

Frank B. Hobbs with Bonnie L. Damon

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Highlights

Population Profile and Growth

- Our Nation's population continues to age. In 1860, half the population was under age 20; in 1994, half were age 34 or older; by 2030, at least half could be 39 years or older.
- In July 1994, there were 33.2 million elderly (aged 65 or older), one-eighth of the total population. Among the elderly, 18.7 million were aged 65 to 74, 11.0 million were aged 75 to 84, and 3.5 million were 85 or older.
- The elderly population increased 11-fold from 1900 to 1994, compared with only a 3-fold increase for those under age 65. Elderly population growth rates for the 1990-2010 period will be modest, but during the 2010-30 period, elderly growth rates will increase dramatically as the Baby-Boom generation ages into the 65 and over group.
- From 1960 to 1994, the oldest old population (persons aged 85 and over) increased by 274 percent, compared with 100 percent for the 65 and over, and 45 percent for the total population. The oldest old population in 1994 would more than double to 7 million in 2020 under middle series projections. The oldest old would reach 19 million by 2050, or as many as 27 million under the Census Bureau's "highest series" assumptions of future life expectancy and net immigration.
- The number of centenarians, persons aged 100 years or older, has grown rapidly in recent years.
 This group has more than doubled since 1980. About 4 in 5 centenarians are women.

- California had the largest number of persons aged 65 or older in 1993 (3.3 million), yet its proportion elderly ranked 46th among the States and the District of Columbia. Florida, Pennsylvania, and States in the Midwest are among the States with the highest proportions elderly. Florida had by far the largest proportion elderly (18.6 percent) in 1993.
- Eight States would double their elderly population between 1993 and 2020. Seven of these States are in the West. The slowest-growing elderly population States are expected to be in the Midwest and Northeast.
- The five States with the highest proportions of oldest old in 1993 were all in the Midwest: Iowa, North Dakota, South Dakota, Nebraska, and Kansas.
- 11 of the 12 States in the Midwest were net losers of elderly migrants between 1985 and 1990. Among the 25 States with net elderly inmigration, 22 were in the South and West.
- The elderly represented 20 percent or more of the population in over 400 counties of the United States in 1991. The elderly were 30 percent or more of the population in 11 counties, 6 of which were in Florida.
- The ratio of elderly persons to those of working age (20 to 64 years) for the nation will nearly double between 1990 and 2050.
- 357 million people in the world were aged 65 or older in 1994, about 6 percent of the world's total population.

Worldwide, the elderly grew by 2.8 percent during 1993-94, compared with only 1.6 percent for the world's total population. The rate of elderly population growth is more rapid in developing countries than in developed countries. Over half the world's elderly lived in developing nations in 1994, and nearly two-thirds of the world's elderly are projected to live in such countries by 2020.

Racial, Ethnic, and Gender Diversity and Change

- Racial and ethnic diversity within the elderly population will continue to increase. The proportion of the elderly that is White, non-Hispanic is projected to decline from 87 percent in 1990 to 67 percent in 2050. Among the elderly in 2050, 10 percent would be Black, non-Hispanic; 7 percent Asian and Pacific Islander, non-Hispanic; less than 1 percent American Indian, Eskimo, and Aleut, non-Hispanic; and 16 percent Hispanic.
- Among elderly Blacks and Hispanics, about 1 in 5 were 80 years or older in 1990. By 2050, these proportions could increase to 30 percent for elderly Blacks and 36 percent for elderly Hispanics. The proportion aged 80 years and over among elderly Whites would be even higher (40 percent).
- In 1990, 12 percent of all elderly persons spoke some language other than English at home. Spanish speakers will become an increasing share of the elderly population that speaks a language other than English at home.
- Income and poverty differences are significant for population subgroups. Elderly White men had

higher median income in 1992 than other population subgroups of the elderly. The 1992 poverty rates were higher for elderly Blacks (33 percent) and Hispanics (22 percent) than for Whites (11 percent).

- Gender and racial gaps in life expectancy at birth persist. Life expectancy at birth in 1991 was about 80 years for White females, 74 years for Black females, 73 years for White males, and 65 years for Black males.
- In the United States, there were 3 elderly women to every 2 elderly men in 1994, and 5 oldest old women to every 2 oldest old men. Globally, there were 50 million more elderly women than men in 1994, and elderly women outnumbered men 4 to 3.
- Elderly White men are more likely to commit suicide (44 per 100,000 population) than to die in a motor vehicle accident (31 per 100,000 population).
- Elderly men are more likely to smoke, smoke heavily, drink, and drink heavily than elderly women.
 Elderly Black men are about twice as likely to smoke as elderly
 White men.
- Elderly women are less likely than men to live in a family setting.
 After age 75, most women are widowed and live alone, while most men are married and live with their wives.
- Women's share of the older labor force (55 years and over) increased from 23 percent in 1950 to 44 percent in 1993.

 Elderly women (16 percent) were more likely to be poor in 1992 than elderly men (9 percent). Of the 2.3 million elderly poor who lived alone in 1992, 2.0 million were women.

Health, Social, and Economic Profile

- Poor health is not as prevalent as many assume, especially among the young old. Among noninstitutionalized persons in 1992, three in four aged 65 to 74 consider their health to be good, very good, or excellent, as do about 2 in 3 aged 75 and over.
- Noninstitutionalized elderly persons reporting the need for personal assistance with everyday activities in 1990-91 increased with age, from only 9 percent of persons aged 65 to 69 up to 50 percent of the oldest old.
- In 1990, elderly with a self-care or mobility limitation were more likely to be poor (20 percent) than elderly without such limitations (11 percent).
- Eighty percent of newborns would survive to age 65 under the mortality conditions of 1991.
- About 7 in 10 persons who died in 1991 were age 65 or older. Heart disease is still the leading cause of death among the elderly, even though heart disease death rates have declined from 1960 levels.
- In 1990, 1.6 million elderly (or 5 percent of all elderly) lived in nursing homes. Ninety percent of

- all nursing home residents are elderly; 7 in 10 are female; and 1 in 3 is a woman aged 85 or over.
- Of all oldest old persons, nearly one-fourth (24 percent) lived in a nursing home in 1990.
- In 1992, 70 percent of elderly reported voting in the presidential election.
- The share of older workers in the nations's labor force declined between 1950 and 1993.
- Median income of the elderly in 1992 (\$14,548 for men, \$8,189 for women) more than doubled since 1957 (in constant 1992 dollars). Social Security benefits were the primary source of income for 63 percent of beneficiaries in 1992, and were the only source of income for 14 percent of beneficiaries.
- The percentage of elderly living in poverty declined from 24.6 percent in 1970 to 12.9 percent in 1992, partly because of "catch-up" increases in Social Security benefits and the indexing of benefits to inflation rates.
- Elderly not living with relatives or living alone were more likely to be poor (25 percent) in 1992 than elderly persons in married couple families (6 percent).
- Most elderly householders (77 percent) owned their own homes in 1991, and their median net worth was more than 15 times that of households with a householder under age 35.

Future Implications

- Tomorrow's elderly will have quite different social, demographic, health, and economic characteristics than today's elderly.
- The sheer size and inevitable aging of the Baby-Boom generation will continue to drive public policy debate.
- Research on genetic, biochemical, and physiological aspects of aging is certain to alter the future world of the elderly. Issues pertaining to ethics and aging are likely to receive increasing attention.
- Educational attainment levels of the elderly population will increase in the coming decades, especially as relatively well-educated Baby Boom cohorts reach older age.
- Baby-Boom women are likely to experience widowhood later in life than today's elderly women, and more may be divorced or never have married.

- Women will be increasingly likely to have been in the labor force long enough to have their own retirement income.
- As average length of life continues to increase, issues regarding the quality of extended life (active life expectancy) are likely to assume greater importance.

Chapter 1. **Introduction**

Changes in population size and composition greatly influence many of our nation's policies and programs. From 1995 to 2005, persons reaching age 65 will be those born during the 1930's Depression era. As a result, the growth rate of the population aged 65 and over will be relatively modest during the next ten years. When persons born from 1946 to 1964, commonly known as the Baby-Boom generation, begin turning age 65 in 2011, we will start to witness a rapid growth rate of persons 65 and over. Unlike the uncertainty associated with many projections, "inevitability" is a term that characterizes this coming rapid growth. The modest growth rate of the population aged 65 and over in the near future provides an opportunity to plan for the certain, rapid growth during the period when the Baby Boom reaches age 65 years.

Growth, then, is one vital aspect of the elderly population (persons 65 and over in this report), especially for the oldest old (the term used herein for persons 85 and over). While we have thought of ourselves as a nation of youth since the country's founding, the United States in 1994 had about as many persons aged 60 or older as children under 14 years. Within the elderly population, the growth rate of the oldest old currently is the most rapid. In the coming years, all developed and most developing countries can expect to experience the changes associated with an aging society.

As with the sheer size and growth rate of the older population, the size of other age groups also has changed radically over the decades. The Baby Boom (30 to 48 years in 1994, figure 1-1) is moving into middle age, years when their children are finishing high school, college, and starting their own families. Some are establishing an

economic base for retirement. The relatively small Baby-Bust cohort is entering the labor force. Fertility, mortality, and migration changes will continue to alter the country's age structure. In this report, we will examine the implications of the growth of the elderly population.

Diversity is a key term that describes the elderly population of the United States. While the label "elderly" is commonly used for the population 65 years and over, this group is remarkably heterogeneous. We cannot fully understand the complexities of their social and economic diversity from sweeping generalizations about the elderly. Each age, gender, race, and ethnic group has distinctive characteristics, and the experience of aging differs among the demographic groups.

Also, rural elderly have characteristics and needs different from those of urban elderly. Some older people have significant financial and health problems while others spend time vacationing, exercising, and participating in sports. Some stay in the paid work force until they die while many fill their leisure time with volunteer work, care of children and the frail elderly, or other personally satisfying activities. Some are bored, angry, or depressed. In short, the elderly, like other age groups, encompasses people with varied levels of needs, abilities, and resources. In the future, "an increasingly numerous and diverse older population is destined to change our social landscape in wavs we can only imagine."1

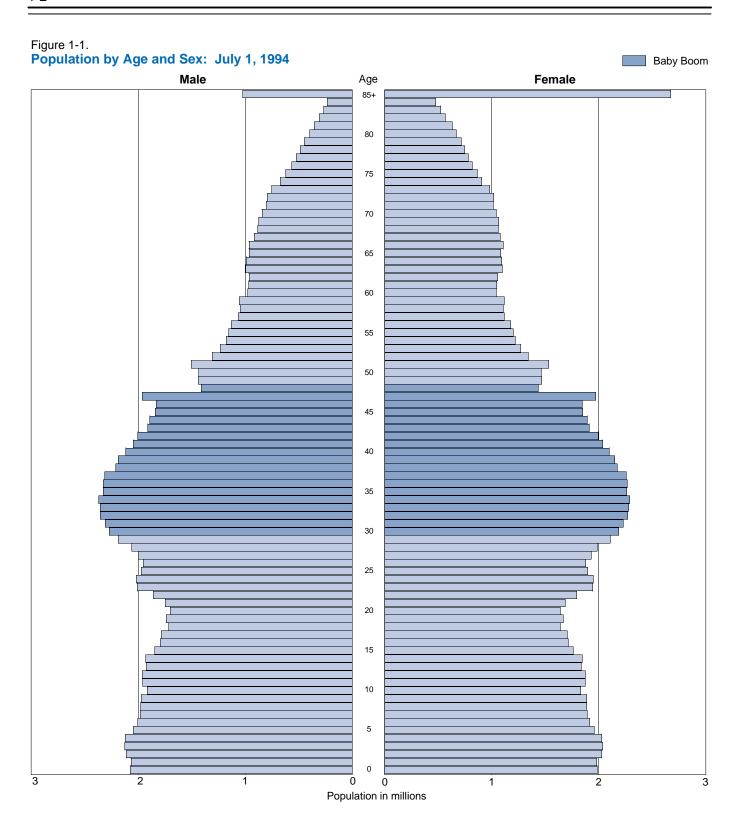
This report focuses on the elderly population, those persons 65 years

and over. Where possible, we distinguish among the component age groups of the elderly to show the diversity of this large population group. For convenience and simplicity, the following terms are used for the component age groups: the young old (65 to 74 years); the aged (75 to 84 years); and the oldest old (85 years and over). The limitations of source data occasionally require using estimates for alternative age groups, such as 55 years and over, 80 years and over, or 65 to 84 years. Deviations from the standard age groups are noted in the text and terms such as the "older" population may be used to refer to these unconventional age groupings. The term "frail elderly" refers to the group of persons 65 years or older with significant physical and cognitive health problems and is used to emphasize that not all elderly persons have serious health problems.

We will focus on the diversity of America's older population in terms of age, race, ethnicity, gender, economic status, longevity, health and social characteristics, and geographic distribution. Throughout, we will examine possible implications of the demographic changes.

What can the elderly expect for the future? The changing characteristics of the elderly, together with the uncertain social, economic, political, and scientific changes that lie ahead, make an accurate portrayal of the elderly population profile of tomorrow problematic. We do know that the characteristics of the elderly population of the future are likely to be very different than those of today's elderly population. For instance, educational attainment levels of the elderly in the 21st century will be higher than those of present-day elderly. One might conclude, for example, that the future

¹ E. Percil Stanford, "Diversity as a Social Force in an Aging Society," *Diversity and Long-Term Care News*, Vol. 1, No. 2, 1994, p. 1.



population explosion of the elderly will result in an expanding number of stereotypically frail and dependent persons and place a serious burden on society. However, given the dynamic nature of changes affecting the future quality of our lives, alternate conclusions might be drawn. As scientists increase the body of knowledge about biological mechanisms that control the aging process, a reduction in the severity of illness and disability may lead to a reduced demand on our health resources. Older Americans can expect to live more years and lives that are healthier longer. At the same time, two important challenges are: "how to maintain the quality of life with advancing age and how to produce cost-effective health care."2 Current social structures have not kept pace with the increased numbers, strengths, and capacities of older persons. One suggested future direction of change is toward "age integration" where opportunities for work, education, and leisure are options for persons of all ages, throughout their lives. Emerging evidence in this direction appears as colleges open up to older and nontraditional students. as companies retrain older adults, as opportunities for older volunteers grow, and as the number of elderly acting as caregivers rather than care receivers increases.3

Questions about the elderly of the future abound. While we know there will be many more elderly, projections

icans Can Expect to Live Longer and Healthi-

er Lives, Special Report on Aging 1993, Dis-

vary in predicting how many more.4 How long will they live? One postulation is that it may be "as likely for a child today to reach age 100 as it was for a child born eight decades ago to reach age 80."5 Others have suggested that "the average life expectancy is unlikely to exceed 85 years in the absence of scientific breakthroughs that modify the basic rate of aging."6 A 1992 survey of over 900 adults found that 61 percent would like to live to 100, yet only 4 percent expected to live that long.⁷

Even if people live longer, what will be their quality of life? National Long Term Care Survey (NLTCS) data have shown that chronic disability and institutional prevalence rates in the U.S. elderly population declined between 1984 and 1989.8 What will be the need for care among the elderly and how will these care needs be met? New and expanded research continues to augment our understanding of the profile of the elderly population into the 21st century. This report also illustrates and discusses

pp. 1-11.

⁵ James W. Vaupel and Bernard Jeune, The Emergence and Proliferation of Centenarians, Center for Health and Social Policy, Population Studies of Aging #12, Odense University, June 1994.

S. Jay Olshansky, Bruce A. Carnes, and Christine K. Cassel, "The Aging of the Human Species," Scientific American, Vol. 268, No. 4, April 1993, pp. 46-52.

Percents are from a telephone survey conducted for the Alliance for Aging Research, December 1992.

⁸ Kenneth G. Manton, Larry S. Corder, and Eric Stallard, "Estimates of Change in Chronic Disability and Institutional Incidence and Prevalence Rates in the U.S. Elderly Population from the 1982, 1984, and 1989 National Long Term Care Survey," Journal of Gerontology, Social Sciences, Vol. 48, No. 4, 1993, pp. \$153-\$166.

implications for the elderly population of tomorrow.

Data used in this report are primarily from the 1990 Census of Population and Housing, including unpublished tabulations from the Modified Age, Race, and Sex (MARS) file and the Public Use Microdata Sample (PUMS); nationally-representative surveys such as the Current Population Survey (CPS), the Survey of Income and Program Participation (SIPP), the National Health Interview Survey, the Longitudinal Study on Aging; and recent projections of population, labor force, and marital status. This report summarizes numerous reports about the elderly prepared by statisticians from the Census Bureau, other federal agencies, and private researchers, and includes information not previously released.

All demographic surveys, including CPS and SIPP, suffer from undercoverage of the population. This undercoverage results from missed housing units and missed persons within sample households. Compared with the level of the 1990 decennial census, overall CPS and SIPP undercoverage is about seven percent. Undercoverage varies with age, sex, and race. For some groups, such as 20-to-24-year-old Black males, undercoverage may be as high as 35 percent. The weighting procedures used by the Census Bureau for its surveys partially correct for the bias due to undercoverage. The final impact of these procedures on estimates is unknown. For further information, see appendix B.

The CPS estimates for the early 1990's are inflated to national population controls by age, race, sex, and

² National Institute on Aging, Older Amer-

coveries in Health for Aging Americans, 1993. Matilda White Riley, "Aging and Society: Past, Present, and Future," The Gerontologist, Vol. 34, No. 4, August 1994, pp. 436-446.

Burton H. Singer and Kenneth G. Manton, "How Many Elderly in the Next Generation?," Focus, Vol. 15, No. 2, Summer and Fall 1993, University of Wisconsin-Madison,

Hispanic origin.⁹ These population controls are based on results of the 1980 census carried forward to 1993. The estimates in this report, therefore, may differ from estimates that would have been obtained using 1990 census results brought forward to the survey date. Population controls incorporating 1990 census results were used for survey estimation beginning with the 1994 CPS.

Survey data are generally presented as point estimates and estimates may differ considerably from those of the census. Estimates of sampling error can be computed from information presented in each of the specific reports cited. Comparisons of characteristics made from sample data in the text are tested for statistical significance (a concept concerning the amount of confidence we have in an estimate derived from a sample) at the 90-percent confidence interval.

Estimates for the characteristics of small subgroups (such as race and detailed age groups) should be used with caution because point estimates can be misleading when population and sample sizes are small. For example, apparent differences in poverty estimates for the oldest old population by race may not be upheld when statistically tested, since the range of variability is generally wider as the population group on which the estimates are based gets smaller. For some characteristics, the range of variability in the estimate is quite narrow, giving us a good idea of what the population group is like in the particular respect.

Individual population figures usually are rounded to the nearest thousand without being adjusted to group totals, which are independently rounded. Therefore, the sums of individual items may not always equal the totals shown in the same tables. Similarly, sums of percent distributions may not always equal 100 percent because of rounding. Differences are insignificant.

Symbols. A dash (-) represents zero or rounds to zero. The symbol "B" means that the base for the derived figure from a survey (such as the Current Population Survey or the Survey of Income and Program Participation) is less than some total, usually 75,000. An "X" means not applicable, and "NA" means not available.

⁹ Information on the Hispanic population shown in this report was collected in the 50 States and the District of Columbia, and therefore, does not include residents of Puerto Rico.

Chapter 2.

Numerical Growth

Changes in Age Composition

The Nation's Population Continues to Age; in 1994, Half the U.S. Population Was at Least 34 Years Old

A population's age composition can only change through the fundamental demographic processes of birth, death, and migration. Generally, changes in the number of births play the most important role in a country's overall age structure. As demographic processes alter a nation's age composition, associated political, economic, and social changes can be foreseen.

In 1860, half the population of the United States was under age 20, and most of the population was not expected to live to age 65. Such a young population is comparable to moderately high fertility populations found in the developing world today. such as those of Egypt and Mexico. The combination of high fertility and high mortality kept the U.S. a youthful nation. As fertility declined and the chance of survival improved, the U.S. population became progressively older. Even so, in 1950 half the population was still under age 30 years. The post-World War II "Baby Boom" was a high fertility period, from 1946 to 1964, and resulted in a brief "younging" of the population. However, since that time, the population has been gradually aging. In 1994, fewer than 1 in 4 (23 percent) persons were

under age 16 and half the population was 34 years of age or older.¹

According to the Census Bureau's middle series projections,² half the population would be 37 or older in 2010 if levels of fertility, mortality, and net migration follow recent trends, and at least half would be 39 years old or older in 2030. Considering all ten alternative projection series published by the Census Bureau, the median age of the population ranges from 36 to 41 years in 2030.

Mortality changes have operated as a secondary influencing factor on the current age structure of the U.S. population. Mortality rates, by age, like fertility rates, fell during this century. Infant and maternal mortality rates declined profoundly as did deaths from infectious and parasitic diseases. Recent improvements in the chance

¹ Official July 1, 1994 estimates are consistent with U.S. Bureau of the Census, 1990 Census of Population, Series CPH-L-74, "Modified and Actual Age, Sex, Race and Hispanic Origin Data." Age and race data in the CPH-L-74 series are drawn from 1990 census counts modified to correct anomalies in age reporting and to assign a specific race to those who marked "other races." Appendix C provides an explanation of the modifications. Throughout this report, counts of persons by age, sex, race, and Hispanic origin are from the modified series unless stated otherwise. For the elderly population, the differences in the two files are relatively minor. The White elderly population is larger in the CPH-L-74 series as a result of assignment of race for Hispanics who marked their race as "other race" on the 1990 census form.

² Throughout this report, projections for the United States for the year 2000 and beyond come from the following report: Jennifer Cheeseman Day, U.S. Bureau of the Census, Projections of the Population of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050, Current Population Reports, P25–1104, Washington, DC, 1993. The Census Bureau produces several national projection series based on varying assumptions about the levels of fertility, mortality, and international migration. Unless stated otherwise, the projections used here are from the middle series.

of survival at the end of the age spectrum have emerged as the most important factor in the growth of the oldest old.³

The age composition of international migration typically exerts the least influence on a nation's changing age distribution. Still, in the next century, our recent levels and composition of immigration to the United States (for example, young Hispanics and Asians) will become an increasingly important factor in the eventual rapid growth and greater diversity of the elderly population (65 years and over). Under the Census Bureau's middle series projection assumptions, net international migration will be responsible for about 8 percent of the total growth of the elderly population between 1992 and 2000. If actual international migration between 1992 and 2000 follows the Census Bureau's high migration series assumption, the contribution of net international migrants to the total growth of the elderly could be as high as 13 percent.

The "Baby-Boom" Generation Will Have a Dramatic Effect on the Growth of the Elderly

Seventy-five million babies were born in the United States from 1946 to 1964. The sheer magnitude of this human tidal wave comes into sharper focus when we realize that those born from 1946 to 1964 totaled 70 percent more people than were born during the preceding two decades. In 1994,

³ Ira Rosenwaike and Arthur Dolinsky, "The Changing Demographic Determinants of the Growth of the Extreme Aged," *The Gerontologist*, Vol. 27, No. 3, June 1987, pp. 275-280.

the Baby Boom was in their economically productive years (about ages 30 to 48) and represented nearly one-third of the U.S. population (figure 1-1). They also were raising families, the Baby Echo. The elderly population was one-eighth of the total population and numbered 33.2 million.

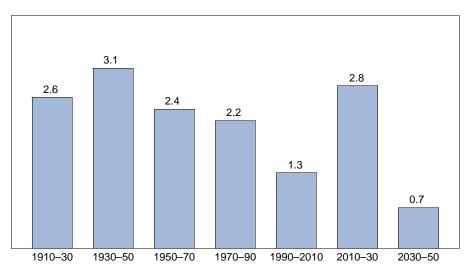
The elderly population has grown rapidly throughout the history of the country. During the 20-year period, 1990-2010, the elderly population will grow at a lower average annual growth rate than during any similar period since 1910 (figure 2-1). This low rate of growth is directly related to the low fertility of the 1930's. (Persons turning age 65 years between 1995 and 2005 were born in the 1930 to 1940 period.) This current low rate of change is slight relative to the approaching substantial elderly growth during the 2010-30 period. The coming high growth is the result of the entrance of the Baby-Boom cohorts into the 65 and over age category. While the high annual growth rate of the 2010-30 period is not without precedent, there will be an unparalleled increase in the absolute number of elderly persons.

Demographers have called out an early warning that the Baby-Boom generation is approaching the elderly ranks. American society has tried to adjust to the size and needs of the Baby-Boom generation throughout the stages of the life cycle. Just as this generation had an impact on the educational system (with "split shift" schools and youth in college) and the labor force (with job market pressures), the Baby-Boom cohorts will place tremendous strain on the myriad specialized services and programs required of an elderly population.

Figure 2-1.

Average Annual Growth Rate of the Elderly Population: 1910–30 to 2030–50

(In percent)



Source: U.S. Bureau of the Census. Data for 1910 to 1940, 1960, and 1980 shown in 1980 Census of Population, *General Population Characteristics*, PC80-1-B1, Tables 42 and 45, U.S. Government Printing Office, Washington, DC, May 1983; data for 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*; data for 2000 to 2050 shown in *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993; data for 1950 shown in *Estimates of the Population of the United States and Components of Change, by Age, Color, and Sex: 1950 to 1960*, Current Population Reports, Series P-25, No. 310, U.S. Government Printing Office, Washington DC, 1965; data for 1970 from unpublished tables consistent with *United States Population Estimates by Age, Race, Sex, and Hispanic Origin: 1988*, Series P-25, No. 1045, U.S. Government Printing Office, Washington, DC, 1990.

A "window of opportunity" now exists for planners and policy makers to prepare for the aging of the Baby-Boom generation.

Elderly Population Increased 11-Fold Between 1900 and 1994; Non-Elderly Only 3-Fold

The rate of growth of the elderly population has far exceeded the growth of the population of the country as a whole. In this century, the total population (and the population under age 65) tripled. The number of persons 65 years and over increased by a factor of eleven, from 3.1 million in 1900 to 33.2 million in 1994 (tables 2-1 and 2-2). Under the Census Bureau's middle series projections, the number of persons 65 years and over would more than double by the middle of the next century to 80 million. About 1 in 8 Americans were elderly in 1994, but about 1 in 5 could be elderly by the year 2030.

Table 2-1. Elderly Population by Age: 1900 to 2050 (Numbers in thousands. Data for 2000 to 2050 are July 1 projections)

	Age in years								
Year and census date/series	Total	65-74		75-84		85 and over		65 and over	
	Total, all ages	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Census Date									
1900 (June 1). 1910 (April 15). 1920 (January 1). 1930 (April 1). 1940 (April 1). 1950 (April 1). 1960 (April 1). 1970 (April 1). 1980 (April 1). 1980 (April 1).	75,995 91,972 105,711 122,775 131,669 150,697 179,323 203,302 226,546 248,710	2,187 2,793 3,464 4,721 6,376 8,415 10,997 12,447 15,581 18,045	2.9 3.0 3.3 3.8 4.8 5.6 6.1 6.9 7.3	772 989 1,259 1,641 2,278 3,277 4,634 6,124 7,729 10,012	1.0 1.1 1.2 1.3 1.7 2.2 2.6 3.0 3.4 4.0	122 167 210 272 365 577 929 1,409 2,240 3,021	0.2 0.2 0.2 0.3 0.4 0.5 0.7 1.0	3,080 3,949 4,933 6,634 9,019 12,269 16,560 19,980 25,550 31,079	4.1 4.3 4.7 5.4 6.8 8.1 9.2 9.8 11.3 12.5
Middle Series (Middle fertility, mortality, and immigration assumptions) ¹									
2000	276,241 300,431 325,942 349,993 371,505 392,031	18,551 20,978 30,910 37,984 33,968 34,628	6.7 7.0 9.5 10.9 9.1 8.8	12,438 13,157 15,480 23,348 29,206 26,588	4.5 4.4 4.7 6.7 7.9 6.8	4,333 5,969 6,959 8,843 13,840 18,893	1.6 2.0 2.1 2.5 3.7 4.8	35,322 40,104 53,348 70,175 77,014 80,109	12.8 13.3 16.4 20.1 20.7 20.4
High Life Expectancy Series (High life expectancy, middle fertility, and middle net immigration assumptions) ²									
2000	276,970 303,115 331,271 358,859 384,846 409,960	18,615 21,242 31,671 39,554 35,856 36,818	6.7 7.0 9.6 11.0 9.3 9.0	12,593 13,625 16,371 25,240 32,362 30,023	4.5 4.5 4.9 7.0 8.4 7.3	4,459 6,572 8,249 11,110 18,205 26,357	1.6 2.2 2.5 3.1 4.7 6.4	35,667 41,439 56,291 75,904 86,423 93,198	12.9 13.7 17.0 21.2 22.5 22.7
Highest Series (High fertility, high life expectancy, and high net immigration assumptions) ³									
2000. 2010. 2020. 2030. 2040. 2050.	281,957 319,536 363,213 410,991 463,579 522,098	18,733 21,585 32,313 40,776 38,127 40,094	6.6 6.8 8.9 9.9 8.2 7.7	12,648 13,806 16,729 25,856 33,472 32,029	4.5 4.3 4.6 6.3 7.2 6.1	4,483 6,644 8,405 11,410 18,736 27,318	1.6 2.1 2.3 2.8 4.0 5.2	35,864 42,035 57,447 78,042 90,335 99,441	12.7 13.2 15.8 19.0 19.5 19.0
Lowest Series (Low fertility, low life expectancy, and low net immigration assumptions) ⁴									
2000. 2010. 2020. 2030. 2040. 2050.	270,259 281,180 289,553 292,902 290,351 285,502	18,217 19,933 28,513 33,800 28,485 27,665	6.7 7.1 9.8 11.5 9.8 9.7	12,132 12,116 13,439 19,228 22,691 19,088	4.5 4.3 4.6 6.6 7.8 6.7	4,101 5,055 5,127 5,808 8,229 9,894	1.5 1.8 1.8 2.0 2.8 3.5	34,450 37,104 47,079 58,836 59,405 56,647	12.7 13.2 16.3 20.1 20.5 19.8

Note: Figures for 1900 to 1950 exclude Alaska and Hawaii. Figures for 1900 to 1990 and projections for 2000 to 2050 are for the resident population.

¹ Assumes a total fertility rate in 2050 of 2,150, life expectancy at birth in 2050 of 79.7 years for males and 85.6 years for females, and an ultimate net migration of 880,000 per year.

2Assumes a total fertility rate in 2050 of 2,150, life expectancy at birth in 2050 of 83.8 years for males and 91.1 years for females, and an ultimate net migration of 2.150, life expectancy at birth in 2050 of 83.8 years for males and 91.1 years for females, and an ultimate net migration of 2.150 in 150 in 150

^{880,000} per year.

3Assumes a total fertility rate in 2050 of 2,622, life expectancy at birth in 2050 of 83.8 years for males and 91.1 years for females, and an ultimate net migration of

^{1,370,000} per year.

Assumes a total fertility rate in 2050 of 1,892, life expectancy at birth in 2050 of 71.6 years for males and 79.2 years for females, and an ultimate net migration of 350,000 per year.

Source: U.S. Bureau of the Census. Data for 1900 to 1940, 1960, and 1980 shown in 1980 Census of Population, PC80-B1, *General Population Characteristics*, Tables 42 and 45; Data for 1990 from 1990 Census of Population and Housing, Series CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data.* 2000 to 2050 shown in *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin:* 1993 to 2050, Current Population Reports, P25-1104, Washington DC, U.S. Government Printing Office, 1993. Data for 1950 shown in *Estimates of the Population of the United States and Components of Change, by Age, Color, and Sex:* 1950 to 1960, Current Population Reports, Series P-25, No. 310, U.S. Government Printing Office, Washington, DC, 1965. Data for 1970 from unpublished table consistent with *United States Population Estimates by Age, Race, Sex, and Hispanic Origin:* 1988, Series P-25, No. 1045, U.S. Government Printing Office, Washington, DC, 1990.

Table 2-2.

Population 65 Years and Over by Age, Sex, Race, and Hispanic Origin: July 1, 1994

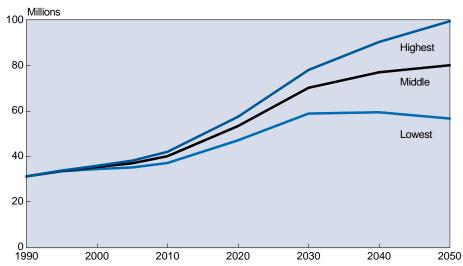
(Consistent with the 1990 Census, as enumerated)

	Age											
Race/Hispanic origin and sex	Total, 65 years and over	65 to 69 years	70 to 74 years	Total, 75 years and over	75 to 79 years	Total, 80 years and over	80 to 84 years	Total, 85 years and over	85 to 89 years	90 to 94 years	95 to 99 years	Total, 100 years and over
All Races												
Both sexes	33,202,067 13,500,836 19,701,231	9,973,114 4,503,313 5,469,801	8,760,095 3,791,106 4,968,989	14,468,858 5,206,417 9,262,441	6,610,810 2,662,205 3,948,605	7,858,048 2,544,212 5,313,836	1,562,534	3,475,447 981,678 2,493,769	2,284,298 694,244 1,590,054	917,741 230,161 687,580	223,514 46,573 176,941	49,894 10,700 39,194
Males per 100 females.	68.5	82.3	76.3	56.2	67.4	47.9	55.4	39.4	43.7	33.5	26.3	27.3
White												
Male	29,772,103 12,141,876 17,630,227	3,999,816	7,848,123 3,416,907 4,431,216	13,132,686 4,725,153 8,407,533	5,973,453 2,416,390 3,557,063	2,308,763	1,420,785	3,173,220 887,978 2,285,242	632,515	834,832 206,120 628,712	202,664 41,340 161,324	40,765 8,003 32,762
Males per 100 females.	68.9	83.5	77.1	56.2	67.9	47.6	55.4	38.9	43.3	32.8	25.6	24.4
Black												
Both sexes	2,677,912 1,035,106 1,642,806	904,525 385,360 519,165	699,910 280,089 419,821	1,073,477 369,657 703,820	505,842 189,129 316,713	567,635 180,528 387,107	320,249 108,335 211,914	247,386 72,193 175,193	155,065 47,496 107,569	67,988 18,441 49,547	16,777 4,031 12,746	7,556 2,225 5,331
Males per 100 females.	63.0	74.2	66.7	52.5	59.7	46.6	51.1	41.2	44.2	37.2	31.6	41.7
American Indian, Eskimo, and Aleut												
Both sexes	136,720 57,790 78,930	46,140 21,057 25,083	36,265 16,026 20,239	54,315 20,707 33,608	24,232 10,052 14,180	30,083 10,655 19,428	16,019 6,119 9,900	14,064 4,536 9,528	8,322 2,741 5,581	4,130 1,320 2,810	1,057 302 755	555 173 382
Males per 100 females.	73.2	83.9	79.2	61.6	70.9	54.8	61.8	47.6	49.1	47.0	40.0	45.3
Asian and Pacific Islander												
Both sexes	615,332 266,064 349,268	231,155 97,080 134,075	175,797 78,084 97,713	208,380 90,900 117,480	107,283 46,634 60,649	101,097 44,266 56,831	60,320 27,295 33,025	40,777 16,971 23,806	25,952 11,492 14,460	10,791 4,280 6,511	3,016 900 2,116	1,018 299 719
Males per 100 females.	76.2	72.4	79.9	77.4	76.9	77.9	82.6	71.3	79.5	65.7	42.5	41.6
Hispanic origin ¹												
Both sexes	1,456,078 608,500 847,578	523,594 233,228 290,366	385,246 168,646 216,600	547,238 206,626 340,612	248,037 99,632 148,405	299,201 106,994 192,207	166,790 61,299 105,491	132,411 45,695 86,716	85,775 30,220 55,555	36,141 12,284 23,857	8,218 2,508 5,710	2,277 683 1,594
Males per 100 females.	71.8	80.3	77.9	60.7	67.1	55.7	58.1	52.7	54.4	51.5	43.9	42.8

¹Hispanic origin may be of any race.

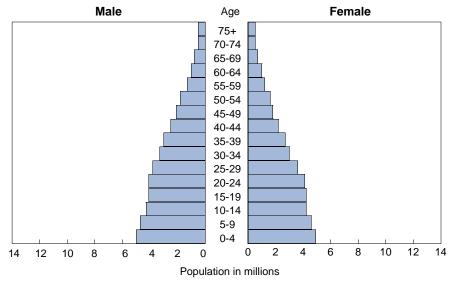
Source: U.S. Bureau of the Census, Data consistent with U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990 to 1993, Population Paper Listing-8 (PPL-8), 1994.

Figure 2-2. **Projected Elderly Population—Alternative Series: 1990 to 2050**



Source: U.S. Bureau of the Census. Data for 1990–92 shown in Population Paper Listing–8 (PPL–8), "U.S. Population Estimates, by Age, Sex, Race and Hispanic Origin: 1990–1993." Data for 1993 to 2050 shown in *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25–1104, U.S. Government Printing Office, Washington, DC, 1993.

Figure 2-3. **Population by Age and Sex: 1905**



Source: U.S. Bureau of the Census, *Estimates of the Population of the United States, by Single Years of Age, Color, and Sex: 1900 to 1959*, Current Population Reports, Series P-25, No. 311. U.S. Government Printing Office, Washington, DC, 1965.

The elderly population explosion between 2010 and 2030 is inevitable (figure 2-2). While the growth of the elderly from 1990 to 2010 will be steady, there will be a massive increase in the number of elderly persons during the 2010-30 period when the Baby-Boom generation reaches age 65. The elderly population of the country reached 30 million persons in 1988. Since then, it will take another two decades before the number of elderly increases to 40 million persons. Then, it would take only 7 more years for the elderly to increase an additional 10 million, to 50 million elderly. Projected elderly populations far into the next century range considerably, due to alternative mortality assumptions (by age) and varying assumptions of the future number and age profile of international migrants.

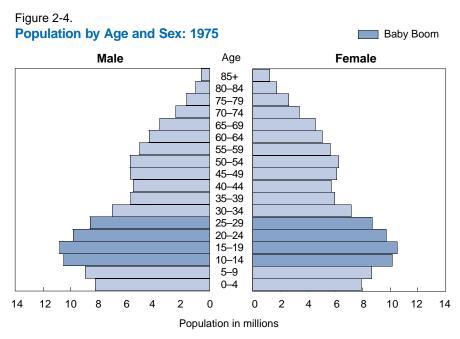
Our Nation's Age Structure Shape has Shifted

To better understand the progression of growth of the elderly population. we will examine selected age-sex pyramids from 1905 to 2050. The distribution of the population by age and sex in 1905 exhibits a classic shape, wider at the bottom from births and more narrow at the top as death takes its toll at the older ages (figure 2-3). This broad-based shape is characteristic of a young, and relatively high fertility population. The general shape of the pyramid remained essentially the same until the 1921-to-1945 period when there was a dramatic drop in birth rates. From 3.1 million births in 1921, annual births declined to 2.5 million in the early 1930's

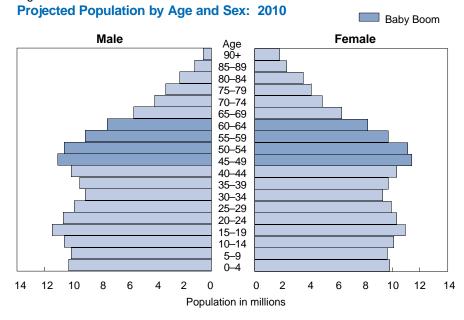
and did not pass the 3 million mark again until 1943.⁴

Since the Second World War, the United States has been on a demographic roller coaster in terms of the number of births. After the 1930's Baby Bust came the 1950's Baby Boom, another Baby Bust in the 1970's, followed by the 1980's Baby Boomlet (also called the "Baby Echo" as they are the children of persons born during the Baby Boom). The population pyramid for 1975 shows a marked "pinch" in the middle of the chart for ages 35-44 years, a result of the exceptionally low birth rates of the Depression years (figure 2-4). The Baby-Boom bulge appears in the 1975 pyramid in the five-year age groups from ages 10 to 29, and the beginnings of the 1970's Baby Bust are evident at the youngest ages. During this period of fluctuating births and improving survivorship, the elderly grew from 5 percent of the American population in 1930 to nearly 13 percent in 1994.

Figure 2-5.



Source: U.S. Bureau of the Census, *Preliminary Estimates of the Population of the United States, by Age, Sex, and Race: 1970 to 1981*, Current Population Reports, Series P-25, No. 917. U.S. Government Printing Office, Washington DC, 1982.

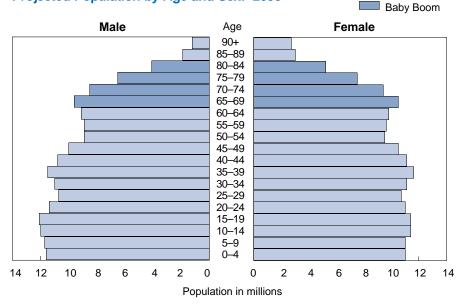


Source: Jennifer C. Day, U.S. Bureau of the Census, *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104. U.S. Government Printing Office, Washington, DC, 1993 (middle series projections).

⁴ Births include adjustment for underregistration and for 1921-32, adjustment for States not in the birth registration area. Trend data are from National Center for Health Statistics, *Vital Statistics of the United States*, 1990, Vol. 1, *Natality*, Washington, DC, Public Health Service, 1994.

Figure 2-6.

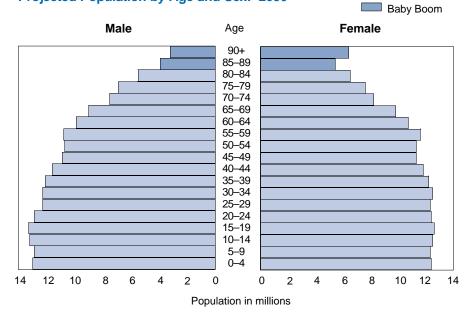
Projected Population by Age and Sex: 2030



Source: Jennifer C. Day, U.S. Bureau of the Census, *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050,* Current Population Reports, P25-1104. U.S. Government Printing Office, Washington, DC, 1993 (middle series projections).

Figure 2-7.

Projected Population by Age and Sex: 2050



Source: Jennifer C. Day, U.S. Bureau of the Census, *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050,* Current Population Reports, P25-1104. U.S. Government Printing Office, Washington, DC, 1993 (middle series projections).

By 2010, the Baby Boom will be aged 46 to 64 (figure 2-5). After that, growth of the elderly population will be more dramatic (figures 2-6 and 2-7) as the Baby Boom becomes the Grandparent Boom. From 2010 to 2030, they will be the young old and the aged (65 to 74 years old and 75 to 84 years old). The present ratio of 3 elderly women to 2 elderly men may be reduced, with women expected to outnumber men 6 to 5 by 2030. During these two decades, the population aged 65 to 84 years would grow 80 percent under middle series projections while the population aged 85 and over would grow 48 percent. The population under age 65 would increase only 7 percent.

After 2030, we will see the final phase of the gerontological explosion. The growth of the young old would decelerate as the cohort born after the Baby Boom, from 1965 to 1984, will be ages 66 through 85 in 2050. That age group would reach 58 million in 2030, and stand at only 59 million in 2050. It is the size of the oldest old population that we will notice after 2030. By 2050, the "rectangular" shape of the pyramid will be quite pronounced, a characteristic of a sustained low fertility, low mortality population. This structure may strongly influence the fabric of our society, which is likely to be vastly different from what we observe today.

Oldest Old Segment of Elderly Population Growing More Rapidly

The oldest old are a small but rapidly growing group. In 1900, 122,000 people were 85 years or older. Their numbers had reached 3 million in 1990 (figure 2-8). In 1994, an estimated 3.5 million persons were 85 years or older and nearly 1.2 million were estimated to be 90 or older.

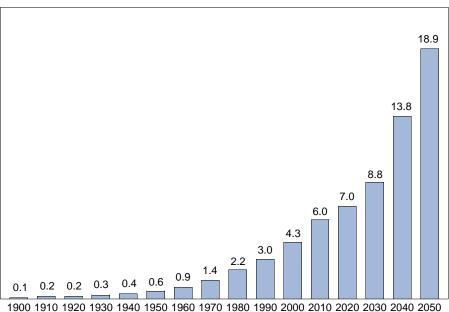
The number of centenarians in the United States, persons 100 years or older, is uncertain. The 1990 population census reports 36,000 centenarians, a total we know is high. Even though the number of centenarians is subject to error due largely to exaggeration in the reporting of age, the number of centenarians in 1990 (by one estimation method) was about 28,000,5 double the number estimated for 1980 (about 14,000).6 Centenarians, while growing rapidly, are still a very small proportion of the U.S. population. About 4 of 5 centenarians are women. The chances of living to age 100 have improved. For those born in 1879, the odds against living 100 years were 400 to 1. The latest available decennial life tables (based on the mortality experience of 1979-1981) imply that persons born in 1980 had odds of 87 to 1.⁷

The age group 85 and over is projected to be the fastest growing part of the elderly population throughout the rest of this century. From 1960 to 1994, this group increased 274 percent compared with an increase of 100 percent for the population 65 years and over and 45 percent for the total population. In 1900, the 85-and-over group represented only 4 percent of the population 65 years and over. In 1994, they were 10

percent of the nation's elderly. While such percent changes are extremely high, those 85 years and over are a relatively small group, just over 1 percent of the American population. Their size is already sufficient, however, to have a major impact on the nation's health and social service systems. Many social, economic, and health characteristics of the oldest old differ greatly from those of the young old.

Figure 2-8. Population 85 Years and Over: 1900 to 2050

(In millions)



1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010 2020 2030 2040 2050

Source: U.S. Bureau of the Census, Decennial Censuses for specified years and *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U. S. Government Printing Office, Washington, DC, 1993. Data for 1990 from 1990 Census of Population and Housing, CPH-L-74, Modified and Actual Age, Sex, Race, and Hispanic Origin Data.

⁵ Prithwis Das Gupta, U.S. Bureau of the Census, unpublished calculations using the Extinct Generation Method of estimation.

⁶ Gregory Spencer, Arnold Goldstein, and Cynthia Taeuber, U.S. Bureau of the Census, America's Centenarians: Data From the 1980 Census, Current Population Reports, Series P-23, No. 153, Washington DC, 1987.
⁷ Ibid.

According to Census Bureau middle series projections, the population aged 85 and over will more than double, from 3 million in 1990 to 7 million in 2020 (figure 2-9). This group will again double in size to 14 million by 2040, as the survivors of the Baby-Boom cohort reach the

oldest ages. By 2050, the oldest old would be nearly 5 percent of the total population, compared to just over 1 percent in 1994. Projections of the future number of persons ages 85 and over range considerably, the longer the projection period. The Census Bureau projections indicate that

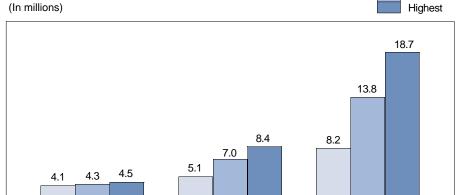
2040

Lowest

Middle

Figure 2-9. Projected Population 85 Years and Over-Alternative Series: 2000 to 2040

(In millions)



Source: U.S. Bureau of the Census, Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993.

2020

Table 2-3. Two-Elderly-Generation Support Ratios: 1950 to 2050

(Ratio of persons aged 85 years and over to persons aged 65 to 69 years. For meaning of abbreviations and symbols, see introductory text.)

Race/Hispanic origin	1950	1990	2010	2030	2050
Total	12	30	50	44	100
	12	31	52	46	109
	11	26	35	26	57
	14	17	36	48	82
	(NA)	21	39	37	84

¹ Hispanic origin may be of any race.

2000

Source: U.S. Bureau of the Census, 1950 from 1950 Census of Population, Volume 2, Part 1, Chapter C, Table 112, 1990 from 1990 Census of Population and Housing, Series CPH-L-74, Modified and Actual Age, Sex, Race, and Hispanic Origin Data; 2010 to 2050 from Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050, Current Population Reports, Series P25-1104, U.S. Government Printing Office, Washington, DC, 1993.

in 2000 the oldest old population would be between 5 to 8 million. Under the "highest" projection series, which assumes additional improvement in survival rates of the population and a higher level of net international migration than projected under middle series assumptions, the oldest old could number as many as 19 million in 2040. If survival rates improve even more than assumed under the Census Bureau's high series assumption, the size of the oldest old population decades from now could be even greater.

If mortality levels continue on the same course as we have experienced recently and if the volume and age composition of net international migration remains stable, then by the middle of the next century nearly 10 million Americans would be 90 years or older, compared with just over 1 million in 1994. If mortality rates decrease at a faster rate among the oldest old than is projected, the numbers would be much higher. If fertility rates decrease further, the elderly would become a larger proportion of the population than now. With such demographic possibilities facing us, public and private sector policy makers are becoming more attentive to the implications of not just an older population, but of an aging society.

Another way to look at the changing age structure of the elderly is a ratio defined by Siegel.⁸ He defines the ratio for two elderly generations as the number of persons aged 85 years and over per 100 persons aged 65 to 69 years (table 2-3). In 1950, the overall ratio was 12 and similar for Whites and Blacks. In four decades,

⁸ Jacob S. Siegel and Cynthia M. Taeuber, "Demographic Perspectives on the Long-Lived Society," Daedalus, Vol. 115, No. 1, 1986, p. 84.

the ratio increased to 30. By 2050, it would increase to 100 and would be highest for Whites. The ratio of 30 in 1990 implies that there were about 3 times as many persons aged 65 to 69 years as there were persons aged 85 years and over, while the ratio of 100 in 2050 implies that there are as many persons aged 85 years and over as there are persons aged 65 to 69 years.

The two-elderly-generation-ratio increased from 1950 to 1990 and would continue to increase steadily from 1990 to 2010. After that, it would decrease somewhat until 2030 because the Baby Boom 65-to-69-year-old group will be large. The ratio would more than double for Whites and Blacks from 2030 to 2050 when the Baby-Boom generation reaches the oldest old ages. The experience and problems of the young old caring for the oldest old will become more and more familiar throughout society. The physical condition of the young old may become a serious issue as they try to help frail elderly move from beds to chairs to baths and toilets. Need for a greater variety of home aids, changes in the physical structure of homes to accommodate physical limitations, and increased demands for access to public buildings for the disabled are likely.

The middle series projections shown above indicate what would happen to the age distribution if fertility, mortality, and net migration trends followed recent patterns into the middle of the next century.⁹ If the number of

children born or the immigration of nonelderly adults increased significantly, the size of the working-age population would eventually increase relative to the elderly population. The relative size of the elderly to the young and working-age populations may be altered by increased fertility or changes in the volume and age structure of international migration. Still, the future explosion of the number of elderly persons will most certainly occur, unless somehow substantial numbers of Baby Boomers were to die young and/or leave the country between now and the 2010-2030 period. Neither of these scenarios is likely. Although projections generally should be used with caution, planners and policymakers can place a great deal of confidence in the projected future rapid growth in the size of the elderly population, even though the

exact numbers remain unknown and dependent on future changes in mortality and migration.

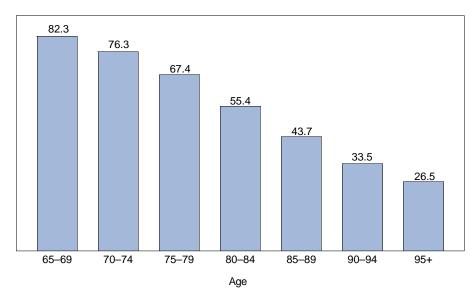
Older Women and Older Men

Elderly Women Outnumber Elderly Men 3 to 2

Men generally have higher death rates than women at every age. As a result, in 1994 elderly women in the United States outnumbered men 3 to 2, a change from 1930 when they were nearly equal in number (due in part to the fact that immigrants were more likely to be men). In 1994, there were nearly 20 million elderly women. That's about 6 million more elderly women than elderly men. The difference between the number of men and women grows with advancing age. At ages 65 to 69, women outnumber men 6 to 5; for those 85

Figure 2-10.

Number of Men per 100 Women by Age: 1994



Source: U.S. Bureau of the Census, data consistent with "U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1990 to 1993," Population Paper Listing–8 (PPL–8), 1994.

⁹ Jennifer Cheeseman Day, U.S. Bureau of the Census, *Projections of the Population of the United States, by Age, Sex, and Race: 1993 to 2050*, Current Population Reports, P25–1104, Washington, DC, 1993, Table A, Principal assumptions for race/Hispanic groups.

years and over, women outnumber men 5 to 2 (table 2-2).

For a global perspective, in 1994, there were 4 elderly women to 3 elderly men, a lower ratio than for the United States. The world had 50 million more elderly women than men. As with the population of the U.S., the extent to which women outnumber men in the world increases with age. By ages 80 years and over, the world's women outnumbered men by a ratio of nearly 2 to 1.

Perhaps no feature of the oldest old population in the United States is as striking as their relative numbers of males and females (982,000 males and 2.5 million females in 1994). In 1994, 72 percent of the U.S. population 85 years and over were women. The sex ratio (males per 100 females) in the United States was 44 for persons aged 85 to 89 years, and 26 for persons aged 95 years and over. By comparison, the sex ratio was 82 for persons aged 65 to 69 years (figure 2-10).

The general trend in the sex ratio for the oldest old population illustrates the greater survivorship probabilities of women throughout the life cycle. In 1930, the sex ratio for persons 85 years and over was 75; in 1990, it was 39. This trend may abate in the next century if relative mortality trends do not change significantly from what they have been in recent years. Men aged 85 and over are expected to increase their numbers relative to

women. By 2050, the sex ratio of the oldest old would be 60 under the middle series projections. Nevertheless, there would still be 4.7 million more women than men in this age group (table 2-4).

The death of a husband often marks the point of acute economic reversals for the surviving wife. The combined factors of men generally being older than their spouses and higher life expectancy for women than men, contribute to the high proportion of women living alone, the earlier institutionalization of women than men, sharply reduced income and a disproportionately high level of poverty among women, and a need for special support from family members or society.

In the future, we expect a delay in some of these problems as more men live to older ages. By the middle of the next century, we expect to see about five elderly men to six elderly women among Whites and a 2 to 3 ratio among elderly Blacks.

Even among the oldest old, we may see a narrowing in mortality differences between men and women. Under middle series projections, we would see a ratio of three men 85 years and over to five women that age by 2050. Women would still be more likely than men to survive to the oldest ages. Thus, the health, social, and economic problems of the oldest old are likely to remain primarily the problems of women.

Table 2-4.

Balance of Males and Females 85 Years and Over: 1930 to 2050

(Sex ratio is males per 100 females 85 years and over)

Year	Sex Ratio	Excess of females (thousands)
1930	75.4	38
1940	75.0	52
1950	69.7	103
1960	63.9	205
1970	53.3	430
1980	43.7	877
1990	38.6	1,339
2030	54.6	2,599
2050	60.1	4,705

Note: Data shown for 1930-1990 are for April 1, and data for 2030 and 2050 are for July 1.

Source: U.S. Bureau of Census, data for 1930 and 1940 shown in 1940 Census of Population, Volume IV, Part 1, Characteristics by Age, Table 2; data for 1950 shown in Estimates of the Population of the United States and Components of Change, by Age, Color, and Sex: 1950 to 1960, Current Population Reports, Series P-25, No. 310, U.S. Government Printing Office, Washington, DC, 1965; data for 1960 and 1980 shown in 1980 Census of Population, PC80-B1. General Population Characteristics, Table 45; data for 1970 shown in unpublished tables consistent with United States Population Estimates by Age, Race, Sex, and Hispanic Origin: 1988, P-25, No. 1045, U.S. Government Printing Office, Washington, DC, 1990; data for 1990 from 1990 Census of Population and Housing, Series CPH-L-74, Modified and Actual Age, Sex, Race, and Hispanic Origin Data.; data for 2030 and 2050 shown in Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1993 to 2050, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993.

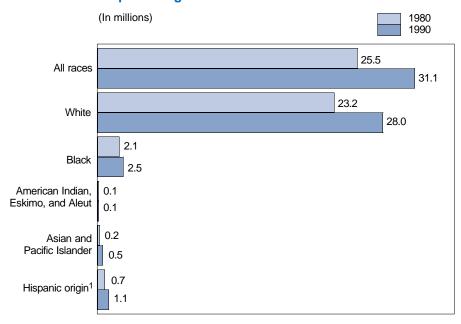
Race and Hispanic Origin of the Elderly

Racial and Ethnic Diversity Among the Elderly Will Increase

The elderly population is predominantly White but we can expect to see more racial diversity and more persons of Hispanic origin within America's elderly population in the coming years. Of the total elderly population in 1994, about 29.8 million were White; 2.7 million, Black; 137,000, American Indian, Eskimo, and Aleut (AIEA); 615,000, Asian and Pacific Islander (API); and 1.5 million were of Hispanic origin (who may be of any race) (table 2-2). The elderly Asian and Hispanic origin populations had relatively large percentage gains between 1980 and 1990 (figure 2-11).10

Figure 2-11.

Persons 65 Years and Over by Race and Hispanic Origin: 1980 and 1990



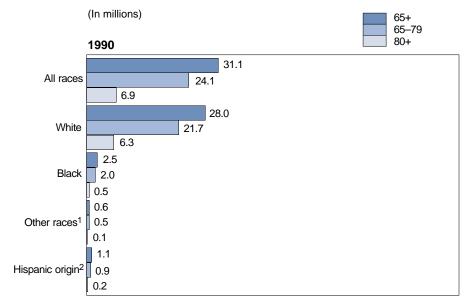
¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991*, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993, table 1.

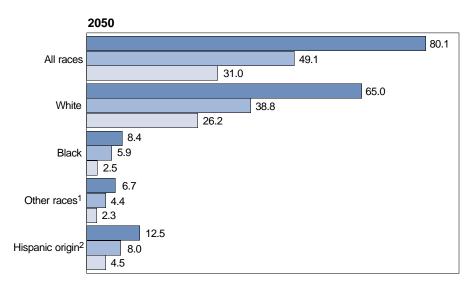
¹⁰ U.S. Bureau of the Census, 1980 Census of Population, *General Social and Economic Characteristics*, U.S. Summary, PC80-1-C1, Washington, DC, December 1983, table 120.

Figure 2-12.

Persons 65 Years and Over by Age, Race, and Hispanic Origin: 1990 and 2050



In the coming decades, the elderly population will be much more racially and ethnically diverse than in the 1990's. Of the 80.1 million elderly projected in the middle series for 2050 (figure 2-12), 8.4 million would be Black, 6.7 million would be races other than White or Black, and 12.5 million would be Hispanic (who may be of any race). These totals reflect the Census Bureau's middle series projection assumptions. The observed totals will vary to the extent actual levels of international migration and survivorship, by race and Hispanic origin, depart from the projection assumptions. If the chance of survival improves more rapidly for each group than in the middle series assumption, the numbers shown would be even higher.



¹ Includes Asian and Pacific Islanders, as well as American Indian, Eskimo, and Aleut.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*, and 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993.

² Hispanic origin may be of any race.

While persons of races other than White constituted about 1 in 10 elderly persons in 1990, that will change significantly by 2050 when the proportion may increase to 2 of 10 (figure 2-13).¹¹ Over this period, the number of elderly Blacks would more than triple (figure 2-14) and their proportion of the total elderly population would increase from 8 to 10 percent (figure 2-15). Asians, Pacific Islanders, American Indians, Eskimos, and Aleuts combined would increase from less than 2 percent of the total elderly population to 8 percent over the 1990 to 2050 period.

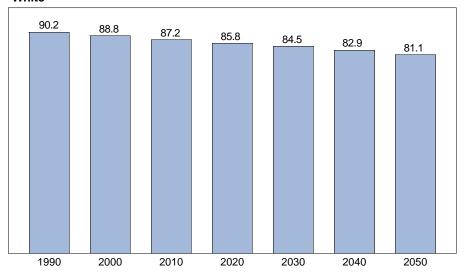
Figure 2-13.

Percent White and White, Non-Hispanic, of the Total

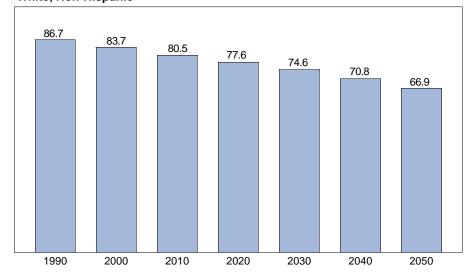
Population 65 Years and Over: 1990 to 2050

(The White population includes persons of Hispanic origin)

White



White, Non-Hispanic



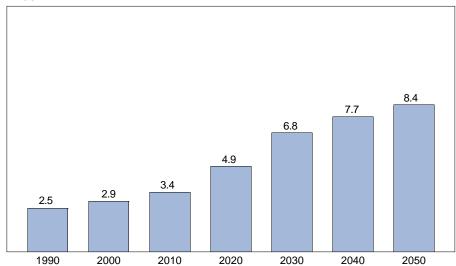
Source: U.S. Bureau of the Census, 1990 from *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991*, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993; and 2000 to 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104. U.S. Government Printing Office, Washington, DC, 1993.

¹¹ Hispanic origin persons may be of any race. In the text, Hispanic origin persons are included in the "White" group if that is the way they identified themselves in the census. The proportion elderly who are "minorities" (that is, Hispanics and races other than White) could be higher than 2 in 10 if many Hispanics identify their race as "White."

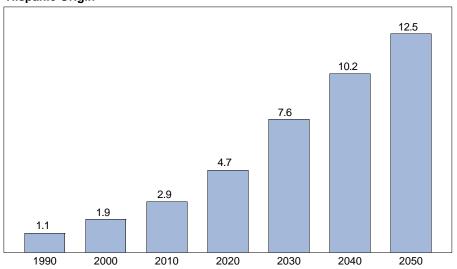
Figure 2-14.

Black and Hispanic Origin Population 65 Years and Over: 1990 to 2050 (In millions)

Black



Hispanic Origin¹



¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*; and 2000 to 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104. U.S. Government Printing Office, Washington, DC, 1993.

Hispanic Elderly Growing Rapidly

Under the middle series projections, the elderly Hispanic population would more than double from 1990 to 2010 and would be 11 times greater by 2050 (figure 2-14). The Hispanic elderly population, which numbered less than half of the Black elderly population in 1990, is growing much faster than the Black elderly population. Under the assumptions of the middle series projections, in 2030, the number of Hispanic elderly (7.6 million) would be larger than the elderly Black population (6.8 million).

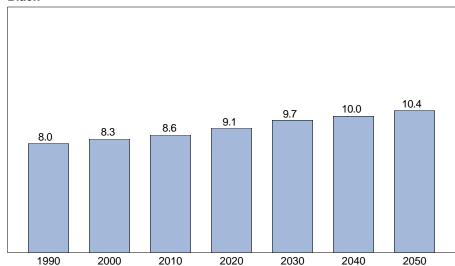
Hispanic elderly would increase from less than 4 percent of the total elderly population in 1990 to 16 percent by the middle of the next century (figure 2-15). The percent Black of the total elderly population also will increase during the coming decades.

Excluding the Hispanic population from the race categories, the Black non-Hispanic proportion of the elderly population by the middle of the next century would be 10 percent, the White non-Hispanic proportion would be 67 percent, and the Asian and Pacific Islander proportion would be 7 percent.

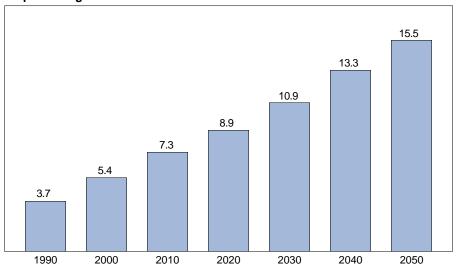
Figure 2-15.

Percent Black and Hispanic Origin of the Total Population
65 Years and Over: 1990 to 2050

Black



Hispanic Origin¹



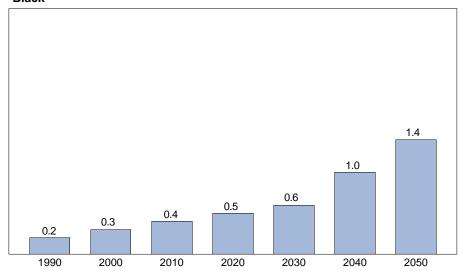
¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*; and 2000 to 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993.

Figure 2-16.

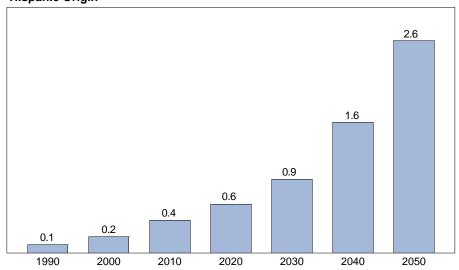
Black and Hispanic Origin Population 85 Years and Over: 1990 to 2050 (In millions)

Black



The Black population 85 years and over 12 would increase from only 223,000 in 1990 to 1.4 million by 2050 (figure 2-16). The number of Hispanics who are 85 or older was small (91,000) in 1990, but their rapid growth rate is projected to produce an oldest old Hispanic population by 2050 of 2.6 million.

Hispanic Origin¹



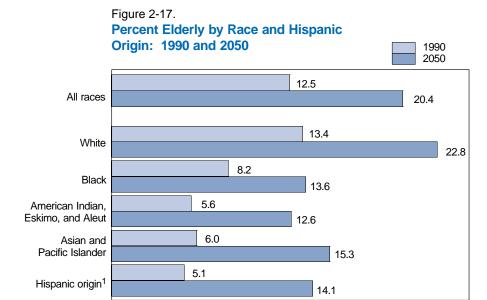
¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*; and 2000 to 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104. U.S. Government Printing Office, Washington, DC, 1993.

¹² Blacks have accounted for a smaller share of the 85-and-over population in recent censuses than in earlier censuses. The decline, however, likely reflects improvement in age reporting because of improved knowledge of actual age through the wider availability of birth certificates and increased literacy. Thus, the result is likely a diminished tendency to exaggerate age among the oldest old.

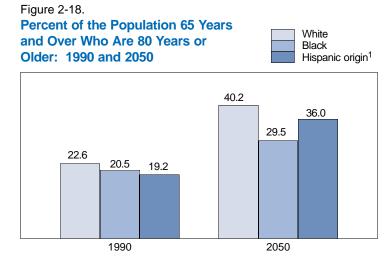
The White population has a higher proportion elderly than any other race group or Hispanics (figure 2-17). This fact is related to the better chance of survival to age 65 of Whites and lower recent fertility. Further, immigration may be a contributing factor. The White non-Hispanic proportion of recent immigrants over the past 30 years has declined. In part because immigrants typically are much younger than 65, other groups, especially Hispanics and Asians, are typically younger populations. In 1990, over 13 percent of the White population was elderly compared with 8 percent of the Black population, 6 percent of the AIEA and API groups combined, and 5 percent of the population of Hispanic origin. By 2050 (when the Baby-Boom generation is 85 years and over), about 14 percent of Black Americans and Hispanics could be 65 or older. A larger proportion of the White population (23 percent) may be elderly.

About one-fifth of elderly Blacks and elderly Hispanics were 80 years or older in 1990. By 2050, the proportions for elderly Blacks could increase to almost one-third, to over one-third for Hispanics, and be even higher (40 percent) for Whites (figure 2-18).



¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1990 from *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991*, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993; 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993. (Middle series projections).



¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*; 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993. (Middle series projections).

Familial Support Ratios

More People Will Face Caring for Frail Relatives

More and more people in their fifties and sixties are likely to have surviving parents, aunts, and uncles. Increases in length of life may result in children having a greater likelihood of knowing grandparents and great-grandparents, although delayed parenthood and increased childlessness are factors that partially counter this likelihood. More people will face the concern and

Table 2-5.

Parent and Sandwich Generation Support Ratios: 1950 to 2050

(For meaning of abbreviations and symbols, see introductory text)

Ratio and race/Hispanic origin	1950	1993	2010	2030	2050
Parent Support Ratio ¹					
Total	3	10	11	16	29
White	3	11	11	17	33
Black	3	7	7	9	15
Other races	2	4	7	13	21
Hispanic origin ²	(NA)	6	7	11	21
Sandwich Generation Ratio ³					
Total	144	200	166	299	267
White	148	205	172	319	286
Black	⁴ 97	171	131	242	216
Hispanic origin ²	(NA)	139	118	217	204

¹ Ratio of persons 85 years old and over to persons 50 to 64 years old.

Source: U.S. Bureau of the Census, 1950 from 1950 Census of Population, Volume 2, Part 1, Chapter C, Tables 97 and 112; 1993 from Population Paper Listing (PPL-8), U.S. Population Estimates, by Age Sex, Race and Hispanic Origin: 1990 to 1993, 2010 to 2050 from Projections of the Population of the United States, by Age, Sex, Race and Hispanic Origin: 1993 to 2050, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993 (middle series projections), table 2.

expense of caring for their very old, frail relatives since so many people now live long enough to experience multiple, chronic illnesses. A fair proportion (26 percent) of the Baby-Boom generation was childless in 1990. (The last half of the Baby Boom is still in the childbearing years and so the percent childless should still decrease.).¹³ Those without children may face institutionalization at earlier ages than persons with surviving adult children.

An approximate idea of things to come can be seen in two familial support ratios (table 2-5): the "parent support" ratio and the "sandwich generation" ratio. Such ratios reflect the way age composition affects the number of elderly persons relative to other specified age groups. The ratios are used as an estimate of elderly generations even though persons who are part of the age group in the numerator are not necessarily in the same families as the age group for the denominator. Thus, the ratios are only a rough indication of need for family support over time.

² Hispanic origin may be of any race.

³ Ratio of persons aged 18 to 22 enrolled in college plus persons aged 65 to 79 to persons aged 45 to 49 years. College enrollment for 2010-2050 is based on 1993 rates for 18-to-22-year olds (Total, 40.3 percent; White, 41.8 percent; Black, 27.8 percent; Hispanics, 26.2 percent).

 $^{^4}$ 1950 data are for "Black and other races" combined. Over 90 percent of "Black and other races" were Black in 1950.

¹³ U.S. Bureau of the Census, Fertility of American Women: June 1990, Current Population Reports, Series P-20, No. 454, U.S. Government Printing Office, Washington, DC, 1991, tables H and J.

The parent support ratio is defined here as the number of persons aged 85 years and over per 100 persons aged 50 to 64 years. In 1950, relatively few people had to worry about caring for the frail elderly. The parent support ratio tripled from 1950 to 1993 and will likely triple again over the next six decades. It is highest for Whites but changes in this ratio are meaningful to every race and ethnic group. The oldest old are the most likely to have pressing needs for economic and physical support. The need for help is likely to come at the very time when the adult children (here estimated as the age group 50 to 64 years) of the frail oldest old are thinking about or have reached the age of retirement. Some of the 50-to-64-year-old group bear health limitations of their own.

There is no historical precedent for the experience of most middle-aged and young-old persons having living parents. When the parents of these middle-aged persons share a home with an adult child, usually the adult child is a daughter. Also, a large proportion of women are not married during their parent-care years, due to the increase in divorce rates, decrease in marriage rates, and increase in survivorship at the oldest ages. These changing marital patterns are influencing patterns of parent care, particularly with regard to the formation and maintenance of shared adult child/elderly parent households.14

Compared with 1950, more people give more difficult care for a longer time period. Additionally, life expectancy has increased for the disabled,

the mentally retarded, and the chronically ill. Overall, today's caregivers provide care that may be much more physically and psychologically demanding than that given in 1950 (especially given the increased number of elderly with chronic physical ailments and long-term cognitive diseases).

As medical technology provides more ways to save lives, we can expect to see the duration of chronic illness, and consequently the need for help, increase even more. The strain of caring for frail elderly could affect worker productivity. Women in their fifties and sixties in particular, leave the work force or work part time in order to care for frail relatives at just the time when they want to work for retirement benefits in their own old age. Other women have responsibility for frail relatives while adjusting to their own retirement, widowhood, and reduced incomes.

Part of the Baby-Boom generation has been referred to as "the sandwich generation" with the idea that these middle-aged persons have joint responsibilities for the support of children enrolled in college and parents (table 2-5). While there certainly are families bearing the double burden of paying for college and supporting frail elderly persons at the same time, most families do not have children in college full-time. In 1993, only 15 percent of families had at least one dependent aged 18 to 24; of these families, only 41 percent had at least one child attending college full time. 15 Additionally, most middle-aged

persons do not have elderly parents who are frail. In general, this situation arises after age 80 when severe mental and physical ailments become common and economic resources are more reduced. Most parents of persons aged 45 to 49 are likely to be under age 80. Nevertheless, the potential burden is greater now than in 1950 when the young were less likely to attend college and there were relatively fewer frail oldest old.

Jennings and Bennefield¹⁶ found that about 13 percent of all persons receiving financial support were parents of the provider (56 percent were children under age 21). In an earlier study, O'Connell et al. 17 showed that in 1985 the overall odds of providing financial support to parents was 1 in 208. Although a similar analysis was not done for the Jennings and Bennefield analysis of 1988 data, the authors believe the results would have been comparable to the findings from the 1985 data. In 1988, there were 1.7 million parents (of any age) who received financial support from their adult children. Most of the parents (1.5 million) lived in private homes. The likelihood of making voluntary payments to parents is strongly related to the income available to pay. The mean family income of those providing parental financial support was \$44,000. The mean level of support was about \$1,300. Both the Jennings

¹⁴ Elaine M. Brody, Sandra J. Litvin, Christine Hoffman, and Morton H. Kleban, "Marital Status of Caregiving Daughters and Co-Residence With Dependent Parents," *The Gerontologist*, Vol. 35, No. 1, 1995, pp. 75-85.

¹⁵ Rosalind R. Bruno and Andrea Adams, U.S. Bureau of the Census, *School Enrollment—Social and Economic Characteristics of Students: October 1993*, Current Population Reports, P20-479, Washington, DC, October 1994.

¹⁶ Jerry T. Jennings and Robert L. Bennefield, U.S. Bureau of the Census, Who's Helping Out? Support Networks Among American Families: 1988, Current Population Reports, Series P-70, No. 28, Washington, DC, March 1992.

¹⁷ Martin O'Connell, Jerry T. Jennings, Enrique J. Lamas, and John M. McNeil, U.S. Bureau of the Census, *Who's Helping Out?* Support Networks Among American Families, Current Population Reports, Series P-70, No. 13, Washington DC, October 1988, pp. 2, 7-8, 10, 12-13 and tables D, H, I, J, and K.

and Bennefield study and O'Connell et al. established that the only consistently significant variable in their model that was positively related to the level of support for parents was family income. Social and demographic variables were not statistically significant. Of the 2.3 million persons aged 45 to 64 years who provided financial support to nonhousehold members in 1988, only 5 percent (108,000) provided support to both children and adults (presumably some of whom were adults under age 65). Persons aged 45 to 64 years were supporting nearly 2 million adults outside their households. These supported persons were more likely to be an adult child aged 21 and over (37 percent) than a parent (25 percent).

More elderly get financial help than give it¹⁸ but support is not a one-way street. Among the elderly who provided financial support to persons outside their household, about 687,000 provided support to other adults and 48,000 to children (5,000 elderly supported both adults and children). The elderly averaged support payments of \$3,600. About half of all adults receiving support in nursing homes received the support from their children (and about 10 percent from a spouse).¹⁹

Some grandparents, in addition to the regular financial support described

above, provide babysitting support. Casper. Hawkins, and O'Connell used the Fall 1991 Survey of Income and Program Participation (SIPP) to show that some 971,000 children under age 15 were cared for in their own homes by their grandparents (of any age).²⁰ Another 1.1 million were cared for in another home (presumably most often the grandparent's home). Seventyfive percent of these 2.1 million children were under age 5. Where the employed mother was White, grandparents provided 15 percent of the primary care arrangements for children under age 5 compared with 20 percent where the employed mother was Black. Grandparents played an important role in providing care for their preschool grandchildren. About 16 percent of children under 5 years of age who were receiving care, were cared for by a grandparent(s) during the mother's working hours. Grandparents were especially likely to provide care for their preschool grandchildren if the employed mother was a lone parent (never married; widowed; divorced; or married, husband absent-including separated). Grandparents were the primary source of care for 25 percent of lone mothers' children, and for 14 percent of married mothers' children.

Some grandparents also have their adult children and grandchildren living in their homes. Saluter²¹ found that in 1993, 3.4 million grandchildren under 18 years lived in homes maintained by their grandparents. This represented 5 percent of all children

under 18 years, up only slightly from 3 percent of all children in 1970. Of these grandchildren, 14 percent had both parents living with them, 49 percent had only their mother present, 7 percent had only the father present, and 30 percent had no parents present. Nearly one-fourth of the grandchildren had grandparents who were 65 years old and over; 5 percent were 75 and over.²² Black grandchildren were more likely to live in their grandparents' homes (12 percent) than were White children (4 percent). Black grandchildren were also more likely to be living with only their grandparents (39 percent versus 25 percent for White). Among Hispanic children, 6 percent lived in their grandparents' home. Of these, 23 percent lived with only their grandparents (not statistically different from that for Whites).

Furukawa²³, using SIPP data, found that 4.7 million children under age 18 in 1991 lived with at least one grandparent, representing 7 percent of all children under age 18 years. Among children living with at least one grandparent, when both parents of the child also were present in the household, only 38 percent lived in the grandparent's home. By comparison, when only one parent of the child was present in the household, 81 percent lived in the grandparent's home. Since children are the unit of analysis in this study, rather than families, further research is needed to explain the implications of this observed difference in the percent of children who live in

¹⁸ Ibid. O'Connell et al. showed that the characteristics of the elderly make them unlikely as providers of financial help. The typical elderly person in 1985 was a woman who did not complete high school and 2 in 3 had family incomes below \$15,000. As many as 3.4 million were low-income widows. See p. 12 of Current Population Reports, Series P-70, No. 13.

¹⁹ Jerry T. Jennings and Robert L. Bennefield, U.S. Bureau of the Census, *Who's Helping Out? Support Networks Among American Families: 1988*, Current Population Reports, Series P-70, No. 28, Washington, DC, March 1992, tables C, D, and I.

²⁰ Lynne M. Casper, Mary Hawkins, and Martin O'Connell, U.S. Bureau of the Census, Who's Minding the Kids? Child Care Arrangements: Fall 1991, Current Population Reports, P70-36, Washington, DC, 1994, table E.

²¹ Arlene F. Saluter, U.S. Bureau of the Census, *Marital Status and Living Arrangements: March 1993*, Current Population Reports, P20-478, Washington, DC, 1994, p. XII.

²² Claudette E. Bennett, U.S. Bureau of the Census, *The Black Population in the United States: March 1994 and 1993*, Current Population Reports, P20-480, Washington, DC, 1995, table I.

²³ Stacy Furukawa, U.S. Bureau of the Census, *The Diverse Living Arrangements of Children: Summer 1991*, Current Population Reports, P70-38, Washington, DC, 1994, table 12.

the grandparent's home. One could speculate that among multigenerational households, when two parents are living with child(ren) and the child's grandparent(s), the parents may be more likely to provide support; whereas, when a single parent is living with child(ren) and the child's grandparent(s), the grandparent(s) may be more likely to provide support.

Being a grandparent is not synonymous with being elderly. In the three preceding studies, the results discuss grandparents who may be of any age. Thus, many grandparents who are:
1) providing babysitting support, 2) householders, or 3) living with children under age 18, are not aged 65 years and over.

Societal Support Ratios

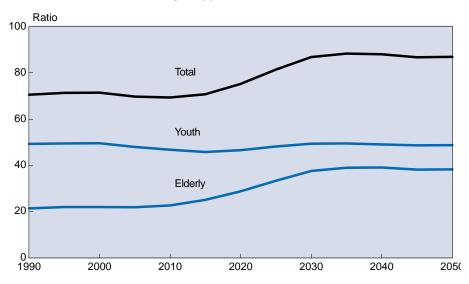
The Ratio of Elderly Persons to Those of Working Age Will Nearly Double From 1990 to 2050

With changes in the balance of the numbers and proportions of persons in broad age groups, public policy issues often arise. We can show broad changes in our age structure by societal support ratios (SR). These are ratios of the number of youth (under age 20) and elderly (65 years and over) per one hundred persons aged 20 to 64 years, the principal ages for participation in the labor force.

Changes in support ratios provide an indirect broad indication of periods when we can expect the particular age distribution of the country to affect the need for distinct types of social services, housing, and consumer products. While not all youth and elderly require support nor do all working-age persons provide direct support to youth or elderly family members, support ratios nevertheless are useful as crude indicators of potential

Figure 2-19.

Total, Youth, and Elderly Support Ratios: 1990 to 2050



Note: Youth Ratio is the number of persons under age 20 divided by the number of persons aged 20 to 64 times 100. Elderly Ratio is the number of persons 65 years and over divided by the number of persons aged 20 to 64 times 100. Total Support Ratio is the sum of the Youth Support Ratio and the Elderly Support Ratio.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data;* 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993. (Middle series projections).

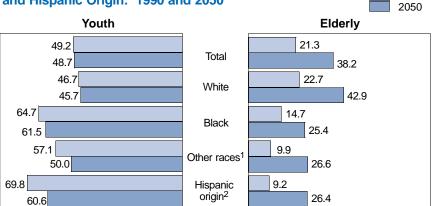
change in the levels of economic and physical support needed. Some argue that the stability of the total SR over time is more pertinent to policy makers than the changes in the composition of the support ratio. Others argue that it is more important to know the balance of old versus young because the relative costs of supporting the young are probably less than for the elderly. Further, the costs of young people are borne by families more than by government programs (with the major exception of education). One major criticism of such ratios, which also are termed "dependency ratios," is that, by using age only for their construction, they ignore the fact that there are many

economically independent older persons, as well as economically dependent unemployed adults.²⁴ Certainly, much depends on the health and economic resources of the aged of the future, as well as the general robustness of the employment situation.

The total SR (youth plus elderly in relation to the working-age population) was 71 youth and elderly per 100 of working age in 1990 (figure 2-19). The total SR would decrease somewhat over the next two decades as the youth ratio declines while the

²⁴ Robert H. Binstock, "The Oldest-Old and 'Intergenerational Equity'," Chapter 19 in *The Oldest Old*, Richard M. Suzman, David P. Willis, and Kenneth G. Manton, (eds), 1992.





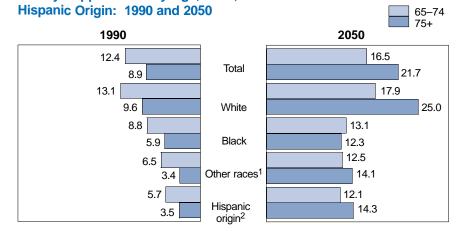
¹ Includes Asian and Pacific Islanders, as well as American Indian, Eskimo, and Aleut.

Note: Youth Ratio is the number of persons under age 20 divided by the number of persons aged 20 to 64 times 100. Elderly Ratio is the number of persons 65 years and over divided by the number of persons aged 20 to 64 times 100.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*; 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993. (Middle series projections).

Figure 2-21.

Elderly Support Ratio by Age, Race, and



¹ Includes Asian and Pacific Islanders, as well as American Indian, Eskimo, and Aleut.

Note: Elderly ratio is the number of persons 65 years and over divided by the number of persons aged 20 to 64 times 100.

Source: U.S. Bureau of the Census, 1990 from 1990 Census of Population and Housing, CPH-L-74, *Modified and Actual Age, Sex, Race, and Hispanic Origin Data*; 2050 from *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993.

elderly support ratio will generally increase slightly. The SR would then begin to climb after 2010 and peak around 2035 as the Baby Boom reaches their elder years and the population of the traditional working ages declines. By 2050, the total SR would be 87 compared with 71 in 1990. The youth support ratio will remain relatively stable throughout the coming decades, with about 1 youth for every 2 persons in the productive ages.

1990

From 1990 to 2050, the total SR would increase most for Whites, from 69 to 89. There will be a profound shift in the composition of the total SR as the support ratio for the elderly population increases while the support ratio for the young population decreases for all groups (figure 2-20). For example, for the Hispanic population, there would be some decrease in the youth SR but the elderly SR would more than double.

The most telling point about the elderly SR is that the population 75 years and over is an increasingly larger proportion of the total elderly population (figure 2-21). Those aged 75 years and over are more likely than those aged 65 to 74 years to have health and disability limitations and reduced economic resources. For each racial and ethnic group, those aged 65 to 74 years comprise the largest proportion of the elderly SR in 1990. By 2050, however, the population 75 years and over could be more than half the elderly SR for each group, except for the Black population. For Blacks, the number of persons aged 65 to 74 years is projected to approach, but remain less than, the 75 and over population.

 $^{^{2}% \}left(-1\right) =0$ Hispanic origin may be of any race.

² Hispanic origin may be of any race.

Our Aging World

Population Aging Is Worldwide

To set the aging of the United States in context, it is useful to look at aging in the rest of the world. Fertility rates and infant and maternal mortality have declined in most nations. Also, mortality from infectious and parasitic diseases has declined. The world's nations generally have improved other aspects of health and education. All of these factors have interacted so that every major region in the world shows an increased proportion of the population that will be 65 or older by 2020.

There were 357 million persons aged 65 and over in the world in 1994 (table 2- 6).²⁵ They represent 6 percent of the world's population. By the year 2000, there would be about 418

million elderly. The annual growth rate for the elderly was 2.8 percent in 1993-94 (compared with an average annual rate for the total world population of 1.6 percent). Such growth is expected to continue far into the 21st century.

Numerical growth of the elderly population is worldwide. It is occurring in both developed and developing countries. The average annual growth rate in 1993-94 of persons 65 years and over was 3.2 percent in developing countries compared with 2.3 percent in the developed world. In absolute numbers, from 1993 to 1994, the net balance of the world's elderly population (65 years and over) increased by over 1,000 persons every hour. Of this increase, 63 percent occurred in developing countries.

Over half (55 percent) of the world's elderly lived in developing nations in 1994. These developing regions could be home to nearly two-thirds (65 percent) of the world's elderly by the year 2020. Thirty nations had

elderly populations of at least 2 million in 1994 (table 2-7). Current population projections indicate there will be 55 such nations by 2020.

Among countries with more than 1 million population, Sweden has the highest proportion of people aged 65 and over, with 18 percent in 1994—about the same as the state of Florida. Sweden also has the highest proportion aged 80 and over with 5 percent. The Caribbean is the oldest of the major developing regions with 7 percent of its population 65 or older in 1994.

By 2020, the elderly will constitute from one-fifth to nearly one-fourth of the population of many European countries. For example, Census Bureau projections indicate that 23 percent of Germany's population would be elderly compared with 22 percent for Italy, Finland, Belgium, Croatia, Denmark, and Greece. The elderly population of 12 additional European countries with more than 1 million population will constitute at

Table 2-6.

World Population by Age and Sex: 1994 and 2000

	Pop	ulation (millions)			Males per		
Year and age	Both sexes	Male	Female	Both sexes	Male	Female	100 females
1994							
All ages	5,640	2,841	2,798	100.0	100.0	100.0	101.5
Under 15 years	1,790	917	873	31.7	32.3	31.2	105.1
15 to 64 years	3,492	1,771	1,722	61.9	62.3	61.5	102.9
65 years and over	357	153	204	6.3	5.4	7.3	75.2
2000							
All ages	6,161	3,103	3,057	100.0	100.0	100.0	101.5
Under 15 years	1,877	962	915	30.5	31.0	29.9	105.2
15 to 64 years	3,866	1,959	1,907	62.7	63.1	62.4	102.8
65 years and over	418	182	236	6.8	5.9	7.7	77.1

Source: U.S. Bureau of the Census, International Data Base.

²⁵ The data for this section are from the Census Bureau's International Data Base on Aging. This file can be obtained from the National Archive of Computerized Data on Aging, a project of the Inter-university Consortium for Political and Social Research, University of Michigan, PO Box 1248, Ann Arbor, MI 48106 (telephone: 313-936-1752).

Table 2-7. **Projected Population for Countries With More Than Two Million Elderly: 1994 and 2020**(In thousands, based on rank in 1994)

Countrylorge	Ra	ank	Population aged 65 years and over		
Country/area	1994	2020	1994	2020	
China, Mainland	1	1	71,073	168,318	
India	2	2	36,282	87,797	
United States.	3	3	33,169	53,348	
Russia	4	5	17,384	26,050	
	5	4	17,140	32,231	
Japan	_		· ·		
Germany	6	7	12,476	18,551	
Italy	7	9	9,259	13,012	
United Kingdom	8	11	9,175	12,018	
France	9	10	8,924	12,969	
Ukraine	10	13	7,155	9,917	
Brazil	11	8	7,098	18,084	
Indonesia	12	6	6,875	19,476	
Spain	13	16	5,768	8,086	
Pakistan	14	14	5,078	9,448	
Poland	15	19	4,216	7,536	
	16	12	· ·		
Mexico			3,882	10,625	
Bangladesh	17	15	3,727	8,949	
Vietnam	18	22	3,570	6,610	
Canada	19	24	3,401	6,287	
Argentina	20	27	3,246	5,022	
Turkey	21	17	3,141	7,835	
Nigeria	22	18	2,818	7,666	
Thailand	23	20	2,809	7,234	
Romania	24	29	2,700	4,398	
Philippines	25	21	2,603	6,631	
			2,368	· ·	
Iran	26	25	· ·	5,199	
South Korea	27	23	2,367	6,607	
Australia	28	32	2,116	3,857	
Egypt	29	26	2,094	5,047	
Netherlands	30	34	2,040	3,467	
Colombia	*	28	*	4,446	
South Africa	*	30	*	4,253	
Burma	*	31	*	4,028	
China, Taiwan	*	33	*	3,490	
Ethiopia	*	35	*	3,224	
Morocco	*	36	*	2,924	
North Korea	*	37	*	2,734	
Sri Lanka	*	38	*	2,584	
Peru	*	39	*	2,535	
Venezuela	*	40	*	2,486	
				•	
Saudi Arabia	*	41	*	2,475	
Algeria	*	42	*	2,413	
Greece	*	43	*	2,348	
Zaire	*	44	*	2,332	
Chile	*	45	*	2,274	
Czech Republic	*	46	*	2,205	
Belgium	*	47	*	2,199	
Hungary	*	48	*	2,181	
Malaysia	*	49	*	2,133	
Uzbekistan	*	50	*	2,132	
Kazakhstan	*	51	*	2,084	
Serbia	*	52	*	2,004	
	*	53	*	· ·	
Portugal	*		*	2,061	
Belarus	*	54		2,021	
Sweden	•	55	· *	2,016	

Source: U.S. Bureau of the Census, International Data Base.

Note: * indicates population in 1994 was less than two million.

least one-fifth of the total country population. The United States would be 16 percent.

Japan's population age 65 and over is expected to grow dramatically in the coming decades. According to projections, the percentage of Japan's population that is elderly could grow from 14 percent (17.1 million) in 1994 to 17 percent (21.0 million) in 2000 and to 26 percent (32.2 million) by 2020 (table 2-8). This is a rapid rise in a short time. Japan's population 80 years and over also is projected to grow very rapidly, from 3 percent of their total population in 1994 to 7 percent by 2020. Already the Japanese are reducing retirement benefits and making other adjustments to prepare for the economic and social results of a rapidly aging society.

In 1994, the world had an estimated 61 million persons aged 80 or older. That number is expected to increase to 146 million by the year 2020. Persons 80 years and over constituted only 1 percent of the world's total population in 1994 and more than 20 percent of the world's elderly (28 percent in developed countries, 16 percent in developing nations).

Developed Countries Now Have Most of World's Oldest Population

Although the developed countries of the world represented only 22 percent of the total world population in 1994, the majority of the world's population aged 80 and over live in developed countries. However, it is projected that by 2020, the majority will live in developing countries. For many nations, the 80-and-over age group will be the fastest growing portion of the elderly population. In 2000, 26 percent of the elderly in the United States would be 80 or older which, among countries with a population size of at

Table 2-8.

Projected Population by Age for Japan: 1994, 2000, and 2020 (In thousands)

Age	1994	2000	2020
Total, all ages	125,107	127,554	126,062
0 to 24 years	39,795	36,145	31,669
25 to 54 years	53,002	53,915	47,297
55 to 59 years	7,906	8,793	7,641
60 to 64 years	7,263	7,609	7,224
65 to 69 years	6,081	6,983	8,097
70 to 74 years	4,340	5,728	8,396
75 to 79 years	3,122	3,897	6,376
80 years and over	3,59	74,483	9,362
55 years and over	32,309	37,494	47,097
65 years and over	17,140	21,092	32,231

Source: U.S. Bureau of the Census, International Data Base.

Table 2-9.

Projected Population for Countries With More Than One Million
Persons Aged 80 Years and Over: 1994 and 2020

(In thousands, based on rank in 1994)

	Ra	ank	Population aged 80 years and over			
Country/area	1994	2020	1994	2020		
China, Mainland	1	1	9,010	28,737		
United States	2	2	7,760	13,007		
India	3	3	4,021	12,639		
Japan	4	4	3,597	9,362		
Russia	5	5	3,317	7,191		
Germany	6	6	3,313	5,889		
France	7	8	2,563	3,754		
United Kingdom	8	9	2,342	3,400		
Italy	9	7	2,221	4,142		
Ukraine	10	12	1,421	2,923		
Spain	11	13	1,287	2,488		
Brazil	*	10	*	3,132		
Indonesia	*	11	*	3,034		
Mexico	*	14	*	2,296		
Poland	*	15	*	1,877		
Turkey	*	16	*	1,751		
Canada	*	17	*	1,595		
Thailand	*	18	*	1,477		
Pakistan	*	19	*	1,385		
Romania	*	20	*	1,264		
South Korea	*	21	*	1,221		
Vietnam	*	22	*	1,199		
Argentina	*	23	*	1,072		
Iran	*	24	*	1,039		

Note: * indicates population 80 years and over in 1994 was less than one million. Source: U.S. Bureau of the Census, International Data Base.

least 5 million, would rank sixth, behind Sweden, Denmark, Switzerland, Cuba, and the United Kingdom.

In 1994, China had the largest number of persons aged 80 or older followed by the United States (table 2-9). Nine additional countries had over 1 million persons 80 years and over in 1994. By 2020, this list is expected to include 13 additional countries, 10 of which are developing countries, the population 80 and over in 2020 is likely to at least quadruple from 1994. This highlights the problems governments may have in planning support services for this burgeoning population group.

The rapid growth of the oldest old has various health and economic implications for individuals, families, and governments throughout the world. The oldest old often have

severe chronic health problems which demand special attention. The nature and duration of their illnesses are likely to produce a substantial need for prolonged care. Developing nations already have diluted resources. They are the most limited in being able to provide preventive measures and, in future years, supportive services. The United States and other countries face enormous investments and payments to maintain current levels of services for the oldest old.

Chapter 3.

Longevity and Health Characteristics

Longevity and Causes of Death

Trends in Life Expectancy and Survival

Most People Live to See Their 65th Birthday

Reductions in mortality have resulted in impressive increases in life expectancy that have contributed to the growth of the older population, especially at the oldest ages. This is in contrast to the early days of our nation when high fertility and high mortality kept the nation "young." Life expectancy at birth was about 35

years when this nation was founded¹ and had increased to perhaps 42 years by the mid-1800's.² By 1900, average life expectancy at birth had increased to 47 years (table 3-1). Life expectancy continued to increase dramatically in the first half of the 20th century, primarily because of

decreased mortality among the young, particularly infants. Under the mortality conditions of 1950, life expectancy at birth had jumped to 68 years. Since then, improvements have slowed. Nevertheless, in 1991, life expectancy at birth had reached a record high of 75.5 years.

Gender and Racial Gaps in Life Expectancy at Birth Persist

From 1900 to 1991, life expectancy at birth increased from 46 years for men to 72 years; for women, the increase was from 48 years to nearly 79 years. Life expectancy at birth has more

Table 3-1. **Life Expectancy at Birth, at 65 Years, and at 75 Years, by Race and Sex: Selected Years, 1900-02 to 1991**(Data are based on the National Vital Statistics System)

.3 46.3 .2 65.6 .7 66.6 .8 67.1	Female Remain 48.3 71.1 73.1	Male ing life expectanc 46.6 66.5	48.7	Male 332.5	Female
.2 65.6 .7 66.6	48.3 71.1	46.6	48.7	³ 32.5	2
.2 65.6 .7 66.6	71.1			³ 32.5	2
.2 65.6 .7 66.6	71.1			³ 32.5	2
.7 66.6		66.5		02.0	³ 33.5
	72.1	50.0	72.2	58.9	62.7
.8 67.1	/3.1	67.4	74.1	60.7	65.9
.01.1	74.7	68.0	75.6	60.0	68.3
.7 70.0	77.4	70.7	78.1	63.8	72.5
.5 72.0	78.9	72.9	79.6	64.6	73.8
.9 11.5	12.2	11.5	12.2	10.4	11.4
.9 12.8	15.0	12.8	15.1	12.9	14.9
.3 12.8	15.8	12.9	15.9	12.7	15.1
.2 13.1	17.0	13.1	17.1	12.5	15.7
.4 14.1	18.3	14.2	18.4	13.0	16.8
.4 15.3	19.1	15.4	19.2	13.4	17.2
.4 8.8	11.5	8.8	11.5	8.3	10.7
	12.1	9.5	12.1	8.7	11.2
3	.9 11.5 i.9 12.8 i.3 12.8 i.2 13.1 i.4 14.1 i.4 15.3	.9 11.5 12.2 .9 12.8 15.0 .3 12.8 15.8 .2 13.1 17.0 .4 14.1 18.3 .4 15.3 19.1 .4 8.8 11.5	.9 11.5 12.2 11.5 .9 12.8 15.0 12.8 .3 12.8 15.8 12.9 .2 13.1 17.0 13.1 .4 14.1 18.3 14.2 .4 15.3 19.1 15.4	.9 11.5 12.2 11.5 12.2 .9 12.8 15.0 12.8 15.1 .3 12.8 15.8 12.9 15.9 .2 13.1 17.0 13.1 17.1 .4 14.1 18.3 14.2 18.4 .4 15.3 19.1 15.4 19.2	.9 11.5 12.2 11.5 12.2 10.4 .9 12.8 15.0 12.8 15.1 12.9 .3 12.8 15.8 12.9 15.9 12.7 .2 13.1 17.0 13.1 17.1 12.5 .4 14.1 18.3 14.2 18.4 13.0 .4 15.3 19.1 15.4 19.2 13.4 .4 8.8 11.5 8.8 11.5 8.3

¹ Death registration area only. The death registration area increased from 10 States and the District of Columbia in 1900 to the coterminous United States in 1933.

Source: National Center for Health Statistics, Health, United States, 1993, Hyattsville, MD, Public Health Service, 1994, table 27.

¹ Life expectancy at birth is defined as the average number of years a person would live given the age-specific mortality rates of a specified year or period. In this chapter, life expectancy is shown also by sex, race, and at selected ages, 65 to 85.

² Irene B. Taeuber and Conrad Taeuber, U.S. Bureau of the Census, *People of the United States in the 20th Century*, U.S. Government Printing Office, Washington, DC, 1971, pp. 497-499.

² Includes deaths of nonresidents of the United States.

³ Figure is for the Black and other races population.

than doubled for Blacks since 1900, from 33 years (for Blacks and "Other" races combined) to 69 years in 1991. For Whites, the increase was from 48 years to 76 years. In the past few decades, the most dramatic mortality reductions among the elderly have occurred among women and among the oldest old.

Survival of the Young

Eighty Percent of Newborns Would Survive to Age 65 Under the Mortality Conditions of 1991

Even as late as 1900, most people did not survive to old age, and few needed to worry about financing many years of retirement. In 1900, about 1 in 5 White children and 1 in 3 children of Black and other races died before their fifth birthday. Now, depending on sex and race, only 1 or 2 of every 100 children die before age 5 years. Under the mortality conditions of 1900, 41 percent of newborns would survive to age 65 (figure 3-1) compared with 80 percent under the mortality conditions of 1991.³

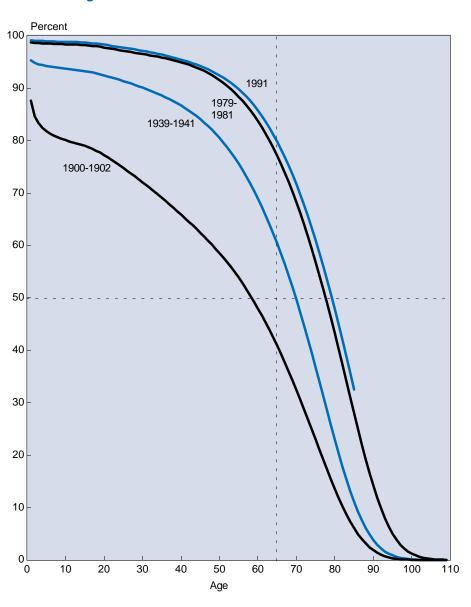
Survival of the Elderly

Improvements in Life Expectancy at Age 65 Have Been Greatest Among White Men in the 1980s

The gains in remaining years of life at age 65 have been less dramatic than among the young. The average expectation of additional years of life at age 65 increased by 46 percent

Figure 3-1.

Percent of Persons Surviving to Each Exact Age
According to Life Tables: 1900-02 to 1991



Source: Data for 1901-1902 from U.S. Bureau of the Census, *United States Life Tables 1890, 1901, 1910, and 1901-1910,* 1921, table 1; 1939–1941 data are from *United States Life Tables and Actuarial Tables 1939–1941,* 1946, table 1; 1979–1981 data are from National Center for Health Statistics: United States Life Tables, *U.S. Decennial Life Tables for 1979–1981,* Vol. 1, No. 1, DHHS Pub. No. (PHS) 85–1150–1, Public Health Service, 1985, table 1, U.S. Government Printing Office, Washington, DC; data for 1991 are from Public Health Service, National Center for Health Statistics, unpublished data from Interpolated Abridged Life Table, 1991.

³ The long-term effect of acquired immunodeficiency syndrome (AIDS) on life expectancy is unclear but recent data suggest that average proportions of infants (both White and Black) surviving to age 65 have continued to increase.

Table 3-2.

Average Number of Years of Life Remaining at Selected Ages by Sex and Race: 1991

	M	ale	Female		
Exact age	White	Black	White	Black	
At birth	72.9	64.6	79.6	73.8	
65	15.4	13.4	19.2	17.2	
70	12.3	10.9	15.5	14.1	
75	9.5	8.7	12.1	11.2	
80	7.2	6.7	9.1	8.6	
85	5.3	5.1	6.5	6.3	

Source: National Center for Health Statistics, unpublished tabulations from abridged 1991 life tables.

Table 3-3. **Life Expectancy at 85 Years by Sex and Race:** 1900-1902 to 1991

(Average number of additional years of life remaining)

	Male		Female		
Year	White	Black	White	Black	
1900-1902	3.8	4.0	4.1	5.1	
1909-1911	3.9	4.5	4.1	5.1	
1919-1921	4.1	4.5	4.2	5.2	
1929-1931	4.0	4.3	4.2	5.5	
1939-1941	4.0	5.1	4.3	6.4	
1949-1951	4.4	5.4	4.8	6.2	
1959-1961	4.3	5.1	4.7	5.4	
1969-1971 ¹	4.6	6.0	5.5	7.1	
1979-1981 ¹	5.1	5.7	6.3	7.2	
1991 ¹	5.3	5.1	6.5	6.3	

¹ Deaths of nonresidents of the United States were excluded beginning in 1970.

Source: National Center for Health Statistics, 1900-1971 from *Vital Statistics of the United States 1978*, Volume II-Section 5, Life Tables. 1979-1981 from *U.S. Decennial Life Tables for 1979-1981*, Volume I, No. 1, U.S. Life Tables. 1991 data from unpublished abridged life table tabulations, the National Center for Health Statistics.

between 1900-1902 and 1991 (from 11.9 years to 17.4 years). Over this long period, the gain among the elderly was 7.0 years for White women, 5.8 years for Black women, 3.9 years for White men, and 3.0 years for Black men (table 3-1).

In the decade of the 1980s, improvements in life expectancy at age 65 have centered primarily on White men (table 3-1). They have registered continuous gains since 1980 when life expectancy at age 65 was 14.2 years and increased to 15.4 years by 1991 (that is, White men age 65 would be expected to live to age 80.4 under the mortality conditions of 1991). For Black men, the gain was less, from 13.0 years to 13.4 years. In fact, life expectancy at age 65 for Black men has declined from an earlier estimate

for 1989 (when Black men age 65 were estimated to live an additional 13.6 years, on average). Life expectancy at age 65 for White women was 0.8 years higher in 1991 than in 1980. For Black women, the 1991 level was only 0.4 years higher. Both White and Black women would have nearly two decades of life remaining at age 65 under the mortality experience of 1991 (19.2 years for White women; 17.2 years for Black women).

Survival of the Oldest Old

White Women Are the Most Likely to Live to Age 85

White women are the most likely to live to age 85 years. Under the mortality conditions of 1991, among those who survive to age 85, White women have the highest level of life expectancy. At age 85, White women would live an additional 6.5 years compared with 6.3 years for Black women. White men at age 85 would survive 5.3 years compared with 5.1 years for Black men (table 3-2). Just as for life expectancy at birth, at age 85 years both White and Black women can still expect to live longer than men.

These estimates of life expectancy at the oldest old ages by race represent a departure from past relationships. That is, data since 1900 have shown a "Black-White crossover" in life expectancy at the oldest ages, with Black life expectancy at age 85 exceeding the corresponding level for Whites of both genders (table 3-3). Recent research by Elo and Preston⁴ has argued that the observed Black-White crossover in mortality experience at older ages results from

⁴ Irma T. Elo and Samuel H. Preston, "Estimating African-American Mortality from Inaccurate Data," *Demography*, Vol. 31, No. 3, August 1994.

errors in the data for Blacks at the oldest ages. Other research leans toward the conclusion that the crossover is real.⁵

In general, surviving to age 65 is much more common nowadays, although considerable variation still exists among various population subgroups. Under the mortality conditions of 1979-81, 80 percent of Whites and Hispanics would survive to age 65. By comparison, 66 percent of Blacks and 71 percent of American Indians would survive to that age.⁶ Of those who live to age 65, one-fourth would survive to age 90 under the mortality conditions of 1979-81 (decennial life tables for 1989-91 are not yet available) compared with only one- eighth in 1949-51 (figure 3-2). The Census Bureau population projections' middle series mortality assumption implies that by the middle of the next century, over 40 percent of persons age 65 years can expect to live to at least age 90.

World's Highest Life Expectancy

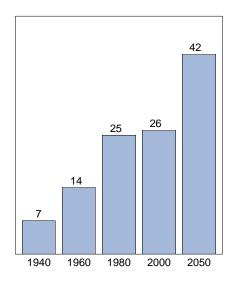
Hong Kong and Japan Have World's Highest Life Expectancy

Among countries with at least one million population, life expectancy at birth in 1994 is projected to be highest in Hong Kong and Japan. Under the mortality conditions of 1990, life

Figure 3-2.

Percent of Persons Age 65

Expected to Survive to Age 90:
1940 to 2050



Source: 1940 to 1980 from National Center for Health Statistics, decennial life tables; 2000 and 2050 from unpublished life tables consistent with *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25-1104, U.S. Government Printing Office, Washington, DC, 1993.

expectancy at birth for Japanese women is 82.5 years. The United States ranks 23rd among the countries of the world in estimated levels of life expectancy at birth in 1994. Under 1990 mortality conditions, Japanese women at age 65 could expect to live an additional 20.6 years, implying that Japanese women who survive to age 65 would live to age 85.6, on average (table 3-4). By comparison, men age 65 years in the U.S. in 1990 could expect to live an additional 15.1 years (or to age 80.1), and women age 65 an additional 18.9 years (or to age 83.9).

Number of Deaths and Death Rates

About 7 in 10 Deaths Occur to People Aged 65 or Older

During 1991, nearly 2.2 million people died in the United States; of these, nearly 1.6 million were elderly: with 0.5 million aged 65 to 74, 0.6 million were aged 75 to 84, and 0.5 million aged 85 and older (table 3-5).⁷ In the future, analysts expect the proportion of deaths at older ages to increase, especially after age 85. While 22 percent of all deaths occurred in 1991 at ages 85 and over, this percentage is expected to continue to increase for the next several decades. Under the Census Bureau's middle series

Mary N. Haan, "Are Older Blacks Really Hardier? Differences in Mortality and Risk Factors in Older Blacks and Whites," *Ethnicity and Disease*, forthcoming.

⁶ National Center for Health Statistics, U.S. Decennial Life Tables for 1979-81, Vol. I, No. 1. Public Health Service. U.S. Government Printing Office, Washington, DC, August 1985. Unpublished life table values for Hispanics from Greg Spencer, Population Division, Bureau of the Census. Life table values for American Indians and Alaskan Natives from Aaron Handler, Indian Health Service, American Indian and Alaskan Native Life Expectancy, 1979-81, for 28 reservation States (which include 67 percent of American Indians) for 1979-81.

National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 42, No. 2(S), August 31, 1993, Hyattsville, MD: Public Health Service, table 2.

Table 3-4. **Life Expectancy at Birth and at 65 Years of Age by Sex:** Selected Countries, 1985 and 1990 (For meaning of abbreviations and symbols see introductory text)

Country ¹	Life exp	,	Life exp at 65		Country ¹	Life expectancy at birth		Life expectancy at 65 years	
·	1985²	1990 ³	1985 ²	1990 ³		1985²	1990 ³	1985²	1990 ³
Male					Female				
Japan	75.0	76.2	15.8	16.5	Japan	81.0	82.5	19.5	20.6
Sweden	73.8	74.8	14.7	15.5	France	80.1	81.8	19.4	20.7
Israel	73.6	74.6	15.1	15.6	Switzerland	80.4	81.0	19.3	19.7
Greece	73.5	74.6	15.3	15.8	Sweden	79.9	80.8	18.7	19.4
Canada	73.1	74.0	14.9	15.5	Canada	80.0	80.8	19.5	19.9
Switzerland	73.5	74.0	15.0	15.3	Spain	79.7	80.5	18.4	19.2
Netherlands	73.1	73.9	14.1	14.4	Italy	78.8	80.4	17.7	19.0
Italy	72.2	73.6	14.0	15.0	Netherlands	79.9	80.3	18.9	19.2
Norway	72.6	73.4	14.4	14.6	Norway	79.6	79.9	18.6	18.7
Spain	73.1	73.4	15.0	15.5	Australia	78.7	79.8	18.2	19.1
France	71.8	73.4	14.9	16.1	Greece	78.5	79.8	17.4	18.3
Australia	72.2	73.2	14.2	15.0	Austria	77.4	79.2	17.0	18.2
United Kingdom	71.3	73.0	13.2	14.1	Finland	79.0	79.0	17.7	17.9
Cuba	72.3	72.9	15.7	15.9	United States	78.2	78.9	18.5	18.9
Austria	70.4	72.6	13.6	14.7	United Kingdom	77.4	78.7	17.3	18.0
Costa Rica	72.0	72.5	14.2	14.4	Germany	(NA)	78.6	(NA)	17.7
Singapore	70.2	72.3	12.9	14.4	Belgium	77.8	78.2	17.5	17.8
Germany	(NA)	72.2	(NA)	14.0	New Zealand	76.9	78.1	17.3	18.1
Denmark	71.7	72.2	13.9	14.0	Israel	77.0	78.1	16.5	17.3
Belgium	70.8	72.0	13.3	14.1	Denmark	77.7	77.9	18.0	18.0
Ireland	70.8	72.0	12.8	13.2	Ireland	76.3	77.7	16.1	17.0
New Zealand	71.0	71.9	13.5	14.3	Singapore	75.6	77.5	15.9	17.2
United States	71.1	71.8	14.5	15.1	Costa Rica	74.5	77.4	17.3	17.2
Finland	70.5	71.0	13.4	13.8	Portugal	76.6	77.3	16.9	17.0
Portugal	69.5	70.1	13.6	13.8	Puerto Rico	77.2	77.2	17.3	17.5 17.8
Chile Puerto Rico	67.4 70.2	69.4 69.1	12.9 15.0	14.0 14.9	Cuba	75.5 74.8	76.8 76.5	17.2 16.3	17.6
Bulgaria	68.3	68.2	12.6	12.8	ChileSlovakia	(NA)	75.7	(NA)	16.1
Czech Republic	(NA)	67.6	(NA)	11.7	Lithuania	(NA) (NA)	75.7 75.7	(NA) (NA)	17.0
Slovakia	(NA)	66.7	(NA)	12.3	Poland	75.0	75.7 75.6	15.9	16.2
	`		` /						
Romania	67.1	66.6	12.8	13.3	Czech Republic	(NA)	75.5	(NA)	15.3
Poland	66.8	66.5	12.5	12.5	Bulgaria	74.2	74.9	14.7	15.3
Lithuania	(NA)	66.0	(NA)	13.3	Estonia	(NA)	74.4	(NA)	15.8
Hungary	65.1	65.1	11.8	12.1	Latvia	(NA)	74.0	(NA)	15.8
Estonia	(NA)	64.1	(NA)	12.1	Hungary	73.2	73.8	15.1	15.4
Latvia	(NA)	63.5	(NA)	12.1	Russia	(NA)	73.4	(NA)	15.8
Russia	(NA)	62.8	(NA)	12.0	Romania	72.7	73.1	14.7	15.2

Note: Rankings are from highest to lowest life expectancy at birth in 1990 based on data for selected countries or geographic areas with at least 1 million population. This table is based on official mortality data from the country concerned, as submitted to the United Nations Demographic Yearbook, the World Health Statistics Annual, or as estimated/projected by the U.S. Bureau of the Census.

Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 26; and U.S. Bureau of the Census, International Data Base.

¹Refers to countries, territories, or geographic areas.

²Data for Costa Rica and United Kingdom are for 1983. Data for Belgium, Finland, Ireland, Chile, Romania, and Poland are for 1984.

³Data for Belgium are for 1986. Data for Costa Rica and Australia are for 1987. Data for Puerto Rico are for 1989.

Deaths and Death Rates by Age, Sex, and Race: 1991
(Rates per 100,000 population in specified group. For meaning of abbreviations and symbols, see introductory text)

		All races			White			Black	
Age	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Number									
All ages Under 1 year. 1-4 years 5-9 years 10-14 years 15-19 years 20-24 years 25-29 years	2,169,518 36,766 7,214 3,926 4,553 15,313 21,139 25,485	1,121,665 21,008 4,045 2,292 2,980 11,358 16,191 18,994	1,047,853 15,758 3,169 1,634 1,573 3,955 4,948 6,491	1,868,904 23,657 5,028 2,903 3,418 11,067 14,921 17,918	956,497 13,696 2,818 1,697 2,219 7,941 11,392 13,470	912,407 9,961 2,210 1,206 1,199 3,126 3,529 4,448	269,525 11,994 1,930 879 990 3,737 5,566 6,811	147,331 6,714 1,083 505 667 3,053 4,312 4,962	122,194 5,280 847 374 323 684 1,254 1,849
30-34 years	34,143 40,561	24,715 28,534	9,428 12,027	24,427 28,928	18,039 20,704	6,388 8,224	8,882 10,651	6,110 7,206	2,772 3,445
40-44 years	47,561 53,627 67,049 96,553 151,525 214,468 264,168 301,822 305,668 477,401	32,018 34,363 41,665 59,342 92,094 126,381 149,475 158,268 140,682 156,823	15,543 19,264 25,384 37,211 59,431 88,087 114,693 143,554 164,986 320,578	35,029 41,199 52,454 78,133 127,160 183,809 232,010 269,816 276,797 439,797	23,848 26,506 32,815 48,337 78,173 109,220 132,362 142,329 127,340 143,266 325	11,181 14,693 19,639 29,796 48,987 74,589 99,648 127,487 149,457 296,531	11,408 11,229 13,135 16,536 21,912 27,578 28,860 28,475 25,707 33,110	7,495 7,149 7,996 9,915 12,535 15,362 15,246 13,964 11,453 11,498	3,913 4,080 5,139 6,621 9,377 12,216 13,614 14,511 14,254 21,612
Percent									
All ages Under 1 year. 1-4 years 5-9 years 10-14 years. 15-19 years. 20-24 years. 20-24 years. 30-34 years. 35-39 years. 40-44 years. 45-49 years. 50-54 years. 55-59 years. 60-64 years.	100.0 1.7 0.3 0.2 0.2 0.7 1.0 1.6 1.9 2.2 2.5 3.1 4.5 7.0	100.0 1.9 0.4 0.2 0.3 1.0 1.4 1.7 2.2 2.5 2.9 3.1 3.7 5.3 8.2	100.0 1.5 0.3 0.2 0.4 0.5 0.6 0.9 1.1 1.5 1.8 2.4 3.6 5.7	100.0 1.3 0.3 0.2 0.2 0.6 0.8 1.0 1.5 1.9 2.2 2.8 4.2 6.8	100.0 1.4 0.3 0.2 0.2 0.8 1.2 1.4 1.9 2.2 2.5 2.8 3.4 5.1 8.2	100.0 1.1 0.2 0.1 0.3 0.4 0.5 0.7 0.9 1.2 1.6 2.2 3.3 5.4	100.0 4.5 0.7 0.3 0.4 1.4 2.1 2.5 3.3 4.0 4.2 4.2 4.9 6.1 8.1	100.0 4.6 0.7 0.3 0.5 2.1 2.9 3.4 4.1 4.9 5.1 4.9 5.4 6.7 8.5	100.0 4.3 0.7 0.3 0.6 1.0 1.5 2.3 2.8 3.2 3.3 4.2 5.4 7.7
65-69 years. 70-74 years. 75-79 years. 80-84 years. 85 years and over	9.9 12.2 13.9 14.1 22.0	11.3 13.3 14.1 12.5 14.0	8.4 10.9 13.7 15.7 30.6	9.8 12.4 14.4 14.8 23.5	11.4 13.8 14.9 13.3 15.0	8.2 10.9 14.0 16.4 32.5	10.2 10.7 10.6 9.5 12.3	10.4 10.3 9.5 7.8 7.8	10.0 11.1 11.9 11.7 17.7

See footnotes at end of table.

Deaths and Death Rates by Age, Sex, and Race: 1991—Continued (Rates per 100,000 population in specified group. For meaning of abbreviations and symbols, see introductory text)

		All races			White			Black	
Age	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Death Rates									
All ages ¹ Under 1 year ² 1-4 years 5-9 years 10-14 years 15-19 years 20-24 years 25-29 years 30-34 years 35-39 years	860.3 916.6 47.4 21.5 25.8 89.0 110.1 123.0 154.1	912.1 1,023.8 52.0 24.5 32.9 128.6 165.6 182.8 224.0 280.5	811.0 804.4 42.7 18.4 18.2 47.2 52.5 62.9 84.7 116.3	886.2 762.6 41.7 19.8 24.2 80.5 95.5 105.2 132.6 168.5	926.2 860.8 45.5 22.6 30.6 112.2 142.3 156.3 194.6 240.5	847.7 659.2 37.6 16.9 17.5 46.9 46.3 52.9 69.8 96.1	864.9 1,771.6 79.7 32.0 36.4 141.2 208.4 247.4 321.5 432.4	998.7 1,957.4 88.4 36.3 48.5 228.0 329.4 378.5 473.3 629.9	744.5 1,580.8 70.8 27.6 24.0 52.3 92.1 128.2 188.3 261.4
40-44 years. 45-49 years. 50-54 years. 55-59 years. 60-64 years. 65-69 years. 70-74 years. 75-79 years. 80-84 years. 85 years and over	53.6 380.5 575.8 926.3 1,431.9 2,136.8 3,205.1 4,806.8 7,575.4 15,107.6	345.8 497.5 736.7 1,189.9 1,862.4 2,814.1 4,233.2 6,376.6 10,005.8 17,800.6	163.7 268.0 423.8 684.5 1,054.3 1,588.3 2,434.1 3,780.7 6,275.6 14,066.6	219.9 340.6 523.9 864.5 2,059.3 3,130.2 4,751.1 7,527.8 15,239.0	300.1 442.9 668.6 1,106.9 1,778.3 2,717.6 4,145.4 6,320.1 9,971.8 18,020.9	140.1 240.4 384.7 638.2 996.5 1,520.4 2,361.9 3,720.1 6,227.4 14,188.1	555.1 773.9 1,084.6 1,574.9 2,238.2 3,159.0 4,352.0 5,823.1 8,655.6 14,271.6	789.8 1,081.5 1,469.9 2,136.9 2,970.4 4,185.8 5,775.0 7,714.9 11,339.6 16,663.8	353.8 516.5 771.6 1,129.9 1,683.5 2,414.2 3,412.0 4,711.4 7,272.4 13,258.9

Source: National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 42, No. 2(S), August 31, 1993.

¹Figures for age not stated are included in "All ages" but are not distributed among age groups. ²Death rates under 1 year (based on population estimates) differ from infant mortality rates (based on live births).

projections, the total number of deaths is expected to increase annually, reaching 3 million in 2024.⁸

The crude death rate for 1991 was 8.6 deaths per 1,000 population of all ages (or, equivalently expressed as 860.3 per 100,000 population). The age-adjusted death rate was 513.7 deaths per 100,000 population. From 1960 to 1991, death rates for the young old (persons aged 65 to 74) decreased by 31 percent (from 3,822 to 2,619 per 100,000 population). A smaller percent decrease of 24 percent occurred during this period for persons 85 years and over (from 19,858 in 1960 to 15,108 per 100,000 population in 1991).

Death Rates Are Higher for Men Than for Women

Men generally have higher death rates than women at every age. In

fact, age-specific male death rates in 1991 ranged from 22 to 215 percent higher than corresponding death rates for females. Since 1960, death rates for persons aged 65 to 74 have decreased the least among Black men. Among White men aged 65 to 74, there were 4,848 deaths per 100,000 population in 1960 compared with 3,350 in 1991 (a 31-percent reduction). For Black men of that age, the death rates were 5,799 in 1960 and 4.851 in 1991 (a 16-percent reduction). Since 1960, death rates decreased about 30 percent among White and Black women aged 65 to 74 (rates per 100,000: White women, 2,779 in 1960 and 1,909 in 1991; Black women, 4,064 and 2,854 respectively).¹¹

Only among Black men do the majority of deaths occur before age 65 (table 3-5). According to data for 1991, 46 percent of Black men died at age 65 or older compared with 68 percent of White men. For Black women, 62 percent died at age 65 or older compared with 82 percent of White women. In 1991, 32 percent of deaths to White women occurred at

age 85 or older compared with only 8 percent of Black men, 15 percent of White men, and 18 percent of Black women.

Among people aged 85 years and over, reported death rates are lowest for Black women and highest for White men. 12 Comparing 1960 to 1991, death rates per 100,000 population 85 years and over were reduced for Whites, especially for White women. Black death rates at age 85 years in 1991 are reportedly greater in 1991 than in 1960. By race and gender, the 1960 to 1991 changes in death rates at age 85 were as follows: White men, from 21,750 to 18,021 (a 17-percent decrease); Black men, from 14,845 to 16,664 (an increase of 12 percent); for White women, from 19,478 to 14,188 (a 27-percent decrease); for Black women, from 13,053 to 13,259 (an increase of 2 percent).

⁸ Jennifer Cheeseman Day, U.S. Bureau of the Census, *Projections of the Population of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25–1104, Washington, DC, 1993, table 1.

⁹ Throughout the remainder of this chapter, all death rates are expressed as per 100,000 resident population.

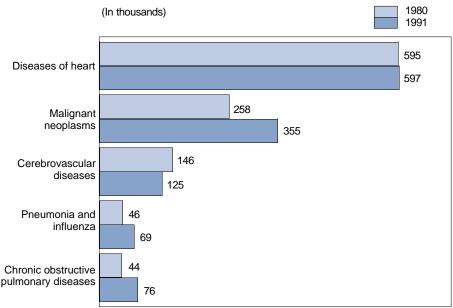
Age-adjusted death rates control for changes and variations in the age composition of the population. They are better indicators than crude death rates for showing changes in mortality risk over time and for showing differences among race-sex groups.

National Center for Health Statistics, Health, United States, 1993, Hyattsville, MD: Public Health Service, 1994, table 41, (data for 1960 include deaths of nonresidents of the United States).

¹² Ibid., table 41. Death rates by race at the oldest ages may be subject to data quality problems. In particular, greater overstatement of age in censuses compared to reported age on death certificates may be factors that contribute to lower observed death rates at the oldest ages for Blacks than for Whites. As a result, the lower mortality of Blacks than Whites at the oldest ages may be due to data deficiencies. See Elo and Preston, 1994, op.

Figure 3-3.

Top Five Causes of Death for the Elderly: 1980 and 1991



Source: National Center for Health Statistics, *Health, United States,* 1993, Hyattsville, MD, Public Health Service, 1994, table 31.

Causes of Death

Heart Disease Is the Leading Cause of Death Among the Elderly

In 1980, three of four elderly deaths were from heart disease, cancer, or stroke. These three major causes of death still were responsible for 7 of

every 10 elderly deaths in 1991. Chronic obstructive pulmonary diseases and influenza and pneumonia are also important causes of death among the elderly.¹³ Heart disease is the leading cause of death within the elderly population (figure 3-3). The total number of deaths due to heart disease in 1991 was about the same as in 1980, at just under 600,000. Cancers, strokes, pneumonia and influenza, and chronic obstructive pulmonary diseases remained the other major causes of death of the elderly population.

Among those aged 65 to 74, heart diseases and cancers were equally prevalent as causes of death; each comprised about one-third of all deaths in that age group in 1991. As age advances, heart disease causes an increasingly larger share of deaths. Heart diseases were the cause of death in 1991 for 44 percent of those 85 years and older.¹⁴

Since the mid-1960's, there has been a consistent decline in deaths attributable to coronary heart disease (CHD). Death rates from CHD are highest among men but are declining more rapidly among White men than among other race-sex groups.

¹³ Ibid., table 31.

National Center for Health Statistics, Monthly Vital Statistics Report, Vol. 42, No. 2(S), August 31, 1993, Hyattsville, MD: Public Health Service, table 7.

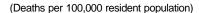
Sempos et al.¹⁵ showed that from 1968 to 1975, the annual rate of decline in deaths due to CHD was about the same for White men, Black men, and Black women, but somewhat lower for White women. After 1976, the decline continued for the four groups but the rapid rate of decline observed in the 1968-to-1975 period continued only for White men.

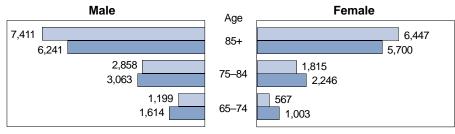
In 1991, among the young old and the aged (65 to 74 years and 75 to 84 years), Black men, followed by White men, had the highest rates of death from both heart disease (figure 3-4) and cancer (figure 3-5). For the 85-and-over group, death rates from heart disease were lower for Blacks than for Whites. Black death rates due to cancers were higher than the corresponding White death rates, even among the oldest old. The higher rate for Blacks among the oldest old is a reversal of the 1960 relationship (table 3-6). In 1991, for cerebrovascular diseases, Blacks had higher death rates than Whites until the oldest ages (figure 3-6).

Among persons aged 65 to 84 years, reported heart disease death rates for 1989-91 are lowest for Asian and Pacific Islanders, while among the population ages 85 years and over, the lowest rates are for American Indians and Alaskan Natives. These findings are in part attributable to inconsistencies in race identification between the underlying source populations (Census Bureau) and death certificate statistics (National Center for Health Statistics) used to calculate

Figure 3-4.

Death Rates for Diseases of Heart for Persons 65 Years and Over by Age, Sex, and Race: 1991





White

Black

White

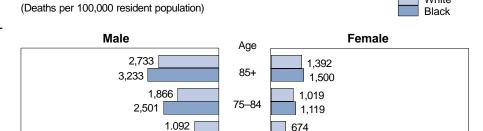
White

Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 42.

Figure 3-5.

Death Rates for Malignant Neoplasms for Persons 65

Years and Over by Age, Sex, and Race: 1991



65-74

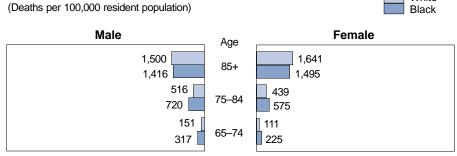
786

Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 44.

Figure 3-6.

Death Rates for Cerebrovascular Diseases for Persons
65 Years and Over by Age, Sex, and Race: 1991

1,587



Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 43.

¹⁵ C. Sempos, R. Cooper, M.G. Kovar, and M. McMillen, "Divergence of the Recent Trends in Coronary Mortality for the Four Major Race-Sex Groups in the United States," *American Journal of Public Health*, Vol. 78, No. 11, 1988, pp. 1422-1427.

Table 3-6.

Death Rates for Diseases of the Heart and Malignant Neoplasms by Age, Race, and Sex: 1960 and 1991

(Deaths per 100,000 resident population. Data are based on the National Vital Statistics System)

Diseases of the Heart 65 to 74 years White male 2,297.9 1,198.6 Black male 2,281.4 1,614.3 White female 1,229.8 567.4 Black female 1,680.5 1,003.4 75 to 84 years 4,839.9 2,858.2 Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over 4,037.9 6,240.6 White male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0 Malignant Neoplasms	ercent change,
65 to 74 years 2,297.9 1,198.6 Black male 2,281.4 1,614.3 White female 1,229.8 567.4 Black female 1,680.5 1,003.4 75 to 84 years Vhite male 4,839.9 2,858.2 Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over White male 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	1960 to 1991
White male 2,297.9 1,198.6 Black male 2,281.4 1,614.3 White female 1,229.8 567.4 Black female 1,680.5 1,003.4 75 to 84 years Vhite male 4,839.9 2,858.2 Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	
Black male 2,281.4 1,614.3 White female 1,229.8 567.4 Black female 1,680.5 1,003.4 75 to 84 years 4,839.9 2,858.2 Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over White male 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	
White female 1,229.8 567.4 Black female 1,680.5 1,003.4 75 to 84 years 4,839.9 2,858.2 Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over White male 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-47.8
Black female 1,680.5 1,003.4 75 to 84 years 4,839.9 2,858.2 Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over 40,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-29.2
75 to 84 years White male	-53.9
White male 4,839.9 2,858.2 Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-40.3
Black male 3,533.6 3,063.1 White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	
White female 3,629.7 1,814.7 Black female 2,926.9 2,246.0 85 years and over 3,629.7 2,246.0 White male 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-40.9
Black female 2,926.9 2,246.0 85 years and over 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-13.3
85 years and over 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-50.0
White male 10,135.8 7,411.2 Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-23.3
Black male 6,037.9 6,240.6 White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	
White female 9,280.8 6,447.3 Black female 5,650.0 5,700.0	-26.9
Black female	3.4
	-30.5
Malignant Neoplasms	0.9
65 to 74 years	
White male	23.0
Black male	69.1
White female	19.9
Black female	45.2
75 to 84 years	
White male	32.0
Black male	137.4
White female	8.5
Black female	60.6
85 years and over	
White male	52.6
Black male	179.9
White female	6.7
Black female	105.8

¹ Includes deaths of nonresidents of the United States.

Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, tables 42 and 44.

the rates. 16 For Hispanic elderly, death rates for heart disease during 1989-91 were about 30 percent below that for White elderly.

Even though heart disease is the major killer of the elderly, there have been meaningful decreases in such death rates since 1960. The declines were largest for those aged 65 to 74 years and for Whites in all elderly age groups. Among the oldest old, Black men and Black women experienced a slight increase in death rates from heart disease (table 3-6).

Death rates from cancer have increased among the elderly since 1960. The increases are especially noticeable among Black men and, to a lesser extent, Black women. White women have had lower rates of increase than White men and Blacks, and especially lower rates of increase after age 75 (table 3-6).

Among persons aged 65 to 74 years, by race and Hispanic origin, cancer death rates in 1989-91 were lowest for Asian/Pacific Islanders (482 per 100,000). American Indian/Alaskan Natives had the lowest cancer death rates, by race and Hispanic origin (805 and 1,082 per 100,000, respectively), for persons aged 75 to 84

¹⁶ National Center for Health Statistics, Health, United States, 1993, Hyattsville, MD: Public Health Service, 1994, table 33. "Consistency of race and Hispanic origin identification between the death certificate (source of data for the numerator of death rates) and data from the Census Bureau (source of data for the denominator) is high for individual White, Black, and Hispanic persons; however, a person identified as American Indian or Asian in data from the Census Bureau is sometimes misreported as White on the death certificate, causing death rates to be underestimated by 22-30 percent for American Indians and by about 12 percent for Asians." (P.D. Sorlie, E. Rogot, and N.J. Johnson, "Validity of Demographic Characteristics on the Death Certificate," Epidemiology, Vol. 3, No. 2, 1992.)

years and for those aged 85 years and over. 17 As with the heart disease death rates discussed previously, these findings are influenced by race identification inconsistencies between the underlying source population and death data used to calculate the rates.

Elderly White Men More Likely to Commit Suicide Than to Die in a Motor Vehicle Accident

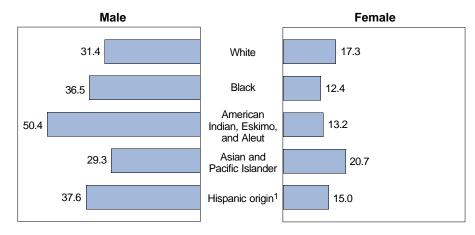
White, Black, and Hispanic origin men aged 65 years and over are 2 to 3 times as likely to die in a motor vehicle accident as the corresponding race/Hispanic origin women (figure 3-7). The pattern of higher motor vehicle accident death rates for males compared to females also is present for age groups under age 65 years. The male-female difference in death rates from motor vehicle accidents among the elderly is least for Asian and Pacific Islanders while the widest differential is observed for American Indian and Alaskan Natives.

Males ages 65 years and over are also much more likely to commit suicide than their female counterparts (figure 3-8). Elderly Black males and elderly Hispanic males have suicide rates 8 to 10 times as great as their female counterparts, respectively. Elderly White males have by far the highest suicide rates among the elderly population. Elderly White males are the only race/ethnic/gender group more likely to commit suicide than to die in a motor vehicle accident. The percent widowed ages 65 to 74 and the percent of unemployed males 65 and over have been shown to significantly contribute to the variation in the

Figure 3-7.

Death Rates for Motor Vehicle Accidents Among the Elderly by Race and Sex: 1989-91

(Deaths per 100,000 resident population)



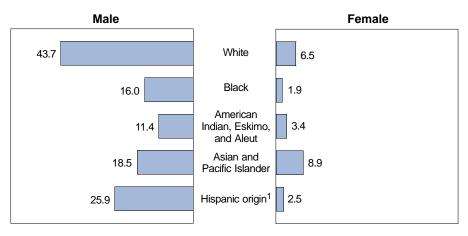
¹ Hispanic origin may be of any race.

Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 36.

Figure 3-8.

Death Rates for Suicide Among the Elderly by Race and Sex: 1989-91

(Deaths per 100,000 resident population)



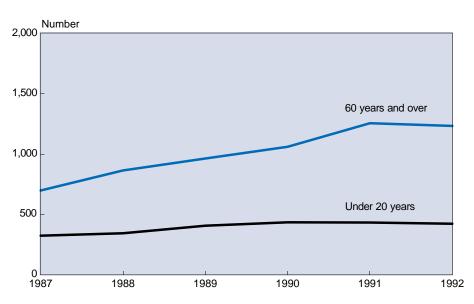
¹ Hispanic origin may be of any race.

Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 37.

¹⁷ Ibid., table 35.

Figure 3-9.

AIDS Deaths Under 20 Years and 60 Years and Over: 1987 to 1992



Source: National Center for Health Statistics, *Health, United States, 1993,* Hyattsville, MD, Public Health Service, 1994, table 62.

White male suicide rate among the young old (65 to 74 years).¹⁸ Other research¹⁹ suggests that lower suicide rates for older women may result from older women possibly having more flexible and diverse coping strategies than older men and concludes that relationships, rather than work, are one important key to prevention of suicide in older men.

AIDS Kills More Elderly Than Children Each Year

In recent years, increased attention has been given to children dying of Acquired Immune Deficiency Syndrome (AIDS). Yet, in 1992, nearly three times as many persons aged 60 years and over died of AIDS as did persons under age 20 (over 1,200 compared to more than 400, figure 3-9). Between 1987 and 1992, the number of children who died of AIDS remained relatively stable. In contrast, the number of persons aged 60 years and over who died from AIDS nearly doubled during the five-year period, 1987 to 1992.

The death rate (per 100,000 resident population) attributed to human immuno-deficiency virus (HIV) infection for infants under age 1 year was the same (2.3) in 1991 as in 1987, while the rate for those aged 65 to 74 rose from 1.3 in 1987 to 2.4 in 1991. The death rates in 1991 for persons aged 1 to 4, 5 to 14, 75 to 84, and 85 and over were 1.0, 0.3, 0.9, and 0.3, respectively. By far the highest death rates from HIV infection remain in the ages from 25 to 54 years.²⁰

Implications

Increasing levels of life expectancy at birth and the shift to a larger proportion of all deaths occurring at the oldest ages have crucial implications for financing a long life even if medical science and changes in personal health practices somehow manage to make old age healthier.

As life expectancy continues to increase, issues arise about the quality of life of older people. The number of years of health in relation to the number of years of chronic illness are important (active life expectancy is discussed below). The financial soundness of retirement plans could be critical to an ever-larger proportion of the population.²¹ We may see more long-term chronic illness, disability, and dependency. At the same time, recent research findings of Manton, Stallard, and Corder indicate that chronic disability rates among the

¹⁸ Patricia L. McCall and Kenneth C. Land, "Trends in White Male Adolescent, Young-Adult, and Elderly Suicide: Are There Common Underlying Structural Factors?" Social Science Research, Vol. 23, 1994, pp. 57-81.

¹⁹ Silvia Sara Canetto, "Gender and Suicide in the Elderly," *Suicide and Life-Threatening Behavior*, Vol. 22(1), 1992, pp. 80-97.

National Center for Health Statistics, Health, United States, 1993, Hyattsville, MD: Public Health Service, 1994, table 48.

²¹ Metropolitan Life Insurance, "New Longevity Record in the United States," *Statistical Bulletin*, Vol. 69, No. 3, 1988, p. 15.

elderly have declined and the prevalence of chronic disease conditions has dropped.²² More people may live long enough to suffer from the cognitive diseases of senile dementia and Alzheimer's disease. Larger numbers of informal caregivers are likely to be elderly, with women in their late sixties increasingly facing the stressful caregiving demands of a surviving parent or parent-in-law aged 85 and over.²³

Health and Disability Status

Many assume health among the elderly has improved because more are living longer. Others hold a contradictory image of the elderly as dependent and frail. Neither view is totally accurate. In one study examining frailty by analyzing deaths due to hunger and exposure among persons 60 years and over, hunger decedents were disproportionately older, White and female (supporting the "frail" stereotype), while the analysis of exposure deaths suggested that younger, male, and minority elderly were at greater risk.²⁴

Poor health is not as prevalent as many assume, especially among the young old. About three-fourths (74.3

percent in 1992) of noninstitutionalized persons aged 65 to 74 consider their health to be good, very good, or excellent compared with others their age as do about two-thirds (66.8 percent) of noninstitutionalized persons 75 years and over. Over the past two decades, the percent of the elderly population identifying their health as good, very good, or excellent has remained fairly consistent (69.8 percent in 1975 compared to 71.3 percent in 1992).²⁵ In a study of "healthy agers," (i.e., persons free of physical performance limitations, selected chronic conditions. limitations of daily activities, and who reported their health as very good to excellent in 1984), Rogers²⁶ found that perceived health was important. Even among persons without the chronic conditions or disabilities in the research model, people who considered themselves in poor health were more likely to die, and those who considered themselves in excellent health were more likely to live. Overall, Rogers estimated that life expectancy at age 55 for healthy agers was 32.5, implying a total life expectancy of 87.5 (83.2 years for males and 92.8 years for females).

Mortality is a limited measure of the health of a population. While more people live to the oldest ages, they may live their increased years with multiple illnesses and disabilities. As described above, heart disease, cancer, and stroke cause many deaths.

These diseases also contribute to chronic health problems and functional dependency. For example, doctors now save the lives of many who would have died from heart attacks in past years. The survivors often face the remainder of their years with chronic, limiting illness or conditions. Other elderly, especially women, have chronic diseases such as arthritis, diabetes, osteoporosis, senile dementia, and so forth. Among those 85 years and over in 1990, nearly 1 in 4 (24.5 percent) lived in a nursing home and many had serious health problems for which they required assistance.

Crimmins, Hayward, and Saito²⁷ have shown that the length of dependent life and the prevalence of disability are affected by changes in mortality and morbidity rates. Simulations based on mortality and morbidity change in the late 1980's indicate that mortality improvements increase the years and the proportion of dependent life, while morbidity improvements act in the opposite direction, reducing both the years and proportion of dependent life. Changing both mortality and morbidity together holds the relative length of dependent life essentially unchanged. Similarly, mortality improvement alone would increase the proportion of functionally dependent individuals, while morbidity improvement would lower this proportion. Their findings indicate that a longer expected life can be accompanied by worsening health.

National Institute on Aging, "Signs of Improving Health Among Older Americans Could Yield Cost Savings," by Carol J. De Vita, Population Reference Bureau, Aging Today: Demographic News for Decisionmakers, No. 3, 1995.

²³ Kenneth G. Manton and Beth J. Soldo, "Disability and Mortality Among the Oldest Old: Implications for Current and Future Health and Long-term-Care Service Needs," Chapter 10 in *The Oldest Old*, Richard M. Suzman, David P. Willis, and Kenneth G. Manton (eds.), 1992, Oxford University Press.

²⁴ Susan M. Macey and Dona F. Schneider, "Frailty and Mortality Among the Elderly," *The Journal of Applied Gerontology*, Vol. 14, No. 1, 1995, pp. 22-32.

²⁵ National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD: Public Health Service, 1994, table 71; and *Health, United States, 1982*, Hyattsville, MD: Public Health Service, 1982, table 27.

²⁶ Richard C. Rogers, "Sociodemographic Characteristics of Long-Lived and Healthy Individuals," *Population and Development Review*, 21(1), 1995, pp. 33-58.

²⁷ Eileen M. Crimmins, Mark D. Hayward, and Yasuhiko Saito, "Changing Mortality and Morbidity Rates and the Health Status and Life Expectancy of the Older Population," *De-mography*, Vol. 31, No. 1, 1994, pp. 159-175.

Habits

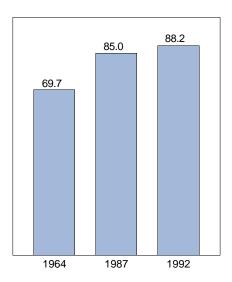
Nearly 9 of 10 Elderly Visited a Physician in the Past Year

The percentage of persons aged 65 years and over visiting a physician in the past year has increased considerably in the past several decades (figure 3-10). This may in part reflect the need for care among those at advanced ages combined with the increased average age of persons aged 65 years and over. The observed

Figure 3-10.

Percent of Elderly Visiting a

Physician in the Last Year:
1964, 1987, and 1992



Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 88.

Table 3-7.

Percent of Persons 65 Years and Over Who Smoked Cigarettes at Time of Survey by Sex and Race: 1965 to 1992

(Data are based on household interviews of a sample of the civilian noninstitutionalized population)

		Male		Female				
	All			All				
Year	races	White	Black	races	White	Black		
1992 ¹	16.1	14.9	28.3	12.4	12.6	11.1		
1990	14.6	13.7	21.5	11.5	11.5	11.1		
1985	19.6	18.9	27.7	13.5	13.3	14.5		
1979	20.9	20.5	26.2	13.2	13.8	8.5		
1974	24.8	24.3	29.7	12.0	12.3	8.9		
1965	28.5	27.7	36.4	9.6	9.8	7.1		

¹ Data for 1992 are not strictly comparable with data for earlier years. Beginning in 1992 the definition of current smoker was modified to specifically include persons who smoked only "some days." Prior to 1992, a current smoker was defined by the questions "Have you ever smoked 100 cigarettes in your lifetime?" and "Do you smoke now?" (traditional definition). In 1992, data were collected for half the respondents using the traditional smoking questions, and for the other half of respondents using a revised smoking question ("Do you smoke everyday, some days, or not at all?"). An unpublished analysis of the 1992 traditional smoking measure revealed that the crude percent of current smokers age 18 and over remained the same as 1991. The figures shown for 1992 in this table combine data collected using the traditional and the revised questions. Future estimates of smoking prevalence will be based on the revised definition which is considered a more complete estimate of smoking prevalence.

Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 72.

increase also may reflect an increase in regular preventive care.

Elderly Black Men Twice as Likely to Smoke as White Men

Smoking has been associated with all three major causes of death (diseases of heart, malignant neoplasm, and cerebrovascular diseases). Men are more likely to smoke and to smoke more heavily than women. Men, however, are relatively more likely to have quit smoking than women. The prevalence of

smoking is lowest in the oldest age groups. In 1992, 16 percent of men aged 65 years and over smoked cigarettes compared with only 12 percent of women. Compared to 1965, the likelihood of smoking in their elder years has decreased among elderly men but increased among elderly women (table 3-7). Elderly Black men are about twice as likely as elderly White men to be a current smoker. Both Black and White women ages 65 years and over have similar proportions of current smokers.

Over Half of Elderly Men Are Current Alcohol Drinkers; Also About One-Third of Elderly Women

Alcohol consumption can have both beneficial and deleterious effects on longevity. The lower mortality risk of light to moderate drinkers results in a J-shaped alcohol-mortality curve. While heavy drinkers are at higher mortality risk due to such conditions as liver cirrhosis, certain cancers, and hypertension, among others, the lower mortality risk of lighter drinkers is almost entirely due to less coronary heart disease.²⁸ Models based on data from the National Health and **Nutrition Examination Survey** (NHANES) and the NHANES I Follow-up indicate that White men who were moderate drinkers had a 3-4 percent longer life span than nondrinkers or light drinkers.²⁹

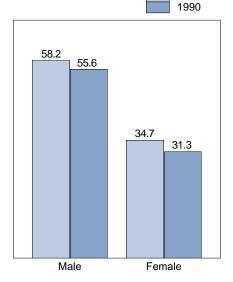
Among adults, the percent who currently drink alcohol generally declines with age. Still, among persons ages 65 years and over in 1990, the majority of men consumed 12 or more drinks in a single year and at least one drink in the past year (i.e., were current drinkers), and about one-third of elderly females were current alcohol drinkers (figure 3-11). The proportion of current alcohol drinkers who are heavy drinkers (consumed 14 or more drinks per week) remains fairly stable for men, by age, at about 14 percent. Although the proportion of heavy drinkers among current drinkers for women is low across age groups, elderly women who are current drinkers are twice as likely to be heavy drinkers (6 percent) as are women aged 18 to 24 years (3 percent).30

Figure 3-11.

Percent of Elderly Population
Who Are Current Alcohol
Drinkers by Sex:

1985 and 1990

1985



Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 77.

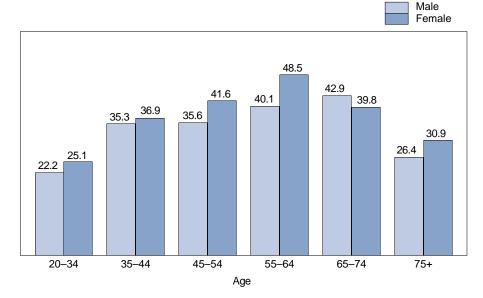
Arthur L. Klatsky and Gary D. Friedman, "Annotation: Alcohol and Longevity,"
 American Journal of Public Health, Vol. 85,
 No. 1, 1995, pp. 16-17.
 Douglas Coate, "Moderate Drinking

²⁹ Douglas Coate, "Moderate Drinking and Coronary Heart Disease Mortality: Evidence from NHANES I and the NHANES I Follow-up," *American Journal of Public Health*, Vol. 83, No. 6, 1993, pp. 888-890.

³⁰ National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD: Public Health Service, 1994, table 77.

Figure 3-12.

Percent of Population Overweight by Age and Sex: 1988-91



Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 80.

Percent Overweight Among Elderly Declines With Age

The percent of the population classified as overweight in 1988-91 peaked for males in the age group 65 to 74, and dropped substantially for those 75 years and over (figure 3-12). The percent of females overweight peaked earlier, at ages 55 to 64, with declining percentages thereafter. A higher proportion of young old (65 to 74 years) males was overweight than young old females. This was the only age group for which the reported percentage overweight is greater for

males than females. The sharply reduced proportions who are overweight after age 64 for females and after age 74 for males might result from several factors. For example, mortality may be selectively higher for overweight persons, leaving a higher proportion of survivors at advanced ages who are not overweight. Other factors might be improved diet (perhaps due to increased contact with physicians, who may educate about food intake or increase fat and sugar restrictions due to existing health conditions or drug interactions), loss of appetite, or reduced ability to afford to consume as much food.

Chronic Illness

Chronic Illnesses Increase With Age and Are More Common Among Women

As chronological age increases, so too does the probability of having multiple chronic illnesses. A study by Guralnik et.al.³¹, found that the proportion of the population 60 years and older with two or more common chronic conditions (referred to as comorbidity) was higher for women than for men. For example, among those 80 years of age and older, 70 percent of the women and 53 percent of the men had two or more of the nine common conditions studied.

With increasing age, rates of hearing and visual impairments increase rapidly. In 1990, 48 percent of men 75 years and over and 37 percent of women (noninstitutionalized) had problems with hearing. Over three of five noninstitutionalized 75-and-older women and more than one in three of the men reported they had arthritis. For men 75 and over, the second most frequently reported chronic condition, after hearing impairment, was heart conditions (40 percent). For women in this age group, the second

³¹ Jack M. Guralnik, Andrea Z. Lacroix, Donald F. Everett, and Mary Grace Kovar, National Center for Health Statistics, *Aging in the Eighties: The Prevalence of Comorbidity and Its Association With Disability, Advance Data*, Number 170, 1989, p. 3. The study looked at nine common chronic conditions: arthritis, hypertension, cataracts, heart disease, varicose veins, diabetes, cancer (except nonmelanoma skin cancer), osteoporosis or hip fracture, and stroke.

ranked chronic condition, following arthritis, was hypertension.³²

Functional Limitations

Difficulty in performing personal care tasks and home management tasks are referred to as "functional limitations." These are measures of ability to live independently and are used as indicators of the need for health services. The scale used to measure the ability to perform physical tasks related to personal care is called the Activities of Daily Living (ADL's). Wiener et al.³³ assessed the variation among the numerous surveys that measure ADL's. The ADL measures vary along several dimensions, including the number of activities considered and the degree of independence in performing physical activities. Most surveys include a list of eating, bathing, dressing, toileting, and getting in or out of a bed or chair. ADL's do not cover all aspects of disability, however, and are not sufficient by themselves to estimate the need for longterm care. Some elderly have cognitive impairments not measured by ADL limitations. An additional commonlyused measure, called Instrumental Activities of Daily Living (IADL's), measures more complex tasks. They usually include handling personal finances, preparing meals, shopping, doing housework, traveling, using the telephone, and taking medications.

There are substantial differences across 11 national surveys in the estimated size of the elderly population with ADL disabilities, as shown in the study by Wiener et al. The various surveys have different purposes, use different lists of activities to measure limitations, and ask about the activities in different ways. Wiener et al. note that ADL estimates of the disabled are affected by whether they include those who can perform an activity if mechanical assistance is available. Despite the differences, the various surveys generally show similar trends among the elderly even though the reported levels are different.

The Need for Personal Assistance With Everyday Activities Increases With Age

The extent of need for personal assistance with everyday activities is an indicator of need for health and social services. Questions were asked in the 1990 and 1991 panels of the Survey of Income and Program

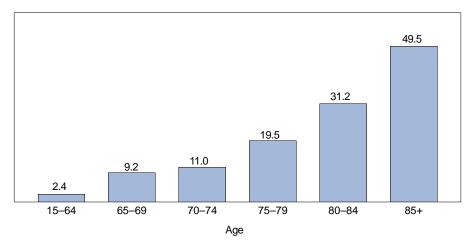
Participation (SIPP) of the civilian noninstitutionalized population about the need for personal assistance with everyday activities. Under the definition used in this study, McNeil³⁴ determined that 4.5 million elderly persons needed assistance with one or more activities (ADL's).

The 1990-91 data from the Survey of Income and Program Participation reveal a strong relationship between age and the need for assistance among the civilian noninstitutionalized population (i.e. persons in institutions, such as nursing homes, are not included in these data). Among persons aged 15 to 64, only 2 percent needed assistance. At older ages,

Figure 3-13.

Percent of Persons Needing Assistance With Everyday Activities by Age: 1991

(Civilian noninstitutional population)



Note: The universe for SIPP data is persons 15 years and older. Source: U.S. Bureau of the Census, 1990 and 1991 panels of the Survey of Income and Program Participation (SIPP) files.

³² U.S. Bureau of the Census, *Statistical Abstract of the United States: 1993*, Washington, DC, 1993, table 206, p. 135.

ington, DC, 1993, table 206, p. 135.

33 J.M. Wiener, R.J. Hanley, R. Clark,
J.F. Van Nostrand, "Measuring the Activities of
Daily Living: Comparisons Across National
Surveys," *Journal of Gerontology*, Volume 45,
No. 6, 1990, pp. S229-237.

³⁴ John M. McNeil, U.S. Bureau of the Census, *Americans With Disabilities:* 1991-92, Current Population Reports, P70-33, Washington, DC. December 1993.

the proportion requiring assistance ranged from 9 percent of those aged 65 to 69 up to 50 percent for those aged 85 or older (figure 3-13). Within each age category, women were more likely to need assistance than men. For example, among noninstitutionalized persons aged 75 and older, 33 percent of women needed help compared with 23 percent of men (figure 3-14). Elderly Blacks and Hispanics were more likely than Whites to need assistance (figure 3-15).

Estimates of the Size of the Dependent Elderly Population Vary

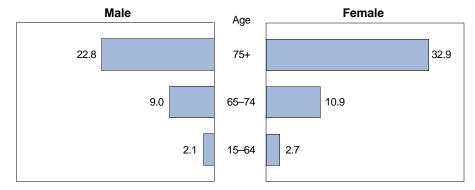
We can get an idea about the size of the elderly population who are dependent. Wiener et al. found that across national surveys, 5 to 8 percent of the noninstitutional elderly received help in one or more of the following five ADL's: bathing, dressing, moving out of beds and chairs, toileting, and eating.³⁵ A broader definition of functionally dependent elderly includes those in nursing homes and the noninstitutionalized elderly with a more extensive list of both ADL's and IADL's.

Hing and Bloom³⁶ defined functional dependency as persons dependent in at least one of seven ADL's or seven IADL's. Under this definition, they estimated 6.7 million noninstitutionalized elderly with functional dependencies. In 1985, all 1.3 million elderly nursing home residents were functionally

Figure 3-14.

Percent of Persons Needing Assistance With Everyday
Activities by Age and Sex: 1991

(Civilian noninstitutional population)



Note: The universe for SIPP data is persons 15 years and older.

Source: U.S. Bureau of the Census, 1990 and 1991 panels of the Survey of Income and Program Participation (SIPP) files.

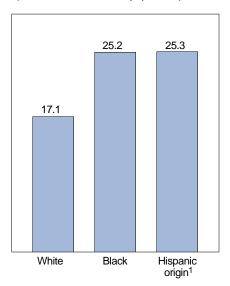
dependent in one or more ADL or IADL activities. Thus, roughly 8 million elderly (including institutionalized) were functionally dependent in the mid-1980's. If doing heavy housework had been excluded from their list of IADLs, the estimate of noninstitutionalized elderly who were functionally dependent would have been reduced to 5.5 million.

A recent Committee on National Statistics workshop noted that the lack of uniform measures used to operationalize functional disability across surveys clearly has produced a wide range in the estimates of the size of the population with disabilities. However, it is less clear whether these inconsistent definitions in the measurement of disability have led to contradictory estimates of disability trends.³⁷

Figure 3-15.

Percent of Persons 65 Years and Over Needing Assistance With Everyday Activities by Race and Hispanic Origin: 1991

(Civilian noninstitutional population)



¹ Hispanic origin may be of any race. Note: The universe for SIPP data is persons 15 years and older.

³⁵ Wiener et al., op.cit., table 1, and p. S235.

³⁶ E. Hing and B. Bloom, National Center for Health Statistics, Long-Term Care for the Functionally Dependent Elderly, Vital and Health Statistics, Series 13, No. 104, DHHS Pub. No. (PHS)90-1765, Hyattsville, MD: Public Health Service, 1990. ADL's include bathing, dressing, eating, getting in or out of beds and chairs, mobility, using the toilet, and continence. IADL's include preparing meals, shopping, managing money, using the telephone, doing light housework, and getting outside.

³⁷ Committee on National Statistics, Trends in Disability at Older Ages: Summary of a Workshop, Vicki A. Freedman and Beth J. Soldo (eds.), 1994, National Academy Press.

Functional Limitations Are More Prevalent Among Women Than Men

Data from the 1991 Survey of Income and Program Participation (SIPP) show that elderly women are more likely than men to have difficulty because of a health or physical problem with most of the activities shown in table 3-8. These SIPP data also suggest that elderly persons living alone generally are more likely to have a functional limitation than those living with others. This may in part reflect the greater tendency for those living alone to be oldest old women.

Hing and Bloom used definitions of functional dependency unique to their report to come to the same conclusions about patterns. In their study, one-third (34 percent) of elderly women were functionally dependent compared with one-fifth (22 percent) of elderly men. They found that functionally dependent elderly males (61 percent) were more likely to live with a spouse than their female counterparts (24 percent). The gender differential in likelihood of living with a spouse increased with age, partly because married men tend to die before their wives. Functionally dependent

women aged 65 to 84 were most likely to live alone (38 percent). Among oldest old functionally dependent women, however, 30 percent lived with someone other than a spouse and 38 percent lived in a nursing home.³⁸

Elderly Blacks Have Higher Rates of Functional Limitations Than Elderly Whites

Regardless of race or sex, functional limitations increase with age, but at a different rate among groups. Data from the 1991 SIPP show the rate of functional limitation was higher among elderly Blacks than Whites. Among the population 65 years and over, 59 percent of Blacks had one or more functional limitations compared with 49 percent of Whites. The limitations were more likely to be severe among elderly Blacks as 40 percent had limitations that were severe compared with 27 percent of White elderly.³⁹

³⁹ McNeil, op. cit., table 6.

Women Have More Years of Expected Dependency Than Men

Active life expectancy, a term coined by Katz et al., 40 refers to the expected years of physical, emotional, and intellectual vigor or functional well being. This concept uses the loss of independence in the activities of daily living (ADLs) as the end of active life expectancy. In their 1974 study of noninstitutionalized elderly in Massachusetts, Katz et al. found that active life expectancy was about 10 years for those aged 65 to 70 years and then decreased to about 3 years for those 85 or older. Active life expectancy was shorter for the poor than for the nonpoor by 2.4 years for the 65-to-69 group and by less than 1 year for those 75 years and older. While men had a shorter life expectancy, surviving men had a greater percentage of remaining years of independent life than women in all age groups. Because of the longer life expectancy of women, the duration of dependency was longer for elderly women than for men.

³⁸ E. Hing and B. Bloom, op. cit., pp. 6-7, table 5. Estimates are based on data collected in the Supplement on Aging to the 1984 National Health Interview Survey and the 1985 National Nursing Home Survey. See report for definitions of functional dependency.

⁴⁰ Sidney Katz et al., "Active Life Expectancy," *The New England Journal of Medicine*, November 17, 1983, pp. 1218-1224.

Table 3-8. Functional Limitations of Persons 65 Years and Over by Age, Sex, and Type of Living Arrangement: 1991 (Civilian noninstitutional population. Numbers in thousands)

		Age								
Functional limitation	Persons 65 years	65	65 to 74 years			75 to 84 years			Living	Living with
	and over	Total	Male	Female	Total	Male	Female	85 years and over		others
Total, 65 years and over	30,748	18,397	8,264	10,133	9,920	3,906	6,014	2,430	9,634	21,214
Percent with difficulty ¹										
Walking	14.3	9.2	7.4	10.5	18.8	16.2	20.4	34.9	18.1	12.6
Getting outside	15.9	8.7	5.9	10.9	22.3	15.9	26.4	44.8	20.7	13.8
Bathing or showering	9.4	5.6	4.0	7.0	11.3	8.6	13.0	30.6	11.2	8.7
Transferring ²	9.0	5.9	4.8	6.9	11.6	9.3	13.1	21.9	10.8	8.2
Dressing	5.8	3.8	3.4	4.1	7.0	5.3	8.1	16.1	6.3	5.6
Using toilet	4.2	2.0	1.5	2.5	5.7	4.2	6.8	14.2	4.8	3.9
Eating	2.1	1.3	0.8	1.7	3.1	3.1	3.1	4.1	2.2	2.0
Preparing meals	8.6	4.5	4.0	4.9	11.7	8.7	13.6	27.6	9.1	8.4
Managing money	7.1	2.8	2.6	3.0	10.3	8.1	11.7	26.2	8.4	6.5
Using the telephone	7.1	3.8	5.2	2.7	9.7	12.3	8.0	21.4	7.1	7.1
Doing light housework	11.4	6.6	5.3	7.7	15.5	12.4	17.5	30.8	13.6	10.4
Percent of total receiving help ³										
Walking	5.9	3.3	2.9	3.5	8.2	8.4	8.0	16.8	4.9	6.4
Getting outside	13.2	6.3	3.7	8.5	18.8	13.4	22.3	42.3	17.2	11.4
Bathing or showering	5.9	3.3	2.6	3.8	7.0	6.2	7.5	20.9	5.0	6.3
Transferring ²	3.9	2.5	2.2	2.7	4.8	3.9	5.4	11.0	2.7	4.5
Dressing	3.9	2.3	2.3	2.3	5.0	4.2	5.5	11.1	2.7	4.4
Using toilet	2.6	1.3	1.0	1.5	3.9	3.4	4.1	7.8	1.9	2.9
Eating	1.1	0.5	0.4	0.6	1.9	2.2	1.7	2.5	0.8	1.2
Preparing meals	7.5	3.6	3.7	3.5	10.5	8.5	11.7	25.4	7.0	7.8
Managing money	6.4	2.5	2.2	2.7	9.1	7.5	10.1	24.6	7.4	5.9
Doing light housework	8.9	4.8	3.9	5.6	12.1	9.3	14.0	27.3	9.6	8.7

¹Difficulty due to a physical or mental health condition. ²Getting in or out of a bed or chair.

Source: U.S. Bureau of the Census, 1991 Survey of Income and Program Participation, Functional Limitations and Disability File, wave 3, unpublished tabulations.

³Receiving help due to a physical or mental health condition with the specified difficulty.

Health Insurance Coverage

Nearly All Elderly Covered by Medicare

Health care coverage is available to nearly all elderly through Medicare. Longitudinal data for a 32-month period beginning in early 1990 from the SIPP indicated that 99.4 percent of the elderly had continuous health insurance coverage, which included private health insurance coverage, Medicare, military health care, and Medicaid. About three-fifths (63 percent) of the elderly were continuously covered by private health insurance during the 1990-92 period.⁴¹

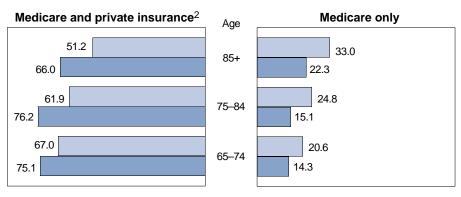
The National Center for Health Statistics reports that in addition to Medicare, private insurance covered three-fourths (75 percent) of persons aged 65 to 74 in 1992 and about two-thirds (66 percent) of persons aged 85 years and over, an increase from 1980. The oldest old are more likely than those aged 65 to 84 years to be covered by Medicare only (figure 3-16).

Both Medicare and private insurance were held by nearly four-fifths (79 percent) of elderly Whites as compared with less than two-fifths of elderly Blacks (39 percent) and elderly Hispanics (36 percent). Medicare was far more likely to be the sole source of insurance for both Black and Hispanic elderly (37 and 30 percent,

Figure 3-16.

Health Care Coverage for Persons 65 Years and Over by Type of Coverage: 1980 and 1992

(In percent. Civilian noninstitutional population)



- ¹ The questionnaire design changed in 1992 compared with 1980. The direction of health care coverage change is consistent with data from the Current Population Survey.
- ² Includes persons not covered by private insurance or Medicaid and a small proportion of persons with other types of coverage, such as CHAMPUS or public assistance.
- Source: National Center for Health Statistics, *Health, United States, 1993*, Hyattsville, MD, Public Health Service, 1994, table 145.

respectively) than for Whites (13 percent).⁴²

Using a broad definition of disability⁴³, 1991-92 SIPP data show that elderly persons not covered by private health insurance were more likely to have a disability and a severe disability than those covered by private insurance

(table 3-9). In part, this may result from more difficulty for the disabled elderly to obtain or qualify for private health insurance coverage.

1980

1992¹

Implications of Health Status for Long-Term Care

Multiple Impairments Lead to Institutionalization

The increasing size of the oldest old population, and their health situation, which clearly declines with increasing age, suggest that a larger number will seek long-term care as part of the continuum from independent living, to assisted living at home, to institutional care. Hing and Bloom found that the elderly with mild impairments were highly likely to live in the community.

⁴¹ Robert L. Bennefield, U.S. Bureau of the Census, *Health Insurance*, 1990 to 1992, Current Population Reports, P70-37, Washington, DC, 1994, table D.

⁴² National Center for Health Statistics, Health, United States, 1993, op.cit., table 145. Data are from the National Health Interview Survey. Data by race and Hispanic origin are age-adjusted.

⁴³ For the purpose of this study, a person was considered to have a disability if the person was identified by any of 12 categories of questions covering such areas as: the use of special aids, sensory and physical functional activities, six Activities of Daily Living (ADL's), five Instrumental Activities of Daily Living (IADL's), the existence of specific conditions, and the presence of a physical, mental, or other health condition that limited the kind or amount of work/housework the person can do.

Table 3-9.

Private Health Insurance Coverage of Persons
65 Years and Over: 1991-92

(In thousands)

Type of functional limitation	Covered	Not covered
Total 65 years and over	23,893	6,796
With a functional limitation Percent	11,964 50.1	4,577 67.4
With a severe functional limitation	7,050 29.5	3,368 49.6

Source: U.S. Bureau of the Census, *Americans With Disabilities: 1991-92*, Current Population Reports, Household Economic Studies, P70-33, U.S. Government Printing Office, Washington, DC, December 1993, table 13.

Elderly with three or more impairments were still likely to live in the community but were much more likely than the mildly impaired to live in a nursing home. Three in five elderly with five or more impairments lived in nursing homes and rarely lived alone (5 percent).⁴⁴

The number of elderly requiring services for functional disabilities can be expected to increase unless there are medical revolutions on several fronts. It is not clear whether the percentage of the oldest old population requiring care will increase. Much turns on whether medical technology can increase active life expectancy among the oldest old as well as increase the length of life. The availability of care that is intermediate between complete

independence in the home and the dependence of a nursing home also appears to be a factor. Recent research found that reliance of elderly community residents on the use of equipment to assist in activities of daily living increased between 1982 and 1989, yet at higher impairment levels, the use of equipment only (without personal assistance) seemed insufficient to support individuals in the community.45 In 1960, 39 percent of nursing home residents were aged 75 to 84 and only 21 percent were 85 or older. In 1990, the proportion 75 to 84 had declined to 34 percent, while the proportion of nursing home residents who were aged 85 and over had doubled to 42 percent.46 That comes from both a decreased probability of dependency among the younger old and increased opportunities

for help in the home that delay movement into a nursing home.

Health-Care Expenditures

An Increased Proportion of Public Health-Care Dollars Go to the Elderly

Nearly 3 of 5 (58 percent) public health-care dollars were spent in 1987 for the elderly, up from one-half (51 percent) in 1977, according to the Health Care Financing Administration (HCFA). (Comparable health care expenditure data by age after 1987 are not available.) In both 1987 and 1977, per capita public expenditures for personal health care were about 17 times greater for the elderly than for children and youth under 19 (table 3-10). During this 10-year period, per capita public expenditures on personal health care for the elderly increased 49 percent (using constant 1987 dol-

Personal health-care expenditures ranged in 1987 from \$3,700 for persons 65 to 69 years old to nearly \$9,200 for persons 85 years and older. Public funds pay about three-fifths of the bill for both age groups (table 3-11). Hospitalization accounts for most of the bill. The services of physicians are the next most costly component for the elderly except for persons 80 years and over. For them, the cost of nursing homes takes second place.

HCFA reports that \$60 billion were spent on nursing home care in 1991. Half of that came from the government (mostly Medicaid) and most of the other half from the out-of-pocket expenses of individuals. Private

⁴⁴ The literature on the link between functional dependency and the increased use of long-term care services is reviewed in Hing and Bloom, op.cit., p. 1. Also see table B (p. 8) for the distribution of functionally dependent persons by living arrangements.

⁴⁵ Kenneth G. Manton, Larry Corder, and Eric Stallard, "Changes in the Use of Personal Assistance and Special Equipment from the 1982 and 1989 NLTCS," *The Gerontologist*, Vol. 33, No. 2, pp. 168-176.

⁴⁶ U.S. Bureau of the Census, U.S. Census of Population: 1960, Subject Reports, *Inmates of Institutions, Final Report*, PC(2)-8A, Washington, DC, 1963, table 7; and *Nursing Home Population: 1990*, CPH-L-137, Washington, DC, 1993, table 2.

health insurance paid for one percent of nursing home costs. From the latest National Nursing Home Survey data, average monthly charges in 1985 were nearly \$1,500 and these costs varied considerably by type of nursing home. Skilled nursing facilities cost the most, about \$1,900 per month. Facilities that were not certified cost under \$900 per month. 47

In 1991, annual Medicare payments per person served ranged from

\$2,700 for persons aged 65 to 66 to \$4,900 for persons 85 years or older. Average payments per person in 1991 for elderly Whites were \$3,800 compared with \$4,600 for persons of other races. Fewer elderly men than women were enrolled in Medicare (12.6 million and 18.8 million, respectively) and fewer men than women were served (the number served per 1,000 enrollees was 759 for men and 828 for women). When men 65 or older used Medicare, the payments per person served averaged higher (\$4,400) than for elderly women

(\$3,600). The gender difference in Medicare payments per elderly enrollee was less (\$3,300 for men and \$3,000 for women).⁴⁸

The elderly represented only about 12 percent of Medicaid recipients (3.7 million elderly) in 1992 but received nearly one-third of the total Medicaid budget. The medical vendor payments for the elderly were \$29.1 billion, about \$7,800 per recipient. 49

Table 3-10.

Personal Health-Care Expenditures, by Age: 1977 and 1987

	A	ggregate amount (in billions)			nt	
Type of expenditure and age	1977 ¹	1987	Percent change	1977 ¹	1987	Percent change
Total expenditures						
All ages	\$281.9	\$447.0	58.6	\$1,234.1	\$1,776.0	43.9
Under 19 years	\$36.6	\$51.9	41.8	\$504.5	\$745.0	47.7
19 to 64 years	\$160.5	\$233.1	45.2	\$1,220.9	\$1,535.0	25.7
65 years and over	\$84.8	\$162.0	91.0	\$3,480.9	\$5,360.0	54.0
Private expenditures						
All ages	\$173.7	\$271.8	56.5	\$759.6	\$1,079.0	42.0
Under 19 years	\$27.0	\$38.1	41.1	\$371.3	\$547.0	47.3
19 to 64 years	\$116.8	\$173.0	48.1	\$889.0	\$1,139.0	28.1
65 years and over	\$29.8	\$60.6	103.4	\$1,224.7	\$2,004.0	63.6
Public expenditures						
All ages	\$108.4	\$175.3	61.7	\$474.5	\$696.0	46.7
Under 19 years	\$9.8	\$13.8	40.8	\$133.2	\$198.0	48.6
19 to 64 years	\$43.5	\$60.0	37.9	\$332.0	\$395.0	19.0
65 years and over	\$55.0	\$101.5	84.5	\$2,258.1	\$3,356.0	48.6

¹ 1977 in 1987 constant dollars.

Source: Health Care Financing Administration, Office of the Actuary, data from the Office of National Cost Estimates.

⁴⁷ National Center for Health Statistics, *Health*, *United States*, *1993*, Hyattsville, MD: Public Health Service, 1994, table 134, p. 230, and table 138, p. 234.

⁴⁸ Ibid., table 148, p. 244.

⁴⁹ Ibid., table 150, p. 247.

Table 3-11.

Per Capita Personal Health-Care Expenditures for Persons 65 Years and Over by Age: 1987 (In dollars)

Age and type of care	Total	Private	Public
65 years and over			
Total Hospital care Physician's services Nursing home care Other personal care	5,360 2,248 1,107 1,085 920	2,004 333 393 634 644	3,356 1,915 714 451 276
65 to 69 years			
Total Hospital care Physician's services Nursing home care. Other personal care	3,728 1,682 974 165 907	1,430 312 380 94 644	2,298 1,370 594 71 263
70 to 74 years			
Total Hospital care Physician's services Nursing home care. Other personal care	4,424 2,062 1,086 360 916	1,564 327 389 205 644	2,860 1,735 697 155 262
75 to 79 years			
Total Hospital care Physician's services Nursing home care. Other personal care	5,455 2,536 1,191 802 925	1,843 341 398 461 644	3,612 2,195 793 341 281
80 to 84 years			
Total Hospital care Physician's services Nursing home care. Other personal care	6,717 2,935 1,246 1,603 934	2,333 355 407 927 644	4,384 2,580 839 676 290
85 years and over			
Total Hospital care Physician's services Nursing home care. Other personal care	9,178 3,231 1,262 3,738 947	3,631 376 420 2,191 645	5,547 2,855 842 1,547 302

Source: Health Care Financing Administration, Office of the Actuary, data from the Office of National Cost Estimates.

Chapter 4.

Economic Characteristics

Work and Retirement

Older persons are a growing proportion of the population of the United States, and more people live longer, but older workers have declined as a share of the nation's work force. In 1970, persons 55 and over represented 19 percent of all adult workers; in 1993, they represented 13 percent.

Few elderly are in the labor force. Only 16 percent of elderly men and 8 percent of elderly women were labor force participants in 1993. A small proportion of the elderly also are expected to be labor force participants in the near future. The Bureau of Labor Statistics (BLS) projects that only 15 percent of men and 9 percent of women 65 years and older will be in the labor force in the year 2005. Among those aged 55 to 64 years, BLS projects that 70 percent of men and 52 percent of women will be in the labor force.¹

There has been a long-term trend among men in their mid-50's and early 60's to retire early, that is, before the age when they can receive full retirement benefits. While the declining trend in labor force participation rates for men aged 50 and over leveled off in the mid-1980's, early pensioners increasingly returned to work, especially part time, between 1984 and 1993.² For older women, their labor force participation pattern over the past few decades has differed from that of older men. Women in their

late 50's have been increasingly likely to be labor force participants.

Labor Force Participation Trends

Today's Older Men Less Likely to Participate in the Labor Force Than Past Generations

Older men are less likely to be in the labor force today than was true four decades ago (figure 4-1). In 1950, two-thirds (69 percent) of men 55 and older, and nearly half (46 percent) of men 65 and older were in the labor force. In 1993, about 2 in 5 (38 percent) men 55 and over, and about 1 in 6 (16 percent) elderly men were in the labor force. The change is significant even among men aged 55 to 59. In 1967, 90 percent of men that age

(Civilian noninstitutional population)

37.6

were in the labor force compared with 78 percent in 1993.³

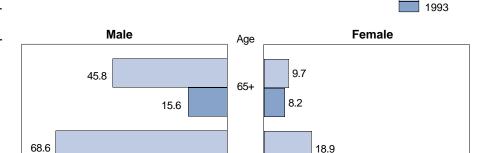
The BLS projects that labor force participation rates of men aged 55 to 59 will continue to decline through 2005, as they have in the past, but at a slower rate. Labor force participation rates for men aged 65 to 69 and 70 to 74 increased slightly from 1985 to 1990. BLS does not project a continuation of this pattern through 2005, although they do project slight increases for men aged 60 to 64 years (table 4-1).

23.0

1950

Figure 4-1.

Percent of Older Population in the Labor Force by Age and Sex: 1950 and 1993



55+

Source: U.S. Bureau of Labor Statistics, 1950 from 1950 Current Population Survey, unpublished tabulations; 1993 from Reprint of 1993, Annual Average Tables from the January 1994 Issue of Employment and Earnings, table 3.

¹ Howard N. Fullerton, "Another Look at the Labor Force," *Monthly Labor Review*, Vol. 116, No. 11, 1993, p. 24, table 4.

² Diane E. Herz, "Work After Early Retirement: An Increasing Trend Among Men," Monthly Labor Review, April 1995, pp. 13-20.

³ For 1967 data, see Diane E. Herz, Bureau of Labor Statistics, "Employment Characteristics of Older Women, 1987," *Monthly Labor Review*, September 1988, table 1, p. 4.

As a result of early retirement and increased life expectancy, pensions, savings, and Social Security are spread over a longer period than in the past for many retirees. Men aged 55 years old in 1991 would, on average, live about 22 additional years (and women an additional 27 years). Most of these years are likely to be spent in retirement, with some portion spent in the labor force, and some time spent with a functional limitation or disability.

Oldest Persons Unlikely to Be in Labor Force

Among older men, 1993 labor force participation rates decreased rapidly with age: from 78 percent for men aged 55 to 59, to 25 percent for men aged 65 to 69, and 7 percent for men aged 75 years and over. Partly because of health and educational differences, labor force participation rates are lower for older Black men than for older White men (detailed table 8-2).⁴

The trend in labor force participation after age 65 years is clear. Among men aged 65 to 69, 28 percent were in the labor force in 1990 compared with 60 percent in 1950. After that age, participation declines rapidly so that only 6 percent of men aged 80 to 84 and 3 percent aged 85 and over were still in the labor force in 1990 (about one-half of the corresponding 1950 proportions). According to the 1990 decennial census, White, Black, and Hispanic origin men 80 years and over had similar rates of participation.

Table 4-1.

Percentage Point Change in Labor Force Participation Rates of Men 55 Years and Over by Age: 1970 to 2005

Period	55 years and over	55 to 59 years	60 to 64 years	65 to 69 years	70 to 74 years
Historical					
1970 to 1975	-6.4	-5.1	-9.5	-9.9	-5.9
1975 to 1980	-3.7	-2.7	-4.7	-3.2	-2.9
1980 to 1985	-4.6	-2.1	-5.2	-4.1	-3.3
1985 to 1990	-1.7	0.2	-0.1	1.6	0.6
Projected					
1990 to 1995	-1.2	-0.5	-0.5	-0.3	-0.3
1995 to 2000	0.9	0.0	1.1	-0.2	0.0
2000 to 2005	2.0	-0.1	0.9	-0.2	0.0

Source: U.S. Bureau of Labor Statistics, unpublished data consistent with Office of Employment Projections.

Today's Older Women More Likely to Participate in the Labor Force Than Past Generations

Today's older women grew up in an age when society did not encourage or expect married women to work outside the home. They have been less likely to be in the labor force at every age than is true of younger cohorts. For example, 38 percent of women in their thirties were in the labor force in 1957.5 More than three decades later, the proportion had nearly doubled, with 74 percent of women in their thirties in the labor force in 1993.6 This increase indicates that the older female worker of the future will bring different needs and resources to the workplace. Research shows that women who had strong life-long attachments to the labor force were more likely to continue working in later life than were women

who were in the workforce intermittently for family-related reasons.⁷

While the level of partication of older men in the labor force has decreased, the participation of women in their fifties has substantially increased. In 1950, only 31 percent of women aged 50 to 54 were in the labor force, which increased to 47 percent in 1970, and to 70 percent in 1993. The increase in participation for women aged 55 to 59 years was similarly striking. From 1950 to 1970 to 1993 the corresponding percentages were 26, 47, and 57 percent. For women aged 60 to 64, their labor force participation increased from 21 percent in 1950 to 36 percent in 1970, but there has been little change since 1970, with a participation rate of 37 percent in 1993 (table 4-2).

⁴ Herbert S. Parnes and David G. Sommers, "Shunning Retirement: Work Experience of Men in Their Seventies and Early Eighties," *Journals of Gerontology*, Vol. 49, No. 3, 1994, pp. S117-S124.

⁵ Herz, op.cit., 1988, p. 4.

⁶ Bureau of Labor Statistics, *Employment* and *Earnings*, January 1994, table 3.

⁷ Amy M. Pienta, Jeffrey A. Burr, and Jan E. Mutchler, "Women's Labor Force Participation in Later Life: The Effects of Early Work and Family Experiences," *Journals of Gerontology*, Vol. 49, No. 5, 1994, pp. S231-S239.

Table 4-2.
Labor Force Participation Rates of Persons 50 Years and Over by Age, Sex, Race, and Hispanic Origin: 1950 to 1990

Age, sex, race, and Hispanic origin	1950	1960	1970	1980 ¹	1990	Age, sex, race, and Hispanic origin	1950	1960	1970	1980¹	1990
Total Male						Black Male ³					
50 to 54 years. 55 to 59 years. 60 to 64 years. 65 to 69 years. 70 to 74 years. 75 to 79 years. 80 to 84 years. 85 years and over	90.6 86.7 79.4 59.8 38.7 24.2 13.2 6.9	92.2 87.7 77.6 43.8 28.7 19.5 11.5	91.4 86.8 73.0 39.0 22.4 14.2 9.1 (²)	88.5 80.6 60.4 29.2 18.3 16.7 10.4 6.6	88.3 78.7 55.1 27.9 16.7 10.6 6.2 3.4	50 to 54 years. 55 to 59 years. 60 to 64 years. 65 to 69 years. 70 to 74 years. 75 to 79 years. 80 to 84 years. 85 years and over	86.9 82.9 76.0 58.1 40.2 27.6 16.7 9.8	86.0 80.8 68.9 40.6 27.3 19.2 12.1 8.0	83.7 77.9 65.9 35.4 19.6 13.0 9.7 (²)	78.3 69.4 53.7 26.1 16.3 13.7 8.8 6.6	78.5 68.3 47.3 22.8 14.0 10.1 6.2 3.2
Total Female						Black Female ³					
50 to 54 years. 55 to 59 years. 60 to 64 years. 65 to 69 years. 70 to 74 years. 75 to 79 years. 80 to 84 years. 85 years and over	30.8 25.9 20.5 12.8 6.6 3.5 1.7	45.8 39.7 29.5 16.6 9.6 5.6 3.0 2.0	52.0 47.4 36.1 17.2 9.1 5.5 3.5 (²)	56.3 48.4 34.0 15.0 7.8 6.1 3.7 2.5	67.5 55.4 36.1 16.9 8.3 4.5 2.2 1.0	50 to 54 years. 55 to 59 years. 60 to 64 years. 65 to 69 years. 70 to 74 years. 75 to 79 years. 80 to 84 years. 85 years and over	40.9 34.9 27.6 16.4 8.4 5.1 2.4 2.1	52.5 44.7 34.1 19.5 11.5 7.0 4.0 3.1	56.5 50.2 38.8 19.4 11.6 7.5 5.7 (²)	58.4 50.2 36.9 16.9 9.3 6.9 4.2 3.2	67.7 56.3 37.7 18.2 9.8 6.2 3.3 1.7
White Male						Hispanic Origin Male ⁴					
50 to 54 years	91.0 87.0 79.7 60.0 38.6 23.9 12.9 6.9	92.8 88.5 78.4 44.1 28.8 19.6 11.5 7.0	92.2 87.6 73.7 39.3 22.7 14.3 9.0 (²)	89.6 81.8 61.0 29.5 18.5 17.0 10.5 6.6	89.6 79.9 55.7 28.3 16.9 10.6 6.2 3.4	50 to 54 years	(NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	88.6 84.1 70.3 36.8 19.7 13.6 8.5 (²)	86.5 78.8 62.6 31.7 18.7 13.9 9.6 6.8	86.1 78.3 58.8 29.7 18.2 11.0 5.5 4.4
White Female						Hispanic Origin Female⁴					
50 to 54 years. 55 to 59 years. 60 to 64 years. 65 to 69 years. 70 to 74 years. 75 to 79 years. 80 to 84 years. 85 years and over	29.8 25.2 20.0 12.5 6.5 3.4 1.6 1.2	45.1 39.1 29.1 16.3 9.4 5.5 3.0 1.9	51.5 47.1 35.9 17.0 8.9 5.3 3.4 (²)	56.1 48.2 33.8 14.8 7.7 6.0 3.6 2.5	68.0 55.6 36.0 16.8 8.2 4.3 2.0 0.9	50 to 54 years. 55 to 59 years. 60 to 64 years. 65 to 69 years. 70 to 74 years. 75 to 79 years. 80 to 84 years. 85 years and over	(NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	42.0 34.7 24.3 11.2 6.3 5.0 3.6 (²)	50.5 42.4 30.3 12.3 6.9 4.2 3.0 2.7	58.2 48.2 34.3 15.1 7.6 4.3 2.8 2.4

¹The figures for age groups 75 years and over are employment rates and do not include unemployed persons in the labor force.

²Data for the population 85 and over in 1970 are not shown here because the count of persons 100 years and over was distorted by a problem with the design of the questionnaire.

³Data for 1950 and 1960 are shown for Nonwhite.

⁴Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1950 to 1980 from Decennial censuses; 1980 detailed age data for population 75 years and over from special tabulations prepared for the National Institute on Aging (Summary Tape File 5A, table 18) and 1990 from Public-Use Microdata Sample File (PUMS).

For women 65 years and over, labor force participation rates have remained at a low level for decades (for example, 10 percent in 1950; 10 percent in 1967; 8 percent in 1993).⁸ As they age, elderly women (and men) who do work often reduce the length of their work week and the number of weeks they work in a year. More than half (58 percent) of women aged 55 to 61 with work experience in 1992 worked full time (35 hours or more per week) and year round (50 to 52 weeks) compared with only about one-fourth (23 percent) of women

65 years and over who worked such schedules.⁹

Older Women Participate in the Labor Force Less Than Older Men, But Women Are a Larger Share of Today's Older Work Force

Older women, as a group, participate in the labor force less than older men. Just as with men, the 1993 rates of older women dropped rapidly with age: from 57 percent for women aged 55 to 59, to 16 percent for women aged 65 to 69, and 3 percent

for women aged 75 and over. There is no meaningful difference between the rates for older White and Black women except for those aged 55 to 59. For that age group, the labor force participation rate for Black women was 53 percent compared with 58 percent for White women (detailed table 8-2).

Women have become a larger share of the older work force, largely because so many men are leaving the labor force at earlier ages. Additionally, more women have long-term experience in the labor force, and are working beyond age 55 years. The female share of the older (55 years and older) work force increased from

Table 4-3.
Occupational Category in 1989 by 1966 Occupational Category for Men Employed in Both Years and Aged 69 to 84 Years in 1990

(In percent. For meaning of abbreviations and symbols, see introductory text)

	1989 Category									
1966 Category	Total	Professional	Managerial	Clerical/ sales	Craftsmen	Operatives/ service/ laborers	Farmers/ farm laborers			
Professional	100.0	57.5	12.2	11.6	3.5	4.7	10.5			
Managerial	100.0	7.8	36.6	24.7	15.0	14.2	1.7			
Clerical/sales	100.0	5.1	5.3	49.2	5.3	27.8	7.4			
Craftsmen	100.0	5.9	15.3	8.0	30.3	30.9	9.6			
Operatives/service/ laborers	100.0	2.2	8.9	8.1	5.0	59.1	16.7			
Farmers/farm laborers	100.0	-	6.9	1.3	7.5	21.9	62.4			
1966 percent distribution	100.0	20.7	19.5	12.0	16.5	15.2	16.2			
1989 percent distribution	100.0	15.3	15.3	15.9	11.2	24.7	17.6			

Note: Occupational groups are based on 1960 Major Occupation Groups. Percentages may not add to 100 due to rounding.

Source: Herbert S. Parnes and David G. Sommers, "Shunning Retirement: Work Experience of Men in Their Seventies and Early Eighties," *The Journals of Gerontology*, Volume 49, No. 3, May 1994, pp. S117-S124.

⁸ Bureau of Labor Statistics, unpublished annual averages from the 1950 Current Population Survey; Herz, op. cit., 1988, table 1; and Bureau of Labor Statistics, op. cit., 1994, table 3.

⁹ U.S. Bureau of Labor Statistics, Division of Labor Force Statistics, unpublished tabulations on work experience in 1992 from the March 1993 Current Population Survey, table 1

23 percent in 1950 to 44 percent of all older workers in 1993 (2.4 million women aged 55 or older in the civilian labor force in 1950 compared with 6.7 million in 1993).

Occupations, Retirement, and Pension Coverage

Occupational Change of Older Men: 1966 to 1989

In a survey of elderly men (69 to 84 years of age) taken in late 1990, it was found that nearly one in six were employed at the time of the survey, and that about one in five had worked at some time during the previous year (1989). Most of those who were not working reported they did not want to work.¹⁰

In a comparison of occupational groups of these elderly men who worked in 1989, most were in the same occupational group in 1989 as in 1966 (table 4-3). The broad occupational categories with the largest percentages of continuity were farmers and farm laborers, operatives/ service/laborers, and professionals. Among those men employed as farmers and farm laborers in 1966 who also were employed in 1989, 62 percent remained employed as farmers or farm laborers in 1989. Of elderly men employed as operatives/service/ laborers and professionals in 1989, the percents in the same occupation group in 1966 were 59 and 58 percent, respectively. 11

Retirement Patterns Differ Among Occupation and Industry Groups

The occupations and work-life patterns of individuals have lifetime implications. Among older men in the 1970's, Hayward and Grady showed that operatives and laborers were more likely to leave the labor force at age 55 than were professionals, managers, and men in sales. Selfemployed workers had the longest working life expectancy compared with other classes of workers even though they had the highest rates of disability expectancy. This could reflect a delay among the self employed in accumulating savings to finance retirement, a delay which may extend to ages when health problems are more likely to occur. 12

Occupational, social, economic, and demographic factors affect the chances that an individual will re-enter the labor force after the first "retirement." For example, only 37 percent of workers in personal services industries and 34 percent in agriculture, forestry, and fisheries industries were covered by pension plans in 1991.¹³ Farm laborers were shown to be much more likely to re-enter the labor force than were workers in industries widely covered by pension plans. Lower rates of re-entry among former workers in manufacturing industries may be indicative of extensive pension systems achieved through collective bargaining (health status

and lack of opportunity may also be important).¹⁴

Employment of older workers also is related to the Nation's economic fortunes and to demographics. The trend toward earlier retirement for older men slowed down in the mid-1980's. It was a period of economic expansion and a reduced number of young workers as the Baby Bust cohort moved into the labor force. Emerging labor shortages in the late 1980's resulted in employers turning to older workers. However, the 1990 recession then led employers to focus on older workers, this time to cut costs, resulting in increases in early retirement buy-outs and layoffs of older workers. 15

Women More Likely to Have Pensions in Their Own Names in the Future

In the future, a greater proportion of elderly are likely to have pensions and that may reduce their desire or necessity to work. As a result of the greater likelihood of women working now than in the past, young and middle-aged women are likely to have been in the labor force long enough to have savings, pensions, and Social Security in their own names, which make a significant difference in their economic status as they age. Data from the Survey of Income and Program Participation (SIPP) show that in 1991, 67 percent of women wage and salary workers 25 years old and over were covered by a pension plan and 44 percent were vested. Sixty-eight percent of men were covered by a

¹⁰ Herbert S. Parnes and David G. Sommers, 1994, op.cit., p. S122.

¹¹ Ibid. The classification system is based on the 1960 occupational classification system.

Mark D. Hayward and William R. Grady, "Work and Retirement Among a Cohort of Older Men in the United States, 1966-1983," *Demography*, Vol. 27, No. 3, 1990, pp. 337-356. The National Longitudinal Survey of Mature Males (NLS) is used to estimate the working life tables.

¹³ Unpublished data from the 1990 Panel of the Survey of Income and Program Participation (SIPP), wave 4. The two percentages were not significantly different.

¹⁴ Hayward and Grady, op.cit.

¹⁵ Herz, op. cit., 1995.

pension plan and 50 percent were vested.16

Increasing Proportions of Early Pensioners Are Working

Both full- and part-time work among men under age 65 who receive pension income has increased markedly since the mid-1980's.17 Half of men aged 55 to 61 and one-fourth of men aged 62 to 64 who had pension income in 1993 were "working retirees," that is, they had re-entered the labor force after their first retirement. Most were working part-time (less than 35 hours a week). Research by Herz shows that a number of factors probably play a role in early retirees returning to the workplace. These include improved health, longer life expectancies, unplanned forced retirements, loss of health insurance coverage for retirees, and erosion of retirees' annuities due to inflation.¹⁸

It is difficult to predict how changes in pension plans may affect early retirement decisions. In the early 1970's about 15 percent of those with defined benefit plans had qualified for early retirement by age 55 years. By 1989, the corresponding proportion had increased to over three-fourths. Still, recent research indicates that only about one fourth of the decline in labor force participation rates of 60 year olds between the early 1970's and 1983 can be explained by changes in pension incentives and social security provisions during the

period.¹⁹ Other research shows that labor force participation rates of older men are poor indicators of the work-to-retirement transition.²⁰

Part-Time Employment

Over Half of Elderly Nonagricultural Workers Are on Part-Time Schedules

A large proportion of elderly who remain in the labor force work part time. In 1993, about 2.9 million elderly persons (65 years and over) were at work in nonagricultural industries and more than half of these elderly workers (54 percent) were on part-time schedules (48 percent of the men and 60 percent of the women). These proportions are comparable to the levels observed in 1981, but represent a substantial increase compared with 1960 when only 30 percent of the men and 43 percent of the women worked part time.21

Most elderly part-time workers in 1993 reported being on such a schedule

voluntarily (90 percent) rather than due to economic reasons (10 percent) such as slack work or because they could only find part-time work. Among all workers in nonagricultural industries on part-time schedules, 7 percent were elderly workers.²²

In the 1980's. Most Social Security Beneficiaries Did Not Work; When They Did, They Worked Part Time

In a longitudinal study of work patterns of Social Security beneficiaries during the 1982-91 period, among persons who were in their early-tomid-seventies in 1991, 16 percent of the men and 10 percent of the women worked in 1990.²³ Only 3 percent of the men and 1 percent of the women worked year round and full time in 1990. Part-time hours for part of the year were the most common work pattern during the decade and occurred among 19 percent of the men and 15 percent of the women. The great majority, however, did not work at all over the decade (62 percent of the men and 72 percent of the women). Only about 10 percent of men and 8 percent of women returned to work after a year without working. Most of the men who returned to work said it was because they wanted to work (43 percent) but for 29 percent of the men the reason was financial need. For women, both financial need (33 percent) and personal preference (36 percent) were important. Other research shows that older men who

¹⁶ Unpublished data from the 1990 Panel of the Survey of Income and Program Participation (SIPP), wave 4. The male and female pension coverage rates were not significantly different.

¹⁷ Herz, op. cit., 1995, p. 14.

¹⁸ Ibid., pp. 14–17.

¹⁹ Patricia M. Anderson, Alan L. Gustman, and Thomas L. Steinmeier, "Trends in Male Labor Force Participation and Retirement: Some Evidence on the Role of Pensions and Social Security in the 1970's and 1980's," Unpublished manuscript, Dartmouth College, Hanover, NH.

²⁰ Mark D. Hayward, Eileen M. Crimmins, and Linda A. Wray, "The Relationship Between Retirement Life Cycle Changes and Older Men's Labor Force Participation Rates,' Journals of Gerontology, Vol. 49, No. 5, 1994, pp. S219-S230.

²¹ Bureau of Labor Statistics, op.cit., table 33; Robert L. Stein and Herman Travis, Labor Force and Employment in 1960, Special Labor Force Report No. 14, Monthly Labor Review, April 1961, table D-7; and Cynthia M. Taeuber, U.S. Bureau of the Census, America in Transition: An Aging Society, Current Population Reports, Series P-23, No. 128, U.S. Government Printing Office, Washington, DC,

²² Bureau of Labor Statistics, op. cit.,

table 33.

23 Social Security Administration, "Statis-System," Social Security Bulletin, Vol. 57, No. 1, Spring 1994, pp. 60-65.

are not economically active generally prefer it that way. For a significant minority, health considerations prevent work. The majority, however, consider themselves completely retired.²⁴

Benefits Less Likely for Part-Time Workers

Whereas the proportion of employed persons aged 55 and over working part time was 25 percent in 1990 compared to 19 percent in 1970, parttime employees are much less likely to be covered by major benefits programs than full-time employees, according to 1992-93 Employee Benefits Survey data.²⁵ These data showed that in 1993 medical care benefits were provided to only 24 percent of part-time employees, compared to 82 percent of full-time employees. Life insurance benefits were offered to 25 percent of part-time employees versus 91 percent of full-time employees; and retirement benefits in 1993 were available to only 40 percent of part-time compared to 78 percent of full-time employees.

Unemployment and Other Labor Market Problems

Older Workers Tend to Be at High Risk of Having Labor Market Problems

About 667,000 people 55 years and over were unemployed in 1993 (out of a total unemployment count of 8.7 million). There were 111,000 unemployed persons aged 65 years and over, or 3.2 percent of the labor force aged 65 and over, compared to a total unemployment rate of 6.8 percent in 1993.²⁶ Data limitations make it

difficult to say much about job loss, discouraged workers, and employment opportunities among older people, but the general patterns are clear.

Official unemployment rates for the older population are somewhat lower than those for the young adult population. Among unemployed workers aged 55 years and over in 1993, most (79 percent) were looking for full-time work. Nearly half (52 percent of the unemployed aged 55 to 64, and 48 percent of those 65 and over) had been unemployed for 15 weeks or more.²⁷ Available data on older unemployed workers by pension receipt indicate that among unemployed men aged 62 to 64 years in 1987, 45 percent had neither pension nor Social Security income and 40 percent had Social Security only.²⁸

Older workers, especially women, tend to be concentrated in declining industries, such as manufacturing and textiles, which puts them at a relatively higher risk of losing their jobs. Unemployed persons, and especially men, often suffer a decline in earnings compared with their previous employment if they find new employment. Among all workers 20 years and over with 3 or more years of tenure who lost or left their jobs during 1991-92 due to plant or company closings or moves, insufficient work, or the abolishment of their positions or shifts, about one-fifth (19 percent) were 55 or older. The overall level of displacement was more common for older workers in the early 1990's than the early 1980's. Among displaced

full-time wage and salary workers aged 55 to 64 years, only 20 percent were re-employed in full-time wage and salary jobs where their earnings in their new job were the same as or higher than in their previous job.²⁹

Before the 1970's, the jobless rate for older men was usually higher than for men aged 25 to 54. Since then, the situation has reversed and now favors older men (5.2 percent unemployed for men aged 55 to 64 years compared to 5.9 percent for men aged 25 to 54 years in 1993), probably because of options now available to older workers. Such options include: (1) improvements in Social Security and private pension plans that have made retirement a viable alternative to employment or unemployment; and (2) the increased use of early retirement inducements. Thus, such options mean older workers can choose more easily to stay out of the labor force than can younger persons who continue to look for work and by definition are unemployed.

Data are limited on unemployment and other labor market problems of older racial and ethnic groups. This is primarily because surveys of the labor force are too small to measure the job market status of small population groups. The limited data available suggest that older Blacks, Hispanics, and other minorities are more likely than older Whites to experience labor market problems. For example, among men aged 55 to 64 years, the unemployment rate in 1993 was 5 percent for White men compared with 9 percent for Black men (detailed table 8-2). In addition to higher rates of unemployment, such problems

²⁴ Parnes and Sommers, op.cit., p. S120.

²⁵ Natalie Kramer, "Employee Benefits for Older Workers," *Monthly Labor Review*, April 1995, pp. 21-27.

²⁶ Bureau of Labor Statistics, op.cit., table 3.

²⁷ Ibid., tables 7 and 15.

²⁸ Philip L. Rones and Diane E. Herz, Bureau of Labor Statistics, *Labor Market Problems of Older Workers*, Report of the Secretary of Labor, Washington, DC, U.S. Government Printing Office, January 1989.

²⁹ Jennifer M. Gardner, Bureau of Labor Statistics, "Worker Displacement: A Decade of Change," *Monthly Labor Review*, April 1995, pp. 45-57.

include discouragement in trying to find work, as well as lower earnings than those of older White workers.³⁰

Income Distributions

The overall economic position of the elderly (65 years and over) has improved significantly since the 1970's (for example, the poverty rate of the elderly exceeded that for children until about 1974).³¹ Nevertheless, not everyone within the elderly population shared equally in the income gains as we will discuss below. Elderly people also face major economic uncertainties in terms of health expenditures and the length of life that must be financed.

Ryscavage found that during the economic recovery after the recession of the early 1980's, real income growth for the elderly was similar to the total population from 1982 to 1989. His research shows the elderly with a somewhat more unequal distribution of income than the total population. Additionally, he found some evidence of an increase in income inequality among the elderly over the 1979 to 1989 period.³²

30 Rones and Herz, op. cit.

The 1990-91 recession halted the overall gains in the economic position of the elderly (as well as the total population). The most recent available indications are that median income (in constant dollars) of the elderly in 1994 had not yet recovered to the pre-recessionary levels.

Money income generally decreases after retirement but is relatively stable because so many elderly receive Social Security. For those older people with retirement income indexed to inflation, income is affected less by fluctuations in the economy than is true for the younger population. Another important income source is property income, which is less insulated from downswings in the economy. Radner³³ concludes the income of the elderly is sensitive to changes in the performance of the economy and to long-run trends. Radner's study shows the elderly, from 1984 to 1989, had sizeable increases in earning and pension income, but had substantial decreases in property income.

Income Differences Are Significant Among Elderly Subgroups

Using constant 1992 dollars, the median income of the population aged 65 and over has more than doubled since 1957 (from \$6,537 to \$14,548 for elderly men; and from \$3,409 to \$8,189 for elderly women).³⁴ The income gains of the elderly in the 1980's were not shared equally within subgroups of the elderly population. It is misleading to only

talk about the total elderly population. Income differences are significant for elderly population subgroups defined by characteristics such as age, sex, race, ethnicity, marital status, living arrangements, educational attainment, former occupational status, and work history. Although rural elderly and elderly in Southern States tend to have the lowest median incomes, characteristics such as older average age, widowhood, lower educational attainment, and lower occupational status explain income differences better than place of residence.³⁵

Living arrangements and marital status are related to income changes during the past decade. The real incomes of elderly married-couple families rose by 16 percent, from \$22,078 to \$25,694 from 1980 to 1992 (in 1992 dollars). By comparison, the incomes of elderly female householders with no husband present increased by only 6 percent over the 1980-92 period, from \$20,943 to \$22,108. The economic situation of black elderly female householders with no husband present changed the least, with essentially no improvement in their median income during the decade (\$13,580 in 1980 and \$13,576 in 1992).

In 1992, incomes greater than \$20,000 were more likely among younger than elderly married-couple households. Eighty-seven percent of married-couple households under age 65 had incomes of \$20,000 or more. Eight percent had incomes greater

³¹ Eleanor F. Baugher and Martina Shea, U.S. Bureau of the Census, *Poverty in the United States: 1992*, Current Propulation Reports, P60-185, U.S. Government Printing Office, Washington, PC 1993

Office, Washington, DC, 1993.

32 Paul Ryscavage, U.S. Bureau of the Census, "Trends in Income and Wealth of the Elderly in the 1980s," in *Studies in the Distribution of Income*, Current Population Reports, P60-183, U.S. Government Printing Office, Washington, DC, 1992. In the paper, the change in the Gini index from .446 to .467 was on the borderline of statistical significance. In the Gini index, 0.0 represents perfect equality and 1.0 represents perfect inequality. Other researchers observed growing inequality among elderly households during the 1980's. See Daniel B. Radner, "Changes in the Income of Age Groups, 1984–1989," *Social Security Bulletin*, Vol. 54, No. 12, 1991, pp. 2-18.

³³ Radner, ibid.

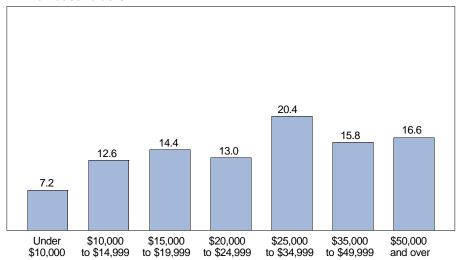
³⁴ Carmen DeNavas, U.S. Bureau of the Census, *Money Income of Households, Families, and Persons in the United States: 1992*, Current Population Reports, P60-184, U.S. Government Printing Office, Washington, DC, 1993, table B-15; also P-60, No. 30, table 18, for 1957 data.

³⁵ Nina Glasgow, Department of Agriculture, Economic Research Service, "The Nonmetro Elderly: Economic and Demographic Status," *Rural Development Research Report*, No. 70, U.S. Government Printing Office, Washington, DC, 1988.

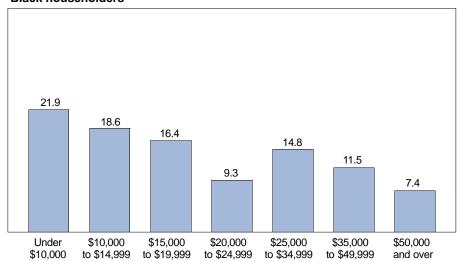
Figure 4-2.

Percent Distribution of Married-Couple Households
With Householder 65 Years and Over, by Total
Money Income: 1992

White householders



Black householders



Source: U.S. Bureau of the Census, Housing and Household Economic Statistics Division, Income Branch, unpublished tabulations from March 1993 Current Population Survey, table H-4.

than \$100,000. In contrast, more than 6 in 10 (64 percent) married-couple households with a householder aged 65 or older had incomes of \$20,000 or more annually. Four percent of all elderly married-couple households had incomes greater than \$100,000 (there were 375,000 such households and about three-fourths (78 percent) had householders aged 65 to 74).³⁶

Nearly two-thirds (66 percent) of White married-couple households with a householder aged 65 or older in 1992 had incomes of at least \$20,000.³⁷ Four in ten (43 percent) elderly Black married-couple households had incomes greater than \$20,000 in 1992. Among elderly Hispanic married-couple households, 48 percent had incomes greater than \$20,000.³⁸ Figures 4-2 through 4-4 provide graphic evidence of the differences in the income distributions of married couples classified by age and race of the householder.

³⁶ DeNavas, op.cit., table 8.

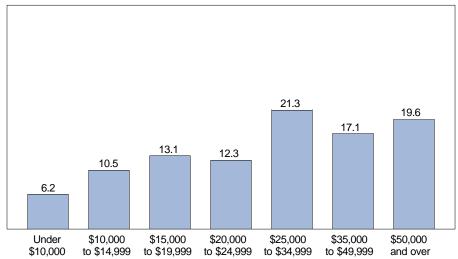
³⁷ U.S. Bureau of the Census, unpublished tabulations from March 1993 CPS, available from Income Statistics Branch, Housing and Household Economic Statistics Division, 301-763-8576.

³⁸ Ibid. The difference between Black and Hispanic married-couple households is not statistically significant.

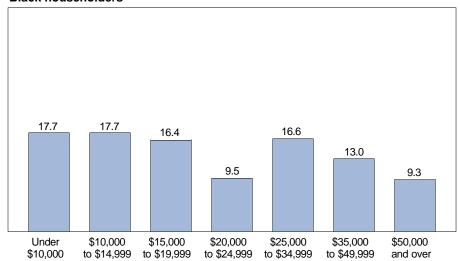
Figure 4-3.

Percent Distribution of Married-Couple
Households With Householder 65 to 74 Years,
by Total Money Income: 1992

White householders



Black householders

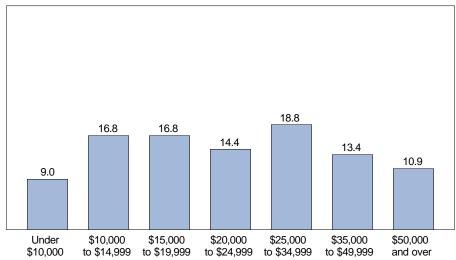


Source: U.S. Bureau of the Census, Housing and Household Economic Statistics Division, Income Branch, unpublished tabulations from March 1993 Current Population Survey, table H-4.

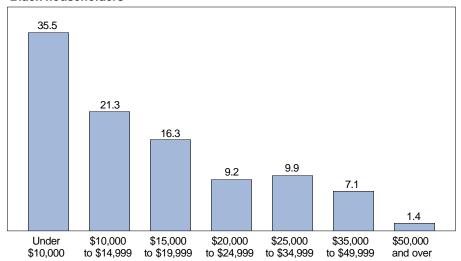
Figure 4-4.

Percent Distribution of Married-Couple Households
With Householder 75 Years and Over, by Total
Money Income: 1992

White householders

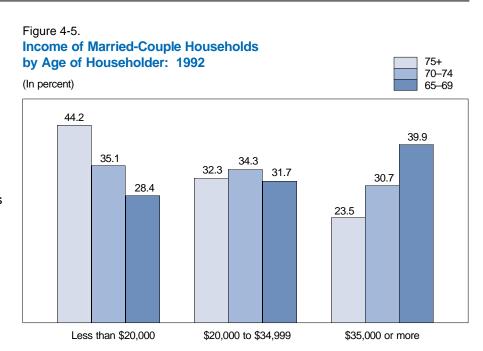


Black householders

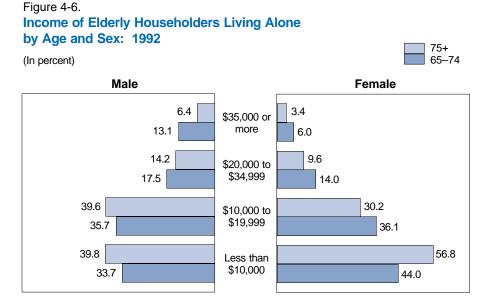


Source: U.S. Bureau of the Census, Housing and Household Economic Statistics Division, Income Branch, unpublished tabulations from March 1993 Current Population Survey, table H-4.

Married couples with a householder aged 65 to 74 are more likely to have higher incomes than are couples with householders 75 years and over. In 1992, 69 percent of married-couple households with a householder aged 65 to 74 years had incomes greater than \$20,000 compared with 56 percent of such households with a householder aged 75 or older (figure 4-5). The elderly who lived alone were more likely than married couples to have low incomes in 1992 (figure 4-6). More than one-half (54 percent) of those 75 years and over who lived alone had incomes below \$10,000 in 1992 and more than four-fifths (86 percent) had incomes below \$20,000. By comparison, 44 percent of married-couple households had incomes below \$20,000 where the householder was 75 or older. The comparable figures for people aged 65 to 74 who lived alone and for married-couple households with householders 65 to 74 were 77 percent and 31 percent, respectively.



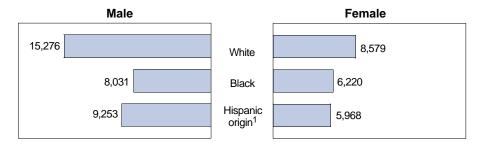
Source: U.S. Bureau of the Census, *Money Income of Households, Families and Persons in the United States: 1992*, Current Population Reports, P60-184, U.S. Government Printing Office, Washington, DC, 1993, table 8.



Source: U.S. Bureau of the Census, *Money Income of Households, Families, and Persons in the United States: 1992*, Current Population Reports, P60-184, U.S. Government Printing Office, Washington, DC, 1993, table 8.

Figure 4-7.

Median Income of Persons 65 Years and Over by Sex and Race: 1992
(In dollars)



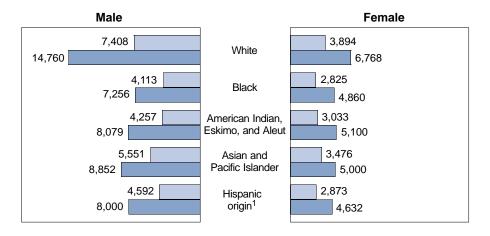
¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Money Income of Households, Families, and Persons in the United States: 1992*, Current Population Reports, P60-184, U.S. Government Printing Office, Washington, DC, 1993, table 26.

Figure 4-8.

Median Income of Persons 65 Years and
Over by Race and Sex: 1979 and 1989

(In current dollars)



¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1979 from 1980 Census of Population, special tabulation from Summary Tape file 5A; 1989 from 1990 Census of Population and Housing, special tabulation from 1990 Public Use Microdata Sample File (PUMS).

Among elderly subgroups, White men had a much higher median income than other groups. The 1992 median income for White men 65 years and over was more than double that of elderly Black and Hispanic women (figure 4-7; the differences in median income were not statistically significant between Black and Hispanic women and between White women and Hispanic men). Data from the 1980 and 1990 censuses showed a similar pattern (figure 4-8).

Sources of Income

Social Security Benefits Are the Primary Source of Money Income for the Elderly

Social Security, combined with pension benefits, accounted for 42 percent of the total household income of elderly retirement pension recipients in 1991.³⁹ Since the 1940's, there has been a marked increase in reliance on Social Security and a decline in the importance of earnings even though earnings make a great difference in the economic position of older people. In 1940, less than one percent of the elderly received Social Security benefits and 22 percent received general welfare assistance. In 1992, 93 percent received Social Security benefits (mean income was \$6,634) and 6 percent received public assistance or Supplemental Security Income (SSI) (mean income from these sources was \$2,276).40

The Social Security program was the major source of income (provided at least 50 percent of total income) for 63 percent of beneficiaries in 1992. It contributed almost all of the income (90 percent or more) for 26 percent and was the only source of income for 14 percent of beneficiaries. 41

One indicator of the trend towards earlier retirement is the proportion of various age groups receiving Social Security benefits. The majority of people aged 62 and over now receive Social Security benefits. In 1974, 43 percent of insured people aged 62 to 64 received Social Security benefits. By 1994, 67 percent received benefits. During the years 1974 to 1994, the percent of insured persons receiving benefits fluctuated between 91 to 94 percent for persons aged 65 to 66 years, and between 97 to 98 percent for persons aged 67 to 69 years. Since 1974, virtually all people aged 70 or older have received benefits.⁴²

The Elderly Are More Likely Than Other Adults (Aged 18 to 64) to Receive Welfare Assistance

In 1990, 12 percent of people aged 65 and over received major welfare assistance in an average month, compared with 8 percent of people aged 18 to 64 and 19 percent of people under 18.43 Children were more likely than elderly to receive major welfare assistance and welfare was a larger part of their family income. In comparison to other age groups, however, the elderly who participated in assistance programs were more likely to be long-term participants than those in other age groups. Of the 3.9 million elderly who participated in major means-tested assistance programs⁴⁴ in 1990, 2.5 million

⁴² Unpublished tabulations from the Office of the Actuary, Social Security Administration, used in preparation of the 1995 Trustees Report. Percentages include retired workers, disabled workers, and insured widow(er)s.

⁴³ Martina Shea, U.S. Bureau of the Census, *Dynamics of Economic Well-Being: Program Participation 1990-1992*, Current Population Reports, P70-41, U.S. Government Printing Office, Washington, DC, 1995.

(or 65 percent) participated for the entire 1990-91 period. The rates for nonelderly adults and children were 47 and 52 percent, respectively. In 1990, means-tested assistance benefits accounted for over one-half of total family income for 23 percent of elderly participants, compared with 49 percent for nonelderly adults and 55 percent for children.⁴⁵

Most Elderly Received Property Income But Earnings Provided the Highest Average Income

Property income⁴⁶ was received by 69 percent of elderly people in 1992. However, the mean income was relatively low, \$4,502. Earnings provided the highest mean income (\$15,781) of all major sources, but earnings were received by only 15 percent of elderly (4.5 million in 1992). Mean earnings for White elderly (\$16,132) were higher than for Black elderly (\$12,564), but not statistically higher than for Hispanic-origin elderly (\$14,759).⁴⁷

Private Pensions and Retirement Income Are Important Sources of Income for the Elderly

Private pensions are another important source of income for the older population. The mean income received from pensions in 1992 was \$8,278. Because women are increasingly joining the labor force and because men are increasingly likely to live at least into their seventies, we can expect in the future to see more married couples with two private pensions in addition to Social Security benefits.

³⁹ Unpublished tables from the 1990 Panel of the Survey of Income and Program Participation (SIPP), wave 4, U.S. Bureau of the Census.

⁴⁰ DeNavas, op.cit., table 34; also see Virginia Reno and Susan Grad, "Economic Security, 1935-1985," Social Security Bulletin, December 1985, tables 12 and 13.

⁴¹ Social Security Administration, Office of Research and Statistics, Fast Facts and Figures About Social Security 1995, U.S. Government Printing Office, Washington, DC, 1995.

⁴⁴ Means-tested programs include Aid to Families With Dependent Children (AFDC) or General Assistance, Supplemental Security Income (SSI), food stamps, Women Infant and Children Program (WIC), and means-tested veterans' compensation or pensions. Family income includes the value of food stamps and WIC.

⁴⁵ Shea, op.cit.

⁴⁶ Includes estates and trusts reported as survivor benefits.

⁴⁷ DeNavas, op.cit., table 34. The Black and Hispanic means are not statistically different

There are important differentials in who receives pensions. About one-third (31 percent) of elderly nonmarried (never married, widowed, or divorced) men received income from a private pension or annuity in 1992, compared with about one-fifth (22 percent) of elderly nonmarried women. The median income from pensions for these nonmarried men was \$4,981 versus \$2,620 for the nonmarried women.48 Among all elderly. Current Population Survey (CPS) data indicate that 35 percent of elderly Whites, 20 percent of elderly Blacks, and 19 percent of Hispanicorigin elderly received pension income in 1992 (the difference between Blacks and Hispanics is not statistically significant).

From the Survey of Income and Program Participation (SIPP) we find that in 1991, 13.7 million retirees (of any age)⁴⁹ received pension benefits. Two-thirds were men. The overall mean monthly pension incomes of White, Black, and Hispanic-origin retirees were not significantly different from one another (\$739, \$680, and \$601, respectively). Fifty-six percent of pension recipients had pensions with Cost of Living Adjustment (COLA) provisions. Not only were these retirees protected from inflation, their mean pension was 55 percent

⁴⁸ Susan Grad, Social Security Adminis-

49 The SIPP universe for retirement con-

tration, Income of the Population 55 or Older,

Government Printing Office, Washington, DC,

1992, SSA Publications No. 13-11871, U.S.

sisted of all persons 25 years old and over

who had retired from a job and received in-

come as a retiree, survivor, or a dependent.

1994, tables I.7 and V.C.7.

higher than the mean pension income of retirees with no COLA provision.50

One in five (20 percent) pension recipients had completed 4 or more years of college and their mean monthly pension income in 1991, not including Social Security, was \$1,173, compared with \$661 for high school graduates, and \$472 for those not completing high school. Some two million people receiving a pension also worked at a wage or salary job and their average pension was \$947. The 11.7 million retirees who did not work received less in the reference period, on average, \$700. Four-fifths (78 percent) of all retirement pension recipients, about 10.7 million retirees, also received monthly Social Security payments averaging \$651.51

Data from the 1990 census on the receipt of retirement income⁵² indicate that 36 percent of men aged 62 to 64 and 18 percent of women that age received retirement income in 1989. For 65 to 69 year old men, 47 percent received retirement income in 1989, compared to 25 percent of women that age. About one of every four (24 percent) men aged 62 to 64 years who worked in 1989 also received retirement income in 1989. Among those 62 to 64 year old men who didn't work in 1989, 55 percent had

retirement income. Corresponding proportions for women aged 62 to 64 years were 15 percent for those who worked in 1989 and 21 percent for those who didn't work.

Some believe that we are now seeing the "golden age of the golden years,"53 and that Baby-Boom retirees will be less well off than today's retirees. Personal savings and retirement benefits of the elderly may be less in the future and more of the burden for economic security may fall on the individual. In contrast, a recent Congressional Budget Office study⁵⁴ concluded that most Baby Boomers are likely to have higher real incomes in retirement than their parents now in retirement. This more optimistic outlook was not equally anticipated for all Baby Boomers, with the poorly educated, single women, and divorced persons particularly at risk. The uncertainty of this outlook is high, however, as future changes in Social Security, health care expenditures, and the federal budget deficit could alter the accuracy of these findings.55 Additional areas of importance are employer-provided pensions, other private savings and wealth (such as IRAs), and health care needs.⁵⁶

ture in Retiree Economics," Statistical Bulletin,

⁵³ Mark H. Weinstein, "The Changing Pic-

⁵⁰ Unpublished data from the 1990 Panel of the Survey of Income and Program Participation (SIPP), wave 4, U.S. Bureau of the Census.

⁵² Retirement income includes retirement pensions and survivor benefits from a former employer, labor union, or Federal, State, county, or other governmental agency; periodic receipts from annuities and insurance: and regular income from IRA and KEOGH plans. Data are from U.S. Bureau of the Census. special tabulations from the 1990 Public Use Microdata Sample File (PUMS).

Metropolitan Life Insurance, Vol. 69, No.3 (July-Sept 1988), p. 7. 54 Congressional Budget Office. Baby Boomers in Retirement: An Early Perspective,

Washington, DC, September 1993. ⁵⁵ Center on Aging, Health and Society, "The Economic Prospects of the Baby Boom Generation," The Public Policy and Aging Report, Vol. 6, No. 2, Chicago, IL, 1994.

⁵⁶ Committee on National Statistics, Toward Improved Modeling of Retirement Income Policies: Interim Report, Washington, DC,

Poverty Status Poverty Levels

The perception of "elderly" and "poor" as practically synonymous has changed to a view that the elderly are better off than other Americans. Both views are simplistic. There are important differences among subgroups and we will discuss some below.

About 36.9 million Americans were poor⁵⁷ in 1992. Of these, 10.8 percent were aged 65 or older, 49.6 percent were aged 18 to 64 years, and 39.6 percent were children under 18. Though the poverty rate for persons aged 65 or older was lower in 1992

Table 4-4.

Percent Poor or Near Poor, by Sex and Age: 1992

Sex and age	Below poverty threshold	Below 150 percent of poverty threshold
Both sexes		
All ages	14.5	24.1
Under 65 years	14.7	23.6
65 years and over	12.9	27.6
Under 18 years	21.9	32.8
18 to 24 years	18.0	28.7
25 to 34 years	13.2	22.0
35 to 44 years	9.8	16.8
45 to 54 years	7.9	13.8
55 to 59 years	10.0	16.6
60 to 64 years	10.6	19.9
65 to 74 years	10.7	22.5
75 years and over	16.2	35.2
Male		
All ages	12.7	21.7
Under 65 years	13.1	21.9
65 years and over	8.9	20.5
Under 18 years	21.5	32.5
18 to 24 years	14.2	25.2
25 to 34 years	9.8	18.3
35 to 44 years	8.3	15.1
45 to 54 years	7.0	12.5
55 to 59 years	8.7	14.3
60 to 64 years	7.8	16.5
65 to 74 years	8.1	18.2
75 years and over	10.3	24.3
Female		
All ages	16.3	26.4
Under 65 years	16.4	25.4
65 years and over	15.7	32.8
Under 18 years	22.3	33.1
18 to 24 years	21.6	32.2
25 to 34 years	16.6	25.7
35 to 44 years	11.2	18.5
45 to 54 years	8.7	15.0
55 to 59 years	11.3	18.6
60 to 64 years	13.1	23.2
65 to 74 years	12.7	25.9
75 years and over	19.8	41.7

Source: U.S. Bureau of the Census, *Poverty in the United States: 1992*, Current Population Reports, P60-185. U.S. Government Printing Office, Washington, DC, 1993, table 6.

⁵⁷ Families and unrelated individuals are classified as being above or below the poverty level using the poverty index originated by the Social Security Administration in 1964 and revised by the Federal Interagency Committees in 1969 and 1980. The poverty index is based solely on money income and does not reflect the fact that many low-income persons receive noncash benefits such as food stamps, Medicaid, and public housing. To be in poverty means that a family of at least three people does not have money income equal to 3 times (slightly higher adjustment for smaller families) the cost of the "Economy Food Plan" established by the Department of Agriculture. The plan assumes that older healthy people have lower nutritional requirements than younger people and therefore the poverty threshold is higher for persons under age 65. The poverty threshold in 1992 was \$6,729 compared to the \$7,299 used for single householders aged 15 to 64. For a two-person elderly household with no related children, it was \$8,487 compared with \$9,443 for younger householders. If the thresholds used for the vounger population also were used for the elderly, poverty rates for the elderly would increase. Poverty rates would decrease if specific taxes were deducted and specific noncash benefits were included in the definition of income.

than that for children and young adults aged 18 to 24, it was higher or not significantly different from that for other adult age groups. The 1992 poverty rate was 12.9 percent for the elderly, and 21.9 percent for children.⁵⁸

Among Adults Aged 25 and Over, Oldest Old Most Likely to be Poor

There is a wide range of poverty rates among detailed age groups. Among persons aged 25 and over, poverty rates ranged in 1992 from 7.9 percent for persons aged 45 to 54 up to 16.2 percent for persons 75 years or older (table 4-4). In 1992, poverty among the elderly living in the community (noninstitutional) increased with age. The poverty rate of persons 65 to 74 was 10.7 percent, 15.3 percent for persons 75 to 84, and for persons 85 and over the rate was 19.8 percent, not statistically different from that of children.

Partly because of "catch-up" increases and the indexing of Social Security to rates of inflation, there have been significant changes nationally in the percentage of all elderly who are poor. In 1959, 33.1 percent of White elderly and 62.5 percent of Black elderly were poor. In 1992, 10.9 percent of White elderly, 22.0 of Hispanic elderly, and 33.3 percent of Black elderly were poor (table 4-5).

⁵⁸ Eleanor F. Baugher and Martina Shea, U.S. Bureau of the Census, Poverty in the United States: 1992, Current Population Reports, P60-185, U.S. Government Printing Office, Washington, DC, 1993. The other 1992 poverty figures in this section also were derived from this report. Newly released poverty data for 1994 show 38.1 million persons in poverty, representing 14.5 percent of the population. For the elderly in 1994, corresponding numbers were 3.7 million in poverty and 11.7 percent of the elderly population. These 1994 data are based on population controls consistent with the 1990 census of populaton. The data for 1992 in this report differ from revised 1992 estimates consistent with the 1990 census. The 1992 revised estimates are: 38.0 persons in poverty (a poverty rate of 14.8 percent); and 3.9 million elderly in poverty (a poverty rate of 12.9 percent). For additional information on the impact of using 1990 based population controls on survey estimates, see U.S. Bureau of the Census, Population Profile of the United States: 1995, Current Population Reports, P23-189, U.S. Government Printing Office, Washington, DC, 1995, appendix B.

Poverty Status of Persons by Age, Race and Hispanic Origin: 1960 to 1992

(Numbers in thousands. Persons as of March of the following year. For meaning of abbreviations and symbols, see introductory text)

Year and race	All persons belo	ow poverty	Persons unde below po		Persons 65 yea below po	
	Number	Percent	Number	Percent	Number	Percent
All Races						
1992. 1990. 1985. 1980. 1975. 1970.	36,880 33,585 33,064 29,272 25,877 25,420 33,185	14.5 13.5 14.0 13.0 12.3 12.6 17.3	14,617 13,431 13,010 11,543 11,104 10,440 14,676	21.9 20.6 20.7 18.3 17.1 15.1 21.0	3,983 3,658 3,456 3,871 3,317 4,793 (NA)	12.9 12.2 12.6 15.7 15.3 24.6 (NA)
1960	39,851	22.2	17,634	26.9	(NA)	(NA)
White						
1992. 1990. 1985. 1980. 1975. 1970. 1965. 1960.	24,523 22,326 22,860 19,699 17,770 17,484 22,496 28,309	11.6 10.7 11.4 10.2 9.7 9.9 13.3 17.8	8,955 8,232 8,253 7,181 6,927 (NA) (NA)	16.9 15.9 16.2 13.9 12.7 (NA) (NA)	2,992 2,707 2,698 3,042 2,634 4,011 (NA) (NA)	10.9 10.1 11.0 13.6 13.4 22.6 (NA)
Black						
1992. 1990. 1985. 1980. 1975. 1970. 1965. 1960.	10,613 9,837 8,926 8,579 7,545 7,548 (NA) (NA)	33.3 31.9 31.3 32.5 31.3 33.5 (NA) (NA)	4,938 4,550 4,157 3,961 3,925 (NA) (NA)	46.6 44.8 43.6 42.3 41.7 (NA) (NA)	887 860 717 783 652 683 (NA) (NA)	33.3 33.8 31.5 38.1 36.3 48.0 (NA) (NA)
Hispanic Origin ¹						
1992. 1990. 1985. 1980. 1975. 1970. 1965.	6,655 6,006 5,236 3,491 2,991 (NA) (NA)	29.3 28.1 29.0 25.7 26.9 (NA) (NA) (NA)	3,116 2,885 2,606 1,749 (NA) (NA) (NA)	39.9 38.4 40.3 33.2 (NA) (NA) (NA)	269 245 219 179 137 (NA) (NA)	22.0 22.5 23.9 30.8 32.6 (NA) (NA)

¹Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Poverty in the United States: 1992*, Current Population Reports, P60-185, U.S. Government Printing Office, Washington, DC; 1993, tables 2 and 3.

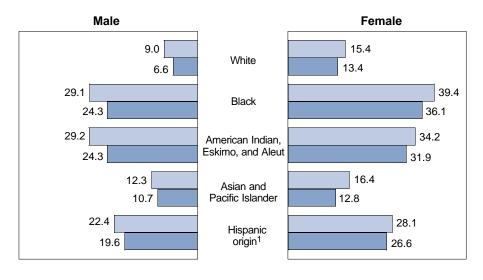


¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Poverty in the United States: 1992*, Current Population Reports, P60-185. U.S. Government Printing Office, Washington, DC, 1993, table 5.

Figure 4-10.

Percent Poor of Persons 65 Years and Over by Sex,
Race, and Hispanic Origin: 1979 and 1989



¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1979 from 1980 Census of Population and Housing, special tabulations for National Institute on Aging, table 5; 1989 from special tabulations from 1990 Public Use Microdata Sample File (PUMS).

Poverty rates varied greatly among elderly population subgroups. In 1992, elderly women (15.7 percent) had a higher poverty rate than elderly men (8.9 percent). As noted above, the poverty rates for elderly Blacks and Hispanics were higher than the rate for elderly Whites. Elderly White, Black, and Hispanic women had higher poverty rates in 1992 than elderly White, Black, and Hispanic men, respectively (figure 4-9).

Women made up 58.4 percent of the elderly population but 71.3 percent of the poor elderly population in 1992. Although Blacks were only 8.6 percent of the total elderly population, they made up 22.3 percent of all elderly poor. Black women were 5.1 percent of the elderly population and 15.0 percent of the elderly poor.

1979

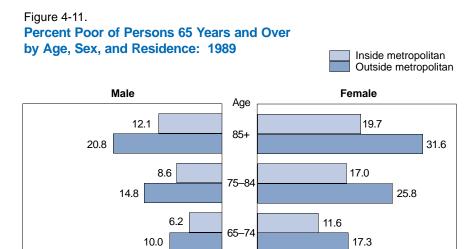
1989

The 1990 decennial census is the only source of poverty data by detailed race (figure 4-10). Poverty became less prevalent during the 1980's for every elderly sex/race/ ethnic group. In addition, within each race/ethnic group, poverty was more common for women than for men at both the decade's beginning and end. These data also show that poverty rates among elderly American Indians were similar to those of Blacks.

Recent data from the 1990 decennial census reveal that, in general, poverty rates were higher among elderly outside metropolitan areas than among those inside metropolitan areas (figure 4-11). The poverty rate in 1989 was 31.6 percent for females 85 years old and over living outside metropolitan areas.

Elderly persons who reported having a self-care or mobility limitation in the 1990 decennial census were more likely to be poor (20 percent) than elderly without such limitations (11 percent). However, among the oldest old, women who did not have a self-care or mobility limitation were just as likely to be living in poverty (22 percent) as oldest old women with a self-care or mobility limitation (figure 4-12).

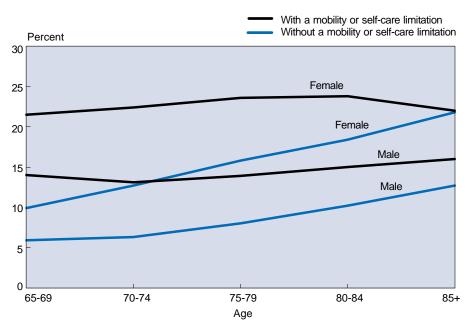
There were a total of 8 million poor families in 1992. Of all poor families, 878,000 had an elderly householder. The poverty rate for families with an elderly householder was 7.8 percent.



Source: U.S. Bureau of the Census, special tabulations from 1990 Public Use Microdata Sample File (PUMS).

Figure 4-12.

Percent Poor of Persons 65 Years and Over by Age, Sex, and Limitation Status: 1989



Source: U.S. Bureau of the Census, special tabulations from 1990 Public Use Microdata Sample File (PUMS).

Figure 4-13.

Percent Poor of Persons 65 Years and

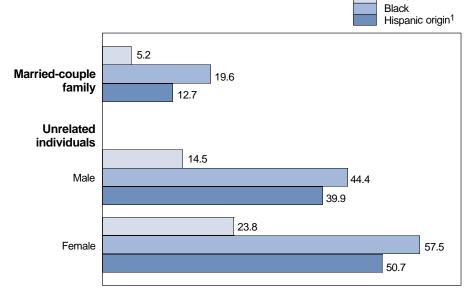
Over by Sex, Type of Living Arrangement,

Race, and Hispanic Origin: 1992

White

Total

Black

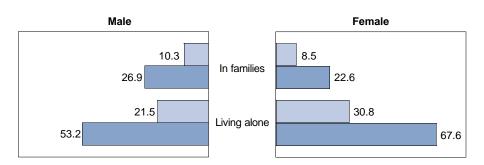


¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Poverty in the United States:* 1992, Current Population Reports, P60-185, U.S. Government Printing Office, Washington, DC, 1993, table 5.

Figure 4-14.

Percent Poor of Persons 85 Years and Over by Race, Sex, and Living Arrangement: 1989



Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, special tabulation from 1990 Public Use Microdata Sample (PUMS) file.

White elderly persons in married-couple families were less likely to be in poverty (5.2 percent) than comparable Black (19.6 percent) or Hispanic (12.7 percent) elderly persons (figure 4-13). Elderly who did not live with relatives ("unrelated individuals" in census terminology, most of whom live alone) were more likely to be poor in 1992 (24.9 percent) than elderly persons in married-couple families (6.2 percent).

Data from the 1990 census reveal the great differences in poverty rates by sex, race, and family status among the "oldest old" (those 85 years old and older). Oldest old persons are more likely to be poor if they live alone than if they live in families. This holds for both men and women, and for the total and Black oldest old population (figure 4-14). Among Black women aged 85 years and over and living alone, 67.6 percent were in poverty.

Elderly Are More Likely to Be Near Poor Than the Younger Population

While the elderly constitute approximately 12.2 percent of the total population, they are only 10.8 percent of the poor. However, a higher proportion of elderly (7.5 percent) than nonelderly (4.5 percent) were concentrated just over their respective poverty thresholds (between 100 percent and 125 percent of their thresholds). Among the Nation's 12.3 million "near poor" persons, there is a larger proportion elderly than might be expected, since the 18.9 percent of the near poor who are elderly exceeds the percent elderly of the total population.

Most Elderly Poor Who Live Alone Are Women

Of the approximately 2.3 million poor elderly who lived alone in 1992, 2.0 million were women. Another 1 million elderly women who lived alone in 1992 were near poor. These near poor women were predominately White (90 percent) and residents of metropolitan areas (75 percent).

Low Educational Attainment Associated With Poverty

Education is closely associated with lifetime economic status, and poverty rates drop dramatically as educational level of the elderly increases. Twenty-one percent of the 12.3 million elderly who never finished high school were poor in 1992. About 10 percent of elderly who completed high school (but no college) were poor. Only 3.2 percent of the elderly who earned a bachelor's degree or more were poor.

Elderly Who Worked Some Time During 1992 Rarely Faced Poverty

Only 3.7 percent of 4.6 million elderly workers were poor in 1992. Most (79 percent) of these poor did not work year-round full-time. By contrast, 14.5 percent of elderly who did not work during the year were poor. Half of all poor elderly workers were women.⁵⁹

Transitions in Income and Poverty Status

Data from SIPP⁶⁰ allow us to make comparisons of the characteristics of elderly who were (1) poor in 1990 and 1991, (2) able to leave poverty between 1990 and 1991, and (3) poor in 1991 but not in 1990. With these data we can also measure year-to-year movement of people along the income distribution.

An important caution is that this analysis includes only elderly from whom information was collected in all eight interviews of the 1990-1991 survey. The data are presented for persons rather than families because family composition can change over a 2-year period. People are characterized by the income and poverty status of their respective family unit based on living arrangements each month during the period of study. Income reflects money income only before taxes and does not include the value of noncash benefits.

Overall, Elderly Higher In Economic Status Than Children But Less Likely to Increase Their Income

SIPP data indicate that people aged 65 or older were significantly more likely to have family or individual⁶¹ incomes under \$10,000 than the total population. Mean family or individual income of the elderly was 67 percent of that for persons under 18. As discussed above, comparisons of family income do not indicate the number of

persons sharing the family income. To account for changes in family size and composition, comparisons based on income-to-poverty ratios are used.⁶² Such ratios change the relative standing of the two groups. The mean income-to-poverty ratio in 1991 was 3.24 for persons 65 and older compared with 2.82 for persons under 18 years.

These data indicate that elderly people had stable incomes relative to young adults (18 to 24 years). Thirty-five percent of the elderly experienced changes of less than 5 percent in their income-to-poverty ratios between 1990 and 1991 compared with 17 percent of young adults.

Elderly and Children Less Likely to Exit Poverty Than Nonelderly Adults

Children and the elderly were less likely than nonelderly adults to move out of poverty between 1990 and 1991. The exit rates were 19 percent for children and 14 percent for the elderly, compared with 25 percent for nonelderly adults. The elderly had relatively low exit rates despite the fact that 67 percent of poor elderly in 1990 had an income-to-poverty ratio between 0.75 and 0.99, compared with 35 percent of poor nonelderly adults. This means a smaller proportion of elderly than nonelderly adults left poverty between 1990 and 1991, even though a larger proportion of elderly than nonelderly adults had incomes just below poverty. This finding reflects the relatively greater stability (i.e., fixed nature) of elderly incomes.

⁵⁹ Ibid., table 14.

⁶⁰ Shea, op.cit., P70-41; and Paul Ryscavage and Wilfred Masumura, U.S. Bureau of the Census, *Dynamics of Economic Well-Being: Labor Force and Income, 1990-1992*, P70-40, U.S. Government Printing Office, Washington, DC, 1994.

⁶¹ Income refers to family income for persons in families and individual income for unrelated individuals.

⁶² To account for economies of scale, family incomes have been adjusted by using poverty thresholds as an equivalence scale to adjust for differences in the size and composition of families.

Household Wealth and Assets

Overall, the elderly have substantial assets, especially if the value of their homes is considered. Once the elderly spend their assets, however, they are less likely than younger people to be able to replace them.

The Elderly Have Higher Asset Holdings Than Younger Households

Economic well being includes both income and asset accumulation. The elderly have had longer to accumulate assets. Their median net worth (\$88,192) is more than fifteen times as high as that of households with a householder under 35 (\$5,565), according to 1991 data from the SIPP. The home is the major asset, but for the elderly, interest-earning assets were also important.⁶³

Eller found that from 1988 to 1991, real median net worth for all households fell from \$41,472 to \$36,623 (in 1991 dollars). For the elderly, however, median net worth remained at around \$88,000.

The life cycle hypothesis of saving says that assets increase during the

life cycle and decline after retirement as savings are spent to finance daily life. Cross-sectional data suggest that assets are not reduced substantially until at least 10 or more years after retirement age. For example, median net worth in 1991 for householders aged 65 to 69 was \$104,354 compared with \$76,541 for householders aged 75 and over. The evidence on whether households accumulate or decumulate wealth during the retirement years is mixed, however, and such cross-sectional evidence does not imply the same behavior for an individual over a lifetime.64 It seems logical that a newly retired person would avoid using savings (called "spend down" by economists) as long as possible given that most people are relatively healthy upon retirement but still face significant uncertainties about future health expenditures, their need for long-term care, and the length of their life. However, a large number of persons reach retirement with little or no savings. Some indirect evidence suggests that inheritances may substantially increase the wealth of Baby Boomers as they enter the young old ages, with research indicating that most inheritances go to householders in their fifties and sixties.65 Debate continues on whether

64 Ibid., p. x; Congressional Budget Office, op. cit., p. 44; and Nancy Ammon Jianakoplos, Paul L. Menchik, and F. Owen Irvine, "Using Panel Data to Assess the Bias in Crosssectional Inferences of Life-Cycle Changes in the Level and Composition of Household Wealth," in Robert E. Lipsey and Helen Stone Tice, eds., The Measurement of Saving, Investment, and Wealth, 1989.

65 Congressional Budget Office, op. cit.; and Daphne T. Greenwood and Edward N. Wolff, "Changes in Wealth in the United States, 1962-1983," *Journal of Population Economics*, 1992, pp. 261-288.

observed savings behavior can be explained by some modification of the life cycle model that incorporates other leading explanations for savings behavior.⁶⁶

Using the 1991 SIPP data, Eller showed that age is correlated with net worth because age offers an increasing opportunity to accumulate wealth (table 4-6). Because of SIPP's relatively small sample size, the final age category shown is 75 years and over. Since home equity is such an important asset to the elderly, it is useful to examine their net worth with and without the effect of home equity. When home equity was included, the 1991 median net worth of the elderly ranged from \$32,172 in the lowest income quintile (7.2 million households) to \$424,721 in the highest income quintile (1.8 million households). When home equity was excluded, median net worth of the elderly ranged from \$3,577 for the lowest income quintile to \$299,679 for the highest income quintile.67

⁶³ T. J. Eller, U.S. Bureau of the Census, Household Wealth and Asset Ownership: 1991, Current Population Reports, P70-34, Washington, DC, 1994. These net worth estimates are based on the sum of the market value of assets owned by every member of the household minus liabilities (secured or unsecured) owed by household members. Major assets not covered are equities in pension plans, cash value of life insurance policies, and the value of home furnishings and jewelry. These items were excluded due to the difficulty of obtaining reliable estimates of the value of these assets in a household survey.

⁶⁶ Alan L. Gustman and F. Thomas Juster, "Income and Wealth of Older American Households: Modeling Issues for Public Policy Analysis," National Bureau of Economic Research (NBER) Working Paper No. 4996, Cambridge, MA, 1995.

⁶⁷ The distribution of wealth is known to be highly concentrated. When the distribution is so concentrated, the normal SIPP sample frame, with few observations for high income households, has large variability in the various wealth statistics for this segment of the wealth distribution. For a description and comparison of survey aggregates with independent estimates, see appendix D of Current Population Reports, P70-34, Household Wealth and Asset Ownership: 1991, by T. J. Eller of the U.S. Bureau of the Census.

Table 4-6.

Median Net Worth by Age of Householder and Monthly Household Income Quintile: 1991
(Excludes group quarters)

					Α	ge			
Households and net worth income quintile ¹							65 years	and over	
income quintile	Total	Under 35 years	35 to 44 years	45 to 54 years	55 to 64 years	Total	65 to 69 years	70 to 74 years	75 years and over
All households (thousands) Median net worth	94,692	25,031	21,514	14,934	12,575	20,638	6,435	5,439	8,764
	\$36,623	\$5,565	\$31,148	\$58,250	\$83,041	\$88,192	\$104,354	\$92,793	\$76,541
	\$10,263	\$3,273	\$9,456	\$16,275	\$25,965	\$26,442	\$33,345	\$25,943	\$22,866
Lowest quintile Households (thousands) Median net worth Excluding home equity	18,977	5,256	2,271	1,901	2,323	7,226	1,657	1,630	3,939
	\$5,224	\$537	\$1,228	\$5,230	\$16,959	\$32,172	\$30,622	\$31,825	\$32,946
	\$1,143	\$187	\$704	\$852	\$1,406	\$3,577	\$2,570	\$3,083	\$4,570
Second quintile Households (thousands) Median net worth Excluding home equity	18,912	5,432	3,231	1,958	2,431	5,860	1,760	1,526	2,574
	\$19,191	\$2,912	\$6,213	\$19,378	\$52,660	\$90,635	\$92,321	\$89,306	\$89,975
	\$5,588	\$1,772	\$2,409	\$4,656	\$10,580	\$29,152	\$25,690	\$25,808	\$34,492
Third quintile Households (thousands) Median net worth Excluding home equity	18,969	5,809	4,474	2,629	2,536	3,523	1,306	1,141	1,075
	\$28,859	\$6,633	\$18,216	\$35,837	\$77,439	\$154,203	\$154,487	\$140,226	\$171,032
	\$8,661	\$3,768	\$5,674	\$9,713	\$24,382	\$68,372	\$64,164	\$64,280	\$83,472
Fourth quintile Households (thousands) Median net worth Excluding home equity	18,928	5,105	5,607	3,432	2,504	2,279	968	657	654
	\$49,204	\$16,176	\$38,762	\$57,706	\$135,458	\$225,594	\$201,867	\$212,062	\$303,510
	\$16,352	\$7,650	\$12,412	\$16,188	\$42,586	\$121,154	\$83,101	\$123,268	\$181,513
Highest quintile Households (thousands) Median net worth Excluding home equity	18,905	3,429	5,931	5,014	2,780	1,751	744	485	522
	\$123,166	\$42,650	\$91,434	\$147,091	\$212,660	\$424,721	\$382,551	\$433,049	\$485,557
	\$48,893	\$19,329	\$36,157	\$54,371	\$95,692	\$299,679	\$226,894	\$315,194	\$399,301

¹Quintile upper limits for 1991 were: lowest quintile - \$1,071; second quintile - \$1,912; third quintile - \$2,914; fourth quintile - \$4,454.

Source: U.S. Bureau of the Census, *Household Wealth and Asset Ownership: 1991*, Current Population Reports, P70-34, U.S. Government Printing Office, Washington, DC, 1994, table E.

Smith, ⁶⁸ using new data from the Health and Retirement Survey (HRS) and the Asset and Health Dynamics Among the Oldest-Old Survey (AHEAD), found large racial and ethnic disparities in household wealth for households maintained by persons aged 51 to 61 years (HRS) and those aged 70 and over (AHEAD). For every dollar of wealth of a White household maintained by a person aged 51 to 61, comparable Black

households had 27 cents on the dollar and Hispanic households 30 cents. Smith found that income differences explained most of the racial difference in wealth, as low income persons save little, regardless of their race and ethnic background.

Data on the composition of net worth show that home equity was the major asset holding for the elderly, as it was for all age groups (table 4-7). Some types of assets are much more important in elderly households. For example, the proportion of net worth in interest-earning assets was significantly larger in elderly households (21 percent) than in those with a householder under age 35 (12 percent). Similarly, the proportion of net worth in stocks and mutual funds ranged from 5 percent in households with a householder under 35 to 9 percent in elderly households. Among the types of assets that were not as important to the elderly were motor vehicles; the share of net worth in this asset ranged from 18 percent in the youngest age group to 4 percent among the elderly.

Table 4-7. **Distribution of Net Worth by Age of Householder and Asset Type: 1991**(Excludes group quarters)

Total	Under 35 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over
100.0	100.0	100.0	100.0	100.0	100.0
14.2	12.2	9.6	9.5	12.1	21.0
5.0	1.9	3.0	3.7	5.1	7.3
0.5	1.2	0.7	0.4	0.4	0.4
7.1	4.7	5.9	5.4	6.6	9.4
41.9	42.1	45.1	40.8	40.9	41.5
6.8	6.1	8.0	9.4	7.1	4.6
5.4	6.2	5.4	6.8	6.3	4.0
6.4	18.1	8.7	6.4	5.2	3.5
7.3	13.5	11.5	10.8	6.8	2.1
0.6	0.7	0.5	0.5	0.7	0.6
5.2	3.2	5.6	5.8	7.1	3.8
3.1	3.5	1.7	4.1	4.3	2.4
-3.4	-13.5	-5.8	-3.7	-2.6	-0.5
	100.0 14.2 5.0 0.5 7.1 41.9 6.8 5.4 6.4 7.3 0.6 5.2 3.1	Total 35 years 100.0 100.0 14.2 12.2 5.0 1.9 0.5 1.2 7.1 4.7 41.9 42.1 6.8 6.1 5.4 6.2 6.4 18.1 7.3 13.5 0.6 0.7 5.2 3.2 3.1 3.5	Total 35 years years 100.0 100.0 100.0 14.2 12.2 9.6 5.0 1.9 3.0 0.5 1.2 0.7 7.1 4.7 5.9 41.9 42.1 45.1 6.8 6.1 8.0 5.4 6.2 5.4 6.4 18.1 8.7 7.3 13.5 11.5 0.6 0.7 0.5 5.2 3.2 5.6 3.1 3.5 1.7	Total 35 years years years 100.0 100.0 100.0 100.0 14.2 12.2 9.6 9.5 5.0 1.9 3.0 3.7 0.5 1.2 0.7 0.4 7.1 4.7 5.9 5.4 41.9 42.1 45.1 40.8 6.8 6.1 8.0 9.4 5.4 6.2 5.4 6.8 6.4 18.1 8.7 6.4 7.3 13.5 11.5 10.8 0.6 0.7 0.5 0.5 5.2 3.2 5.6 5.8 3.1 3.5 1.7 4.1	Total 35 years years years years 100.0 100.0 100.0 100.0 100.0 14.2 12.2 9.6 9.5 12.1 5.0 1.9 3.0 3.7 5.1 0.5 1.2 0.7 0.4 0.4 7.1 4.7 5.9 5.4 6.6 41.9 42.1 45.1 40.8 40.9 6.8 6.1 8.0 9.4 7.1 5.4 6.2 5.4 6.8 6.3 6.4 18.1 8.7 6.4 5.2 7.3 13.5 11.5 10.8 6.8 0.6 0.7 0.5 0.5 0.7 5.2 3.2 5.6 5.8 7.1 3.1 3.5 1.7 4.1 4.3

¹ Includes mortgages held from sale of real estate, amount due from sale of business, unit trusts, and other financial investments.

⁶⁸ James P. Smith, "Unequal Wealth and Incentives to Save," Documented Briefing, RAND, 1995.

² Since net worth is the value of assets less liabilities, unsecured liabilities are subtracted from the distribution of net worth and are shown as negative.

Source: U.S. Bureau of the Census, *Household Wealth and Asset Ownership: 1991*, Current Population Reports, P70-34, Washington, DC, U.S. Government Printing Office, 1994, table G.

Housing

Most Elderly Own Their Homes

There were 20.3 million householders in 1991 aged 65 or older. A little over three-fourths (77 percent), or 15.7 million of the householders, were homeowners. Elderly householders who rented their home numbered 4.6 million in 1991.

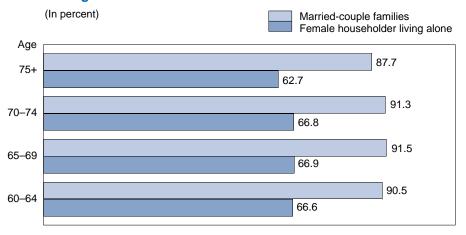
Just over seven in ten (72 percent) homes occupied by elderly house-holders were single-family homes. Six in one hundred (6 percent), or 1.2 million elderly householders, lived in mobile homes. ⁶⁹

Homeownership Varies by Elderly Subgroup

Data from the 1991 American Housing Survey (AHS) show that elderly Whites were more likely than elderly Blacks or Hispanics to be homeowners: 79 percent of Whites were homeowners compared with 64 percent of Blacks and 59 percent of Hispanics (the apparent difference

Figure 4-15.

Homeownership Rate by Family Status and Age of Householder: 1993



Source: U.S. Bureau of the Census, *Housing Vacancies and Homeownership*, Current Housing Reports, H111/93-A, U.S. Government Printing Office, Washington, DC, 1994, table 21.

between Blacks and Hispanics was not statistically significant).⁷⁰

Homeownership data from the Current Population Survey (CPS) indicate that elderly married couples are much more likely to be homeowners than are elderly women who live alone. In 1993, 91 percent of married couples with a householder aged 65 to 69 years old owned their homes compared with 67 percent of similarly aged women who lived alone (figure 4-15).

While elderly householders with household incomes more than \$10,000 were more likely to own their homes in 1991 than those with household incomes less than \$10,000, 61 percent of elderly householders in this lower household income range were owners. Among elderly owners, women living alone were more likely than men living alone or in multi-person households to use 30 percent or more of their income for housing.⁷¹

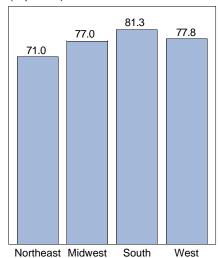
⁶⁹ U.S. Bureau of the Census and U.S. Department of Housing and Urban Development, Office of Policy Development and Research, *American Housing Survey for* the United States in 1991, Current Housing Reports, H150/91, U.S. Government Printing Office, Washington, DC, 1993, tables 7-1 to 7-24

⁷⁰ Ibid.

Mary L. Naifeh, U.S. Bureau of the Census, *Housing of the Elderly: 1991*, Current Housing Reports, H123/93-1, U.S. Government Printing Office, Washington, DC, 1993.

Figure 4-16.
Homeownership Rate for
Householders 65 Years and
Over by Region: 1993

(In percent)



Source: U.S. Bureau of the Census, Housing Vacancies and Homeownership, Current Housing Reports, H111/93-A, U.S. Government Printing Office, Washington, DC, 1994.

CPS data also reveal significant differences in homeownership in 1993 for elderly in different areas of the country. In the South, 81 percent of elderly householders owned their homes compared with the Northeast where only 71 percent owned their own homes (figure 4-16).

Elderly Tend to Live in Older Homes

Elderly householders tend to live in units that are more than 30 years old. One-third of all elderly owners in 1991 had lived in their residence for at least 30 years. Elderly Black owners were as likely as elderly White owners to have lived in their residence for 30 or more years (35 percent). Among owners 85 years

and over, nearly half (49 percent) have lived in their current residences for at least 30 years.⁷²

Housing of the elderly is basically sound. Only 3 percent of housing units with an elderly householder had severe physical problems (603,000 units with such problems). Another 5 percent (972,000 units) had moderate problems. Most of the severe problems were because of plumbing (536,000 units). Most of the moderate problems were because of heating (617,000 units). Most of the units with moderate or severe problems were in metropolitan areas (393,000 with severe problems: 577,000 with moderate problems) and the units with severe problems were evenly divided between inner city and suburbs. Elderly Blacks and elderly Hispanics were somewhat more likely than elderly Whites to live in housing with severe physical problems (5 percent, 5 percent and 3 percent, respectively).⁷³ Structures with severe or moderate physical problems tend to be older houses. The median year the structure was built for housing units with severe physical problems and occupied by an elderly householder was 1950, compared with 1957 for all units occupied by an elderly householder. Only 5 percent of elderly householders lived in a unit built between 1985 and 1989.

Virtually all housing occupied by elderly householders has basic equipment and many units have clothes washing machines and dishwashers, air-conditioning, and other equipment that makes living more comfortable. Of the 20.3 million units occupied by

elderly householders, only 178,000 lacked complete kitchen facilities (a sink, refrigerator, and burners). Complete plumbing facilities (hot piped water, a bathtub or shower, and a flush toilet) were found in 97 percent of units occupied by elderly householders. Only 56,000 units had no access to a public sewer or septic tank, cesspool, or chemical toilet. Most units (78 percent) had a washing machine, 40 percent had a dishwasher, 96 percent had a telephone, and 71 percent enjoyed air-conditioning. Warm-air furnaces were the main source of heat in 52 percent of the units while it was portable electric heaters for 1 percent and stoves for 3 percent. Only 132,000 elderly householders reported they had no main source of heat.⁷⁴

Savage and Fronczek showed that, with few exceptions, the ability to afford a median-priced home increases with age.⁷⁵ Using 1991 data from SIPP, they found that homeownership affordability peaked for homeowner families with a householder 55 to 64 years old. Thirty-one percent of homeowner families with a householder 65 years old and over could not afford a median-priced home in their area in 1991 (not significantly different from those with a householder between the ages of 55 and 64). Families with a householder under the age of 25 were most likely to be

⁷² Ibid.

⁷³ U.S. Bureau of the Census and U.S. Department of Housing and Urban Development, Office of Policy Development and Research, op. cit.

⁷⁴ Mary L. Naifeh, op. cit.

⁷⁵ Howard Savage and Peter J. Fronczek, U.S. Bureau of the Census, Who Can Afford to Buy A House in 1991?, Current Housing Reports, Series H-121/93-3, U.S. Government Printing Office, Washington, DC, 1993, table 2-3. Data are from the Survey of Income and Program Participation. Affordability refers to whether the family or individual could qualify for the purchase of a median-priced home where they live with conventional fixed-rate, 30-year financing.

unable to afford a median-priced home in their area (96 percent).

Of the 15.7 million elderly homeowners, 13.0 million (82 percent) owned their homes free and clear. Median monthly housing costs (including maintenance) in 1991 were \$549 for owners with a mortgage, \$217 for owners with no mortgage, and median rent was \$360. Median monthly housing costs as a percent of income were 29 percent for homeowners with a mortgage, 16 percent for homeowners with no mortgage, 37 percent for renters; for those elderly householders with incomes below poverty, housing costs were 43 percent of income. Of the

15.7 million elderly homeowners, 15.0 million reported they did not share ownership with someone outside their home and 15.4 million reported no one outside the home helped pay the costs of owning their home (no statistical difference between 15.0 million and 15.4 million). The 1991 median value of homes owned by elderly householders was \$70,418; the median purchase price was \$19,259.⁷⁶

⁷⁶ U.S. Bureau of the Census and U.S. Department of Housing and Urban Development, Office of Policy Development and Research, op. cit.

Geographic Distribution

Geographic Changes in the Elderly Population, 1980-90

The South and West Regions Experienced Largest Percent Increase in Elderly and in Oldest Old Population During the 1980's

Over the decade of the 1980's, the largest percent increases in elderly population (65 years and over) were mostly in the West, particularly the Mountain States, and in the South, especially the South Atlantic States of Florida, South Carolina, and Delaware (figure 5-1, table 5-1). The percent change in the elderly population during the 1980's ranged from a low of 4 percent in Washington, DC to a

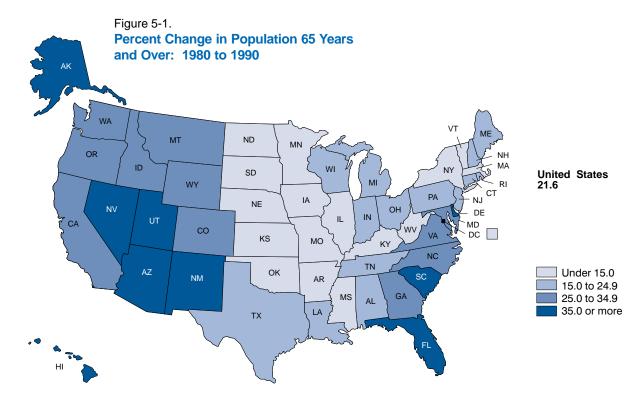
high of 93 percent in Nevada. The South and West regions also experienced the largest percent increases in the oldest old population in the 1980's (table 5-2).

Every State's elderly population and oldest old population increased during the 1980's. The proportion elderly and the proportion oldest old of the total population of each State also rose between 1980 and 1990 (table 5-3).

The regional relocation of the elderly to the South and West has been occurring among the younger elderly since the 1960's and among the older elderly since the 1970's. In addition

to the older adult migrants to these areas generally tending to be among the young old, they also have tended to be relatively well-educated and relatively well-off financially. As a result, such migrants tend to rejuvenate and enrich the older population of the receiving States.

² Charles F. Longino, Jr., "Geographic Distribution and Migration," *Handbook of Aging and the Social Sciences*, (3rd ed.), in Robert H. Binstock and Linda K. George (eds.), 1990, San Diego, CA: Academic Press.



Source: U.S. Bureau of the Census, unpublished data consistent with *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin:* 1980 to 1991, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993.

¹ Lawrence E. Hazelrigg and Melissa A. Hardy, "Older Adult Migration to the Sunbelt: Assessing Income and Related Characteristics of Recent Migrants," *Research on Aging*, Vol. 17, No. 2, 1995, pp. 209-234.

293Table 5-1.

Percent Change of Population 65 Years and Over by Region, Division, and State: 1980 and 1990

D : "::	Nun	nber		Percent	D	Num	nber		Percent
Region, division, and State	1980	1990	Change, 1980-90	change, 1980-90	Region, division, and State	1980	1990	Change, 1980-90	change, 1980-90
United States	25,549,544	31,078,895	5,529,351	21.6	West North Central—Con.				
Northeast	6,071,865	6,948,232	876,367	14.4	Nebraska	205,684	222,667	16,983	8.3
New England	1,520,446	1,761,658	241,212	15.9	Kansas	306,344	341,977	35,633	11.6
Middle Atlantic	4,551,419	5,186,574	635,155	14.0	South Atlantic	4,367,143	5,801,662	1,434,519	32.8
Midwest	6,692,026	7,725,193	1,033,167	15.4	Delaware	59,179	80,285	21,106	35.7
East North Central	4,493,259	5,280,452	787,193	17.5	Maryland	395.607	514,359	118.752	30.0
West North Central	2,198,767	2,444,741	245,974	11.2	District of Columbia .	74,287	77,084	2,797	3.8
South	8.487.699	10,668,679	2,180,980	25.7	Virginia	505,299	661,388	156,089	30.9
South Atlantic	4,367,143	5,801,662	1,434,519	32.8	West Virginia	237,948	267,830	29,882	12.6
East South Central	1,656,780	1,920,425	263,645	15.9	North Carolina	603,039	800,199	197,160	32.7
West South Central .	2,463,776	2,946,592	482,816	19.6	South Carolina	287,361	394,049	106,688	37.1
West South Central .		· ' '	,		Georgia	516,722	650,542	133,820	25.9
West	4,297,954	5,736,791	1,438,837	33.5	Florida	1,687,701	2,355,926	668,225	39.6
Mountain	1,061,036	1,516,439	455,403	42.9	East South Central	1.656.780	1.920.425	263.645	15.9
Pacific	3,236,918	4,220,352	983,434	30.4	Kentucky	409,826	464,999	55,173	13.5
New England	1.520.446	1,761,658	241,212	15.9	Tennessee	517,584	616,143	98,559	19.0
Maine	140.997	162,862	21,865	15.5	Alabama	440.014	519,898	79,884	18.2
Vermont	58,166	65,887	7,721	13.3	Mississippi	289,356	319,385	30,029	10.4
New Hampshire	102,967	124,524	21,557	20.9	· · ·	,	,	, i	
Massachusetts	726,531	815,005	88,474	12.2	West South Central	2,463,776	2,946,592	482,816	19.6
Rhode Island	126,922	149,749	22,827	18.0	Arkansas	312,474	348,783	36,309	11.6
Connecticut	364,863	443,631	78,768	21.6	Louisiana	404,320	466,419	62,099	15.4
Middle Atlantic	4.551.419	5.186.574	635.155	14.0	Oklahoma	376,142	422,956	46,814	12.4
New York	2,160,767	2.340.113	179,346	8.3	Texas	1,370,840	1,708,434	337,594	24.6
New Jersey	859,780	1,025,021	165,241	19.2	Mountain	1,061,036	1,516,439	455,403	42.9
Pennsylvania	1,530,872	1,821,440	290,568	19.0	Montana	84,559	106,197	21,638	25.6
•			,		Idaho	93,688	120,901	27,213	29.0
East North Central	4,493,259	5,280,452	787,193	17.5	Wyoming	37,175	46,966	9,791	26.3
Ohio	1,169,454	1,402,841	233,387	20.0	Colorado	247,360	328,364	81,004	32.7
Indiana	585,384	693,937	108,553	18.5	New Mexico	115,931	161,900	45,969	39.7
Illinois	1,261,992	1,429,420	167,428	13.3	Arizona	307,347	476,016	168,669	54.9
Michigan	912,242	1,104,101	191,859	21.0 15.2	Utah	109,220	149,482	40,262	36.9
Wisconsin	564,187	650,153	85,966	15.2	Nevada	65,756	126,613	60,857	92.5
West North Central	2,198,767	2,444,741	245,974	11.2	Pacific	3,236,918	4,220,352	983,434	30.4
Minnesota	479,564	545,870	66,306	13.8	Washington	431,581	572,914	141,333	32.7
lowa	387,584	425,666	38,082	9.8	Oregon	303,336	389,765	86,429	28.5
Missouri	648,127	715,508	67,381	10.4	California	2,414,304	3,111,851	697,547	28.9
North Dakota	80,445	90,939	10,494	13.0	Alaska	11,547	22,095	10,548	91.3
South Dakota	91,019	102,114	11,095	12.2	Hawaii	76,150	123,727	47,577	62.5

Source: U.S. Bureau of the Census, unpublished data consistent with *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991*, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993.

Table 5-2.

Percent Change of Population 85 Years and Over by Region, Division, and State: 1980 and 1990

Desire division and Ctate	Nun	nber	Ch a ra a ra	Percent	Danian divinian and Chata	Nun	nber	Ch a ra a ra	Percent
Region, division, and State	1980	1990	Change, 1980-90	change, 1980-90	Region, division, and State	1980	1990	Change, 1980-90	change, 1980-90
United States	2,240,178	3,021,425	781,247	34.9	West North Central—Con.	10 107	40.040	0.700	20.7
Northeast	546,516	693,231	146,715	26.8	South Dakota Nebraska	10,427 23,744	13,213 28,918	2,786 5,174	26.7 21.8
New England	151,402	190,414	39,012	25.8	Kansas	33,474	41,832	8,358	25.0
Middle Atlantic	395,114	502,817	107,703	27.3	South Atlantic	326,955	504,210	177,255	54.2
Midwest	649,419	828,541	179,122	27.6	Delaware	5,269	7,005	1,736	32.9
East North Central	414,833	530,728	115,895	27.9	Maryland	32.665	45,596	12,931	39.6
West North Central	234,586	297,813	63,227	27.0	District of Columbia	6,385	7,590	1,205	18.9
South	663,816	971,892	308.076	46.4	Virginia	41,131	58,829	17,698	43.0
South Atlantic	326,955	504,210	177,255	54.2	West Virginia	19,439	25,064	5,625	28.9
East South Central	134,004	182,232	48,228	36.0	North Carolina	45,197	68,647	23,450	51.9
West South Central	202,857	285,450	82,593	40.7	South Carolina	20,062	29,999	9,937	49.5
Wood Coddin Contidant	202,007	200, 100	'		Georgia	39,434	56,013	16,579	42.0
West	380,427	527,761	147,334	38.7	Florida	117,373	205,467	88,094	75.1
Mountain	86,306	130,552	44,246	51.3	East South Central	134.004	182.232	48.228	36.0
Pacific	294,121	397,209	103,088	35.0	Kentucky	35.033	45.716	10,683	30.5
New England	151,402	190.414	39.012	25.8	Tennessee	41,443	57,745	16,302	39.3
Maine	14,130	17,956	3,826	27.1	Alabama	34,019	47,282	13,263	39.0
New Hampshire	9,650	13,075	3,425	35.5	Mississippi	23,509	31,489	7,980	33.9
•	6,007	7,424	1,417	23.6		•	,		
Vermont					West South Central	202,857	285,450	82,593	40.7
Massachusetts	73,908	90,339	16,431	22.2	Arkansas	26,354	34,534	8,180	31.0
Rhode Island	11,978	15,640	3,662	30.6	Louisiana	30,545	42,382	11,837	38.8
Connecticut	35,729	45,980	10,251	28.7	Oklahoma	33,980	45,084	11,104	32.7
Middle Atlantic	395,114	502,817	107,703	27.3	Texas	111,978	163,450	51,472	46.0
New York	192,983	241,008	48,025	24.9	Mountain	86,306	130,552	44.246	51.3
New Jersey	72,231	93,194	20,963	29.0	Montana	8,837	10,549	1,712	19.4
Pennsylvania	129,900	168,615	38,715	29.8	Idaho	8.476	11,264	2.788	32.9
5 (N (1 O))	444000	500 700	445.005	07.0	Wyoming	3,473	4,451	978	28.2
East North Central	414,833	530,728	115,895	27.9	Colorado	24,365	32,540	8,175	33.6
Ohio	108,425	136,156	27,731	25.6	New Mexico	8,784	13,888	5,104	58.1
Indiana	54,410	70,945	16,535	30.4	Arizona	19,879	37,090	17,211	86.6
Illinois	114,710	144,970	30,260	26.4	Utah	8.852	13.443	4,591	51.9
Michigan	81,652	105,170	23,518	28.8	Nevada	3,640	7,327	3,687	101.3
Wisconsin	55,636	73,487	17,851	32.1		,	·	103.088	
West North Control	224 500	207.042	62 207	27.0	Pacific	294,121 41.476	397,209 55,463	13,987	35.0 33.7
West North Central	234,586	297,813	63,227	27.0	_	, -	1 '	9,836	34.6
Minnesota	52,789	68,069	15,280	28.9	Oregon	28,431 218,034	38,267 292,217	74,183	34.0
lowa	44,940	54,691	9,751	21.7			1,200		93.9
Missouri	61,072	79,996	18,924	31.0	Alaska	619 5 561	1 '	581	
North Dakota	8,140	11,094	2,954	36.3	Hawaii	5,561	10,062	4,501	80.9

Source: U.S. Bureau of the Census, unpublished data consistent with *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991*, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993.

Table 5-3.
Percent 65 Years and Over and 85 Years and Over of the Total State Population: 1980 to 2020

Danies division and Out		Perso	ns 65 and	over			Pers	ons 85 and	over	
Region, division, and State	1980	1990	2000	2010	2020	1980	1990	2000	2010	2020
United States	11.3	12.5	12.8	13.3	15.7	1.0	1.2	1.6	2.0	2.1
Northeast	12.4	13.7	14.1	14.3	16.9	1.1	1.4	1.8	2.2	2.3
New England	12.3	13.3	14.0	14.4	17.5	1.2	1.4	1.9	2.5	2.5
Middle Atlantic	12.4	13.8	14.1	14.2	16.7	1.1	1.3	1.7	2.2	2.3
Midwest	11.4	12.9	13.1	13.4	16.2	1.1	1.4	1.7	2.1	2.2
East North Central	10.8 12.8	12.6 13.8	12.8 13.7	13.2	15.9 17.1	1.0 1.4	1.3 1.7	1.6 2.0	2.0 2.3	2.2 2.4
				14.0						
SouthSouth Atlantic	11.3 11.8	12.5 13.3	13.1 14.3	14.0 15.5	17.5 19.2	0.9 0.9	1.1 1.2	1.6 1.7	2.0 2.3	2.2 2.6
East South Central	11.3	12.7	12.9	13.7	17.0	0.9	1.2	1.7	1.9	2.0
West South Central	10.4	11.0	11.2	11.8	14.9	0.9	1.1	1.4	1.6	1.8
West	10.0	10.9	10.9	11.6	14.6	0.9	1.0	1.3	1.6	1.8
Mountain	9.3	11.1	11.4	12.4	16.0	0.8	1.0	1.3	1.8	2.0
Pacific	10.2	10.8	10.8	11.4	14.1	0.9	1.0	1.2	1.6	1.7
New England	12.3	13.3	14.0	14.4	17.5	1.2	1.4	1.9	2.5	2.5
Maine	12.5	13.3	14.2	14.6	18.3	1.3	1.5	1.9	2.3	2.5
Vermont	11.4	11.7	12.2	13.1	16.8	1.2	1.3	1.6	1.9	2.1
New Hampshire	11.2	11.2	12.1	13.0	16.9	1.0	1.2	1.6	2.0	2.1
Massachusetts	12.7	13.5 14.9	14.1 15.1	14.5	17.4 17.9	1.3	1.5 1.6	2.0 2.1	2.5 2.6	2.6 2.6
Connecticut	13.4 11.7	13.5	14.4	14.8 14.8	2.6	1.3 1.1	1.6	2.1	2.6	2.6
Middle Atlantic	12.4	13.8	14.1	14.2	16.7	1.1	1.3	1.7	2.2	2.3
New York	12.4	13.0	13.3	13.6	15.8	1.1	1.3	1.7	2.0	2.2
New Jersey	11.7	13.3	13.7	13.9	16.3	1.0	1.2	1.6	2.0	2.1
Pennsylvania	12.9	15.3	15.6	15.3	18.2	1.1	1.4	1.9	2.5	2.5
East North Central	10.8	12.6	12.8	13.2	15.9	1.0	1.3	1.6	2.0	2.2
Ohio	10.8	12.9	13.5	13.9	2.3	1.0	1.3	1.6	2.2	2.3
Indiana	10.7	12.5	12.8	13.3	16.2	1.0	1.3	1.6	2.0	2.1
Illinois	11.0	12.5	12.4	12.6	14.8	1.0	1.3	1.6	1.9	2.0
Michigan	9.8 12.0	11.9 13.3	12.4 13.2	12.7 13.8	15.2 17.3	0.9 1.2	1.1 1.5	1.5 1.8	2.0 2.2	2.1 2.3
West North Central	12.8 11.8	13.8 12.5	13.7 12.5	14.0 13.3	17.1 16.9	1.4 1.3	1.7 1.6	2.0 1.8	2.3 2.1	2.4 2.3
lowa	13.3	15.3	15.0	15.0	18.0	1.5	2.0	2.3	2.7	2.8
Missouri	13.2	14.0	14.1	14.5	17.5	1.2	1.6	1.9	2.2	2.3
North Dakota	12.3	14.2	14.5	13.7	16.2	1.2	1.7	2.5	2.7	2.7
South Dakota	13.2	14.7	14.0	13.6	16.4	1.5	1.9	2.1	2.4	2.5
Nebraska	13.1	14.1	13.8	13.9	16.8	1.5	1.8	2.1	2.3	2.4
Kansas	13.0	13.8	13.5	13.5	16.5	1.4	1.7	2.0	2.3	2.4
South Atlantic	11.8	13.3	14.3	15.5	19.2	0.9	1.2	1.7	2.3	2.6
Delaware	10.0 9.4	12.1 10.8	13.1 11.3	13.8 12.1	16.7 14.8	0.9 0.8	1.1 1.0	1.4 1.2	2.0 1.6	2.2 1.8
District of Columbia	11.6	12.7	13.5	12.1	13.7	1.0	1.3	1.8	2.0	1.0
Virginia	9.5	10.7	11.4	12.5	15.7		1.0	1.3	1.7	1.9
West Virginia	12.2	14.9	15.1	15.2	18.5		1.4	1.9	2.4	2.5
North Carolina	10.3	12.1	13.1	14.4	18.1	0.8	1.0	1.5	2.0	2.4
South Carolina	9.2	11.3	12.3	13.3	16.8		0.9	1.3	1.8	2.0
Georgia	9.5	10.0	10.5	11.7	15.0		0.9	1.2	1.5	1.7
Florida	17.3	18.2	19.6	21.0	25.6	1.2	1.6	2.4	3.4	3.8

See footnotes at end of table.

Table 5-3.

Percent 65 Years and Over and 85 Years and Over of the Total State Population: 1980 to 2020—Continued

Degion division and State		Perso	ons 65 and	over		Persons 85 and over				
Region, division, and State	1980	1990	2000	2010	2020	1980	1990	2000	2010	2020
East South Central	11.3	12.7	12.9	13.7	17.0	0.9	1.2	1.5	1.9	2.1
Kentucky	11.2	12.6	12.8	13.5	16.9	1.0	1.2	1.5	1.9	2.0
Tennessee	11.3	12.6	12.9	14.0	17.6	0.9	1.2	1.5	1.9	2.1
Alabama	11.3	12.9	13.2	13.8	16.7	0.9	1.2	1.5	1.9	2.0
Mississippi	11.5	12.4	12.7	13.4	16.6	0.9	1.2	1.6	1.9	2.1
West South Central	10.4	11.0	11.2	11.8	14.9	0.9	1.1	1.4	1.6	1.8
Arkansas	13.7	14.8	14.9	15.7	19.3	1.2	1.5	1.9	2.2	2.4
Louisiana	9.6	11.1	11.5	11.8	14.3	0.7	1.0	1.3	1.6	1.7
Oklahoma	12.4	13.4	13.4	13.6	16.5	1.1	1.4	1.8	2.0	2.1
Texas	9.6	10.1	10.3	11.1	14.2	0.8	1.0	1.2	1.5	1.7
Mountain	9.3	11.1	11.4	12.4	16.0	0.8	1.0	1.3	1.8	2.0
Montana	10.7	13.3	12.8	13.0	16.2	1.1	1.3	1.8	2.2	2.3
Idaho	9.9	12.0	11.1	11.9	15.4	0.9	1.1	1.4	1.7	1.8
Wyoming	7.9	10.4	9.7	9.0	11.2	0.7	1.0	1.2	1.3	1.3
Colorado	8.6	10.0	10.2	11.4	15.3	0.8	1.0	1.2	1.6	1.8
New Mexico	8.9	10.7	11.2	11.9	15.0	0.7	0.9	1.3	1.7	1.9
Arizona	11.3	13.0	14.0	15.4	19.6	0.7	1.0	1.6	2.3	2.6
Utah	7.5	8.7	8.7	9.3	12.1	0.6	0.8	1.0	1.4	1.5
Nevada	8.2	10.5	10.8	12.0	15.5	0.5	0.6	0.9	1.4	1.6
Pacific	10.2	10.8	10.8	11.4	14.1	0.9	1.0	1.2	1.6	1.7
Washington	10.4	11.8	11.1	11.9	15.6	1.0	1.1	1.4	1.7	1.8
Oregon	11.5	13.7	12.7	13.0	16.6	1.1	1.3	1.6	2.0	1.9
California	10.2	10.5	10.6	11.2	13.8		1.0	1.2	1.5	1.7
Alaska	2.9	4.0	4.4	4.8	6.2	0.2	0.2	0.3	0.4	0.5
Hawaii	7.9	11.2	11.9	12.3	14.4	0.6	0.9	1.3	1.9	2.2

Source: U.S. Bureau of the Census, 1980 and 1990 from unpublished data consistent with *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991*, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993; 2000 to 2020 from unpublished data consistent with Series A - preferred series, from *Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2020,* Current Population Reports, P25-1111, U.S. Government Printing Office, Washington, DC, 1994.

In the nation as a whole, the oldest old population increased more rapidly (35 percent) than the elderly population (22 percent) during the 1980's. The greater percent increase of the oldest old compared to the elderly held for all States, with the exception of Delaware and Montana.

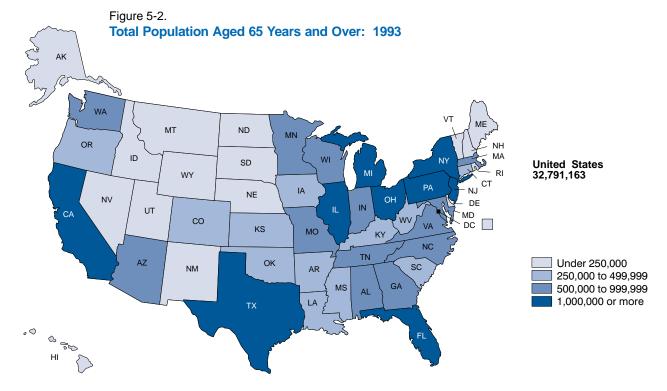
State Estimates and Projections of Elderly and Oldest Old

Most Populous States Tend to Also Have Most Elderly, Florida and Midwestern States Among Highest Proportions Elderly

Our most populous States are also the ones with the largest number of elderly. In 1993, nine States had more than 1 million elderly: California, Florida, New York, Pennsylvania, Texas, Illinois, Ohio, Michigan, and New Jersey (figure 5-2, table 5-4).

The States with the greatest proportion of elderly are generally different from those with the greatest number. While California has by far the largest number of persons aged 65 and over, its proportion elderly of the State population ranks 46th among the States and the District of Columbia. Florida. however, with almost 19 percent of its population aged 65 or older in 1993, had both a large number and the highest proportion. Pennsylvania also has a high ranking in terms of both the number and proportion of elderly. Florida's proportion elderly ranks far above the proportions of other States (figure 5-3). Other

States with high proportions elderly (14 to 16 percent), ranked in descending order, were Pennsylvania, Iowa, Rhode Island, West Virginia, Arkansas, North Dakota, South Dakota, Nebraska, Missouri, Connecticut, Kansas, and Massachusetts. The proportion of a State's total population aged 65 years and over is one indicator of the importance an aging population has with regard to the State's resources. Some States "age" because of in-migration of elderly. some because of out-migration of the voung, and some because of sustained low fertility (or some combination of these factors). The Farm Belt States have a higher proportion of elderly than for the total United States (12.7 percent in 1993) primarily because of out-migration of the young.



Source: U.S. Bureau of the Census, State Age-Sex Population Estimates Consistent with Census Advisory, CB94-43.

Table 5-4.

Population 65 Years and Over and 85 Years and Over for States: 1993, 2000, 2010, and 2020 (Numbers in thousands)

		Persons	65 years a	nd over			Persons	85 years a	and over	
Region, division, and State		Num	ber		Percent change,		Num	ber		Percent change,
	1993 ¹	2000	2010	2020	1993 to 2020	1993 ¹	2000	2010	2020	1993 to 2020
United States	32,791	35,322	40,104	53,348	62.7	3,369	4,333	5,969	6,959	106.5
Northeast	7,199	7,304	7,600	9,348	29.9	753	923	1,198	1,295	72.0
	1,832	1,853	1,979	2,537	38.5	207	257	338	369	78.6
	5,366	5,451	5,622	6,811	26.9	546	665	861	926	69.4
Midwest East North Central West North Central	8,060	8,367	8,912	11,206	39.0	906	1,099	1,407	1,549	71.0
	5,533	5,754	6,097	7,578	37.0	583	719	941	1,032	77.1
	2,527	2,613	2,815	3,627	43.6	323	380	466	517	60.0
SouthSouth AtlanticEast South CentralWest South Central	11,360	12,724	15,058	20,513	80.6	1,115	1,512	2,158	2,613	134.4
	6,228	7,132	8,560	11,644	86.9	587	840	1,264	1,549	163.9
	2,007	2,167	2,461	3,247	61.8	207	260	335	391	89.3
	3,125	3,425	4,037	5,622	79.9	321	412	559	673	109.6
West	6,173	6,927	8,534	12,281	99.0	595	800	1,206	1,501	152.1
	1,677	1,925	2,361	3,374	101.2	155	222	338	417	169.9
	4,496	5,002	6,174	8,906	98.1	441	578	868	1,084	145.9
New England Maine New Hampshire. Vermont Massachusetts. Rhode Island Connecticut	1,832	1,853	1,979	2,537	38.5	207	257	338	369	78.6
	170	176	192	256	50.4	19	23	30	34	79.5
	134	141	166	237	76.8	15	19	25	29	98.1
	69	72	82	110	59.1	8	9	12	14	66.6
	842	842	881	1,109	31.7	97	120	155	168	73.6
	155	151	153	195	26.2	17	21	27	28	66.2
	462	471	504	630	36.3	51	65	88	96	88.3
Middle Atlantic	5,366	5,451	5,622	6,811	26.9	546	665	861	926	69.4
New York	2,388	2,426	2,526	3,028	26.8	257	301	379	418	62.7
New Jersey	1,071	1,112	1,192	1,480	38.2	102	128	171	187	83.3
Pennsylvania	1,908	1,913	1,904	2,303	20.7	187	236	310	320	71.1
East North Central Ohio. Indiana Illinois Michigan Wisconsin	5,533	5,754	6,097	7,578	37.0	583	719	941	1,032	77.1
	1,480	1,547	1,619	1,986	34.2	151	186	252	276	82.4
	728	772	836	1,048	44.0	77	95	125	139	80.1
	1,479	1,513	1,588	1,952	32.0	157	193	243	262	66.2
	1,171	1,211	1,277	1,579	34.9	116	148	200	219	88.4
	676	711	776	1,013	50.0	80	97	121	136	69.2
West North Central	2,527	2,613	2,815	3,627	43.6	323	380	466	517	60.0
	568	602	683	918	61.5	73	88	110	126	73.3
	436	439	449	546	25.1	58	67	80	85	46.5
	741	769	837	1,072	44.6	89	104	129	143	61.1
	94	93	93	117	23.9	13	16	18	20	55.7
	105	108	111	142	34.3	14	16	20	22	55.6
	229	236	248	317	38.5	31	35	42	46	47.6
	353	366	395	517	46.5	46	54	67	75	64.3

See footnotes at end of table.

Table 5-4.

Population 65 Years and Over and 85 Years and Over for States: 1993, 2000, 2010, and 2020—Continued (Numbers in thousands)

		Persons	65 years a	and over			Persons	s 85 years a	and over	
Region, division, and State		Num	ber		Percent change,		Num	nber		Percent change,
	1993¹	2000	2010	2020	1993 to 2020	1993 ¹	2000	2010	2020	1993 to 2020
South Atlantic. Delaware Maryland. District of Columbia Virginia West Virginia North Carolina	6,228 87 549 77 712 278 865	7,132 100 602 73 803 277 998	8,560 113 701 72 967 280 1,200	11,644 146 929 87 1,319 342 1,633	86.9 67.2 69.2 13.2 85.3 23.1 88.7	587 8 52 8 67 28 80	840 10 66 10 91 35	1,264 16 95 12 134 44 170	1,549 19 111 12 162 46 213	163.9 134.6 115.1 47.3 143.7 67.3 166.3
South Carolina Georgia Florida	426 695 2,539	482 798 2,999	575 998 3,654	788 1,419 4,982	84.9 104.0 96.2	35 65 245	52 89 372	79 125 589	96 156 735	171.8 138.2 200.4
East South Central Kentucky Tennessee Alabama Mississippi	2,007 482 651 545 329	2,167 509 717 591 350	2,461 563 839 668 391	3,247 729 1,129 874 514	61.8 51.3 73.5 60.4 56.3	207 52 66 54 35	260 62 84 69 45	335 77 112 90 55	391 88 133 106 64	89.3 70.1 102.9 95.4 82.4
West South Central Arkansas. Louisiana Oklahoma. Texas.	3,125 362 487 440 1,835	3,425 383 514 454 2,074	4,037 436 565 501 2,534	5,622 580 741 661 3,640	79.9 60.1 52.0 50.4 98.4	321 39 47 50 186	412 49 60 60 244	559 62 77 75 344	673 72 88 85 428	109.6 86.5 88.0 70.6 130.3
Mountain. Montana Idaho Wyoming. Colorado New Mexico Arizona Utah. Nevada	1,677 113 130 51 357 178 529 165	1,925 118 144 51 416 204 623 187 183	2,361 130 172 54 514 247 783 230 231	3,374 174 246 74 743 350 1,121 334 333	101.2 54.2 89.4 43.4 108.0 97.3 111.9 102.4 115.6	155 12 13 5 37 16 46 16	222 16 18 6 48 24 72 23 15	338 22 25 8 72 35 117 34 27	417 24 29 8 89 44 146 42 34	169.9 102.9 121.7 69.5 143.8 166.6 221.2 161.1 245.3
Pacific	4,496 612 418 3,303 26 137	5,002 676 434 3,704 31 158	6,174 836 505 4,605 38 190	8,906 1,245 724 6,622 54 262	98.1 103.5 73.2 100.5 103.3 91.6	441 62 43 323 2 12	578 84 56 418 2 18	868 123 76 636 3 30	1,084 146 84 809 4	145.9 135.5 95.2 151.0 197.0 241.8

Note: Totals may not add due to independent rounding and percents are computed on unrounded numbers.

Source: U.S. Bureau of the Census, 1993 data consistent with 1994 Census Advisory, *Updated National/State Population Esimates*, CB94-43; 2000, 2010, and 2020 from *Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2020*, Current Population Reports, P25-1111, U.S. Government Printing Office, Washington, DC, 1994, Series A - preferred series.

¹These estimates are consistent with the population as enumerated in the 1990 census, and have not been adjusted for census coverage errors. Includes Armed Forces residing in each State.

In 2020, Arizona and Arkansas Would Have Higher Proportions Elderly Than Florida Today

While Florida is the only State in 1993 with more than 16 percent of its population aged 65 and over, by 2020 a projected 32 States will fall in this category (figure 5-3, table 5-2).³ In the U.S. as a whole, about 1 of every 6 persons will be elderly, compared to about 1 of 8 persons in 1993. In 2020, nearly 1 of every 5 persons will be elderly in Arizona and Arkansas. These proportions are greater than those of present-day Florida. In 2020, Florida will continue to have the nation's highest proportion of State population aged 65 years and over. One-fourth of the State's population will be elderly.

Over Half of U.S. Elderly Likely to Live in Just 10 States in 2020

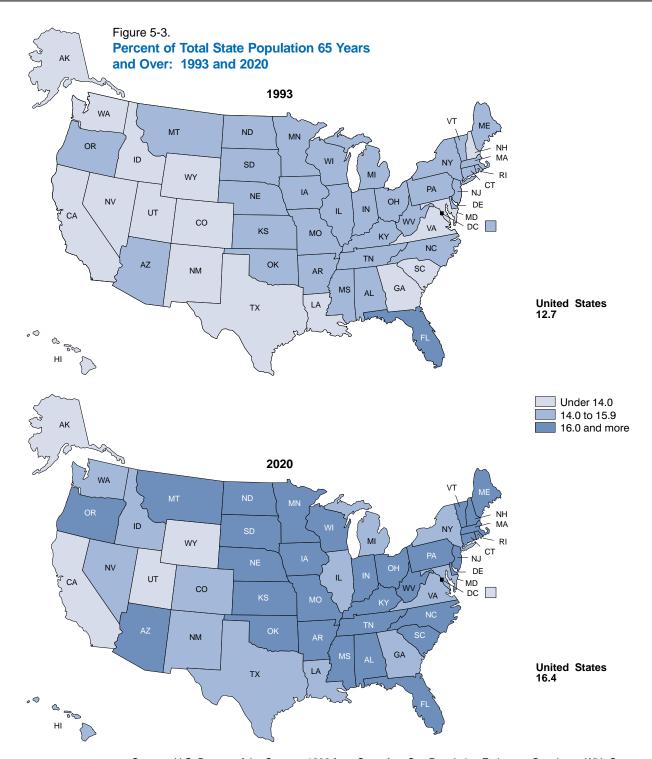
Census Bureau projections indicate that the West and the South would increase their elderly population by 99 and 81 percent, respectively, from 1993 to 2020 while the elderly of the Midwest would increase by only 39 percent and the Northeast by 30 percent over the same period (table 5-4).

The Census Bureau projects (in Series A) that in 2020, over half (55 percent) of the nation's 53 million elderly will live in the same nine States with the most elderly in 1993, plus North Carolina. California still would have the nation's largest elderly population, with 6.6 million persons 65 years and over, a 100-percent increase from 1993 (figure 5-4). Florida would have the second highest elderly population with 5.0 million, a 96-percent increase from 1993. One in four Floridians (26 percent) would be elderly in 2020. Texas would replace New York as the State with the country's third-largest elderly population in 2010. Texas' ranking would remain third in 2020, with 3.6 million elderly, a 98-percent increase from their 1993 estimate. Alaska had the smallest number of elderly in 1993 and, based on Series A projections, would still have the smallest elderly population in the year 2020, with an elderly population of only 54,000.

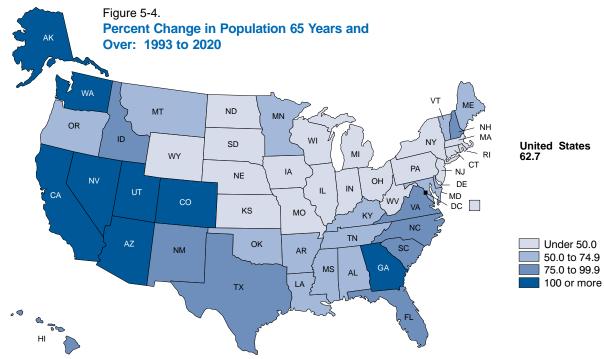
Elderly Population Would Double in 8 States From 1993 to 2020

Eight States would double their percentage of persons aged 65 years and over from 1993 to 2020, according to Census Bureau projections (figure 5-4, table 5-4). All of these States (Alaska, Arizona, California, Colorado, Nevada, Utah, and Washington) would be in the West, with the exception of Georgia. Most of the States with the least percent change in the elderly population would be in the Midwest and the Northeast. Among the 20 States with less than a 50 percent increase in their elderly population during the 1993 to 2020 period, only 1 (Wyoming) would be in the West, and only 2 in the South (West Virginia and the District of Columbia).

³ Paul R. Campbell, U.S. Bureau of the Census, *Population Projections for States, by Age, Race, and Hispanic Origin: 1993 to 2020,* Current Population Reports, P25-1111, U.S. Government Printing Office, Washington, DC, 1994. State projections in this report are from Series A, the preferred series, a time-series model that uses the State-to-State migration observed from 1975-76 through 1991-92.



Source: U.S. Bureau of the Census, 1993 from State Age-Sex Population Estimates Consistent With Census Advisory CB94-43; 2020 from *Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2020*, Current Population Reports, P25-1111, U.S. Government Printing Office, Washington, DC, 1994.



Source: U.S. Bureau of the Census, 1993 from 1994 Press Release, *Updated National/State Population Estimates*, CB94-43; 2020 from *Population Projections for States, by Age, Sex, Race, and Hispanic Origin:* 1993 to 2020, Current Population Reports, P25-1111, U.S. Government Printing Office, Washington, DC, 1994.

Percent Oldest Old Population Highest in Midwestern States; By 2020, Florida To Have Highest Percent Oldest Old

Those States with large numbers of elderly also had large numbers of persons aged 85 and over (table 5-4). In 1993, the nine States with more than 100,000 oldest old persons were the same nine States with more than 1 million elderly (see above), and also the top nine States in terms of total population size. Their ranking of oldest old population was also the same as their ranking of elderly population, with one exception—New York had the second largest oldest old population, switching places with Florida, which had the second largest elderly population, behind California. About half (51 percent) of the 3.4 million

oldest old in the United States lived in these nine States in 1993.

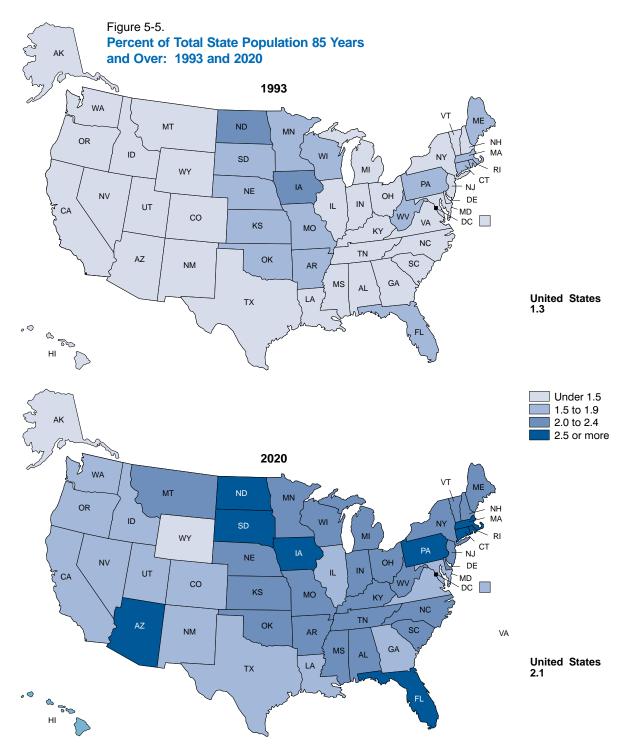
The five States with the highest proportion of persons aged 85 years and over of their total population in 1993 were all farm States: Iowa (2.1 percent), North Dakota (2.0 percent), South Dakota (1.9 percent), Nebraska (1.9 percent), and Kansas (1.8 percent). Alaska had the smallest proportion of oldest old with 0.3 percent of its population aged 85 or older (figure 5-5).

In 1993, only lowa had more than 2 percent of its population aged 85 years and over, but by 2020, thirty-four States would fall in this category. The oldest old also would be over 2 percent of the nation's population.

The percentage of Florida's population that is 85 or older would reach nearly 4 percent under the assumptions of Series A, surpassing lowa as the State with the highest proportion of oldest old population. Another eight States would have a proportion of their population aged 85 years and over in 2020 between 2.5 and 3.8 percent.

Distribution Inside and Outside Metropolitan Areas

During the 1980's, there was a renewed disparity in elderly and nonelderly geographic population shifts. Among the nonelderly, population gains in the Sunbelt were more concentrated in large metropolitan areas,



Source: U.S. Bureau of the Census, 1993 from State Age-Sex Population Estimates Consistent With Census Advisory CB94-43; 2020 from *Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2020*, Current Population Reports, P25-1111, U.S. Government Printing Office, Washington, DC, 1994.

while their shift away from large metropolitan areas in the North (Northeast and Midwest) contributed to increased elderly population concentrations inside metropolitan areas of the Northeast and Midwest.⁴ The more concentrated pattern of population growth in the 1980's among the nonelderly "led to a significant number of areas whose elderly concentrations have risen due to aging-in-place,"5 and these aging-in-place metropolitan areas were found disproportionately in the Northeast and Midwest, and among moderate and smaller-sized metropolitan areas in the South.

Nearly 3 Times as Many Elderly Lived Inside Metropolitan Areas Than Outside Metropolitan Areas in 1990

In 1990, about 23 million elderly Americans lived inside metropolitan areas compared with 8.2 million living outside metropolitan areas. However, the elderly represented a higher proportion (15 percent) of the population outside metropolitan areas than inside (nearly 12 percent), compared to a proportion elderly of 12.5 percent for the United States total population. Over 800,000 persons aged 85 or older lived outside metropolitan areas of the United States, with over 2 million oldest old living within them (table 5-5). The oldest old represented a larger proportion (1.5 percent) of the

population outside metropolitan areas than inside (1.1 percent), the same pattern as for the elderly.

Elderly American Indians, Eskimos, and Aleuts (AIEA) were the only racial group more likely to live outside metropolitan areas than inside. Elderly Asians are particularly more likely to live inside metropolitan areas (417,000 lived inside metropolitan areas and 33,000 outside in 1990). Elderly Hispanics were about 8 times more likely to have lived inside metropolitan areas than outside in 1990, Blacks about 4 times more likely, and Whites about 3 times more likely. For each racial group, the likelihood of living outside metropolitan areas was slightly higher for the 85-and-over population than for persons aged 65 to 84 years.

Geographic Distribution of Elderly Racial Groups and Hispanics

Elderly Whites Are More Evenly Distributed Among U.S. Regions; Elderly of Races Other Than White and Elderly Hispanics Are More Regionally Concentrated

About one-third of the U.S. elderly population lived in the South region in 1991. The South also had the largest number of oldest old among the country's regions (table 5-6). Elderly Whites were most numerous in the South, but were more evenly distributed among the nation's four regions than the elderly of other race groups and Hispanic elderly. Elderly Blacks are most numerous in the South region, as is the total Black population. The elderly Asian and Pacific Islander population is especially numerous in the West. More elderly American Indian, Eskimo, and Aleut

(AIEA) lived in the West than in any other region, but a large number of AIEA elderly also lived in the South region. Large numbers of Hispanic elderly were found in both the South and the West in 1991. The regional concentrations of the elderly for these population groups are similar to the concentrations of the total population of each group.

Over half of elderly Blacks lived in Southern States. Nearly 60 percent of America's Blacks aged 85 or older lived in the South in 1991. Thirteen States had an elderly Black population of 100,000 or more. These States represented nearly 70 percent of the elderly Black population and were either in the South and West, or the largest States of either the Northeast (New York and Pennsylvania) or the Midwest (Illinois, Ohio, and Michigan).6

Three out of four AIEA elderly (78 percent) lived in Western (43 percent) and Southern States (35 percent). Forty percent lived in Oklahoma, California, and Arizona. These were also the only States with more than 10,000 American Indians, Eskimos, and Aleuts aged 65 or older. Four out of five (79 percent) AIEA oldest old were found in Western and Southern States in 1991.

Seven States had an elderly Asian and Pacific Islander (API) elderly population of 10,000 or more in 1991. Eighty-four percent of the API elderly lived in these States—California, Hawaii, and Washington in the West,

⁴ William H. Frey, "Metropolitan Redistribution of the US Elderly: 1960-70, 1970-80, 1980-90," Chapter 7 in *Elderly Migration and Population Redistribution*, Andrei Rogers (ed.), with the assistance of William H. Frey, Alden Speare, Jr., Philip Rees and Anthony M. Warnes, 1992, London: Belhaven Press.

⁵ Ibid. Metropolitan areas were defined as aging-in-place during the decade if: 1) their percent elderly exceeded the end-of-decade U.S. elderly percentage, 2) the increase in percent elderly exceeded the U.S. decade increase, and 3) the percent change in the nonelderly population was less than the U.S. nonelderly percent change for the decade.

⁶ Data discussed in this section on the numerical distribution of the elderly and oldest old population by race and Hispanic origin in 1991 are from U.S. Bureau of the Census, "1991 Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin," PF-16.

Table 5-5.
Population 65 Years and Over Inside and Outside Metropolitan Areas by Age, Sex, Race, and Hispanic Origin: 1990

Inside and outside metropolitan areas, sex, and age	Total	White	Black	American Indian, Eskimo, and Aleut	Asian and Pacific Islander	Hispanic origin ¹
INSIDE METROPOLITAN AREAS						
Both sexes	22.074.044	20, 426, 269	1.072.240	FF 000	447 220	1.045.510
65 years and over	22,871,814 7,521,588	20,426,368 6,630,605	1,972,310 702,352	55,808 21,792	417,328 166,839	1,015,512 383,781
70 to 74 years	5,879,669	5,244,833	508,068	14,365	112,403	251,757
75 to 79 years	4,448,069	3,989,815	374,704	9,952	73,598	186,621
80 years and over	5,022,488	4,561,115	387,186	9,699	64,488	193,353
80 to 84 years	2,834,842	2,571,143	219,328	5,665	38,706	112,774
85 years and over	2,187,646	1,989,972	167,858	4,034	25,782	80,579
Male						
65 years and over	9,102,704	8,138,533	754,682	22,835	186,654	415,809
65 to 69 years	3,343,086	2,963,826	295,365	9,758	74,137	170,621
70 to 74 years	2,482,650	2,226,186	200,567	6,048	49,849	103,951
75 to 79 years	1,716,691 1,560,277	1,542,690 1,405,831	136,776 121,974	3,768 3,261	33,457 29,211	71,596 69,641
80 to 84 years	964,098	870,237	73,282	1,954	18,625	41,647
85 years and over	596,179	535,594	48,692	1,307	10,586	27,994
Female	,	,	,	,	,	•
65 years and over	13,769,110	12,287,835	1,217,628	32,973	230,674	599,703
65 to 69 years	4,178,502	3,666,779	406,987	12,034	92,702	213,160
70 to 74 years	3,397,019	3,018,647	307,501	8,317	62,554	147,806
75 to 79 years	2,731,378	2,447,125	237,928	6,184	40,141	115,025
80 years and over	3,462,211	3,155,284	265,212	6,438	35,277	123,712
80 to 84 years	1,870,744	1,700,906	146,046	3,711	20,081	71,127
85 years and over	1,591,467	1,454,378	119,166	2,727	15,196	52,585
OUTSIDE METROPOLITAN AREAS						
Both sexes						
65 years and over	8,207,081	7,594,194	519,911	60,345	32,631	130,711
65 to 69 years	2,544,247	2,353,373	157,342	21,582	11,950	47,219
70 to 74 years	2,099,991 1,654,860	1,946,180 1,528,526	130,009 108,831	15,466 11,570	8,336 5,933	32,328 24,811
75 to 79 years	1,907,983	1,766,115	123,729	11,727	6,412	26,353
80 to 84 years	1,074,204	995,125	68,955	6,571	3,553	15,528
85 years and over	833,779	770,990	54,774	5,156	2,859	10,825
Male						
65 years and over	3,390,062	3,145,874	202,254	26,039	15,895	59.021
65 to 69 years	1,164,453	1,083,709	65,288	9,900	5,556	22,328
70 to 74 years	916,625	853,615	52,400	6,711	3,899	14,745
75 to 79 years	672,204	622,371	41,919	4,784	3,130	10,768
80 years and over	636,780	586,179	42,647	4,644	3,310	11,180
80 to 84 years	391,732	361,947	25,069 17,579	2,687	2,029	6,783
85 years and over	245,048	224,232	17,578	1,957	1,281	4,397

See footnotes at end of table.

Table 5-5.

Population 65 Years and Over Inside and Outside Metropolitan Areas by Age, Sex, Race, and Hispanic Origin: 1990—Continued

Inside and outside metropolitan areas, sex, and age	Total	White	Black	American Indian, Eskimo, and Aleut	Asian and Pacific Islander	Hispanic origin ¹
OUTSIDE METROPOLITAN AREAS—Con.						
Female						
65 years and over	4,817,019	4,448,320	317,657	34,306	16,736	71,690
65 to 69 years	1,379,794	1,269,664	92,054	11,682	6,394	24,891
70 to 74 years	1,183,366	1,092,565	77,609	8,755	4,437	17,583
75 to 79 years	982,656	906,155	66,912	6,786	2,803	14,043
80 years and over	1,271,203	1,179,936	81,082	7,083	3,102	15,173
80 to 84 years	682,472	633,178	43,886	3,884	1,524	8,745
85 years and over	588,731	546,758	37,196	3,199	1,578	6,428

¹Hispanic origin may be of any race.

Table 5-6.

Persons 65 Years and Over by Age, Race, and Hispanic Origin for Regions: 1991

Age, race, and Hispanic origin ¹	United States	Northeast	Midwest	South	West
All Persons					
65 years and over 65 to 84 years. 85 years and over	31,763,630 28,610,352 3,153,278	7,049,503 6,333,404 716,099	7,860,059 7,002,436 857,623	10,944,022 9,917,779 1,026,243	5,910,046 5,356,733 553,313
White					
65 years and over 65 to 84 years. 85 years and over	28,594,585 25,714,822 2,879,763	6,506,306 5,832,388 673,918	7,327,151 6,515,223 811,928	9,449,202 8,564,907 884,295	5,311,926 4,802,304 509,622
Black					
65 years and over 65 to 84 years. 85 years and over	2,551,325 2,319,900 231,425	464,032 426,656 37,376	481,285 438,844 42,441	1,408,937 1,272,878 136,059	197,071 181,522 15,549
American Indian, Eskimo, and Aleut					
65 years and over 65 to 84 years. 85 years and over	122,040 111,536 10,504	8,946 8,145 801	18,348 16,969 1,379	42,395 38,745 3,650	52,351 47,677 4,674
Asian and Pacific Islander					
65 years and over 65 to 84 years. 85 years and over	495,680 464,094 31,586	70,219 66,215 4,004	33,275 31,400 1,875	43,488 41,249 2,239	348,698 325,230 23,468
Hispanic Origin ¹					
65 years and over 65 to 84 years. 85 years and over	1,229,844 101,749 1,128,095	208,218 16,509 191,709	75,222 6,085 69,137	477,085 40,621 436,464	469,319 38,534 430,785

¹Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, 1991 Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin, PE-16.

Source: U.S. Bureau of the Census, unpublished data consistent with *U.S. Population Estimates, by Age, Sex, Race, and Hispanic Origin: 1980 to 1991*, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993.

along with four States (New York. Illinois, New Jersey, and Texas) from the other three U.S. regions. Among all API elderly, over half lived in just two States, 45 percent in California, and 19 percent in Hawaii. The West region accounted for 70 percent of all elderly Asian and Pacific Islanders in the United States in 1991. Three out of four (77 percent) elderly and oldest old Hispanics (who may be of any race) were concentrated in the South (39 percent) and West (38 percent) in 1991. Sixty-two percent of all elderly Hispanics lived in just three States— California (27 percent), Texas

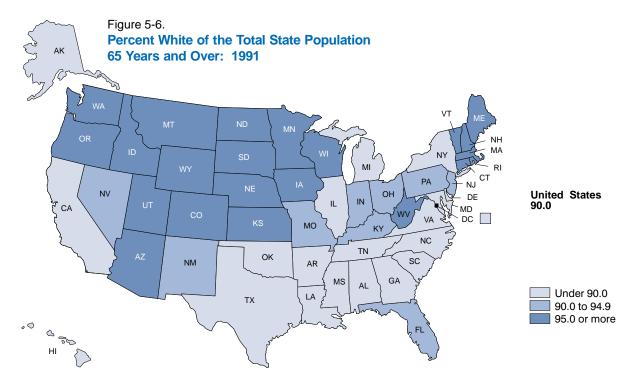
(20 percent), and Florida (15 percent). Adding New York, the State with the fourth largest number of Hispanic elderly in 1991 (and where 11 percent of all elderly Hispanics lived), nearly three of every four (73 percent) elderly Hispanics lived in these four States.

Percent White of Elderly State Populations Highest in Parts of Midwest and West; Percent Black Highest in Southern States

Overall, the future elderly population in the United States will become more racially and ethnically diverse.

However, State-level data on the elderly in 1991 by race and Hispanic origin indicate that the elderly populations of the major race groups and Hispanic elderly tend to be concentrated in particular States or regions of the country.

In 1991, the White elderly population represented 90 percent or more of a State's elderly population in 31 States (figure 5-6). In 22 States, 95 percent or more of their elderly populations were White. Among these 22 States, 8 were in the West, 7 in the Midwest, 6 in the Northeast, and only 1 (West Virginia) in the South region.



Source: U.S. Bureau of the Census, "1991 Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin," PE-16.

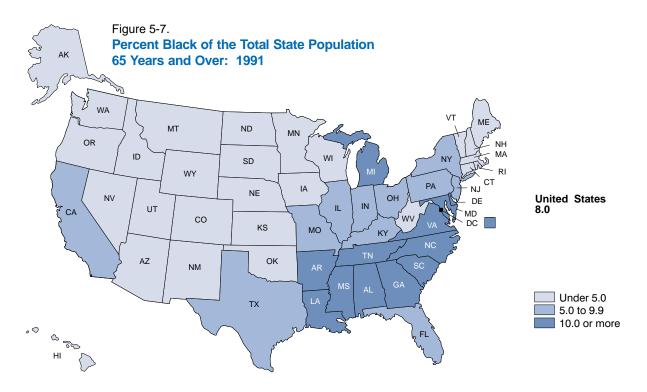
The percent Black of a State's elderly population was 10 percent or more in 13 States in 1991 and all were in the South, with the exception of Michigan (figure 5-7). Black elderly constituted between 20 and 30 percent of all elderly in Georgia, Alabama, South Carolina, Louisiana, and Mississippi (listed in increasing order). Two of every three elderly in the District of Columbia were Black.

Percent AIEA of Elderly State Populations Highest West of the Mississippi

Although California has the second largest number of elderly American Indians, Eskimos, and Aleuts (AIEA), it ranks fifteenth in terms of the proportion AIEA of total State elderly populations. Alaska, with the numerically smallest total elderly population, ranks first in percent AIEA elderly (figure 5-8). Nearly 1 of every 5 (19 percent) of elderly Alaskans were AIEA in 1991. Only 6 additional States had at least 1 percent elderly AIEA of their total elderly populations. The top ten States in percent elderly AIEA in 1991 were all west of the Mississippi River.

Hawaii and California Had Highest Percents API Elderly

Nearly three of every four (73 percent) elderly in Hawaii in 1991 were Asians or Pacific Islanders (API). California had the next largest percent API of its elderly population (figure 5-9). These two States were also ranked first and second (but in reverse order) with respect to the total number of elderly API. In only two other States (Alaska and Washington) did the API elderly population represent at least 2 percent of the total elderly State population.



Source: U.S. Bureau of the Census, "1991 Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin," PE-16.

Figure 5-8.

Percent American Indian, Eskimo, and Aleut of the Total State
Population 65 Years and Over for the Top Ten States: 1991

WA
0.7

ND
0.7

ND
0.7

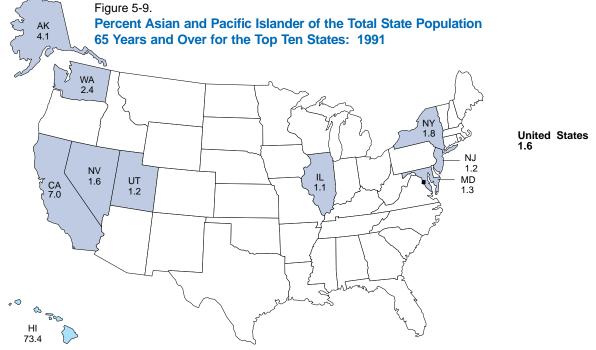
ND
0.7

NV
0.9

AZ
NM
4.6

OK
5.1

Source: U.S. Bureau of the Census, "1991 Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin," PE-16.



Source: U.S. Bureau of the Census, "1991 Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin," PE-16.

New Mexico Had Highest Percent Hispanic Elderly

One-fourth (27 percent) of all elderly in New Mexico were of Hispanic origin in 1991. The States with the highest percents Hispanic of their elderly population were the border States with Mexico (California, Arizona, New Mexico, and Texas), plus Florida, Colorado, and New York (figure 5-10). Less than 1 percent of the elderly population was Hispanic in more than half (27) of the States. Of these States with low percents Hispanic elderly, 12 were in the South, 10 in

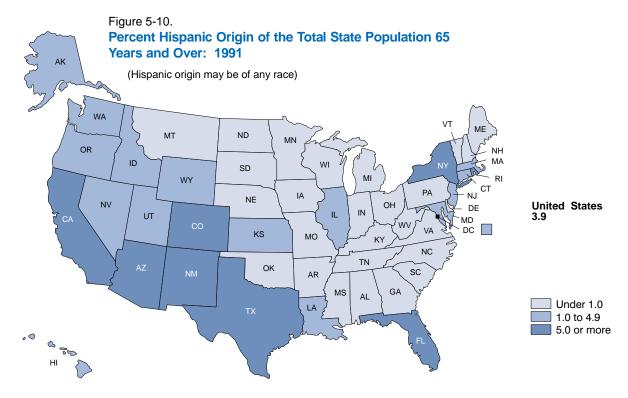
the Midwest, 4 in the Northeast, and only 1 (Montana) in the West region.

Elderly and Oldest Old for Counties

Nine Counties Had More Than 250,000 Elderly in 1991; Eight Counties Had More Than 25,000 Persons Aged 85 or Older

In the 1980's, many of the fastest growing counties in terms of elderly population were in traditional retirement community areas in Florida and Arizona, and in recent retirement magnets in South Atlantic and Mountain States. Most counties with faster growing elderly populations in the 1980's resulted from past migration of working-age adults who "graduated" into seniorhood, and who, like elderly migrants, tend to be married and to have above-average incomes. These

⁷ William H. Frey, "Mature Markets— Elderly Growth Patterns in US Counties," Research Report No. 93-270, 1993, Population Studies Center, University of Michigan; and Dianne Crispell and William H. Frey, "American Maturity," *American Demographics*, 1993, pp. 31-42.



Source: U.S. Bureau of the Census, "1991 Estimates of the Population of States by Age, Sex, Race, and Hispanic Origin," PE-16.

counties were disproportionately found in the West region.

Of the more than 3,000 counties in the United States, nine had over 250,000 persons aged 65 or older in 1991, and 573 counties had elderly populations of at least 10,000 persons (detailed table 8-4). Among the nine largest counties, two were in California (Los Angeles and San Diego), two in New York (Queens and Kings), two in Florida (Dade and Broward), with one county in Arizona (Maricopa), Illinois (Cook), and Michigan (Wayne). These counties are all representative of large cities, including Los Angeles, San Diego, New York, Miami, Ft. Lauderdale, Phoenix, Chicago, and Detroit. Although these counties had large numbers of elderly, only Broward county had at least 20 percent of its population aged 65 or older.

As with the largest counties in elderly population, the eight counties with over 25,000 persons aged 85 or older in 1991 were all representative of large cities. The counties were: Los Angeles, California (85,507), Cook, Illinois (58,941), Dade, Florida (31,187), Queens, New York (28,851), Pinellas, Florida (27,857), Kings, New York (26,911), Broward, Florida (26,049), and San Diego, California (25,626). All of these counties were among the same nine counties ranked highest in terms of elderly population size, with the exception of Pinellas county (St. Petersburg), which had by far the highest percentage of its total population 85 or older (3.2 percent) among these counties. The oldest old represented 2.0 percent of Broward county's and 1.6 percent of Dade county's population. Los Angeles and San Diego county's oldest old were only 1.0 percent of their total population, the

lowest proportion in this group of counties (detailed table 8-4).

Counties With Highest Percent Elderly Concentrated in 18 States; Counties With Highest Percent Oldest Old Mainly in the Midwest

In over 400 counties of the United States, at least 1 of every 5 persons is aged 65 years and over (detailed table 8-5). All of these counties with high percent elderly are located in 30 States. The top 100 ranking counties in terms of percent elderly are found in only 18 States, 9 of which are in the Midwest, 5 in the South, and 4 in the West. None of the 100 counties with the highest percent elderly is in the Northeast region. Among the top 11 counties (which all had at least 30 percent elderly), 6 were in Florida (Charlotte, Highlands, Pasco, Sarasota. Citrus, and Hernando), and all had elderly populations of at least 10,000 persons. The other 5 counties (Kalawao, Hawaii; Llano, Texas; Sierra, New Mexico; Keweenaw, Michigan; and McIntosh, North Dakota) all had large percents elderly, but elderly populations of less than 5,000 persons.

There were only 29 counties in the United States in 1991 that had both more than 10,000 elderly and at least 20 percent of the county's population elderly. The top 13 of these counties were all in Florida. Among all 29 counties, 18 were in Florida. Also, there were 3 in Arizona (Yavapai, Garland, and Mohave), 2 in North Carolina (Henderson and Moore), 2 in New Jersey (Ocean and Cape May), and one each in Massachusetts (Barnstable), Oregon (Josephine), Washington (Clallam), and Pennsylvania (Schuylkill).

Ranking the 410 counties with at least 20 percent elderly population in 1991 by their proportion of population aged 85 and over indicates that the vast majority were in the Midwest. Among the top 29 counties (which all had at least 4 percent oldest old), 25 were in the Midwest, with 17 of these counties in Kansas and Nebraska. The top 75 counties in terms of percent oldest old all had fewer than 500 persons aged 85 and over.

Patterns of Migration

Most Elderly Don't Move

Most older people stay put. Persons aged 65 years and over represented 4 percent of all movers within the United States between 1992 and 1993. About 1.7 million noninstitutionalized elderly (about 6 percent) moved to a different house in the United States between 1992 and 1993. Only 773,000 elderly, about 3 percent of all elderly, moved far enough to change their county of residence. Only 1 percent of the elderly population moved to another State. The proportions of persons aged 75 or older who moved were similar.8

The proportional distribution of elderly movers within the United States by race and Hispanic origin was similar to the racial and Hispanic origin distribution of the total elderly population. For example, 86 percent of elderly movers between 1992 and 1993 were White and a similar proportion of elderly persons are White. Elderly

⁸ Kristin A. Hansen, U.S. Bureau of the Census, *Geographical Mobility: March 1992 to March 1993*, Current Population Reports, P20-481, U.S. Government Printing Office, Washington, DC, 1994, table 2.

Blacks and Hispanics also moved within the United States in proportions similar to their representation among the total elderly population.

Of those elderly who moved during 1992-93, about half (49 percent) remained within the same metropolitan area. Another 18 percent of elderly movers moved from one metropolitan area to another and 6 percent moved from outside a metropolitan area to inside a metropolitan area. Among all elderly movers in the United States, 8 percent left a metropolitan area and

moved to a nonmetropolitan area. An additional 19 percent of elderly movers went from one nonmetropolitan area to another.

Most elderly migrants (persons who moved to a different county) stayed in the same region of the country where they had lived the year before (table 5-7). In the Northeast, from 1992 to 1993, about 131,000 elderly moved from one county to another; 82 percent came from another county within the Northeast and only 18 percent came from some other part of the country. About one-fourth of migrants in the Midwest (23 percent), the South

(26 percent), and the West (30 percent) came from other regions.

Among persons aged 65 years and over, about 5 to 7 percent moved within the United States between 1992 and 1993 (table 5-8). This compares to about 18 percent of persons ages 1 to 64 years. Only about 1 percent of elderly men and women moved to a different State during this 1-year period. The proportions of women movers were comparable to those of men for all elderly age groups and mobility types between 1992 and 1993.

Table 5-7.

Region of Residence in 1992 and 1993 for County Migrants 65 Years and Over: 1993

(In thousands. For meaning of abbreviations and symbols see introductory text.)

Parida and in 1999	Total	Residence in 1992						
Residence in 1993	migrants 1	Northeast	Midwest	South	West			
Number								
United States	774	169	179	275	150			
Northeast	131	107	-	22	2			
Midwest	183	9	140	16	18			
South	297	42	19	220	16			
West	162	11	20	16	114			
Percent Distribution, by Region of Residence in 1993								
United States	100.0	21.8	23.1	35.5	19.4			
Northeast	100.0	81.7	-	16.8	1.5			
Midwest	100.0	4.9	76.5	8.7	9.8			
South	100.0	14.1	6.4	74.1	5.4			
West	100.0	6.8	12.3	9.9	70.4			

¹ "Migrants" are persons who moved from a different county within the United States.

Note: Regions may not add to the total, due to independent rounding.

Source: Kristin A. Hansen, U.S. Bureau of the Census, *Geographical Mobility: March 1992 to March 1993*, Current Population Reports, P20-481, U.S. Government Printing Office, Washington, DC, 1994, tables 5 and 20.

⁹ Ibid., table 34.

Table 5-8.

Percent Distribution of Geographical Mobility for Persons 60 Years and Over by Age and Sex: 1992-93 (Numbers in thousands)

			Ag	е		
Sex and mobility type	60 to 64	65 years	65 to 69	70 to 79	80 to 84	85 years
	years	and over	years	years	years	and over
Total Men	5,084	12,832	4,334	6,208	1,498	792
Same house	92.8	94.5	94.5	94.7	93.6	94.9
Different house in the U.S	6.9	5.3	5.5	5.1	6.0	4.7
Same county	4.2	2.9	3.2	2.7	3.5	2.3
Different county	2.8	2.4	2.3	2.4	2.6	2.4
Same state	1.4	1.0	1.0	1.0	0.6	1.5
Different state	1.4	1.4	1.3	1.4	1.9	0.8
Abroad	0.3	0.2	0.0	0.2	0.4	0.4
Total Women	5,445	18,038	5,498	8,291	2,451	1,798
Same house	93.7	94.1	93.8	94.5	94.2	93.4
Different house in the U.S	6.1	5.6	5.9	5.3	5.8	6.6
Same county	3.8	3.1	3.1	2.8	3.2	4.0
Different county	2.3	2.6	2.8	2.5	2.6	2.6
Same state	1.0	1.1	1.2	1.2	0.8	1.3
Different state	1.3	1.4	1.6	1.3	1.8	1.3
Abroad	0.2	0.2	0.3	0.2	0.0	0.0

Source: Kristin A. Hansen, U.S. Bureau of the Census, *Geographical Mobility: March 1992 to March 1993*, Current Population Reports, P20-481, U.S. Government Printing Office, Washington, DC, 1994, table 2.

Table 5-9.

Percent Distribution of Geographical Mobility for the Elderly Population by Age: 1975-80 and 1985-90

				А	ge			
	65 years	and over	65 to 7	74 years	75 to 8	34 years	85 years	and over
Mobility type	1975-80	1985-90	1975-80	1985-90	1975-80	1985-90	1975-80	1985-90
Total	25,799,910	31,195,275	15,781,654	15,215,153	7,806,843	9,973,466	2,211,413	3,003,328
Same house	19,874,845	24,159,537	12,270,516	12,290,250	6,050,298	7,764,583	1,554,031	2,052,352
Different house, U.S	5,815,675	6,888,313	3,433,287	2,827,654	1,730,673	2,173,417	651,715	943,621
Same county	3,481,783	4,080,984	1,977,231	2,459,230	1,086,989	1,534,403	417,563	588,398
Different county	2,333,892	2,807,329	1,456,056	1,902,827	643,684	50,616	234,152	355,223
Same state	1,195,443	1,459,467	704,357	562,237	351,307	458,954	139,779	219,138
Different state	1,138,449	1,347,862	751,699	705,319	292,377	370,373	94,373	136,085
Abroad	109,390	147,425	77,851	97,249	25,872	35,466	5,667	7,355
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Same house	77.0	77.4	77.8	80.8	77.5	77.9	70.3	68.3
Different house, U.S	22.5	22.1	21.8	18.6	22.2	21.8	29.5	31.4
Same county	13.5	13.1	12.5	16.2	13.9	15.4	18.9	19.6
Different county	9.0	9.0	9.2	12.5	8.2	0.5	10.6	11.8
Same state	4.6	4.7	4.5	3.7	4.5	4.6	6.3	7.3
Different state	4.4	4.3	4.8	4.6	3.7	3.7	4.3	4.5
Abroad	0.4	0.5	0.5	0.6	0.3	0.4	0.3	0.2

Source: U.S. Bureau of the Census, 1980 Census of Population, Summary Tape File 5, National Institute on Aging Special Tabulations, table 5 and 1990 Census of Population, Special tabulations for Administration on Aging, table 5.

An analysis of intercounty migrants during the 1980-85 period among male householders aged 55 and over in 1980 indicated that such migrants tended to move toward lower cost-of-living areas, especially if they were younger, and toward lower-crime areas, especially if they were younger and homeowners. There also was a tendency for these migrants to move toward nonmetro areas and toward locations where family and friends resided.

The decennial census measures movement over a 5-year period. Data from the 1980 census show that 23 percent of elderly persons changed their residence between 1975 and 1980 (table 5-9). Ten years later, 1990 census data reveal that the proportions of the elderly moving to a different house, county, or State during the 1985-90 period remained consistent with the corresponding 1975-80 proportions; 22 percent of the elderly moved during 1985-90. In the 1955-60 period, over onefourth (28 percent) of elderly changed residence.11

In general, the central cities of metropolitan areas have lost elderly migrants to nonmetropolitan areas. Decennial census data indicate that the trend of the loss of elderly migrants from metropolitan areas and the gain of elderly migrants in nonmetropolitan areas has been

consistent during the 1960-70, 1970-80, and 1980-90 decades. 12

In an analysis of age patterns of migration among the elderly using data for selected developed countries, including the United States, Rogers¹³ found two basic patterns of elderly migration. One pattern is characterized by intercommunity, amenitymotivated, long-distance migrations, and the other pattern by intracommunity, assistance-motivated, short-distance moves.

In the 1985-90 period, the oldest old (85 years and over) were more likely to have moved within the United States than either the younger old (65 to 74 years) or the aged (75 to 84 years; table 5-9). This suggests that the moves of the oldest old may be related to health problems and that perhaps nursing homes or the residences of near relatives are their destinations.

Research has found that an increase in instrumental disabilities increases the probability that an older person will move. In addition, when health declines are combined with becoming widowed, the probability of a move is greatly increased.¹⁴ "The strong evidence of a final rise in the migration propensity in extreme old age among females is undoubtedly associated

with the higher incidence and prevalence of widowhood among women." Levels of disability also have been shown to predict residential mobility and institutionalization, as well as a change to more dependent living arrangements. 16

As the size of the elderly population has increased, so also has the volume of movement of elderly persons, from about 4.5 million persons 65 years and over in the 1955-60 period to 5.8 million from 1975 to 1980, and to 6.9 million between 1985 and 1990.

The volume of different types of migration has also increased along with the elderly population itself. For example, interstate migration of elderly persons increased from 1.1 million persons between 1975 and 1980 to 1.3 million persons in the 1985-90 period. While the volume of elderly interstate migrants increased from 1975-80 to 1985-90, the proportion of the elderly moving to a different state remained about the same during these periods, at just over 4 percent. As a result of the increase in the number of interstate elderly migrants, Longino and Crown¹⁷ note that planners "are becoming increasingly concerned about the economic implications" of such migration, and that some States that have been major

¹⁰ Jeffrey E. Kallan, "A Multilevel Analysis of Elderly Migration," *Social Science Quarterly*, Vol. 74, No. 2, 1993, pp. 405-416.

¹¹ U.S. Bureau of the Census, Census of Population: 1960, Vol. 1, Characteristics of the Population, Part 1, United States Summary, U.S. Government Printing Office, Washington, DC, 1964, table 164.

¹² Glenn V. Fuguitt and Calvin L. Beale, "The Changing Concentration of the Older Nonmetropolitan Population, 1960-90, CDE Working Paper 93-05, University of Wisconsin-Madison, table 3.

¹³ Andrei Rogers, "Age Patterns of Elderly Migration: An International Comparison," Demography, Vol. 25, No. 3, 1988, pp.

¹⁴ Julia E. Bradsher, Charles F. Longino, Jr., David J. Jackson, and Rick S. Zimmerman, "Health and Geographic Mobility Among the Recently Widowed," *Journals of Gerontol*ogy, Vol. 47, No. 5, 1992, pp. S261-S268.

¹⁵ Rogers, 1988, op.cit.

¹⁶ Alden Speare, Jr., Roger Avery, and Leora Lawton, "Disability, Residential Mobility, and Changes¹⁷ Charles F. Longino, Jr. and William H. Crown, "Retirement Migration and Interstate Income Transfers," The Gerontologist, Vol. 30, No. 6, 1990, pp. 784-789. in Living Arrangements," Journals of Gerontology, Vol. 46, No. 3, 1991, pp. S133-S142

¹⁷ Charles F. Longino, Jr. and William H. Crown, "Retirement Migration and Interstate Income Transfers," *The Gerontologist*, Vol. 30, No. 6, 1990, pp. 784-789.

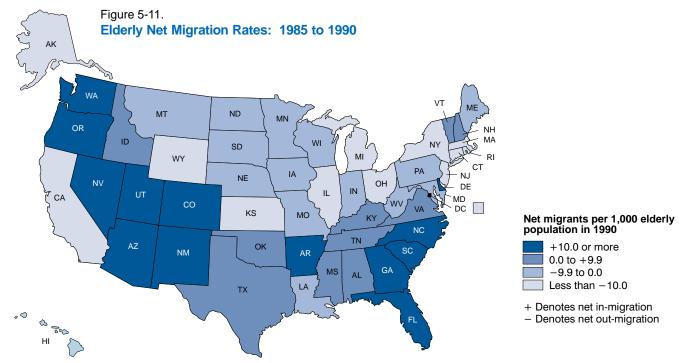
sources of elderly out-migration are becoming concerned about their economic loss. For States receiving older migrants, their data suggest that "the taxes generated by the infusion of retirement income circulating in a state economy may at least partially offset the public cost incurred by these new residents, at least for those services targeted to the elderly."

Longino¹⁸ finds that interstate migration of persons age 60 and over has tended to be concentrated among relatively few origin and destination States. During 1965-70, 1975-80, and 1985-90 Florida was the State with the largest net in-migration of

persons 60 and over while New York had the largest out-migration. Also, while Florida remains the dominant receiving State among older migrants, during the past four decades there has been a gradual decrease in the share of total in-migrants held by the major destination States.

Data from the 1990 census¹⁹ permit the derivation of elderly net migration rates by State during the 1985-90 period (figure 5-11). These rates reveal a clear geographic pattern. Of the 12 States in the Midwest, 11 were net losers of elderly migrants between 1985 and 1990. All 13 States with the highest net elderly in-migration rates were in the South and West. Among the 25 States with net in-migration of the elderly, 22 were in the South and West. Only New Hampshire, Kentucky and Vermont had net in-migrants of the elderly among the 21 States of the Northeast and Midwest regions.

Substantial amounts of retirement income may be transferred between States as a result of retirement migration. In 1989, Florida is estimated to have received a net \$6.5 billion in transferred income due to interstate migration of the population aged 60



Source: U.S. Bureau of the Census, "County-to-County Migration Flow Files: In-Migration," CD90-MIG-01, and "County-to-County Migration Flow Files: Out-Migration," CD90-MIG-02, 1990 Census of Population and Housing, Special Project 312 (SP312), 1995.

¹⁸ Charles F. Longino, Jr., *Retirement Migration in America*, Houston, TX: Vacation Publications, 1995, pp. 16-17.

¹⁹ U.S. Bureau of the Census, "County-to-County Migration Flow Files: In-Migration," CD90-MIG-01, and "County-to-County Migration Flow Files: Out-Migration," CD90-MIG-02, 1990 Census of Population and Housing, Special Project 312 (SP312), 1995

and over, while New York lost a net \$3.3 billion to other States, with more than half of that loss (\$1.9 billion) going to Florida. Comparable data for 1979 from the 1980 population census showed Florida with a net gain of \$3.5 billion, and New York with a net loss of nearly \$2.0 billion, again with over half (\$1.2 billion) going to Florida.

Research on elderly migration streams generally suggests that "older persons moving from sunbelt to frostbelt states are disproportionately disabled and widowed in comparison with older persons moving in the opposite direction."²² This pattern is consistent with a "second" elderly move after the "first" retirement move,

and is believed to be motivated by the onset of disability and represents a "return to their home community or move to a community where children or other relatives can better care for them." Using Longitudinal Study of Aging data, Silverstein found that a decline in older parents' health "increased the propensity of parents and children to become temporally closer to each other." While a study of 1980 census data indicated that return migrants in the United States were older and more residentially dependent than nonreturn migrants, this finding did not hold for each region of the United States.²³ This research suggested that these return moves may not indicate a return to the State of birth, "but rather a return from a Sunbelt retirement move to an earlier

place of residence, regardless of whether one was born there." Other research has concluded that available cross- sectional data indicate that elderly persons are not more likely than nonelderly to return to their native state, and that "a dynamic perspective" is needed in order to better address this research question.²⁴ To the extent that a selectivity of retirement move migration versus "second" move migration operates, States such as Florida presumably benefit by receiving relatively healthier and wealthier migrants, while "sending" States first lose well-off consumers and then may later gain back migrants more likely to place greater demands on social and health services.

²⁰ Longino, 1995, op.cit.

²¹ Longino and Crown, 1990, op.cit.

²² Merril Silverstein, "Stability and Change in Temporal Distance Between the Elderly and Their Children," *Demography*, Vol 32, No. 1, 1995, pp. 29-45.

²³ Charles F. Longino, Jr. and William J. Serow, "Regional Differences in the Characteristics of Elderly Return Migrants," *Journals of Gerontology*, Vol. 47, No. 1, 1992, pp. S38-S43.

Andrei Rogers, "Return Migration to Region of Birth Among Retirement-Age Persons in the United States," *Journals of Gerontology*, Vol. 45, No. 3, 1990, pp. S128-S134.

Chapter 6.

Social and Other Characteristics

Segments of the older population differ widely in terms of their marital status, living arrangements, educational attainment, veterans status, voting participation, and other social characteristics. Among those aged 65 to 74, 64 percent were married and living with their spouse in 1993 and 24 percent were living alone. As age increases, so does the proportion living alone. Among those aged 85 and over, only 24 percent lived with their spouse and 48 percent lived alone.¹ In general, men are much more likely than women to be living in a family setting, and as discussed in chapter 4, the income situation of young-old married couples is generally much better than that of the oldest old and those who live alone. The elderly population is increasingly better educated, which has implications for future health and economic status as well as the need for and delivery of services.

The social characteristics of the elderly population are discussed in more detail below. Data refer to noninstitutionalized elderly persons except where specifically noted otherwise. In the March 1993 Current Population Survey, there were an estimated 30.9 million persons 65 years and over in the noninstitutional population.

Marital Status

Most Elderly Men Are Married While Most Elderly Women Are Not

Elderly men were nearly twice as likely as elderly women to be married and living with their spouse in 1993

(75 percent and 41 percent, respectively). Elderly women were more than 3 times as likely as men to be widowed (14 percent of men and 48 percent of women). While the gender gap in average longevity accounts for much of these differences, remarriage rates also are important. During 1990, only about 2 per 1,000 widowed women aged 65 and over remarried, whereas elderly widowed men were much more likely than elderly women to remarry (14 per 1,000 widowed men).² Elderly men and women were about equally likely to have never married (4 percent in both cases) in 1993.3

On the whole, there were only 29 unmarried elderly men per 100 unmarried elderly women in 1993. One implication of such numbers is that most elderly men have a spouse for assistance, especially when health fails, and the majority of elderly women do not (detailed table 8-6). Research from the 1980's has shown that spouses represented 36 percent of caregivers (23 percent wives and 13 percent husbands) who gave assistance to the noninstitutionalized elderly, and adult daughters represented 29 percent of primary caregivers.4 In the near future, the availability of family members who may provide care to the parents of the Baby-Boom generation is likely to increase as a result of relatively high levels of fertility during the 1950's.⁵

The estimated number of divorces among elderly persons in 1990 was low (about 10,000 to men and 5,000 to women) compared to younger age groups, and the divorce rate during the 1970 to 1990 period remained at about 2 per 1,000 married elderly persons.⁶

In 1993, among all elderly men and women, about 5 percent were currently divorced (and had not remarried).⁷ By comparison, in 1970, only 2 percent of elderly persons were currently divorced. For divorced women, the probability of remarriage after age 45 is small. In 1990 (the latest year for which data are available), only 30 of 1.000 divorced women aged 45 to 64 remarried during the year compared with 43 per 1,000 in 1970. Only 4 of 1,000 elderly divorced women remarried during 1990 compared with 6 per 1,000 in 1970. Divorced men were much more likely to remarry than divorced women. In 1990, 67 per 1,000 divorced men aged 45 to 64 and 19 per 1,000 divorced men aged 65 and over remarried.8

Arlene F. Saluter, U.S. Bureau of the Census, *Marital Status and Living Arrangements: March 1993*, Current Population Reports, P20-478, U.S. Government Printing Office, Washington, DC, 1994, tables 1 and 7.

² Sally C. Clarke, National Center for Health Statistics, *Advance Report of Final Marriage Statistics*, *1989 and 1990*, Monthly Vital Statistics Report, Vol. 43, No. 12, Supplement, July 14, 1995, table 6

July 14, 1995, table 6.

³ Saluter, op.cit., table 1. Unmarried refers to persons who are either never married, divorced, or widowed.

⁴ R. Stone, G.L. Cafferata, and J. Sangl, "Caregivers of the Frail Elderly: A National Profile," *The Gerontologist*, Vol. 27, No. 5, 1987, pp. 616-626.

Christine L. Himes, "Future Caregivers: Projected Family Structures of Older Persons," *The Journals of Gerontology*, Vol. 47, No. 1, 1992, pp. S17-26.
 Sally C. Clarke, National Center for

⁶ Sally C. Clarke, National Center for Health Statistics, Advance Report of Final Divorce Statistics, 1989 and 1990, Monthly Vital Statistics Report, Vol. 43, No. 9, Supplement, March 22, 1995, table 5.

⁷ Saluter, op.cit., table 1.

⁸ Unpublished tabulations from the National Center for Health Statistics; and Peter Uhlenberg, Teresa Cooney, and Robert Boyd, "Divorce for Women After Midlife," *The Journals of Gerontology*, Vol. 45, No. 1, 1990, table

Table 6-1.

Marital Status of Persons 65 Years and Over by Age and Sex: 1960 to 2050

(Percentage distribution; civilian noninstitutional population for March 1960 to 1990; Social Security Area Population January 1, 2000 to 2050)

Age and year		Ma	lle		Female				
Age and year	Single	Married ¹	Widowed	Divorced	Single	Married ¹	Widowed	Divorced	
65 years and over									
1960	7.1	72.5	18.8	1.6	8.5	37.1	52.9	1.5	
1970	7.5	73.1	17.1	2.3	7.7	35.4	54.4	2.3	
1980	4.9	78.0	13.5	3.6	5.9	39.5	51.2	3.4	
1990	4.2	76.5	14.2	5.0	4.9	41.5	48.6	5.1	
2000	5.1	73.0	15.6	6.3	4.8	39.5	49.0	6.7	
2010	4.8	73.1	14.6	7.5	4.5	40.8	44.3	10.3	
2020	6.2	72.1	12.7	8.9	5.0	43.6	37.1	14.3	
2030	9.4	68.9	12.5	9.2	6.5	44.0	34.5	15.1	
2040	11.2	66.6	13.5	8.6	7.4	42.1	36.4	14.2	
2050	11.6	66.6	13.4	8.4	7.9	41.5	36.9	13.6	
65 to 74 years									
1960	6.7	78.9	12.7	1.7	8.4	45.6	44.4	1.7	
1970	8.0	78.0	11.3	2.7	7.8	45.2	44.0	3.0	
1980	5.2	82.1	8.4	4.3	5.6	50.0	40.4	4.0	
1990	4.7	80.2	9.2	6.0	4.6	53.2	36.1	6.2	
2000	5.7	77.9	9.2	7.3	4.4	53.9	33.1	8.6	
2010	5.4	78.1	8.1	8.5	4.7	55.6	26.6	13.2	
2020	7.5	75.0	7.6	9.9	5.6	55.4	22.4	16.6	
2030	12.0	71.0	7.2	9.8	7.7	56.0	20.8	15.5	
2040	13.6	70.8	6.7	8.9	8.4	57.0	21.2	13.5	
2050	13.2	71.7	6.2	8.9	8.7	57.5	20.1	13.7	
75 years and over									
1960	7.8	59.1	31.6	1.5	8.6	21.8	68.3	1.2	
1970	6.6	64.3	27.7	1.4	7.5	20.6	70.3	1.3	
1980	4.2	69.8	23.7	2.2	6.4	23.4	67.9	2.4	
1990	3.4	69.9	23.7	3.1	5.4	25.4	65.6	3.6	
2000	4.3	66.4	24.4	5.0	5.1	26.0	64.0	4.9	
2010	4.0	65.9	24.0	6.1	4.3	26.2	62.1	7.5	
2020	4.0	66.9	22.1	7.0	4.3	28.3	56.2	11.2	
2030	5.6	65.7	20.6	8.2	5.1	30.8	49.5	14.6	
2040	8.7	62.3	20.6	8.4	6.6	30.7	48.0	14.7	
2050	9.9	61.1	21.2	7.9	7.4	29.3	49.8	13.6	

¹Includes separated.

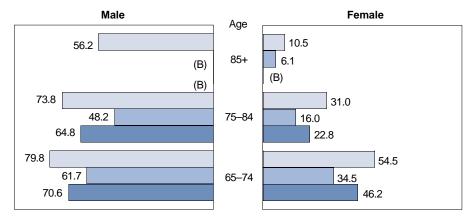
Source: U.S. Bureau of the Census, 1960 from *Marital Status and Family Status: March 1960*, Current Population Reports, Series P-20, No. 105, U.S. Government Printing Office, Washington, DC, 1960, table 1; 1970 and 1980 from unpublished revised data that replaces data published in appropriate P20 report; 1990 from *Marital Status and Living Arrangements: March 1990*, Current Population Reports, P20-450, U.S. Government Printing Office, Washington DC, 1991, table 1; and 2000 to 2050 projections from Social Security Administration, Felicitie Bell, data consistent with *The 1994 Trustees Report*, Office of the Actuary, (intermediate data).

Figure 6-1.

Percent of Persons 65 Years and Over Who Are
Married With Spouse Present by Age, Sex,
Race, and Hispanic Origin: 1993



(Civilian noninstitutional population)



B Base is less than 75,000.

1 Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Marital Status and Living Arrangements: March 1993*, Current Population Reports, P20-478, U.S. Government Printing Office, Washington, DC, 1994, table 1.

Table 6-2.

Percentage of Persons 65 Years and Over, by Marital Status,
Age, Sex, Race, and Hispanic Origin: 1993
(Civilian noninstitutional population)

Age, race, and Hispanic origin ¹		rried, present	Widowed		
Age, race, and mispanic origin	Male	Female	Male	Female	
65 years and over White Black Hispanic origin ¹	74.6	40.6	14.3	47.6	
	76.5	42.1	13.2	46.7	
	56.5	26.4	23.3	55.5	
	68.5	37.1	17.1	44.1	
65 to 74 years White Black Hispanic origin ¹	77.8	52.3	9.4	35.2	
	79.8	54.5	8.7	34.1	
	61.7	34.5	15.6	44.3	
	70.6	46.2	14.1	35.6	
75 to 84 years White Black Hispanic origin ¹	72.0	29.7	19.3	59.2	
	73.8	31.0	18.0	58.0	
	48.2	16.0	35.4	70.1	
	64.8	22.8	23.4	58.5	
85 years and over White Black Hispanic origin ¹	53.7	10.1	38.5	79.2	
	56.2	10.5	35.9	78.8	
	(B)	6.1	(B)	82.6	
	(B)	(B)	(B)	(B)	

B Base is less than 75,000. ¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Marital Status and Living Arrangements: March 1993*, Current Population Reports, P20-478, U.S. Government Printing Office, Washington, DC, 1994, table 1

According to the intermediate projections of the Social Security Administration (SSA) shown in table 6-1, we would see little change in the proportion of married elderly females well into the next century, and a decline in the proportion of married elderly males. There would be a decline in the proportion widowed among women as men improve their chances of survival beyond age 65. The projected decreases in widowhood would occur for women aged 65 to 74 (from over one-third in 1990 to one-fifth by 2030) as well as for women 75 years and over (from about two-thirds in 1990 to one-half in 2030). There would be notable increases in the proportion divorced, however, from 5 percent of elderly men and women in 1990 to 9 percent of elderly men and 15 percent of elderly women in 2030 when all the Baby-Boom cohorts are elderly.

Living arrangements and marital status shift considerably with advancing age, and the patterns differ between men and women and by race and Hispanic origin. Among noninstitutionalized persons aged 65 to 74 in 1993, most White, Black, and Hispanic men were married and living with their spouse, as were the majority of White women (figure 6-1). At 85 years and older, only 56 percent of White men and 11 percent of White women were married.

Widowhood is a common marital status for elderly women in the United States as well as for elderly women throughout the world. Proportions widowed in the United States are striking among specific age groups. More than 1 in 3 (35 percent) women aged 65 to 74 in 1993 were widowed (table 6-2). After age 75, the likelihood that a woman is widowed increases rapidly. Almost three in five

(59 percent) women aged 75 to 84, and 4 in 5 (79 percent) women 85 years and over, were widowed in 1993.

The likelihood that elderly men were widowers in 1993 was much less than for women, regardless of age group: 9 percent for men aged 65 to 74, 19 percent for men aged 75 to 84, and 39 percent for men aged 85 years and over.

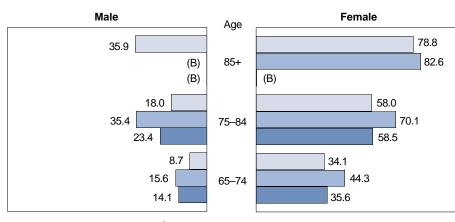
Among the young old (65 to 74 years), White, Black, and Hispanic women were much more likely to be widowed than White, Black, and Hispanic men, respectively. Significant differences between men and women in the proportion widowed continue after age 75 (figure 6-2). Black men 75 to 84 are more likely to be widowed than White or Hispanic men that age. Similarly, Black women 75 to 84 also are more likely to be widowed than White and Hispanic women in the same age group.

Data from the 1990 census show widowhood rates among persons 75 years and over for Asian and Pacific Islanders (API) and American Indians, Eskimos, and Aleuts (AIEA). Women again have much higher proportions widowed than men in this age group. Percents widowed among API and AIEA women aged 75 years and over were 68 and 69 percent, respectively, while only 19 percent of API men and 29 percent of AIEA men in these ages were widowed.⁹

Figure 6-2.

Percent of Persons 65 Years and Over Who
Are Widowed by Age, Sex, Race, and
Hispanic Origin: 1993





White Black

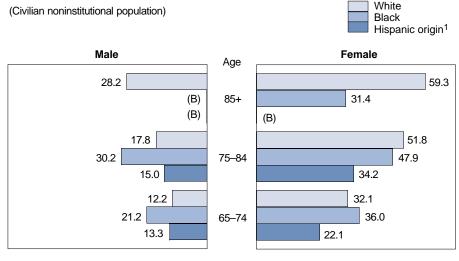
Hispanic origin¹

B Base is less than 75,000. ¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Marital Status and Living Arrangements: March 1993*, Current Population Reports, P20-478, U.S. Government Printing Office, Washington, DC, 1994, table 1.

Figure 6-3.

Percent of Persons 65 Years and Over Living Alone by Age, Sex, Race, and Hispanic Origin: 1993



B Base is less than 75,000. ¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Marital Status and Living Arrangements: March 1993*, Current Population Reports, P20-478, U.S. Government Printing Office, Washington, DC, 1994, table 7.

⁹ U.S. Bureau of the Census, 1990 Census of Population, General Population Characteristics, United States, CP-1-1, U.S. Government Printing Office, Washington, DC, 1992, table 34.

Baby-Boom Women Expected to Experience Widowhood Later Than Today's Elderly Women

Gains in life expectancy have influenced the chance that a newborn will live long enough to reach marriageable age as well as experience divorce or widowhood. The cohort of men and women born from 1898 to 1912 were somewhat less likely to marry than the Baby-Boom cohort. A greater proportion of the Baby-Boom generation has experienced divorce than is true of the current generation of oldest old. Women born at or before the turn of the century were likely to experience widowhood at younger ages than are the women of the Baby-Boom generation. Baby-Boom women, with their longer life expectancy, may experience more years of being widowed (or divorced), especially if they are less likely to remarry.

Living Arrangements

Elderly Women More Likely to Live Alone Than Elderly Men

In 1993, 9.4 million persons aged 65 or older lived alone. Eight in ten (79 percent) were women; 7 in 10 (71 percent) were White women, even though White women represented only 52 percent of the elderly. Of the total elderly who lived alone, about 5.7 million were White women aged 65 to 84.

Elderly male householders have long been highly likely to live in families. The proportion of elderly male householders who were family householders was 83 percent in 1970 and 81 percent in 1993, while the proportion living alone increased slightly from 16 percent in 1970 to 18 percent in 1993. Among elderly female householders, 75 percent lived alone in 1970 and 76 percent were living alone in 1993. Elderly female family householders were 22 percent of the elderly female householder total in 1970 and 1993.¹⁰

Among noninstitutionalized persons aged 65 to 74 years in 1993, Black women and White women were more likely to live alone than Hispanic women (figure 6-3). Black men in these ages were more likely to live alone than White men.¹¹

For noninstitutionalized persons 85 years and over in 1993, White women were twice as likely to live alone as White men (59 percent and 28 percent, respectively). Saluter found that living arrangements changed more since 1980 for the oldest old than for the younger elderly. The proportion of persons 85 years and over living alone rose from 39 percent as shown in the 1980 census to 48 percent as shown in the 1993 Current Population Survey. The corresponding change for persons aged 65 to 74 was only

23 to 24 percent. Oldest old living with their spouse remained about the same (22 and 24 percent, respectively), while oldest old persons living with relatives other than a spouse declined from 36 to 25 percent (table 6-3). Some factors associated with these changes are discussed below.

Data from the 1990 census show that the proportions of elderly Blacks living alone (males, 23 percent; females, 37 percent) and American Indians, Eskimos, and Aleuts living alone (males, 20 percent; females, 35 percent) were similar. The proportion of elderly Asians and Pacific Islanders living alone (males, 8 percent; females, 16 percent) was lower. The corresponding proportions for Hispanics were 14 percent for males and 27 percent for females.¹³

Research on elderly Hispanics living alone has shown variability according to national origin. Among four major groups of unmarried elderly Hispanics in 1988, a higher proportion (55 percent) of Puerto Ricans were living alone than other Hispanics. Somewhat more than 4 in 10 elderly, unmarried Mexican Americans and Cubans (43 and 42 percent, respectively) were residing alone, and Central/South Americans were least likely (25 percent) to be living alone.

¹⁰ U.S. Bureau of the Census, unpublished tabulations from the Current Population Survey; and Arlene F. Saluter, U.S. Bureau of the Census, *Marital Status and Living Arrangements: March 1993*, Current Population Reports, P20-478, U.S. Government Printing Office, Washington, DC, 1994, tables 2 and 7. The percentages for elderly men are of statistically significant difference between 1970 and 1993, while those for women are not.

¹¹ The difference between Black men and Hispanic men aged 65 to 74 years is not statistically significant.

¹² Saluter, op.cit., tables 1, 2, and 7.

¹³ U.S. Bureau of the Census, 1992, op.cit., tables 29 through 32.

¹⁴ Barbara A. Zsembic, "Determinants of Living Alone Among Older Hispanics," *Research on Aging*, Vol. 15, No. 4, 1993, pp. 449-464.

Table 6-3.
Living Arrangements of the Elderly: 1980 and 1993

(Numbers in thousands. Civilian noninstitutional population)

		1980					1993					
Age and living arrangement		Number		Perc	ent distrib	ution		Number		Perc	ent distrib	oution
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
65 years and over	24,157	9,889	14,268	100.0	100.0	100.0	30,870	12,832	18,038	100.0	100.0	100.0
Living: Alone With spouse With other relatives With nonrelatives only ¹ 65 to 74 years	7,067 12,781 3,892 417 15,302	1,447 7,441 832 169 6,621	5,620 5,340 3,060 248 8,681	29.3 52.9 16.1 1.7	14.6 75.2 8.4 1.7	39.4 37.4 21.4 1.7	9,356 16,886 3,941 687 18,362	1,994 9,568 908 362 8,114	7,362 7,318 3,033 325 10,249	30.3 54.7 12.8 2.2 100.0	15.5 74.6 7.1 2.8 100.0	40.8 40.6 16.8 1.8
Living: Alone With spouse With other relatives With nonrelatives only ¹	3,750 9,436 1,890 226	797 5,285 436 103	2,953 4,151 1,454 123	24.5 61.7 12.4 1.5	12.0 79.8 6.6 1.6	34.0 47.8 16.7 1.4	4,330 11,675 1,977 380	1,046 6,316 525 227	3,284 5,359 1,453 153	23.6 63.6 10.8 2.1	12.9 77.8 6.5 2.8	32.0 52.3 14.2 1.5
75 to 84 years	7,172	2,708	4,464	100.0	100.0	100.0	9,918	3,925	5,992	100.0	100.0	100.0
Living: Alone With spouse With other relatives With nonrelatives only ¹	2,664 2,977 1,394 137	505 1,882 271 50	2,159 1,095 1,123 87	37.1 41.5 19.4 1.9	18.6 69.5 10.0 1.8	48.4 24.5 25.2 1.9	3,774 4,603 1,319 222	720 2,826 265 114	3,054 1,777 1,053 108	38.1 46.4 13.3 2.2	18.3 72.0 6.8 2.9	51.0 29.7 17.6 1.8
85 years and over	1,683	560	1,123	100.0	100.0	100.0	2,590	792	1,798	100.0	100.0	100.0
Living: Alone With spouse With other relatives With nonrelatives only ¹	653 368 608 54	145 274 125 16	508 94 483 38	38.8 21.9 36.1 3.2	25.9 48.9 22.3 2.9	45.2 8.4 43.0 3.4	1,252 608 645 85	228 426 117 21	1,024 182 528 64	48.3 23.5 24.9 3.3	28.8 53.8 14.8 2.7	57.0 10.1 29.4 3.6

¹1980 data include a small number of persons in unrelated subfamilies.

Source: U.S. Bureau of the Census, 1980 from 1980 Census of Population, Chapter D, Detailed Population Characteristics, U.S. Government Printing Office, Washington, DC, tables 264, 265, and 266; 1993 from Marital Status and Living Arrangements: March 1993, Current Population Reports, P20-478, U.S. Government Printing Office, Washington, DC, 1994, tables 1, 2, and 7.

Information on proportions living alone for subnational geographical areas is available from the 1990 census of population. According to these data, the District of Columbia, West Virginia, and Nebraska had the highest percentages of persons 65 years and over living alone (35, 31, and 31 percent, respectively). The Midwest States, which generally have high proportions of oldest old persons, also have some of the highest percentages of elderly persons living alone. Of the 14 States with 30 percent or more of the elderly population living alone, 7 were in the Midwest (figure 6-4). Florida surprisingly ranked 49th among the States and the District of Columbia in terms of percent living alone, even though it ranked 1st in percent elderly in 1990. This results

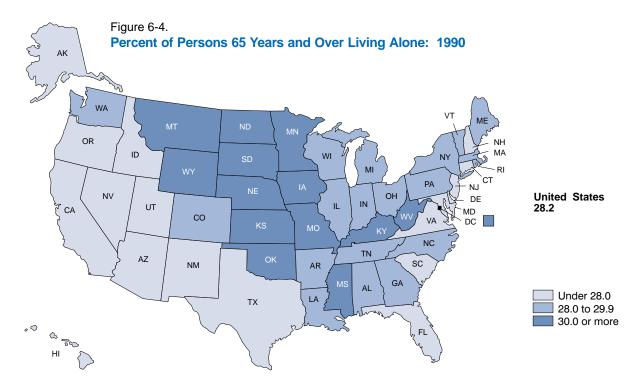
from Florida's high proportion of elderly aged 65 to 84, who as a group are much less likely to live alone than their oldest old counterparts.

Given the longer lives of women compared to men, it might seem to make sense for women to marry men at least seven years younger than they are, but they rarely do. Among noninstitutionalized women aged 65 to 69 years in 1993, 9 out of 10 (91 percent) were married to men 65 or older. About 8 percent were married to men aged 55 to 64 and only 1 percent were married to men under age 55. 15 Likewise, most younger

¹⁵ Steve W. Rawlings, Household and Family Characteristics: March 1993, Current Population Reports, P20-477, U.S. Government Printing Office, Washington, DC, 1994, table 14 women are continuing to marry men several years older than they are. Thus it is likely that the disproportionate representation of elderly women living alone will persist. The Census Bureau projects that women will maintain over three-fourths (77 percent) of the households run by persons 75 years and over in the year 2000. 16

Today's young-old women are more likely to be in relatively good health and to be able to afford to live alone than was true in the past. Most elderly who live alone are not disabled and

¹⁶ Jennifer Cheeseman Day, unpublished U.S. Bureau of the Census tabulations consistent with *Projections of the Number of Households and Families: 1995 to 2010*, Current Population Reports, P25, forthcoming 1996.



Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, Summary Tape File 1A.

are in good health.¹⁷ "The improved economic status of the elderly. coupled with their strong desire to live independently, have certainly contributed to the ever-increasing proportion of them who opt for independent living arrangements."18 However, "an elderly person's choice between living alone and not living alone is also a matter of familial process and may strongly reflect such multiple factors as intergenerational family ties, kinship network, friend interaction, and differing attitude toward privacy, independence, and personal freedom." In particular, in analyzing living arrangements separately by race, Choi found that family-related factors, rather than economic affordability, were "the most important factors in the living arrangement decision of widowed elderly women of color."19

In many ways, the current generation of elderly women are pacesetters as they defy stereotypes of aging. Many have dealt with the shortage of men by developing new interests and friendships. For elderly women (and men) with protective social networks, living alone does not necessarily mean being lonely.

A considerable volume of research has attempted to establish relationships between social isolation and subjective well-being on the part of elderly individuals. Some studies have suggested that the number of confidants and companions is more germane to well-being than are marital status and living arrangements per se.²⁰ In general, however, research reflects strong associations between marital status and well-being. Having a spouse "who provides interpersonal closeness, emotional gratification, and support in dealing with daily stress" can be used to explain research findings that reveal married individuals "experience less stress and emotional pathology than their unmarried counterparts."21 A recent investigation of marital status and health among the elderly suggests that changes in contemporary marriage patterns may not uniformly imply adverse effects,

because some unmarried groups (e.g., single women) may be creating social environments or lifestyles to compensate for the loss or absence of a spouse.²²

Elderly living alone often have families nearby and other companionship. About 3 in 5 have lived in the same place for 10 or more years. Those living alone also have a greater tendency to use community services than do those living with others.²³ A study of 1982-84 National Long-Term Care Channeling Demonstration data found that elderly persons living alone were more likely than those living with others to use informal support services to meet instrumental activities of daily living and social needs, while those elderly living with others were more likely to use medical care services. Also, while the elderly living alone had generally better physical health than those living with others, those living alone reported greater levels of depression, loneliness, and social isolation.²⁴

¹⁷ R.J. Havlik, B.M. Liu, M.G. Kovar, et al., National Center for Health Statistics, "Health Statistics on Older Persons, United States: 1986," Vital and Health Statistics, Series 3, No. 25, Public Health Service, U.S. Government Printing Office, Washington, DC, 1987, pp. 26-27. Data from National Health Interview Survey 1984 Supplement on Aging.

¹⁸ Namkee G. Choi, "Racial Differences in the Determinants of Living Arrangements of Widowed and Divorced Elderly Women," *The Gerontologist*, Vol. 31, No. 4, 1991, pp. 496-504.

¹⁹ Ibid.

Neena L. Chappell and Mark Badger, "Social Isolation and Well-Being," *The Journals of Gerontology*, Vol. 44, No. 5, 1989, pp. S169-S176.

²¹ Robert H. Coombs, "Marital Status and Personal Well-Being: A Literature Review," *Family Relations*, Vol. 40, 1991, pp. 97-102.

Noreen Goldman, Sanders Korenman, and Rachel Weinstein, "Marital Status and Health Among the Elderly," Office of Population Research Working Paper No. 94-3, 1994, Princeton University.

Havlik, Liu, Kovar, et al., op.cit.
 Ada C. Mui and J. Denise Burnette,
 Comparative Profile of Frail Elderly Persons Living Alone and Those Living With Others,
 Journal of Gerontological Social Work,
 1, 1994, pp. 5-26.

Data from the 1984 Longitudinal Survey on Aging showed that more than 1 in 4 (28 percent) persons 70 years and over who lived alone had no living children (1.7 million). Of those who had living children, nearly half (48 percent) had daily contact and 86 percent had at least weekly contact with their children.²⁵ Children clearly are important as providers of informal support in their parents' old age. Recent research indicates that, other things being equal, the childless elderly were no more likely to use formal social services than elderly parents. However, elderly parents living apart from their children were more likely to use social services than elderly parents residing with their children.²⁶

In addition to being more likely to live alone, elderly women were more likely than men to live with a relative other than a spouse in 1993. Fourteen percent of women aged 65 to 74 lived with another relative compared with 7 percent of men. For those aged 85 and over, the proportions were 29 and 15 percent, respectively (table 6-3).

In 1993, 20.9 million households were maintained by a person 65 or older (table 6-4). Of such households, 11.5 million had two or more people. About 9.3 million households maintained by a person 65 or older had two people (not all were married couples, of course).

Elderly Blacks were more likely than elderly Whites to maintain households with three or more people. One-fifth (21 percent) of households maintained by an elderly Black had three or more persons compared with 9 percent of households maintained by an elderly White person. Part of this difference may be explained by the younger-elderly grandparents who have allowed their adult children and grandchildren to live in their homes (see "Familial Support Ratios" in chapter 2).

As indicated earlier by data on proportions of elderly living alone, the probability that elderly householders will have other people living with them decreases as age increases, at least up to very old ages. Half of households with a householder aged 65 to 74 were two-person households and 14 percent were three-or-more-person households. Where the householder was 85 or older, only 29 percent were in two-person households while a mere 4 percent lived with two or more additional household members.

Elderly Living in Institutions

One of Every Three Nursing Home Residents Is An Oldest Old Woman

Most elderly live in households but the likelihood of living in a nursing home increases with age. In 1990, most people (90 percent) in nursing homes were elderly and, most commonly, oldest old women (34 percent of all nursing home residents were women ages 85 and over). Three out of four residents of nursing homes in 1990 were aged 75 or older and 7 out of 10 were women. The proportion of an elderly age group living in a nursing home increased with age. In 1990, about 1.4 percent of those aged 65 to 74 lived in a nursing home, compared with 6 percent of the 75-to-84 year old group and 24 percent of those aged 85 years and over.27

In 1990, nearly 1.6 million of the 31 million persons aged 65 and over lived in nursing homes. California and New York each had more than 100,000 elderly persons in nursing homes. Alaska had the smallest number of nursing home residents (table 6-5).

²⁵ M.G. Kovar, "Aging in the Eighties, People Living Alone — Two Years Later," National Center for Health Statistics, Advance Data, No. 149, April 4, 1988, table 2. Data are the 1984 Longitudinal Survey on Aging.

Namkee G. Choi, "Patterns and Determinants of Social Service Utilization: Comparison of the Childless Elderly and Elderly Parents Living With or Apart From Their Children," *The Gerontologist*, Vol. 34, No. 3, 1994, pp. 353-362.

²⁷ U.S. Bureau of the Census, 1990 Census of Population, General Population Characteristics, United States, CP-1-1, U.S. Government Printing Office, Washington, DC, 1992, table 14; and 1993 Press Release, "Nursing Home Population Increase in Every State," CB93-117.

Table 6-4.

Size of Households by Age, Race, and Hispanic Origin of Householder 65 Years and Over: March 1993

(Numbers in thousands. Civilian noninstitutional population. For meaning of abbreviations and symbols, see introductory text)

Cine of household was and			Num	nber			Per	cent	
Size of household, race, and	All ages	65 years	65 to 74	75 to 84	85 years	65 years	65 to 74	75 to 84	85 years
Hispanic origin ¹		and over	years	years	and over	and over	years	years	and over
All races									
Households One person Two persons Three persons Four or more persons Persons per household.	96,391	20,895	11,834	7,182	1,879	100.0	100.0	100.0	100.0
	23,642	9,355	4,330	3,773	1,252	44.8	36.6	52.5	66.6
	31,175	9,341	5,845	2,951	545	44.7	49.4	41.1	29.0
	16,895	1,447	1,086	301	60	6.9	9.2	4.2	3.2
	24,678	753	573	157	23	3.6	4.8	2.2	1.2
	2.63	1.77	1.91	1.61	1.44	(X)	(X)	(X)	(X)
White									
Households One person Two persons Three persons Four or more persons Persons per household	82,083	18,651	10,428	6,494	1,729	100.0	100.0	100.0	100.0
	20,211	8,366	3,771	3,423	1,172	44.9	36.2	52.7	67.8
	27,478	8,583	5,367	2,725	491	46.0	51.5	42.0	28.4
	14,105	1,191	913	228	50	6.4	8.8	3.5	2.9
	20,290	511	377	118	16	2.7	3.6	1.8	0.9
	2.59	1.72	1.87	1.58	1.41	(X)	(X)	(X)	(X)
Black									
Households One person Two persons Three persons Four or more persons Persons per household	11,190	1,908	1,204	571	133	100.0	100.0	100.0	100.0
	2,892	882	503	312	67	46.2	41.8	54.6	50.4
	2,895	617	397	167	53	32.3	33.0	29.2	39.8
	2,155	210	141	61	8	11.0	11.7	10.7	6.0
	3,248	199	164	31	4	10.4	13.6	5.4	3.0
	2.84	2.12	2.26	1.90	1.80	(X)	(X)	(X)	(X)
Hispanic origin ¹									
Households One person Two persons Three persons Four or more persons Persons per household	6,626	704	457	201	46	100.0	100.0	100.0	(B)
	996	257	148	87	22	36.5	32.4	43.3	(B)
	1,477	263	182	69	12	37.4	39.8	34.3	(B)
	1,294	91	62	22	7	12.9	13.6	10.9	(B)
	2,859	93	65	23	5	13.2	14.2	11.4	(B)
	3.41	2.20	2.33	1.96	(B)	(X)	(X)	(X)	(X)

¹Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Household and Family Characteristics: March 1993*, Current Population Reports, P20-477, U.S. Government Printing Office, Washington, DC, 1994, table 17.

Table 6-5. Elderly Nursing Home Population by Region, Division, and State: 1980 and 1990

D	Number	r	Ohaaaa	Daniel de la como
Region, division, and State	1980	1990	Change, 1980 to 1990	Percent change, 1980 to 1990
UNITED STATES	1,232,958	1,590,763	357,805	29.0
Northeast	289,740	362,058	72,318	25.0
New England	93,051	109,403	16,352	17.6
Middle Atlantic	196,689	252,655	55,966	28.5
Midwest	406,813	490,434	83,621	20.6
East North Central	250,914	309,247	58,333	
West North Central	155,899	181,187	25,288	16.2
South	340,153	498,340	158,187	46.5
South Atlantic	140,246	240,760	100,514	71.7
East South Central	67,012	92,447	25,435	38.0
West South Central	132,895	165,133	32,238	24.3
West	196,252	239,931	43,679	22.3
Mountain	39,848	58,954	19,106	47.9
Pacific	156,404	180,977	24,573	15.7
New England	93,051	109,403	16,352	17.6
Maine	8,481	9,194	713	8.4
Vermont	3,862	4,399	537	13.9
New Hampshire	5,964 43,930	7,741 50,852	1,741 6,922	29.8 15.8
Rhode Island	7,337	9,534	2,197	29.9
Connecticut	23,477	27,683	4,206	17.9
Middle Atlantic	196,689	252,655	55,966	28.5
New York	101,050	111,901	10,851	10.7
New Jersey	30,332	42,883	12,551	41.4
Pennsylvania	65,307	97,871	32,564	49.9
East North Central	250,914	309,247	58,333	23.2
Ohio	62,343	84,081	21,738	34.9
Indiana	34,288	45,375	11,087	32.3
Illinois	66,014	82,422	16,408	24.9
Michigan	46,562	51,605	5,043	10.8
Wisconsin	41,707	45,764	4,057	9.7
West North Central	155,899	181,187	25,288	16.2
Minnesota	40,316	43,475	3,159	7.8
lowa	31,199	33,429	2,230	7.1
Missouri	33,636 6,578	46,844 7,459	13,208 881	39.3 13.4
South Dakota	7,306	8,278	972	13.3
Nebraska	15,847	17,698	1,851	11.7
Kansas	21,017	24,004	2,987	14.2
South Atlantic	140,246	240,760	100,514	71.7
Delaware	2,534	4,330	1,796	70.9
Maryland	17,905	24,663	6,758	37.7
District of Columbia	2,380	5,336	2,956	124.2
Virginia	20,253	32,947	12,694	62.7
West Virginia	5,555	11,080	5,525	99.5
North Carolina	24,147	40,260	16,113	66.7
South Carolina	10,063	16,009	5,946	59.1
Georgia	24,954 32,455	32,645 73,490	7,691 41,035	30.8 126.4
i iuliua	32,400	73,490	41,035	120.4

See footnotes at end of table.

Table 6-5. Elderly Nursing Home Population by Region, Division, and State: 1980 and 1990—Continued

Danies division and Chats	Nun	nber	Change	Dereent change
Region, division, and State	1980	1990	Change, 1980 to 1990	Percent change, 1980 to 1990
East South Central Kentucky Tennessee Alabama Mississippi West South Central Arkansas Louisiana Oklahoma Texas Mountain Montana Idaho Wyoming Colorado New Mexico Arizona. Utah	67,012 19,817 20,083 16,539 10,573 132,895 15,232 18,786 21,086 77,791 39,848 4,748 4,427 1,932 13,519 2,299 7,228 3,780	92,447 24,436 31,678 21,965 14,368 165,133 19,117 27,934 26,140 91,942 58,954 7,128 5,798 2,441 16,696 5,645 12,743 5,441	25,435 4,619 11,595 5,426 3,795 32,238 3,885 9,148 5,054 14,151 19,106 2,380 1,371 509 3,177 3,346 5,515 1,661	38.0 23.3 57.7 32.8 35.9 24.3 25.5 48.7 24.0 18.2 47.9 50.1 31.0 26.3 23.5 145.5 76.3 43.9
Nevada Pacific Washington Oregon California Alaska Hawaii	1,915 156,404 24,122 14,057 114,987 675 2,563	3,062 180,977 29,735 16,076 131,358 1,039 2,769	1,147 24,573 5,613 2,019 16,371 364 206	59.9 15.7 23.3 14.4 14.2 53.9 8.0

Source: U.S. Bureau of the Census, 1980 from 1980 Census of Population, General Social and Economic Characteristics, United States Summary, PC80-1-C1, table 235; 1990 from 1993 Press Release, Nursing Home Population Increases in Every State, CB93-117.

We saw above that among States. the Farm Belt tended to have higher proportions of total population aged 85 or older and relatively higher proportions of elderly living alone. This also is the part of the country with the highest proportion of the total elderly population living in nursing homes (figure 6-5). Nationally, 5.1 percent of the elderly population lived in nursing homes in 1990. North Dakota, South Dakota, Minnesota, Nebraska, and lowa each had about 8 percent of their elderly population in nursing homes in 1990. Other Midwestern States also had higher than average percentages. The farm States are the ones with outmigration of the young and an aging population that has stayed put. Their higher institutionalization rates may be related to the

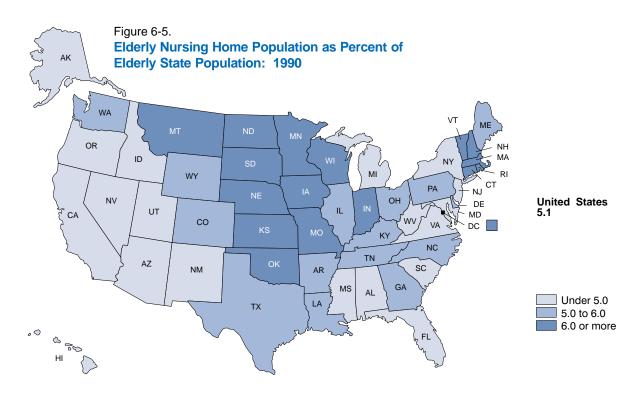
dwindling number of nearby family members.

The size of the elderly nursing home population increased by over onefourth (29 percent) from 1980 to 1990 (figure 6-6) compared with a 35-percent increase in the size of the population 85 years and over. The percentage increases from 1980 to 1990 in the elderly nursing home population for the Northeast (25 percent) and South (47 percent) are in line with their proportionate increases in oldest old population (27 and 46 percent, respectively). The Midwest and the West, however, had much smaller increases in their elderly nursing home populations (21 and 22 percent, respectively) than in their 85-and-over populations (28 percent for the

Midwest and 39 percent for the West).²⁸

The increasing number of aged and the increased participation of women (the primary caretakers of the aged) in the labor force lead many to believe that the number and proportion of elderly living in institutions will increase. Certainly the number may increase just because the size of the elderly population is increasing. As

²⁸ U.S. Bureau of the Census, 1980 Census of Population, General Social and Economic Characteristics, United States Summary, PC80-1-C1, table 235; 1993 Press Release, "Nursing Home Population Increase in Every State," CB93-117; and U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980 to 1991, Current Population Reports, P25-1095, U.S. Government Printing Office, Washington, DC, 1993.



Source: U.S. Bureau of the Census, 1993 Press Release, "Nursing Home Population Increases in Every State," CB93-117.

shown above, however, the percentage increase in the size of the elderly U.S. nursing home population over the last decade is less than the increase in the size of the oldest old population. Indications of declines in chronic disability rates and the prevalence of chronic disease conditions²⁹ (see chapter 3) suggest that the elderly population living in nursing homes may continue to grow slower than the oldest old population.

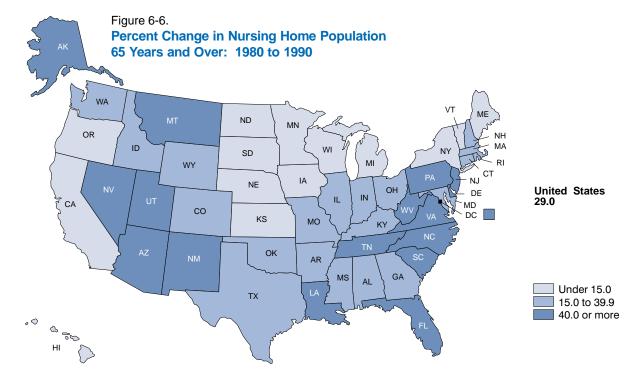
Kemper and Murtaugh estimate that the lifetime risk of institutionalization for those reaching age 65 in 1990, if past utilization rates continue, would be 43 percent. Over half the women (52 percent) and one-third (33 percent) of men would use a nursing home before they die. If survival rates improve at the oldest ages, it is likely the risk of institutionalization would also increase. For example, 70 percent of women who died at 90 years or older (1982 to 1984) had lived in a nursing home.³⁰ Previous research has shown that women generally have longer nursing home lengths of stay than men and that

30 P. Kemper and C. Murtaugh, "Lifetime Use of Nursing Home Care," *New England Journal of Medicine*, Vol. 324, No. 9, February 28, 1991, p. 595. Also see Charles E. McConnell, "A Note on the Lifetime Risk of Nursing Home Residency," *The Gerontologist*, Vol. 24, No. 2, 1984, pp. 193-198.

most admissions are short term (3 out of 4 are for less than one year).³¹

One recent study found that among those admitted at age 65 or older, women stayed an average of 26 months in an institution compared to 19 months for men.³² This study

32 Vicki A. Freedman, "Kin and Nursing Home Lengths of Stay: A Backward Recurrence Time Approach," *Journal of Health and Social Behavior*, Vol. 34, 1993, pp. 138-152.



Source: U.S. Bureau of the Census, 1980 from 1980 Census of Population, *General Social and Economic Characteristics, United States Summary*, PC80-1-C1; 1990 from 1993 Press Release, "Nursing Home Population Increases in Every State," CB93-117.

²⁹ Kenneth G. Manton, Larry Corder, and Eric Stallard, "Changes in the Use of Personal Assistance and Special Equipment from the 1982 and 1989 NLTCS," *The Gerontologist*, Vol. 33, No. 2, 1993, pp. 168-176.

³¹ Korbin Liu, Teresa Coughlin, and Timothy McBride, "Predicting Nursing Home Admission and Length of Stay: A Duration Analysis," *Medical Care*, Vol. 29, 1991, pp. 125-141; and Korbin Liu and Ken Manton, "The Characteristics and Utilization Pattern of Admission Cohorts of Nursing Home Patients," *The Gerontologist*, Vol. 23, No. 1, 1983, pp. 92-98.
32 Vicki A. Freedman, "Kin and Nursing

found that family members were important in reducing the average length of time spent by older persons in nursing homes. For example, the length of stay was 3 months less for women and 4 months less for men when there was a surviving spouse, and 3 months less for women and no effect for men when there was a surviving child. Another analysis, of nonmarried parents aged 70 and over in the Longitudinal Study of Aging (LSOA), found a positive relationship between the number of children and the likelihood of parents' changing their living arrangement from living alone to living with a child. However, the number of children did not affect the odds of becoming institutionalized.33

Families use nursing homes for both recuperative care and care of those near death. Analysis of LSOA data determined that the odds of dying were 2.7 times greater among respondents placed in nursing homes between 1984 and 1988 than among respondents who remained in the community during the period.³⁴

Recent simulation modelling of nursing home utilization found rates less than, but similar to, those of Kemper

and Murtaugh.³⁵ This research determined that 35 percent of individuals who reach age 65 will have at least one nursing home admission during their lifetimes. The median age of first admission was 81 for men and 84 for women. Forty-two percent of first nursing home admissions end in death, and while the probability of a nursing home spell ending in death increased with age, it did not vary by race.

Demographic circumstances may be moderated by medical advances and increased understanding of the sociopsychological factors that lead to institutionalization. Research based on LSOA data found that among persons aged 70 and over, those who participated in some form of social activity decreased their risk of institutionalization and their risk of mortality. Persons living alone had an increased likelihood of institutionalization.³⁶ In the latter half of the 1990's, numerous ongoing research activities are aimed at a better understanding of factors associated with a high risk of institutionalization, including basic demographic characteristics such as age, sex, race, and family structure, as well as social support measures,

economic resources, and health and functional status variables.

Whether the frail elderly receive care in nursing homes, by families, or by paid help in the elderly person's home, more persons are likely to experience the economic, emotional, and physical stresses of long-term care for frail elderly persons.

Educational Attainment of the Elderly

Educational Attainment
Within the Elderly Population Is
Increasing Significantly

Some use educational attainment and consequent behaviors as rough indicators of economic and health status in older ages. Research suggests that "education extends both total life expectancy and active life expectancy. Education thus may serve as a powerful social protective mechanism delaying the onset of health problems at older ages." 37

The population 65 years and over is less likely than those aged 25 to 64 to have completed high school. In 1993, only 60 percent of noninstitutionalized elderly persons had at least a high school education compared with 85 percent of persons aged 25 to 64 (table 6-6). Only one-third (33 percent) of elderly Blacks and 26 percent

³³ Glenna Spitze, John R. Logan, and Joyce Robinson, "Family Structure and Changes in Living Arrangements Among Elderly Nonmarried Parents," *The Journals of Gerontology*, Vol. 47, No. 6, 1992, pp. S289-S296.

³⁴ Fredric D. Wolinsky, Christopher M. Callahan, John F. Fitzgerald, and Robert J. Johnson, "The Risk of Nursing Home Placement and Subsequent Death Among Older Adults," *The Journals of Gerontology*, Vol. 47, No. 4, 1992, pp. S173-S182.

³⁵ Andrew Dick, Alan M. Garber, and Thomas A. MaCurdy, "Forecasting Nursing Home Utilization of Elderly Americans," Chapter 10 in *Studies in the Economics of Aging*, David A. Wise (ed.), National Bureau of Economic Research, 1994, University of Chicago Press.

³⁶ Ulrike Steinback, "Social Networks, Institutionalization, and Mortality Among Elderly People in the United States," *The Journals of Gerontology*, Vol. 47, No. 4, 1992, pp. S183-S190.

³⁷ Kenneth C. Land, Jack M. Guralnik, and Dan G. Blazer, "Estimating Increment-Decrement Life Tables with Multiple Covariates from Panel Data: The Case of Active Life Expectancy," *Demography*, Vol. 31, No. 2, 1994, pp. 297-319.

Table 6-6.
Years of School Completed by Age, Race, and Hispanic Origin: March 1993
(Numbers in thousands. Civilian noninstitutional population. For meaning of abbreviations and symbols, see introductory text)

Age, race, and Hispanic origin	Total	Less than 9th grade	9th-11th grade	High school graduate	Some college/ Associate degree	Bachelor's degree or more	Percent high school graduate or more
ALL RACES							
Number							
25 years and over	162,826 131,956 30,870 9,832 8,530 12,508	15,127 7,675 7,452 1,733 1,738 3,979	17,067 12,251 4,816 1,515 1,287 2,016	57,589 47,022 10,567 3,736 3,142 3,688	37,451 33,108 4,343 1,456 1,336 1,550	35,590 31,899 3,691 1,392 1,026 1,273	80.2 84.9 60.3 67.0 64.5 52.1
Percent							
25 years and over 25 to 64 years 65 years and over 65 to 69 years 70 to 74 years 75 years and over	100.0 100.0 100.0 100.0 100.0 100.0	9.3 5.8 24.1 17.6 20.4 31.8	10.5 9.3 15.6 15.4 15.1 16.1	35.4 35.6 34.2 38.0 36.8 29.5	23.0 25.1 14.1 14.8 15.7 12.4	21.9 24.2 12.0 14.2 12.0 10.2	(X) (X) (X) (X) (X) (X)
BLACK							
Number							
25 years and over 25 to 64 years 65 years and over 65 to 69 years 70 to 74 years 75 years and over	17,786 15,126 2,660 939 763 957	2,182 951 1,231 332 321 579	3,079 2,529 550 232 162 158	6,451 5,904 547 245 175 127	3,910 3,735 175 72 57 46	2,165 2,008 157 59 49	70.4 77.0 33.0 40.0 36.9 23.2
Percent							
25 years and over 25 to 64 years 65 years and over 65 to 69 years 70 to 74 years 75 years and over	100.0 100.0 100.0 100.0 100.0 100.0	12.3 6.3 46.3 35.4 42.1 60.5	17.3 16.7 20.7 24.7 21.2 16.5	36.3 39.0 20.6 26.1 22.9 13.3	22.0 24.7 6.6 7.7 7.5 4.8	12.2 13.3 5.9 6.3 6.4 5.1	(X) (X) (X) (X) (X) (X)

See footnotes at end of table.

Years of School Completed by Age, Race, and Hispanic Origin: March 1993—Continued

(Numbers in thousands. Civilian noninstitutional population. For meaning of abbreviations and symbols, see introductory text)

Age, race, and Hispanic origin	Total	Less than 9th grade	9th-11th grade	High school graduate	Some college/ Associate degree	Bachelor's degree or more	Percent high school graduate or more
HISPANIC ORIGIN ¹							
Number							
25 years and over 25 to 64 years 65 years and over 65 to 69 years 70 to 74 years 75 years and over	475	3,812 3,055 757 261 200 295	1,865 1,723 142 57 36 50	3,242 3,071 171 84 48 40	2,092 2,016 76 34 30 12	1,090 1,014 76 39 18	53.1 56.1 26.5 33.2 28.8 17.1
Percent							
25 years and over	100.0	31.5 28.1 61.9 54.9 60.2 70.9	15.4 15.8 11.6 12.0 10.8 12.0	26.8 28.2 14.0 17.7 14.5 9.6	17.3 18.5 6.2 7.2 9.0 2.9	9.0 9.3 6.2 8.2 5.4 4.6	(X) (X) (X) (X) (X) (X)

¹Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Educational Attainment in the United States: March 1993 and 1992,* Current Population Reports, P20-476, U.S. Government Printing Office, Washington, DC, 1994, table 1.

of elderly Hispanics had completed at least high school.

About 24 of 100 elderly had only an eighth grade education or less compared with about 6 of 100 persons aged 25 to 64 in 1993. This relatively low level of educational attainment was particularly acute among elderly Blacks (46 percent) and Hispanics (62 percent).

Within the elderly population, however, there are important differences in the educational attainment of younger and older elderly. About 67 percent of persons aged 65 to 69 had completed

at least high school compared with only 52 percent of persons aged 75 and over. Just over three in ten (32 percent) persons aged 75 and over had only an eighth grade education or less compared with less than 2 in 10 (18 percent) aged 65 to 69. Differences in educational attainment also were present within the elderly Black population; those aged 65 to 74 years were more likely to have graduated from high school (38 percent) than those aged 75 years and over (23 percent).

The encouraging news is that the proportion of all elderly with at least a

high school education will increase in the coming decades. Such improvements in educational attainment are likely to make notable differences in the interests of the future elderly, their needs and their abilities (for example, the ability to read and follow instructions on medications). About 77 percent of people aged 55 to 59 in 1993 had at least a high school education as did 87 percent of people aged 45 to 49. Twelve percent of elderly had completed a Bachelor's degree or more compared with 20 percent of people aged 55 to 59 and 27 percent of persons aged 45 to 49 (table 6-7).

Table 6-7.

Percent High School and College Graduates for the Population 25 Years and Over, by Age, Race, and Hispanic Origin: March 1993

	High	school gradu	uates or highe	er		Bachelor's degree or hig				
Age	Total	White	Black	Hispanic origin ¹	Total	White	Black	Hispanic origin ¹		
25 years and over	80.2	81.5	70.4	53.1	21.9	22.6	12.2	9.0		
25 to 29 years	86.7	87.3	82.8	60.9	23.7	24.7	13.2	8.3		
30 to 34 years	87.0	87.7	83.6	59.8	23.9	24.8	12.8	9.8		
35 to 39 years	88.4	89.2	83.0	59.1	25.4	26.2	15.3	11.3		
40 to 44 years	88.8	89.9	82.1	57.4	28.2	29.5	15.9	8.9		
45 to 49 years	86.6	88.1	74.8	54.9	27.1	27.9	14.4	10.4		
50 to 54 years	82.4	84.2	68.1	50.8	22.9	23.6	11.4	9.4		
55 to 59 years	76.7	78.3	63.4	44.5	19.8	20.6	9.8	8.2		
60 to 64 years	71.8	74.5	49.6	34.1	17.5	18.2	8.8	4.7		
65 years and over	60.3	63.3	33.0	26.5	12.0	12.5	5.9	6.2		
65 to 69 years	67.0	70.4	40.0	33.2	14.2	14.9	6.3	8.1		
70 to 74 years	64.5	67.8	36.9	28.8	12.0	12.6	6.5	5.6		
75 years and over	52.1	54.8	23.2	17.1	10.2	10.6	5.1	4.6		

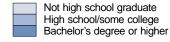
¹ Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, Educational Attainment in the United States: March 1993 and 1992, Current Population Reports, P20-476, U.S. Government Printing Office, Washington, DC, 1994, tables 1 and 2.

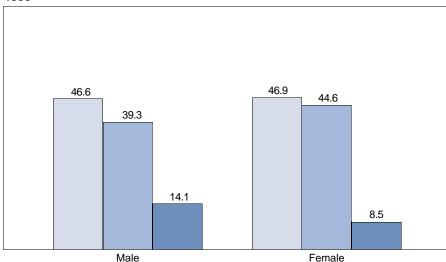
Figure 6-7.

Educational Attainment of the Elderly by Sex: 1990 and 2030

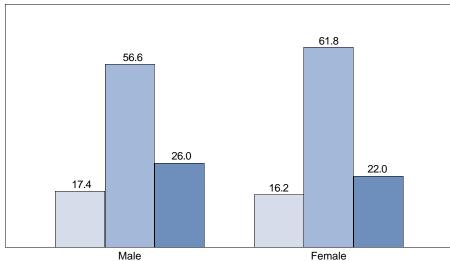
(In percent)



1990



2030



Source: U.S. Bureau of the Census, 1990 Census of Population, *Education in the United States*, CP-3-4, U.S. Government Printing Office, Washington, DC, 1994, table 1.

The future educational profile of the elderly will be quite different from the observed 1990 profile. In 1990, nearly half (47 percent) of the elderly had not completed high school (figure 6-7). Assuming that the educational profile of the 25 to 54 year old population in 1990 will represent the elderly population in 2030, more than 4 of every 5 elderly (83 percent) in 2030 would have completed high school or more.³⁸ The proportion of the elderly with a bachelor's degree or more will increase from 11 percent in 1990 to 24 percent in 2030. The educational profile of elderly women will change substantially in the future as the proportion of elderly women with a bachelor's degree or more likely will double in the next forty years.

Future improvements in the levels of educational attainment among the elderly will be slower for Blacks and Hispanics than for Whites. For example, in 1993, about 88 percent of Whites aged 45 to 49 had at least a high school education and about 28 percent had a Bachelor's degree or more. By comparison, 75 percent of Blacks and 55 percent of Hispanics aged 45 to 49 had at least a high school diploma. Additionally, 14 percent of Blacks that age had completed a Bachelor's degree or more as had 10 percent of Hispanics.³⁹

³⁸ The educational attainment levels in 2030 were obtained by assuming that the combined level in 1990 for the population aged 25 to 54 years would represent the level of the 65 and over population in 2030 (persons aged 25 to 54 in 1990 will be aged 65 to 94 in 2030)

³⁹ Robert Kominski and Andrea Adams, U.S. Bureau of the Census, *Educational Attainment in the United States: March 1993 and 1992*, Current Population Reports, P20-476, U.S. Government Printing Office, Washington, DC, 1994, table 1.

Foreign-Born and Language Spoken at Home

Hispanics Are an Increasing Proportion of the Elderly Foreign-Born

In 1990, population census data indicate that there were 2.7 million foreign-born elderly (table 6-8). Of the total elderly population, about 1 in 12 (8.6 percent) were foreign-born. The elderly represented 13.6 percent of the total foreign-born population of 19.8 million.

A higher percentage of elderly than nonelderly (aged 0 to 64 years) were foreign-born in 1990. However, the proportion foreign-born among the elderly has declined over the past several decades. If the trend from 1980 to 1990 continues, the proportion foreign-born in 2000 among the nonelderly will exceed the proportion of elderly who are foreign-born.

Hispanics are an increasing proportion of the elderly foreign-born. In 1990, 19 percent of foreign-born elderly were Hispanic, compared to 12 percent in 1980. Among the Hispanic foreign-born nonelderly, the corresponding proportions were 43 and 25 percent, respectively. Among all foreign-born elderly, the proportion Hispanic decreased with age. In 1990, nearly one of every four

(23 percent) young-old foreign-born persons was Hispanic, compared to 17 percent of foreign-born aged 75 to 84, and 12 percent of the oldest old foreign-born.

Among the race and Hispanic origin groups, the percent of the elderly who were foreign-born in 1990 ranged from a high of 66 percent for Asians and Pacific Islanders (API) to a low of 3 percent for American Indians, Eskimos, and Aleuts (AIEA). The number of API foreign-born elderly more than doubled from 144,000 in 1980 to 308,000 in 1990. API represented 11 percent of all elderly foreign-born in 1990, a substantial increase from 5 percent in 1980.

Table 6-8.

Foreign-Born Population, by Age, Sex, Race and Hispanic Origin: 1980 and 1990

(Numbers in thousands. For meaning of abbreviations and symbols, see introductory text)

Number Percent foreign-born of total population Age, race and Hispanic origin¹ 1990 1980 1980 1990 Both sexes Both sexes Male Female Both sexes Both sexes Male Female All races 10,096 14,080 6.2 19,767 9,671 7.9 8.0 7.9 8,454 760 577 5.5 9.0 11,100 17,072 7.8 7.2 7.9 6.9 7.8 7.4 8,618 5-74 75-84 65+ 85+ 1,408 1,308 548 1,166 2.980 360 1,053 15.1 11.7 9.4 8.6 9.7 8.4 17.5 9.2 8.8 937 2,696 1,643 305 18.6 15.0 All_ages 9.324 10.023 4.758 5.265 4.9 5.0 4.9 5.1 3,941 559 487 4.6 5.7 8.8 4.6 6.2 8.6 6,648 7,874 3,933 4.0 4.6 8.8 15.3 11.7 1,221 1.072 964 780 405 6.0 75-84 65+ 293 825 8.7 7.7 2,149 405 2.676 1,324 277 7.4 17.2 8.0 128 14.0 19.1 14.9 3.1 3.1 2.6 3.2 2.8 0-64 65-74 816 1,455 741 5.1 5.2 3.7 3.0 3.5 3.5 682 22 8 33 2 5.0 3.8 3.3 3.6 3.7 4.8 3.9 3.4 3.7 3.8 1,365 57 25 683 35 17 34 19 58 91 58 American Indian, Eskimo, and Aleut 2.5 2.4 3.5 3.8 3.6 4.6 2.2 2.1 2.8 2.5 2.7 2.9 38 35 2 47 44 2 25 24 22 20 All ages 2.3 2.6 2.6 2.7 3.6 2.5 2.5 2.3 2.8 2.6 4.8 0 3 1 Asian and Pacific Islander 58.6 58.2 63.6 67.5 65.2 64.3 63.9 69.1 73.4 71.0 2,178 2,043 83 2,381 2,207 114 63.1 62.9 66.9 All ages 2,183 2,038 4,559 4,250 61.8 0-64 65-74 75-84 65+ 85+ 61.4 63.9 197 46 174 74.1 65.9 44 88 41 74.8 308 68.1 144 135 23 10 80.7 70.7 82.2 Other All ages 0-64 65-74 75-84 65+ 3,684 3,539 1,996 1.936 1,688 1,603 29.8 29.1 37.9 37.6 39.8 39.6 35.9 35.5 1,719 1.620 61 31 99 37 17 59 50 26 49.3 57.8 52.4 59.6 44.3 52.3 47.9 88 44.0 43.7 43 145 14 51.8 47.5 51.0 47.0 85 6 63.5 64.5 Hispanic¹ 4,173 2,825 213 109 3,730 3,423 173 102 307 32 34.6 33.7 45.5 All ages 7,842 7,327 300 4,112 3,904 127 28.6 27.5 48.8 35.8 35.1 44.7 36.9 36.5 43.8 57.1 51.8 58.3 53.8 48.8 63.2 54.3 49.5 61.8 208 19 515 348 26 Non-hispanic 5,559 4,714 421 298 5.5 5.1 6.0 7.8 7.4 12.9 All ages 9,907 7,275 6,367 4.7 3.9 7.9 14.1 11,926 5.3 5.0 5.7 5.1 9,745 1,008 773 5,031 587 475 4.8 5.5 8.3 1,194 1,057 8.0 2,632 381 2,181 399 845 126 1,335 273 10.6 17.7 7.2 13.7 7.0 15.7

Source: U.S. Bureau of the Census, 1984, 1980 Census of Population, Detailed Population Characteristics, United States Summary, Section A: United States. PC80-1-D1-A; and 1994 Press Release, "Nativity: 1990," CPH-L-153, Washington, DC.

¹Hispanic origin may be of any race.

About 1 of Every 8 Elderly Speaks a Language Other Than English at Home

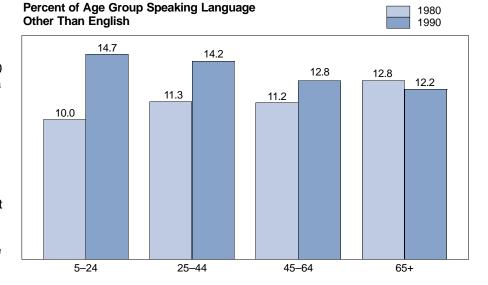
In 1990, 3.8 million elderly, or 12 percent of all elderly persons, spoke some language other than English at home (figure 6-8). The elderly were the only broad age group that did not experience an increase between 1980 and 1990 in the proportion speaking a language other than English at home.

The composition of persons speaking a language other than English at home varies considerably by age and language spoken. For example, among the elderly who spoke another language at home in 1990, 28 percent spoke Spanish and 72 percent spoke some other language. However, among those aged 5 to 24 who spoke another language at home in 1990, 65 percent spoke Spanish and 35 percent some other language.

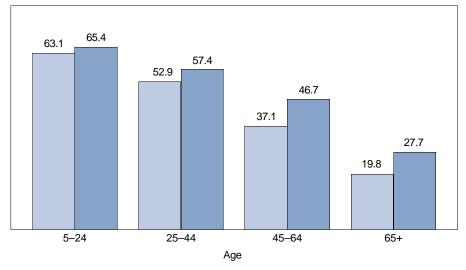
Of the elderly who spoke another language at home, the percent speaking Spanish increased between 1980 and 1990. Just as the trends in the foreign-born data discussed above showed that Hispanics are an increasing proportion of the elderly foreign-born, Spanish speakers will become an increasing share of the future elderly population that speaks a language other than English at home.

Figure 6-8.

Percent Speaking Languages Other Than English at Home and Proportion Speaking Spanish Only, by Age: 1980 and 1990



Percent Speaking Spanish Only of All Other Language Speakers



Source: U.S. Bureau of the Census, "Social and Economic Characteristics of Selected Language Groups for U.S. and States: 1990," CPH-L-159, table 5; and 1980 Census of Population, Detailed Population Characteristics, United States Summary, Section A: United States, PC 80-1-D1-A, U.S. Government Printing Office, Washington, DC, 1984, table 256.

Veterans Status

The Number of Elderly Veterans Will Peak by The Year 2000

In 1994, there were close to 8.6 million veterans aged 65 or older. About 4 percent were women. Because of the aging of World War II veterans, the number is expected to peak by the year 2000 when there would be about 9.3 million elderly veterans. The number of elderly veterans is projected to decline after 2000 to about 8.5 million by 2010.⁴⁰

Voting Among the Elderly

About Two-Thirds of the Elderly Vote

Voter turnout for Presidential elections began to fall around the mid-1960's for the general population and reached its lowest level in 1988.⁴¹ That year, overall voter turnout in the Presidential election was 57 percent compared with 69 percent in 1964. More than 3 in 5 elderly have voted in presidential elections since 1964.

In 1992, overall voter turnout was 61 percent, an increase of 4 percentage points over the 1988 level. In 1992, 70 percent of elderly reported voting in the presidential election. A higher proportion of elderly men than elderly women have reported voting over the years (table 6-9).

Persons aged 65 to 74 were more likely to report voting than were persons 75 years and over (74 percent and 65 percent, respectively, in 1992). By comparison, 58 percent of people aged 25 to 44 reported voting. Elderly persons were more likely to vote than were persons aged 25 to 44 regardless of educational level.

Table 6-9.

Registration and Reported Voting in Presidential Elections of Persons 65 Years and Over, by Age: 1964 to 1992

(Numbers in thousands. Civilian noninstitutional population. For meaning of abbreviations and symbols, see introductory text.)

,						•		•	,	,	
	Persons 65 years and over							Reported voting			
		Reg	istered		Reported voting			65 to 74 years		75 years and over	
Year	Voting-age				Percent						
	population	Number	Percent	Number	Both sexes	Male	Female	Number	Percent	Number	Percent
1964	17,269	(X)	(X)	11,447	66.3	73.7	60.4	8,063	71.4	3,384	56.7
1968	18,468	13,970	75.6	12,150	65.8	73.1	60.3	8,270	71.5	3,880	56.3
1972	20,074	15,172	75.6	12,741	63.5	70.7	58.4	8,590	68.1	4,151	55.6
1976	22,001	15,716	71.4	13,685	62.2	68.3	58.0	9,282	66.4	4,403	54.8
1980	24,094	17,968	74.6	15,677	65.1	70.4	61.3	10,622	69.3	5,055	57.6
1984	26,658	20,507	76.9	18,055	67.7	71.9	64.8	11,761	71.8	6,294	61.2
1988	28,804	22,580	78.4	19,818	68.8	73.3	65.6	12,840	73.0	6,978	62.2
1992	30,846	24,049	78.0	21,637	70.1	74.5	67.0	13,607	73.8	8,030	64.8
	I					1					i

Source: U.S. Bureau of the Census, 1964 to 1980 data from *Voting and Registration Highlights From the Current Population Survey: 1964 to 1980,* Current Population Reports, P-23, No. 131, U.S. Government Printing Office, Washington, DC, 1984, tables 2-6; 1984 and 1988 data from *Voting and Registration in the Election of November 1988,* P20-440, U.S. Government Printing Office, Washington, DC, 1989, tables 2 and A-1; 1992 data from *Voting and Registration in the Election of November 1992,* P20-466, U.S. Government Printing Office, Washington, DC, 1993, table 2. Data for ages 65 to 74 and 75 and over for the years 1964 to 1976, from the appropriate P-20 series report.

⁴⁰ Department of Veterans Affairs, "Veteran Population Estimates by State, Age and Period of Service July 1, 1994," September 1994; and "Projections of the U.S. Veteran Population: 1990 to 2010," by Kathleen A. Sorensen and Thomas C. Feild, table 2.

⁴¹ The percentage voting has been generally down since 1964 (when it was 69 percent) except that in 1980, 59 percent of the total population voted and in 1984, 60 percent voted, a statistically significant increase. In 1988, 57 percent voted, which continued the general pattern of a declining proportion of the population which votes. In 1992, the percent voting increased to 61 percent.

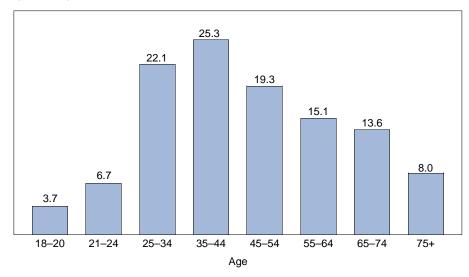
Although the proportion of adults aged 25 to 44 years who vote is less than the proportion of elderly who vote, the number of 25-to-44 year old voters is more than twice as large. About 47.4 million people aged 25 to 44 voted in the 1992 election. By comparison, 21.6 million elderly reported voting. Another 15.1 million voters were aged 55 to 64 (figure 6-9). About 19 percent of all voters were 65 or older.

More elderly live in the South than in other regions of the country, and as would be expected, the largest number of elderly voters reside in the South (7.3 million). In the Midwest, there were 5.6 million; in the Northeast, 4.6 million; and in the West, 4.2 million (table 6-10).

Figure 6-9.

Persons Who Reported Voting by Age: November 1992

(In millions)



Source: U.S. Bureau of the Census, *Voting and Registration in the Election of November 1992*, Current Population Reports, P20-466, U.S. Government Printing Office, Washington, DC, 1993, table 2.

Table 6-10.
Characteristics of Persons Who Reported Voting by Age: 1992

(Numbers in thousands. Civilian noninstitutional population)

21		Reported voting		
Characteristics	All persons	Number	Percent	
Total, 65 years and over	30,847	21,636	70.1	
Northeast 65 to 74 years	4,063	2,869	70.6	
	2,711	1,684	62.1	
Midwest 65 to 74 years75 years and over	4,397	3,403	77.4	
	3,315	2,233	67.4	
65 to 74 years	6,520	4,689	71.9	
	4,076	2,592	63.6	
65 to 74 years	3,466	2,645	76.3	
	2,299	1,521	66.1	
YEARS OF SCHOOL COMPLETED, 65 YEARS AND OVER Total Less than 9th grade. 9th to 12th grade, no degree. High school graduate. Some college, no degree or associate degree. Bachelor's degree or more.	30,847	21,636	70.1	
	7,029	3,464	49.3	
	4,855	3,182	65.5	
	10,402	7,838	75.4	
	4,607	3,760	81.6	
	3,954	3,392	85.8	
YEARS OF SCHOOL COMPLETED, 25 to 44 YEARS	0,004	0,002	00.0	
Total Less than 9th grade 9th to 12th grade, no degree High school graduate. Some college, no degree or associate degree Bachelor's degree or more.	81,319	47,388	58.3	
	3,309	359	10.8	
	6,855	1,852	27.0	
	28,261	14,066	49.8	
	22,056	14,749	66.9	
	20,838	16,362	78.5	
EMPLOYMENT STATUS AND CLASS OF WORKER, 65 YEARS AND OVER				
In civilian labor force Employed Males Females Agricultural industries Nonagricultural industries Unemployed Not in labor force	3,671	3,014	82.1	
	3,554	2,923	82.2	
	2,086	1,722	82.5	
	1,468	1,201	81.8	
	315	266	84.4	
	3,239	2,657	82.0	
	116	91	78.4	
	27,176	18,623	68.5	
FAMILY INCOME				
Family members, 65 to 74 years				
Total Under \$10,000 \$10,000 to \$14,999 \$15,000 to \$24,999 \$25,000 to \$34,999 \$35,000 or more Income not reported.	13,779	10,367	75.2	
	1,493	837	56.1	
	2,116	1,422	67.2	
	5,470	4,331	79.2	
	1,652	1,417	85.8	
	1,680	1,401	83.4	
	1,368	960	70.2	

See footnotes at end of table.

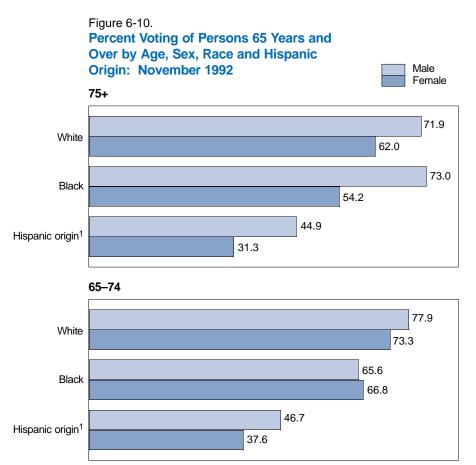
Table 6-10.

Characteristics of Persons Who Reported Voting by Age: 1992—Continued

(Numbers in thousands. Civilian noninstitutional population)

Ch assatasiation		Reporte	ed voting
Characteristics	All persons	Number	Percent
FAMILY INCOME—Con.			
Family members, 75 years and over			
Total Under \$10,000 \$10,000 to \$14,999 \$15,000 to \$24,999 \$25,000 to \$34,999 \$35,000 or more. Income not reported.	1,370 2,485 676 671	4,617 592 883 1,772 464 455 451	65.9 54.6 64.4 71.3 68.7 67.8 62.4
Family members, 25 to 44 years			
Total Under \$10,000 \$10,000 to \$14,999 \$15,000 to \$24,999 \$25,000 to \$34,999 \$35,000 or more. Income not reported.	5,096 20,075 13,257 18,071	39,504 1,901 1,882 10,691 9,031 13,932 2,068	59.5 32.0 36.9 53.3 68.1 77.1 52.8

Source: U.S. Bureau of the Census, *Voting and Registration in the Election of November 1992*, Current Population Reports, P20-466, U.S. Government Printing Office, Washington, DC, 1993, tables 2, 7, 9, and 12.



¹ Hispanic origin may be of any race. Source: U.S. Bureau of the Census, *Voting and Registration in the Election of November 1992*, Current Population Reports, P20-466, U.S. Government Printing Office, Washington, DC, 1993, table 2. Among the elderly aged 65 to 74. Whites and Blacks were more likely to vote in the 1992 election than were Hispanics (26 percent of whom were not U.S. citizens and thus ineligible to vote). There were only 147,000 Hispanic men aged 75 years and over, too few to determine whether the percentage voting represented a statistically significant difference from the other groups in figure 6-10. Among the remaining groups, White and Black men were the most likely to vote (about 7 out of 10 in each group) and Hispanic women the least likely (31 percent). About one-third (35 percent) of Hispanics aged 75 and over were not American citizens and not eligible to register to vote.42

 ⁴² Jerry T. Jennings, U.S. Bureau of the Census, *Voting and Registration in the Election of November 1992*, Current Population Reports, P20-466, U.S. Government Printing Office, Washington, DC, 1993, table 2.
 ⁴³ The voting profile in 2020 was ob-

tained by assuming that the observed proportions voting within each age group in the 1992 general election would pertain to the 2020 population, by age. The change reflects the aging of the population of eligible voters.

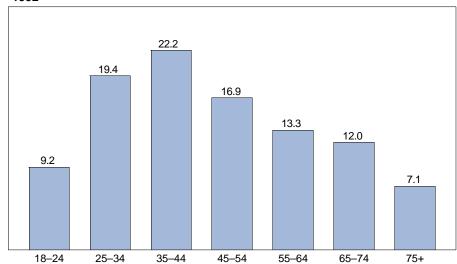
Tomorrow's Average Voter Likely to be Older Than Today's

The age profile of future voters is likely to be "grayer" than today's profile (figure 6-11). In 1992, one out of every five voters (22 percent) was aged 35 to 44. Assuming that the 1992 voting pattern, by age, is maintained in 2020, more persons aged 55 to 64 will vote in 2020 than any other age group. The median age of voters in 1992 was 43.6 years. If the proportion voting by age remains unchanged, then the median age of voters in 2020 would be 50.4 years.

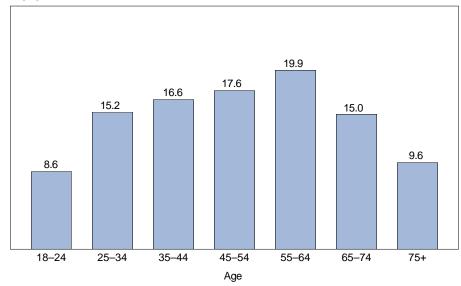
Figure 6-11.

Percent Distribution of Voters by Age:
November 1992 and 2020

1992



2020



Note: For 1992, the percents refer to the age distribution of those who actually voted. For 2020, the percents refer to the age distribution of all projected voters, if the proportions voting by age in 2020 are the same as observed in 1992.

Source: U.S. Bureau of the Census, calculations based on *Voting and Registration in the Election of November 1992*, Current Population Reports, P20-466, U.S. Government Printing Office, Washington, DC, 1993, table 2; and Jennifer Cheeseman Day, U.S. Bureau of the Census, *Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2050*, Current Population Reports, P25–1104, U.S. Government Printing Office, Washington, DC, 1993.

The Elderly of Today and Tomorrow

Among the countries of the world. the United States is remarkable for the diversity of its population, including the older population. Population diversity will increase in the years ahead. Within the elderly population itself, there are important differences between the various age segments in terms of their health and socioeconomic characteristics. In the coming decades, the oldest old (85 years and over) will comprise an increasing proportion of the total elderly population. The pace and course of the demographic changes ahead will create compelling social, economic, and ethical choices for individuals, families, and governments. "One can only speculate on the precise number, direction, pace, and synergistic effects of such social and demographic changes for future cohorts in the U.S. population. It is even more difficult to estimate how theses matters will be exacerbated or modified by changes in the technological and legal milieus."1

The coming growth of the elderly population is inevitable, and will occur worldwide. In developed nations, especially, we can expect to see less of the traditional focus on youth. Already we are beginning to confront impending issues and to seek answers to essential questions. Questions have arisen, principally in developed countries, pertaining to ethics and aging, such as: what are the moral and ethical limits of euthanasia and end of life treatments: should health care be provided on an age-based rationing system; and who can judge the level of competence of

a patient with respect to decisionmaking². Decisions made today and directions chosen in these and other aging-related areas will directly affect the quality and vitality of our lives for many decades.

We face numerous questions raised by the growth and increasing longevity of the older population. Some of the most urgent are: will tomorrow's generation of older people be healthy; will they be independent; will societies provide productive and purposeful roles for them³. Questions about the older population of tomorrow, such as whether more people will be subject to extended years of disability or whether the age of the onset of chronic conditions is going to be postponed, remain unanswered.

While "accurate projections of the size, structure, and health of the elderly population are essential to planning public and private programs,"4 data and methodological deficiencies partially limit researchers' ability to answer some mortality, morbidity, and health questions regarding the elderly of the future. For example, the ability to better forecast mortality for specific causes of death "will depend on improving cause of death data in vital statistics reports, taking into account multiple causes."5 Models of human

morbidity and morbidity-mortality linkages are even less developed than mortality models.6

Simply considering growth of the elderly population, especially for those aged 80 and over, suggests that there will be increases in the number of incident cancers diagnosed over the next several decades.7 Other simulation model research has concluded that the interaction of demographic, health, and income trends will result in a tripling of the number of elderly requiring nursing home care between 1990 and 2030, compared to only a 100 to 125 percent increase in the elderly population during this period.8 This study also suggests that recent cohorts' marital patterns and fertility histories will lead to an elderly population in the future that is more likely to be living alone and less likely to have family caregivers.

The future roles of individuals, families, and society with respect to the older population are unknown. What is needed to educate the public about long-term physical and economic effects of lifestyle in younger years? Who will care for the physically and economically dependent aged? Will care programs take into account cultural differences? Will older per-

¹ Richard M. Suzman, Kenneth G. Manton, and David P. Willis, "Introducing the Oldest Old," Chapter 1 in The Oldest Old, R.M. Suzman, D.P. Willis, and K.G. Manton (eds.), Oxford University Press, New York, 1992.

² Government of Canada, National Advisory Council on Aging, Ethics and Aging, Ottawa, Ontario, 1993.

³ Daniel Perry, "Aging Research and Public Policy in the United States," Unpublished remarks presented to the European Federation of Pharmaceutical Industries' Association, Salzburg, Austria, May 1993.

⁴ Kenneth G. Manton, Burton H. Singer, and Richard M. Suzman, "The Scientific and Policy Needs for Improved Health Forecasting Models for Elderly Populations," Chapter 1 in Forecasting the Health of Elderly Populations, Kenneth G. Manton, Burton H. Singer, and Richard M. Suzman (eds.), Springer- Verlag, New York, 1993.

⁵ Institute of Medicine, Forecasting Survival, Health, and Disability: Workshop Summary, Michael A. Stoto and Jane S. Durch (eds.), National Academy Press, Washington, DC, 1993.

⁶ Kenneth G. Manton, Burton H. Singer,

and Richard M. Suzman, op. cit.

Anthony P. Polednak, "Projected Numbers of Cancers Diagnosed in the U.S. Elderly Population, 1990 through 2030," American Journal of Public Health, Vol. 84, No. 8, 1994, pp. 1313-1316.

⁸ Sheila Rafferty Zedlewski and Timothy D. McBride, "The Changing Profile of the Elderly: Effects on Future Long-Term Care Needs and Financing," The Milbank Quarterly, Vol. 70, No. 2, 1992, pp. 247-275.

sons be able to pay a larger proportion of the costs of their old age? What is the proper funding balance between research to prevent non-fatal chronic illness and research to prevent and treat killer diseases? For example, one recent simulation study determined that reductions in arthritis would result in much greater savings in future disability than similar reductions in stroke, diabetes, heart disease, or cancer.⁹

This report generally describes the older population of the 1990's. Some historical trends and future projections of the older population also are discussed. Today's older population looks very different from the older population of the past. The older population of tomorrow will not look the same as today's elderly. Current lifestyle choices of vounger persons will affect their life prospects at older ages. Looking at the characteristics of younger cohorts can help to predict change. Educational attainment is much higher for the Baby-Boom generation, for example, and we know that the elderly of tomorrow will have higher educational attainment levels than present-day elderly. Many predictions have been made for the Baby-Boom generation as they age, 10 and in a few decades their characteristics will, of course, become those of the elderly. Still, health and economic status characteristics of the elderly of

tomorrow are particularly problematic to predict. For example, we cannot simply use the characteristics and attitudes of the current generation of the elderly to predict future labor prospects for the older population. The Baby-Boom generation is quite different. Their health is generally better, their educational attainment higher, and most women work. Their attitude towards retirement may differ and their pension plans are increasingly dependent on individual contributions. The age for receiving full benefits for retirement may move upward. Each of these factors complicates the drawing of an accurate portrait of the older population's labor force characteristics.

While we can be confident that the United States will experience a "boom" in the absolute size and growth rate of the elderly population, as well as increased diversity and an increased proportion oldest old of the total elderly population, some characteristics of the elderly of tomorrow are less predictable. What will happen if large numbers of people have Alzheimer's disease, for example? Is it inevitable? Preventable? The continued study of the genetic, biochemical, and physiologic aspects of aging is certain to alter the future world of the elderly. Ongoing scientific research advances are beginning to identify "the basic biological mechanisms that control aging" and to clarify "the differences between normal aging processes and disease states." In the future, one outlook is that "older Americans can expect to stay healthy for more of their later years."11 "It is

likely that several factors will work to reduce disability among the elderly, including improved health, new forms of service delivery, and improved technology."¹² Perhaps the human life span will be extended. It has been suggested that such research will "very certainly contribute to better health, less disability, and more independence in the second fifty years of life."¹³

On balance, our knowledge of the elderly population in the United States has increased phenomenally over the past two decades. Regarding the future elderly, their growth explosion, increased diversity, and increasing proportion of oldest old will influence the society of tomorrow. Our ability to understand and describe the future elderly varies considerably, depending on their demographic, social, health, or economic characteristics. Data, methodology, and research on the older population continue to improve and evolve, leading us toward a clearer view of the profile of tomorrow's elderly. As individuals, families, and a nation, our current and expected gains in understanding will provide us with informed opportunities to make appropriate adjustments to effectively meet the challenges and needs associated with our aging society.

⁹ C. Boult, M. Altmann, D. Gilbertson, C. Yu, and R.L. Kane, "Disability in the 21st Century: Future Effects of Controlling Fatal and Nonfatal Disease," *American Journal of Public Health*, under review.

¹⁰ Cheryl Russell, 100 Predictions for the Baby Boom: The Next 50 Years, Plenum Press, New York, 1987.

¹¹ National Institutes of Health, National Institute on Aging, "Older Americans Can Expect to Live Longer and Healthier Lives," Special Report on Aging 1993, Washington, DC 1993.

¹² Charles F. Longino, Jr., "Myths of An Aging America," *American Demographics*, August 1994, pp. 36-42.

August 1994, pp. 36-42.

13 National Institutes of Health, National Institute on Aging, *In Search of the Secrets of Aging*. Bethesda. MD. 1993.

Chapter 8. **Detailed Tables**

Table 8-1.

Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020

Region and country/area	Total, all ages	0 to 24 years	25 to 54 years	55 to 59 years	60 to 69 years	70 to 74 years	75 to 79 years	80 years and over	65 years and over
1994									
Sub-Saharan Africa									
Angola	9,803,576	6,177,803	2,919,479	262,153	318,310	72,204	34,989	18,638	248,989
Benin	5,341,710	3,654,814	1,380,263	99,382	129,589	36,910	22,526	18,226	131,785
Botswana	1,359,352	882,763	381,387	28,090	40,256	12,538	7,783	6,535	44,419
Burkina	10,134,661 6,124,747	6,848,638 4,070,943	2,560,905 1,669,464	219,827 118,695	313,602 161,001	94,421 47,564	56,953 31,945	40,315 25,135	327,527 171,641
Cameroon	13,132,191	8,308,572	3,809,841	320,592	440,215	127,803	75,427	49,741	440,745
Central African Republic	3,142,182	1,956,801	918,560	85,136	124,473	33,718	16,974	6,520	109,832
Chad	5,466,771	3,486,661	1,687,983	115,226	129,436	27,747	13,245	6,473	97,636
Congo	2,446,902	1,566,532	697,325	54,300	81,653	24,992	14,359	7,741	82,726
Cote d'Ivoire	14,295,501	9,593,590	3,891,189	301,957	357,017	83,567	44,219	23,962	294,643
Eritrea	3,309,360	2,175,111	895,955	75,470	101,975	30,506	16,056	14,287	103,539
Ethiopia	54,252,938	34,979,600	15,666,047	1,197,706	1,596,685	431,955	241,565	139,380	1,487,003
Gabon	1,139,006	584,784	406,928	53,029	63,580	16,676	8,808	5,201	57,135
Ghana	17,225,185	11,089,528	4,942,111	382,941	516,749	150,890	88,732	54,234	514,985
Guinea	6,391,536	4,042,983	1,912,186	151,193	195,976	50,530	25,759	12,909	170,352
Guinea-Bissau	1,098,231 28,240,658	699,166 19,535,235	322,977 7,174,662	25,599 501,441	32,250 672,731	8,639 186,687	5,463 105,938	4,137 63,964	31,108 638,049
Lesotho	1,944,493	1,186,234	580,847	47,176	76,967	25,412	15,926	11,931	87,534
Liberia	2,972,766	1,860,121	894,755	66,383	85,749	25,494	17,304	22,960	101,925
Madagascar	13,427,758	8,798,049	3,697,974	267,067	418,380	127,773	74,664	43,851	429,105
Malawi	9,732,409	6,621,111	2,511,251	199,337	263,866	73,203	39,630	24,011	247,911
Mali	9,112,950	6,085,159	2,343,881	208,905	298,947	90,497	51,475	34,086	306,314
Mauritania	2,192,777	1,487,184	579,596	43,180	57,141	15,023	7,737	2,916	49,413
Mauritius	1,116,923	514,165	472,932	36,146	56,270	18,557	11,186	7,667	65,087
Mozambique	17,346,280 1,595,567	11,174,187 1,045,357	5,066,615 433,066	383,742 37,257	488,063 51,883	126,667 14,746	68,652 8,010	38,354 5,248	433,181 50,281
Namibia	8,971,605	6,082,419	2,370,992	167,473	220,216	63,348	37,308	29,849	223,353
Nigeria	98,091,097	62,423,698	28,715,168	2,340,367	3,095,074	847,235	452,089	217,466	2,817,776
Rwanda	8,373,963	5,820,130	2,082,208	140,437	208,050	62,786	38,076	22,276	213,210
Senegal	8,730,508	5,666,769	2,435,109	195,946	280,261	78,276	44,815	29,332	271,852
Sierra Leone	4,630,037	2,897,849	1,363,824	128,384	159,584	39,755	23,565	17,076	146,146
Somalia	6,666,873	4,279,831	1,899,057	130,425	194,646	65,429	52,877	44,608	248,034
South Africa	43,930,631	25,818,728	14,328,081	1,132,985	1,553,886	493,933	336,152	266,866	1,773,753
Sudan	29,419,798	19,413,944	8,298,972	638,017	695,155	184,337	107,632	81,741	648,441
Tanzania	27,985,660 4,255,090	18,788,502 2,894,048	7,369,182 1,132,791	579,821 76,991	780,638 96,973	223,162 26,196	143,457 15,070	100,898 13,021	792,469 94,059
Togo	19,121,934	13,109,623	4,969,806	341,771	471,304	132,107	72,301	25,022	429,240
Zaire	42,684,091	28,739,089	11,296,466	835,096	1,181,286	340,400	191,883	99,871	1,136,270
Zambia	9,188,190	6,329,063	2,342,963	168,444	223,347	63,527	37,610	23,236	217,753
Zimbabwe	10,975,078	7,559,432	2,765,146	204,233	268,218	82,443	53,817	41,789	291,498
North Africa									
Algeria	27,897,670	17,280,478	8,404,935	629,895	967,852	278,649	180,331	155,530	1,022,226
Egypt	60,765,028	35,623,729	20,084,746	1,641,963	2,276,152	606,464	327,980	203,994	2,093,720
Libya	5,057,392	3,351,158	1,333,233	125,202	168,256	44,397	20,321	14,825	151,409
Morocco	28,560,873	16,936,919	9,082,805	737,677	1,079,270	331,962	211,733	180,507	1,198,723
Tunisia	8,727,417	4,873,134	2,917,140	254,026	419,228	126,437	79,057	58,395	450,510

Table 8-1. Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020—Continued

Topulation by Age, for Countries with more than 1 million 1 opulation. 1994 and 2020—Continued									
Region and country/area	Total,	0 to 24	25 to 54	55 to 59	60 to 69	70 to 74	75 to 79	80 years	65 years
	all ages	years	years	years	years	years	years	and over	and over
1994 —Con.									
Asia, excluding Near East									
Afghanistan	19,253,533	11,659,784	6,328,605	439,725	555,140	146,561	79,633	44,085	499,304
	125,149,469	77,608,218	38,604,821	2,916,398	3,992,600	1,163,360	623,891	240,181	3,727,106
	1,739,463	1,018,385	560,462	51,490	71,106	20,066	11,369	6,585	67,991
	44,277,014	24,580,732	15,458,293	1,264,801	1,877,696	551,263	324,059	220,170	1,912,659
Cambodia	10,264,628	6,427,149	3,136,570	206,612	311,161	99,289	55,235	28,612	322,989
	1,190,431,106	543,435,875	494,302,719	43,493,396	67,325,901	20,650,514	12,213,079	9,009,622	71,072,508
	21,298,930	9,020,194	9,228,206	792,948	1,347,671	443,469	265,183	201,259	1,552,561
	5.548,754	1,877,535	2,589,582	247,520	450,234	156,695	109,138	118,050	590,586
India Indonesia Iran Iran Iran Iran Iran Iran Iran Ira	919,903,056	503,401,819	330,460,359	27,793,400	37,929,376	10,368,534	5,928,280	4,021,288	36,281,819
	200,409,741	107,543,215	74,551,652	6,448,646	8,272,181	1,958,874	1,026,091	609,082	6,874,962
	63,120,170	40,669,058	17,359,579	1,395,136	2,338,136	681,976	396,483	279,802	2,368,283
Japan	125,106,937	39,795,180	53,002,485	7,905,889	13,344,431	4,339,918	3,121,951	3,597,083	17,140,265
	4,701,654	3,040,263	1,310,240	103,686	155,382	45,163	26,515	20,405	158,954
	19,283,157	10,654,499	6,940,569	564,691	698,057	197,363	132,689	95,289	734,228
	2,429,762	1,470,703	754,206	58,857	87,776	28,039	17,669	12,512	96,853
Mongolia	21,041,527	13,135,525	6,352,426	546,775	686,644	170,427	91,928	57,802	597,353
	23,066,573	11,463,881	9,436,155	698,028	922,409	259,421	159,785	126,894	923,274
	128,855,965	80,861,240	37,055,691	3,246,687	4,636,262	1,517,969	959,312	578,804	5,078,074
Philippines	71,631,023	42,185,227	23,665,629	1,782,822	2,438,905	753,122	474,998	330,320	2,603,458
	2,859,142	1,089,914	1,374,919	118,466	161,416	48,208	33,608	32,611	185,809
South Korea	45,082,880	19,522,826	19,896,980	1,892,361	2,381,579	685,044	393,126	310,964	2,367,235
	18,129,850	8,827,545	7,175,408	584,641	900,914	295,427	192,460	153,455	1,048,681
	59,510,471	29,615,456	23,540,927	1,982,832	2,734,688	762,275	494,415	379,878	2,809,309
	73,103,898	41,583,970	24,362,996	1,820,712	3,116,450	996,027	613,354	610,389	3,570,178
Near East									
Iraq	19,889,666	13,638,722	5,030,034	313,879	554,322	167,121	104,175	81,413	613,815
	5,050,850	2,340,316	1,845,230	180,200	331,621	141,089	98,971	113,423	515,962
	3,961,194	2,555,431	1,150,781	87,389	111,390	26,688	16,724	12,791	101,641
	1,819,322	1,010,558	714,417	39,976	39,057	7,668	4,257	3,389	30,156
	3,620,395	2,200,906	1,015,442	107,676	177,377	58,549	33,398	27,047	201,004
Oman	1,701,470	1,104,502	479,656	39,594	50,678	13,567	8,158	5,315	48,302
	18,196,783	10,135,007	6,911,890	451,886	485,835	109,340	60,181	42,644	397,053
	14,886,672	10,140,327	3,820,242	273,823	415,280	119,974	63,459	53,567	422,380
	62,153,898	33,948,216	21,479,742	1,968,349	2,849,327	882,841	540,428	484,995	3,141,428
United Arab Emirates	2,791,141	1,297,017	1,383,761	54,897	42,842	6,310	3,882	2,432	26,991
	1,443,790	901,184	441,403	26,469	42,985	14,309	9,109	8,331	51,193
	11,105,202	7,728,804	2,658,609	242,843	315,372	84,262	46,155	29,157	289,789
Latin America and the Caribbean									
Argentina Bolivia Brazil Chile Colombia Costa Rica	33,912,994	15,459,006	12,459,949	1,429,629	2,475,545	896,413	625,224	567,228	3,246,361
	7,719,445	4,601,017	2,438,802	200,919	298,781	92,875	53,599	33,452	312,958
	158,739,257	82,810,727	60,236,523	4,789,363	6,743,221	2,044,750	1,225,906	888,767	7,097,604
	13,950,557	6,460,868	5,654,513	502,394	769,189	249,611	166,728	147,254	909,787
	35,577,556	18,684,358	13,586,191	969,892	1,427,720	440,335	268,604	200,456	1,536,321
	3,342,154	1,809,148	1,212,355	86,987	132,630	42,071	28,859	30,104	159,607
Cuba	11,064,344	4,443,152	4,776,485	456,272	686,331	253,803	195,343	252,958	1,013,555

Table 8-1. Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020—Continued

Region and country/area	Total,	0 to 24	25 to 54	55 to 59	60 to 69	70 to 74	75 to 79	80 years	65 years
	all ages	years	years	years	years	years	years	and over	and over
1994 —Con.									
Latin America and the Caribbean—Con.									
Dominican Republic	7,826,075	4,310,771	2,824,715	202,883	295,992	78,539	52,985	60,190	322,784
Ecuador	10,677,067	6,112,707	3,632,031	270,850	380,927	118,762	78,403	83,387	446,082
El Salvador	5,752,511	3,683,433	1,589,965	139,967	217,647	59,216	35,661	26,622	215,215
Guatemala Haiti Honduras Jamaica Mexico Nicaragua Panama Paraguay Peru	10,721,387	6,832,089	3,089,412	236,704	356,419	101,471	57,240	48,052	360,637
	6,491,450	4,156,750	1,767,365	172,241	225,715	70,247	47,775	51,357	264,743
	5,314,794	3,432,707	1,500,468	112,567	158,313	48,550	30,797	31,392	178,769
	2,555,064	1,362,051	898,330	67,057	114,578	44,920	33,401	34,727	166,789
	92,202,199	54,259,188	29,801,378	2,375,783	3,307,942	1,032,414	680,798	744,696	3,882,404
	4,096,689	2,682,556	1,166,023	79,527	110,568	30,819	16,813	10,383	105,661
	2,630,000	1,406,861	944,679	74,817	110,532	37,838	26,828	28,445	142,568
	5,213,772	3,126,990	1,660,159	112,785	179,778	59,662	40,028	34,370	215,796
	23,650,671	13,310,435	8,190,784	670,199	928,768	270,486	166,147	113,852	945,018
Puerto Rico	3,801,977	1,614,691	1,518,409	158,584	255,462	95,777	72,737	86,317	373,497
	1,328,282	666,129	521,312	39,131	56,320	19,112	13,229	13,049	71,059
	3,198,910	1,331,211	1,171,395	152,800	286,163	102,412	71,466	83,463	391,433
	20,562,405	11,590,519	7,172,850	519,864	751,510	232,282	146,534	148,846	859,118
North America	,,	,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,	,		,
Canada	28,113,997	9,693,967	12,605,121	1,235,496	2,252,338	913,397	636,398	777,280	3,400,754
	261,090,952	94,076,869	112,713,154	10,797,598	20,472,814	8,723,540	6,546,671	7,760,306	33,169,227
Europe									
Albania Austria Belgium Bulgaria Czech Republic Denmark Finland. France Germany Greece	3,374,085	1,703,469	1,265,913	117,897	166,666	55,728	32,412	32,000	192,419
	7,954,974	2,408,264	3,529,935	399,212	767,734	345,436	180,836	323,557	1,230,662
	10,062,836	3,091,331	4,264,238	550,808	1,081,251	448,063	237,438	389,707	1,592,070
	8,799,986	2,961,020	3,525,312	514,912	1,012,220	383,229	177,614	225,679	1,269,213
	10,408,280	3,732,199	4,343,446	481,787	982,063	405,754	177,285	285,746	1,345,083
	5,187,821	1,579,750	2,295,063	270,133	464,164	210,312	159,731	208,668	804,892
	5,068,931	1,592,107	2,254,786	265,333	475,174	187,696	132,056	161,779	712,444
	57,840,445	19,116,452	23,999,299	2,863,192	5,673,122	2,476,692	1,149,066	2,562,622	8,923,771
	81,087,506	22,435,201	36,207,626	5,677,228	8,250,730	3,438,311	1,765,422	3,312,988	12,475,638
	10,564,630	3,374,433	4,300,495	661,697	1,195,874	374,222	287,980	369,929	1,580,255
Hungary. Ireland Italy Netherlands Norway Poland Portugal Romania Slovakia Spain	10,319,113	3,490,873	4,263,694	560,201	1,063,557	432,425	198,795	309,568	1,449,113
	3,539,296	1,501,446	1,349,538	144,499	259,769	114,359	82,442	87,243	410,292
	58,138,394	17,327,829	24,735,755	3,507,437	6,364,532	2,563,752	1,418,005	2,221,084	9,258,956
	15,367,928	4,883,558	6,991,959	755,410	1,320,442	550,580	383,184	482,795	2,039,942
	4,314,604	1,426,118	1,822,407	187,245	368,827	189,653	145,443	174,911	696,807
	38,654,561	14,963,899	15,750,032	1,876,570	3,448,674	1,167,072	594,015	854,299	4,215,660
	10,524,210	3,691,300	4,273,615	555,813	1,021,214	400,853	273,435	307,980	1,468,246
	23,181,415	8,836,207	9,028,866	1,361,765	2,327,057	789,580	351,670	486,270	2,700,102
	5,403,505	2,154,740	2,196,624	232,395	442,235	180,839	74,071	122,601	586,937
	39,302,665	13,254,308	16,084,296	2,041,949	4,050,734	1,526,119	1,058,243	1,287,016	5,768,081
Sweden	8,778,461	2,738,303	3,656,678	439,315	813,544	410,779	312,778	407,064	1,538,472
	7,040,119	2,061,308	3,228,041	378,365	639,499	264,207	183,358	285,341	1,031,490
	58,135,110	18,853,779	24,305,616	2,997,159	5,457,616	2,546,393	1,632,833	2,341,714	9,174,566
(Former) Yugoslavia* Bosnia and Herzegovina Croatia	4,651,485	1,763,681	2,031,901	259,635	383,975	99,567	42,139	70,587	374,460
	4,697,614	1,531,505	1,969,131	298,184	527,071	179,539	73,517	118,667	605,643
Yugoslav Republic of	2,213,785	912,814	921,549	105,992	166,413	52,242	23,208	31,567	179,647
	10,093,314	3,723,693	4,026,943	593,749	1,080,983	340,383	125,318	202,245	1,154,627
	1,972,227	673,949	842,089	110,263	195,329	64,869	30,603	55,125	238,503

Table 8-1. Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020—Continued

- Optilation by Age, for	Odditities	With More	- Illali i i	WIIIIIOII I C	pulation.	1554 and	1 2020	Ontinucu	
Region and country/area	Total, all ages	0 to 24 years	25 to 54 years	55 to 59 years	60 to 69 years	70 to 74 years	75 to 79 years	80 years and over	65 years and over
1994 —Con.									
(Former) Soviet Union									
Baltics Estonia Latvia Lithuania	1,616,882 2,749,211 3,848,389	586,710 976,429 1,423,375	648,772 1,103,766 1,548,806	95,140 167,702 212,236	161,936 282,511 372,220	51,088 90,487 120,504	30,693 52,134 65,005	42,543 76,182 106,243	200,516 352,907 464,705
Commonwealth of Independent States Armenia Azerbaijan Belarus Georgia Kazakhstan Kyrgyzstan Moldova Russia Tajikistan Turkmenistan Ukraine Uzbekistan	3,521,517 7,684,456 10,404,862 5,681,025 17,267,554 4,698,108 4,473,033 149,608,953 5,995,469 3,995,122 51,846,958 22,608,866	1,645,005 3,852,924 3,727,287 2,210,743 8,216,139 2,577,447 1,881,669 54,324,016 3,689,654 2,362,756 17,841,908 13,317,188	1,317,819 2,768,273 4,154,334 2,209,523 6,572,381 1,548,104 1,773,869 61,220,457 1,752,270 1,275,757 20,527,611 7,114,291	170,635 341,001 635,953 344,482 798,419 160,983 221,715 9,296,403 160,275 107,028 3,666,233 634,419	263,399 461,198 1,115,250 556,501 1,025,775 255,946 352,912 14,862,908 241,859 156,629 5,562,219 939,688	52,913 97,872 327,380 147,617 265,453 65,653 118,601 3,961,191 62,012 40,134 1,788,064 238,958	29,062 57,138 175,025 93,536 169,193 37,335 59,364 2,626,898 35,582 23,981 1,040,335 138,857	42,684 106,050 269,633 118,623 220,194 52,640 64,903 3,317,080 53,817 28,837 1,420,588 225,465	248,289 456,721 1,306,365 630,477 1,173,835 277,022 408,947 17,384,133 260,104 164,231 7,155,418 1,031,162
Australia	18,077,419 3,388,737 4,196,806	6,661,681 1,323,918 2,609,127	7,817,032 1,389,893 1,289,033	773,923 142,822 100,082	1,407,388 261,474 139,603	574,139 106,033 35,981	405,678 76,253 14,934	437,578 88,344 8,046	2,115,679 398,304 119,842
2020									
Sub-Saharan Africa									
Angola Benin Botswana Burkina Burundi Cameroon Central African Republic Chad Comoros Congo	19,272,113 11,919,983 2,186,815 18,123,341 10,733,515 28,329,473 4,561,126 9,396,034 1,248,591 3,774,843	11,706,269 7,462,250 992,723 11,906,226 6,931,222 17,405,861 2,855,973 5,616,755 789,244 2,215,520	6,168,735 3,736,974 952,951 5,214,431 3,155,783 8,662,288 1,393,989 3,170,067 381,931 1,261,137	490,398 242,111 77,735 273,823 179,896 672,858 88,586 224,399 25,762 89,209	572,359 301,664 103,222 430,292 293,486 954,678 128,639 269,274 31,471 126,266	164,175 88,529 27,027 142,261 81,375 294,823 40,423 64,299 9,530 37,242	99,842 53,885 17,447 90,207 48,343 186,986 29,450 33,059 6,057 24,977	70,335 34,570 15,710 66,101 43,410 151,979 24,066 18,181 4,596 20,492	570,788 303,160 103,396 491,894 304,447 1,048,207 148,055 222,990 33,479 135,486
Cote d'Ivoire Eritrea Ethiopia Gabon Gambia, The Ghana Guinea Guinea Guinea-Bissau	29,705,179 7,674,281 114,402,266 1,674,634 2,073,372 35,876,919 11,663,881 1,925,160	19,034,864 4,707,448 71,766,061 837,222 1,290,179 21,774,117 6,833,124 1,073,286	8,871,667 2,422,090 34,884,597 610,743 642,784 11,357,170 3,927,854 685,614	480,273 171,979 2,566,952 50,759 45,080 931,214 301,781 49,770	772,274 231,435 3,370,735 85,937 61,406 1,216,305 396,330 75,727	274,580 74,301 927,338 41,066 17,597 270,514 108,456 21,138	162,112 41,003 527,549 29,229 9,887 180,677 60,279 12,086	109,409 26,025 359,034 19,678 6,439 146,922 36,057 7,539	920,333 240,756 3,223,573 132,884 60,005 1,075,259 370,250 73,726

Table 8-1.

Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020—Continued

Population by Age, for	Countries	WILLI MOI	e man i	WIIIIOII PO	pulation.	1994 and	1 2020—0	onunueu	
Region and country/area	Total,	0 to 24	25 to 54	55 to 59	60 to 69	70 to 74	75 to 79	80 years	65 years
	all ages	years	years	years	years	years	years	and over	and over
2020 —Con.									
Sub-Saharan Africa—Con.									
Kenya	44,240,071	26,041,507	15,217,752	848,446	1,239,016	406,434	268,249	218,667	1,442,540
	3,314,373	1,658,461	1,282,504	116,253	153,786	45,777	28,885	28,707	167,648
Liberia	6,449,072	3,863,069	2,030,893	164,123	220,107	66,852	44,935	59,093	264,859
	29,361,770	18,183,990	9,114,599	681,193	884,681	247,530	141,111	108,666	865,154
	16,696,823	11,170,520	4,674,866	232,486	365,834	122,589	77,485	53,043	418,728
	20,427,491	13,355,514	5,874,344	367,079	516,409	158,231	94,384	61,530	538,914
	4,858,822	3,118,712	1,472,845	95,322	116,461	30,456	16,928	8,098	103,100
	1,428,162	505,017	594,773	95,289	142,373	42,814	23,796	24,100	154,186
	35,240,106	21,238,212	11,411,736	849,781	1,126,452	313,772	184,023	116,130	1,088,328
	3,637,859	2,243,062	1,129,542	83,572	108,168	32,772	21,718	19,025	119,501
	21,147,561	14,030,314	5,912,099	392,426	538,628	148,995	81,151	43,948	504,274
	215,893,447	131,746,168	67,492,045	5,106,304	6,950,758	2,313,076	1,385,486	899,610	7,666,012
Rwanda	15,006,486	10,200,932	4,081,280	198,386	326,186	95,895	54,445	49,362	348,365
	19,126,682	11,617,381	6,044,406	434,619	624,474	198,389	117,028	90,385	688,292
	9,035,817	5,442,541	2,908,920	205,669	275,807	97,208	62,847	42,825	330,826
	16,832,452	10,313,748	5,214,587	438,008	521,612	135,187	104,346	104,964	539,966
	82,501,526	44,821,319	28,614,296	2,671,112	3,732,629	1,147,801	775,014	739,355	4,253,029
	58,090,474	33,386,067	20,332,287	1,432,448	1,835,830	568,743	325,584	209,515	1,911,908
	2,128,022	1,325,440	655,342	48,623	62,290	17,748	10,649	7,930	62,349
	48,526,191	32,025,299	13,697,401	739,870	1,184,106	399,316	266,133	214,066	1,416,971
	10,145,548	6,409,040	3,077,503	219,583	277,997	80,845	48,237	32,343	279,267
	29,881,575	19,795,852	8,609,410	464,885	626,654	188,301	128,591	67,882	648,485
	92,859,851	60,732,120	26,785,276	1,691,833	2,274,509	659,051	403,587	313,475	2,331,569
Zambia	15,828,491	10,603,296	4,405,108	214,087	343,191	115,486	78,566	68,757	419,147
	14,619,629	8,098,063	5,452,945	283,494	441,398	143,396	103,029	97,304	540,766
North Africa Algeria Egypt Libya Morocco Tunisia	44,783,265	20,212,493	18,986,434	1,789,543	2,376,534	665,093	384,289	368,879	2,412,555
	92,604,379	41,943,524	39,021,186	3,658,289	5,151,932	1,459,379	787,796	582,273	5,047,354
	12,391,415	7,864,628	3,697,369	264,904	313,121	113,809	72,436	65,148	388,033
	44,518,893	19,558,409	18,614,376	1,875,874	2,643,218	694,094	519,815	613,107	2,923,938
	12,413,020	4,806,925	5,476,145	622,196	851,618	249,208	189,576	217,352	1,002,207
Asia, excluding Near East									
Afghanistan Bangladesh Bhutan Burma Cambodia China, Mainland China, Taiwan	49,569,668	28,273,445	16,956,217	1,501,698	1,889,754	497,635	279,900	171,019	1,723,091
	210,247,865	105,809,389	82,828,748	7,203,119	9,482,310	2,709,729	1,517,679	696,891	8,949,211
	3,034,570	1,669,377	1,055,890	97,119	136,682	37,491	22,293	15,718	134,048
	65,913,524	29,746,066	26,853,365	2,967,895	3,927,781	1,060,750	708,764	648,903	4,027,923
	20,207,884	11,959,743	6,580,628	605,549	700,819	187,031	101,999	72,115	664,104
	1,424,725,202	443,498,595	643,904,698	95,728,074	142,233,004	44,122,526	26,500,990	28,737,315	168,318.035
	25,122,314	7,695,067	10,438,446	1,821,545	3,085,482	838,095	523,012	720,667	3,490,062
Hong Kong	5,729,119 1,320,745,649 276,473,535 104,282,274		2,193,484 555,466,938 119,386,697 43,780,056	516,704 61,007,182 14,023,108 3,521,692	897,100 84,832,227 20,134,083 4,683,186	276,720 24,292,022 4,652,031 1,363,546	143,554 15,177,330 3,261,308 842,010	307,769 12,638,636 3,033,571 1,039,479	1,116,363 87,797,082 19,476,381 5,198,973

Table 8-1. Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020—Continued

Region and country/area	Total, all ages	0 to 24 years	25 to 54 years	55 to 59 years	60 to 69 years	70 to 74 years	75 to 79 years	80 years and over	65 years and over
2020 —Con.									
Asia, excluding Near East—Con.									
Japan Laos Malaysia Mongolia Nepal North Korea Pakistan Philippines Singapore South Korea Sri Lanka Thailand. Vietnam	126,062,097 8,922,700 31,680,692 4,309,089 37,767,446 30,968,795 251,329,845 115,988,445 3,335,233 54,013,718 22,876,980 62,941,226 102,359,259	31,668,682 5,106,927 14,870,163 2,187,199 20,742,157 11,248,063 147,077,935 56,524,500 950,117 16,305,581 7,759,672 21,215,000 42,040,894	47,296,675 3,128,874 12,138,166 1,625,520 13,727,363 13,575,736 82,756,108 44,886,358 1,300,298 23,637,382 10,003,513 27,175,718 44,631,745	7,641,258 225,613 1,409,921 153,669 1,058,896 1,828,974 6,738,069 4,364,589 266,221 3,935,848 1,350,548 3,924,108 5,039,170	15,321,567 293,351 1,976,327 211,453 1,423,216 2,640,739 9,109,498 6,335,327 471,765 5,998,829 2,125,998 6,046,049 6,846,948	8,395,881 81,416 599,767 57,947 392,790 727,414 2,541,579 1,818,134 155,454 1,722,984 691,370 1,848,069 1,602,970	6,376,082 47,397 349,502 38,085 244,745 474,032 1,721,847 1,129,958 82,526 1,192,000 478,633 1,254,984 998,962	9,361,952 39,122 336,846 35,216 178,279 473,837 1,384,809 929,579 108,852 1,221,094 467,246 1,477,298 1,198,570	32,231,249 289,660 2,133,499 217,946 1,419,920 2,734,407 9,447,549 6,631,241 556,215 6,607,375 2,583,812 7,234,002 6,610,169
Near East									
Bahrain Gaza Strip Iraq Israel Jordan Kuwait Lebanon Oman. Saudi Arabia Syria Turkey United Arab Emirates West Bank Yemen	1,008,332 1,636,049 46,259,719 6,935,430 7,594,934 4,090,984 5,747,794 4,174,612 42,084,714 34,309,054 93,361,833 6,079,587 2,368,207 25,907,090	459,242 1,003,027 27,918,094 2,713,887 3,908,541 2,057,885 2,605,691 2,632,101 25,631,848 20,733,623 38,571,712 2,771,793 1,063,682 16,898,431	348,179 519,476 15,194,642 2,710,568 2,901,637 1,363,369 2,461,830 1,214,080 11,500,273 11,186,978 38,923,401 2,191,634 993,901 7,765,553	47,663 39,014 1,010,751 328,430 256,590 192,333 206,695 82,723 1,232,113 815,116 4,484,259 300,333 100,804 481,506	97,075 48,076 1,310,627 606,009 304,283 311,243 242,975 140,349 2,286,569 974,122 6,312,887 579,999 131,206 435,340	27,265 10,693 385,010 227,499 98,447 85,134 87,000 47,305 719,577 262,706 1,929,368 138,146 33,984 147,127	15,284 7,367 233,738 138,999 66,324 47,697 66,572 31,496 414,154 170,966 1,388,732 65,295 21,211 105,150	13,624 8,396 206,857 210,038 59,112 33,323 77,031 26,558 300,180 165,543 1,751,474 32,387 23,419 73,983	101,195 43,880 1,439,670 872,052 351,020 298,480 340,990 170,728 2,474,910 1,003,653 7,834,760 495,306 128,888 503,215
Latin America and the Caribbean									
Argentina . Bolivia . Brazil . Chile . Colombia . Costa Rica . Cuba . Dominican Republic . Ecuador . El Salvador	43,189,700 12,547,357 197,466,256 19,224,706 49,266,260 5,257,018 12,754,861 11,153,011 15,893,847 8,763,390	16,703,755 6,014,510 73,185,871 7,322,445 17,861,334 2,199,724 3,753,509 4,369,339 6,486,233 4,354,009	17,459,126 4,911,327 87,140,678 7,536,288 21,702,727 2,111,090 5,420,521 4,862,194 6,883,712 3,462,349	2,087,086 463,596 10,460,650 1,120,155 2,917,065 263,916 977,128 593,970 739,813 293,436	3,600,490 676,731 15,391,681 1,729,861 4,047,580 388,554 1,237,884 797,572 1,041,393 353,955	1,324,950 221,670 4,940,161 599,565 1,157,276 118,400 491,325 236,078 309,807 118,306	942,585 140,615 3,215,606 436,534 755,510 79,131 366,955 149,996 209,354 87,631	1,071,708 118,908 3,131,609 479,858 824,768 96,203 507,539 143,862 223,535 93,704	5,021,897 779,716 18,084,409 2,273,868 4,445,735 457,637 1,933,524 865,592 1,189,668 450,170
GuatemalaHaitiHonduras	18,131,240 9,499,319 9,042,135	9,114,638 5,307,800 4,433,342	7,052,463 3,407,503 3,630,651	574,355 209,377 290,155	826,723 324,005 404,475	246,105 99,396 122,291	156,120 77,889 79,348	160,836 73,349 81,873	925,742 391,726 458,487

Table 8-1. Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020—Continued

					<u> </u>				
Region and country/area	Total, all ages	0 to 24 years	25 to 54 years	55 to 59 years	60 to 69 years	70 to 74 years	75 to 79 years	80 years and over	65 years and over
2020 —Con.									_
Latin America and the Caribbean—Con.									
Jamaica	3,446,078 136,096,133 6,944,878 3,885,791 9,473,632 34,339,754 4,220,383 1,721,773 3,821,865	1,260,633 59,192,415 3,357,708 1,585,790 4,729,866 13,996,156 1,351,552 622,305 1,361,774	1,552,135 55,820,302 2,867,052 1,601,379 3,536,343 14,876,802 1,792,429 749,105 1,516,771	195,238 5,894,875 231,826 191,947 345,336 1,639,636 242,158 108,495 205,064	251,826 8,242,543 308,695 274,335 517,967 2,278,990 395,447 146,695 342,575	71,903 2,719,691 82,154 92,516 146,682 692,741 158,338 43,021 130,998	50,907 1,930,217 51,682 65,328 97,397 452,505 119,256 26,515 102,847	63,436 2,296,090 45,761 74,496 100,041 402,924 161,203 25,637 161,836	292,579 10,625,254 311,024 354,216 564,708 2,534,663 624,887 156,483 552,224
Venezuela North America	31,311,639	13,037,224	13,127,424	1,434,764	2,169,166	642,485	430,430	470,146	2,485,999
Canada	34,346,876 326,322,233	9,867,978 108,377,618	13,368,942 122,334,479	2,487,997 21,705,044	4,320,452 37,918,934	1,618,827 13,547,749	1,088,053 9,431,896	1,594,627 13,006,513	6,287,193 53,348,064
Europe									
Albania Austria Belgium Belgium Bulgaria Czech Republic Denmark Finland France Germany Greece Hungary Ireland Italy Netherlands Norway Poland Portugal Romania Slovakia Spain	4,423,721 8,329,284 10,015,219 8,642,065 10,990,957 5,307,446 5,283,341 61,792,505 82,385,025 10,688,963 10,449,167 4,033,859 57,844,198 16,221,798 4,446,293 42,473,803 11,038,067 24,336,996 6,078,281 40,240,912	1,600,333 2,038,553 2,514,133 2,337,087 3,187,660 1,405,468 1,440,604 17,266,656 19,616,342 2,632,547 2,981,326 1,248,813 14,049,936 4,035,708 1,114,334 12,724,462 2,886,486 7,235,932 1,855,428 10,223,173	1,884,048 3,285,554 3,810,164 3,399,018 4,328,207 2,018,805 1,948,261 23,528,057 31,274,298 4,221,600 4,060,324 1,694,332 22,321,727 6,289,530 1,806,645 16,925,480 4,569,139 10,064,419 2,475,650 16,243,689	250,679 690,275 770,320 537,356 639,735 384,586 360,731 4,120,828 7,014,116 773,198 569,190 232,076 4,591,203 1,275,973 311,804 2,437,824 821,927 1,192,433 365,113 3,053,714	385,868 1,048,244 1,354,865 1,044,417 1,309,821 654,406 700,622 7,605,311 10,997,678 1,343,033 1,353,790 422,796 7,228,028 2,174,597 562,807 5,491,633 1,286,259 2,826,845 719,210 4,822,322	111,246 411,915 551,545 475,804 615,992 309,335 337,839 3,455,112 3,941,773 561,642 525,392 169,370 3,176,972 953,795 249,170 1,949,336 491,330 1,036,882 252,403 1,932,307	86,790 353,344 366,229 327,589 409,908 234,443 203,803 2,062,866 3,652,032 405,717 396,047 113,034 2,334,680 617,440 169,210 1,067,655 371,864 716,647 167,746 1,477,213	104,757 501,399 647,963 520,794 499,634 300,403 291,481 3,753,675 5,888,786 751,226 563,098 153,438 4,141,652 874,755 232,323 1,877,413 611,062 1,263,838 242,731 2,488,494	465,879 1,731,429 2,198,781 1,839,178 2,205,034 1,158,899 1,181,726 12,969,436 18,550,906 2,347,611 2,181,141 636,555 13,012,151 3,466,892 919,049 7,536,096 2,060,997 4,397,640 1,011,510 8,086,499
Sweden	9,469,375 7,696,467 60,042,409	2,651,588 1,954,113 16,721,768	3,633,321 3,007,148 23,098,134	612,657 597,727 4,472,429	1,083,044 973,028 6,963,980	534,758 408,391 3,172,394	411,825 317,723 2,213,277	542,182 438,337 3,400,427	2,016,218 1,616,250 12,017,977
(Former) Yugoslavia* Bosnia and Herzegovina Croatia	5,116,876 4,646,710 2,577,743 11,130,684	1,374,253 1,193,565 772,375 3,416,838	2,111,097 1,807,295 1,070,680 4,338,739	404,315 314,442 166,988 656,215	636,126 635,361 293,846 1,301,008	199,121 235,354 102,807 484,404	137,968 169,127 71,115 337,806	253,996 291,566 99,932 595,674	879,500 1,003,610 412,362 2,078,351
Slovenia	2,007,818	522,297	793,127	131,709	270,606	98,783	74,949	116,347	425,163

Table 8-1.

Population by Age, for Countries With More Than 1 Million Population: 1994 and 2020—Continued

Region and country/area	Total,	0 to 24	25 to 54	55 to 59	60 to 69	70 to 74	75 to 79	80 years	65 years
	all ages	years	years	years	years	years	years	and over	and over
2020 —Con.									
(Former) Soviet Union									
Baltics Estonia Latvia Lithuania	1,879,603	585,321	767,318	109,947	203,066	76,379	52,968	84,604	309,559
	3,193,660	1,006,527	1,285,999	190,654	335,366	123,783	99,007	152,324	527,819
	4,505,363	1,377,276	1,801,481	290,160	477,072	173,306	145,724	240,344	769,460
Commonwealth of Independent States Armenia Azerbaijan Belarus Georgia Kazakhstan Kyrgyzstan Moldova Russia Tajikistan Turkmenistan Ukraine Uzbekistan	3,958,708	1,490,360	1,482,731	247,674	421,671	110,242	60,252	145,778	494,850
	9,688,584	3,626,830	3,891,761	625,938	877,328	202,137	111,551	353,039	1,009,288
	11,046,942	3,150,476	4,306,572	780,779	1,414,877	469,160	291,364	633,714	2,021,094
	6,506,287	2,031,419	2,548,722	453,539	738,467	237,813	155,485	340,842	1,062,731
	19,404,049	7,171,347	8,009,654	1,126,948	1,781,340	505,442	266,315	543,003	2,084,006
	6,489,901	2,887,402	2,551,790	307,957	445,531	111,191	55,675	130,355	482,138
	4,879,700	1,606,897	2,015,522	301,162	551,320	160,115	98,707	145,977	652,774
	159,262,562	47,877,111	64,168,662	10,393,604	19,924,528	6,474,967	3,232,482	7,191,208	26,050,142
	10,428,597	5,264,126	3,906,578	392,204	502,236	118,940	71,706	172,807	563,456
	6,115,628	2,929,308	2,425,043	251,164	327,741	74,079	38,253	70,040	311,878
	52,336,839	14,794,978	20,484,771	3,561,137	6,664,476	2,346,214	1,562,640	2,922,623	9,917,157
	35,422,199	16,715,672	13,805,700	1,533,715	2,051,681	468,610	264,681	582,140	2,131,736
Oceania									
Australia Fiji	22,723,981	6,830,016	9,155,125	1,489,692	2,601,646	1,034,536	688,110	924,856	3,856,512
	1,036,800	445,351	430,805	51,434	70,774	20,018	11,625	6,793	68,023
	3,586,242	1,041,124	1,414,558	240,443	430,496	175,610	118,260	165,751	661,190
	7,044,351	3,642,790	2,744,720	220,375	275,222	79,112	47,145	34,987	276,538

^{*} The U.S. view is that the Socialist Federal Republic of Yugoslavia has dissolved and no successor state represents its continuation. Serbia and Montenegro have asserted the formation of a joint independent state, but this entity has not been recognized as a state by the U.S.

Source: U.S. Bureau of the Census, International Data Base.

Table 8-2. Employment Status of the Civilian Noninstitutional Population 25 Years and Over by Age, Sex, and Race: 1993

			Ci	vilian labor forc	e		
Age, sex, and race	Civilian non				Unemp	oloyed	
	Civilian non- institutional population	Total	Percent of population	Employed	Number	Percent of labor force	Not in labor force
ALL RACES							
Men							
25 to 54 years	54,232 20,381 19,829 14,021 9,980 5,146 4,834 13,079 4,580 3,765 4,735	50,225 19,053 18,537 12,634 6,639 4,022 2,616 2,041 1,162 555 324	92.6 93.5 93.5 90.1 66.5 78.2 54.1 15.6 25.4 14.7 6.9	47,239 17,734 17,508 11,997 6,294 3,811 2,482 1,976 1,119 543 313	2,986 1,319 1,029 638 345 211 134 65 43 11	5.9 6.9 5.6 5.0 5.2 5.2 5.1 3.2 3.7 2.0 3.4	4,007 1,328 1,292 1,387 3,341 1,124 2,218 11,038 3,418 3,210 4,410
Women							
25 to 54 years	56,276 20,933 20,510 14,833 11,056 5,627 5,430 18,086 5,468 4,777 7,841	42,046 15,412 15,727 10,907 5,228 3,215 2,013 1,479 880 378 221	74.7 73.6 76.7 73.5 47.3 57.1 37.1 8.2 16.1 7.9 2.8	39,682 14,373 14,894 10,415 5,017 3,085 1,933 1,433 855 366 212	2,364 1,038 833 492 211 130 81 46 24 12	5.6 6.7 5.3 4.5 4.0 4.0 4.0 3.1 2.8 3.3 4.1	14,230 5,522 4,783 3,926 5,828 2,412 3,417 16,608 4,589 4,399 7,620
WHITE							
Men 25 to 54 years	46,250 17,124 16,973 12,153 8,695 4,460 4,235 11,713 4,063 3,358 4,292	43,359 16,217 16,043 11,099 5,861 3,540 2,322 1,873 1,058 514 301	93.8 94.7 94.5 91.3 67.4 79.4 54.8 16.0 26.0 15.3 7.0	41,043 15,211 15,248 10,584 5,588 3,371 2,217 1,818 1,023 505 291	2,316 1,006 795 516 274 169 105 55 35 10	5.3 6.2 5.0 4.6 4.7 4.8 4.5 2.9 3.3 1.9 3.2	2,891 907 930 1,053 2,834 920 1,914 9,840 3,005 2,844 3,991

Table 8-2.

Employment Status of the Civilian Noninstitutional Population 25 Years and Over by Age, Sex, and Race: 1993—Continued

		Civilian labor force							
Civilian nan				Unem	oloyed				
institutional population	Total	Percent of population	Employed	Number	Percent of labor force	Not in labor force			
46,816 17,161 17,084 12,571 9,475 4,787 4,688 16,104 4,804 4,228 7,073	35,234 12,779 13,148 9,308 4,524 2,769 1,755 1,316 780 335 200	75.3 74.5 77.0 74.0 47.7 57.8 37.4 8.2 16.2 7.9 2.8	33,481 12,045 12,529 8,907 4,349 2,665 1,684 1,277 760 324 192	1,753 734 619 400 175 104 71 39 20 11	5.0 5.7 4.7 4.3 3.9 3.8 4.0 3.0 2.6 3.3 4.0	11,582 4,382 3,936 3,263 4,951 2,018 2,933 14,788 4,023 3,893 6,872			
5,814 2,422 2,077 1,315 977 519 458 1,087 408 327 351	4,953 2,115 1,788 1,050 566 347 219 126 78 29	85.2 87.3 86.1 79.8 57.9 66.9 47.7 11.6 19.1 9.0 5.3	4,419 1,854 1,600 964 515 315 199 119 72 28	534 261 188 85 51 32 19 7 6	10.8 12.3 10.5 8.1 9.1 9.2 8.8 5.7 7.4 (B)	862 308 289 266 411 172 240 961 330 298 333			
7,075 2,897 2,540 1,638 1,206 633 573 1,586 516 440	5,166 2,053 1,950 1,163 536 332 204 131 82 32	73.0 70.9 76.8 71.0 44.4 52.5 35.6 8.2 15.9 7.3	4,667 1,789 1,783 1,096 508 312 196 126 79	499 264 167 67 28 20 8 5 3	9.7 12.9 8.6 5.8 5.2 6.0 3.8 3.6 3.7 (B)	1,908 844 590 475 670 301 369 1,455 434 408			
	5,814 2,422 2,077 1,315 977 519 4,588 16,104 4,804 4,228 7,073 5,814 2,422 2,077 1,315 977 519 458 1,087 408 327 351 7,075 2,897 2,540 1,638 1,206 633 573 1,586 516	institutional population 46,816 17,161 12,779 17,084 13,148 12,571 9,308 9,475 4,524 4,787 2,769 4,688 1,755 16,104 1,316 4,804 780 4,228 335 7,073 200 5,814 2,422 2,115 2,077 1,788 1,315 1,050 977 566 519 347 458 219 1,087 1,266 408 78 327 29 351 18 7,075 2,897 2,053 2,540 1,950 1,638 1,163 1,206 633 332 573 204 1,586 131 516 82 440 32	Civilian noninstitutional population Percent of population 46,816 17,161 12,779 74.5 17,084 13,148 77.0 12,571 9,308 74.0 12,571 9,308 74.0 12,571 9,308 74.0 12,571 9,308 74.0 12,571 9,308 74.0 12,571 9,308 74.0 12,571 9,308 74.0 12,575 37.4 16,104 1,316 8.2 4,688 1,755 37.4 16,104 1,316 8.2 4,228 335 7.9 7,073 200 2.8 5,814 4,953 200 2.8 35,709 7.073 200 2.8 5,814 2,422 2,115 87.3 2,077 1,788 86.1 1,315 1,050 79.8 977 566 57.9 347 66.9 47.7 1,087 126 11.6 408 78 19.1 327 29 9.0 351 18 5.3 11,087 126 11.6 73.0 11.6 73.0 73.0 73.0 73.0 73.0 73.0 73.0 73.0	Civilian non-institutional population Total Percent of population Employed 46,816 17,161 12,779 74.5 12,045 17,084 13,148 77.0 12,529 12,571 9,308 74.0 8,907 9,475 4,524 47.7 4,349 4,787 2,769 57.8 2,665 4,688 1,755 37.4 1,684 16,104 1,316 8.2 1,277 4,804 780 16.2 760 4,228 335 7.9 324 7,073 200 2.8 192 16,104 1,316 8.2 1,277 4,804 780 16.2 760 16.2 7	Civilian non-institutional population Total Percent of population Employed Number 46,816 17,161 12,779 74.5 12,045 734 17,084 13,148 77.0 12,529 619 12,571 9,308 74.0 8,907 400 9,475 4,524 47.7 4,349 175 4,524 47.7 4,349 175 4,524 47.7 4,349 175 4,688 1,755 37.4 1,684 71 16,104 1,316 8.2 1,277 39 4,804 780 16.2 760 20 4,228 335 7.9 324 11 7,073 200 2.8 192 8 5,814 4,953 85.2 4,419 534 2,422 2,115 87.3 1,854 261 2,077 1,788 86.1 1,600 188 1,315 1,050 79.8 964 85 977 566 57.9 515 51 51 51 51 34 7,073 126 11.6 119 7 7 1,087 126 11.6 119 119 7 7 1,087 126 11.6 119 119 119 119 119 119 119 119 119 11	Civilian non- institutional population Total Percent of population Total Percent of population Employed Number Percent of labor force			

Source: U.S. Bureau of Labor Statistics, 1993 Annual Average Tables from the January 1994 Issue of Employment and Earnings, table 3.

Table 8-3.
Poverty Status of Persons by Age, Sex, Household Relationship, Race, and Hispanic Origin: 1992

		All races			White			Black			Hispanic origin ¹		
Characteristic		I	poverty vel		Below lev			I	poverty vel			poverty vel	
	Total	Number	Percent of total	Total	Number	Percent of total	Total	Percent of total	Number	Total	Number	Percent of total	
ALL PERSONS													
Both Sexes													
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	253,969 66,834 24,309 41,864 40,342 28,503 10,718 10,529 30,870 18,362 12,508	36,880 14,617 4,367 5,540 3,944 2,245 1,073 1,112 3,983 1,956 2,027	14.5 21.9 18.0 13.2 9.8 7.9 10.0 10.6 12.9 10.7 16.2	211,820 53,090 19,711 34,666 33,976 24,505 9,190 9,182 27,501 16,210 11,290	24,523 8,955 3,023 3,749 2,641 1,591 771 800 2,992 1,397 1,595	11.6 16.9 15.3 10.8 7.8 6.5 8.4 8.7 10.9 8.6 14.1	31,916 10,599 3,531 5,399 4,629 2,910 1,144 1,044 2,660 1,703 957	10,613 4,938 1,121 1,521 1,077 544 262 263 887 504 383	33.3 46.6 31.7 28.2 23.3 18.7 22.9 25.2 33.3 29.6 40.0	22,720 7,807 2,813 4,277 3,330 2,037 680 554 1,222 806 416	6,655 3,116 844 1,076 719 349 137 145 269 157 112	29.3 39.9 30.0 25.2 21.6 17.1 20.2 26.2 22.0 19.5 26.8	
Male													
Total. Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	123,873 34,180 12,049 20,856 19,904 13,847 5,122 5,084 12,832 8,114 4,718	15,700 7,343 1,714 2,050 1,647 964 443 397 1,142 657 485	12.7 21.5 14.2 9.8 8.3 7.0 8.7 7.8 8.9 8.1 10.3	103,850 27,231 9,821 17,408 16,976 12,081 4,428 4,460 11,443 7,187 4,256	10,493 4,509 1,221 1,477 1,166 695 328 288 809 465 344	10.1 16.6 12.4 8.5 6.9 5.7 7.4 6.4 7.1 6.5 8.1	15,001 5,379 1,669 2,487 2,109 1,289 516 471 1,081 742 338	4,388 2,468 404 441 388 221 94 82 290 173 118	29.3 45.9 24.2 17.7 18.4 17.1 18.2 17.5 26.9 23.3 34.8	11,378 3,958 1,417 2,237 1,682 1,035 292 249 508 345 163	3,067 1,551 360 467 328 170 53 50 88 57 31	27.0 39.2 25.4 20.9 19.5 16.5 18.1 19.9 17.4 16.7	
Female													
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	130,096 32,654 12,260 21,008 20,438 14,655 5,597 5,445 18,038 10,249 7,790	21,180 7,273 2,653 3,490 2,297 1,281 630 715 2,840 1,299 1,542	16.3 22.3 21.6 16.6 11.2 8.7 11.3 13.1 15.7 12.7 19.8	107,970 25,859 9,889 17,257 17,000 12,424 4,762 4,721 16,057 9,023 7,034	14,030 4,446 1,802 2,272 1,475 896 443 512 2,183 932 1,252	13.0 17.2 18.2 13.2 8.7 7.2 9.3 10.8 13.6 10.3 17.8	16,915 5,220 1,862 2,912 2,520 1,620 628 573 1,579 960 619	6,225 2,470 717 1,081 689 323 168 181 596 331 265	36.8 47.3 38.5 37.1 27.3 20.0 26.8 31.5 37.7 34.5 42.8	11,342 3,849 1,396 2,040 1,648 1,002 387 305 715 462 253	3,588 1,565 484 609 391 178 84 96 181 100 81	31.6 40.7 34.7 29.9 23.7 17.8 21.7 31.3 25.3 21.6 32.0	

Table 8-3.

Poverty Status of Persons by Age, Sex, Household Relationship, Race, and Hispanic Origin: 1992—Continued

		All races		White				Black		His	spanic ori	gin ¹
Characteristic		Below	,		Below lev	poverty vel			poverty vel			poverty vel
	Total	Number	Percent of total	Total	Number	Percent of total	Total	Percent of total	Number	Total	Number	Percent of total
PERSONS IN FAMILIES												_
Both Sexes												
Total	215,515	27,947	13.0	179,199	17,645	9.8	27,280	8,908	32.7	20,116	5,655	28.1
Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	65,748 19,692 33,055 34,393 24,350 8,915 8,528 20,825 13,652 7,172	13,911 2,793 4,100 2,958 1,507 606 588 1,484 876 609	21.2 14.2 12.4 8.6 6.2 6.8 6.9 7.1 6.4 8.5	52,172 15,771 27,316 29,092 21,055 7,721 7,525 18,547 12,118 6,429	8,361 1,724 2,677 1,933 1,077 423 400 1,050 616 434	16.0 10.9 9.8 6.6 5.1 5.5 5.3 5.7 5.1 6.8	10,476 3,116 4,326 3,779 2,292 853 739 1,700 1,159 541	4,856 937 1,243 851 338 158 150 375 231 143	46.4 30.1 28.7 22.5 14.8 18.5 20.3 22.0 20.0 26.5	7,606 2,368 3,492 2,894 1,770 593 456 935 641 294	2,958 623 862 585 285 108 102 133 86 47	38.9 26.3 24.7 20.2 16.1 18.1 22.4 14.2 13.4 15.9
Male												
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	105,988 33,659 9,700 15,548 16,205 11,750 4,350 4,301 10,475 6,841 3,633	12,303 7,028 1,023 1,310 1,073 640 270 255 705 413 292	11.6 20.9 10.5 8.4 6.6 5.4 6.2 5.9 6.7 6.0 8.0	89,054 26,792 7,831 13,056 13,970 10,340 3,795 3,833 9,437 6,125 3,312	8,024 4,251 659 969 763 478 208 178 518 309 210	9.0 15.9 8.4 7.4 5.5 4.6 5.5 4.6 5.5 5.0 6.3	12,594 5,325 1,463 1,801 1,535 972 394 333 771 557 214	3,639 2,431 318 274 240 121 48 54 153 92 61	28.9 45.7 21.8 15.2 15.7 12.5 12.2 16.1 19.9 16.6 28.5	9,899 3,865 1,175 1,715 1,384 863 252 217 427 291 135	2,608 1,485 251 355 242 137 42 41 56 38 18	26.4 38.4 21.3 20.7 17.5 15.9 16.6 18.7 13.2 13.2
Female												
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	109,527 32,089 9,992 17,516 18,188 12,600 4,565 4,227 10,350 6,811 3,539	15,643 6,883 1,771 2,790 1,885 867 336 333 780 463 317	14.3 21.4 17.7 15.9 10.4 6.9 7.4 7.9 7.5 6.8 9.0	90,145 25,379 7,940 14,260 15,122 10,715 3,926 3,693 9,110 5,993 3,117	9,621 4,110 1,066 1,709 1,170 598 215 222 531 307 225	10.7 16.2 13.4 12.0 7.7 5.6 5.5 6.0 5.8 5.1 7.2	14,686 5,151 1,653 2,525 2,244 1,319 459 406 929 602 327	5,269 2,425 619 969 611 217 110 97 222 139 82	35.9 47.1 37.4 38.4 27.2 16.5 24.0 23.8 23.9 23.1 25.2	10,217 3,741 1,194 1,776 1,510 907 341 239 509 350 159	3,047 1,473 373 507 342 148 66 61 77 48 29	29.8 39.4 31.2 28.6 22.7 16.3 19.3 25.7 15.1 13.7 18.3

Table 8-3.

Poverty Status of Persons by Age, Sex, Household Relationship, Race, and Hispanic Origin: 1992—Continued

	All races Below poverty level				White			Black		His	spanic oriç	gin ¹
Characteristic			,		Below				poverty vel			poverty vel
	Total	Number	Percent of total	Total	Number	Percent of total	Total	Percent of total	Number	Total	Number	Percent of total
PERSONS IN FAMILIES—Con.												_
Householder												
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	68,144 23 2,728 14,376 17,569 13,069 4,663 4,454 11,261 7,350 3,911	7,960 20 1,031 2,567 1,904 901 338 321 878 496 383	11.7 (B) 37.8 17.9 10.8 6.9 7.3 7.2 7.8 6.7 9.8	57,858 18 2,118 11,769 14,699 11,288 4,015 3,905 10,046 6,522 3,524	5,160 16 649 1,605 1,237 633 216 207 597 337 260	8.9 (B) 30.7 13.6 8.4 5.6 5.4 5.3 5.9 5.2 7.4	7,888 3 508 2,039 2,142 1,295 484 429 986 683 303	2,435 3 342 855 567 225 108 88 246 145	30.9 (B) 67.2 41.9 26.5 17.4 22.2 20.6 24.9 21.2 33.4	5,318 10 416 1,507 1,453 935 310 249 438 305 133	1,395 7 187 481 367 168 61 52 72 48 24	26.2 (B) 45.0 31.9 25.3 18.0 19.8 20.9 16.3 15.7
Related Children												
Under 18 years	65,691 23,129 42,562	13,876 5,781 8,095	21.1 25.0 19.0	52,122 18,240 33,882	8,333 3,527 4,806	16.0 19.3 14.2	10,471 3,765 6,706	4,850 2,000 2,850	46.3 53.1 42.5	7,589 2,870 4,719	2,946 1,223 1,723	38.8 42.6 36.5
Under 18 years	61,184 21,019 40,165 21,091	12,422 5,105 7,317 1,833	20.3 24.3 18.2 8.7	49,521 17,010 32,511 16,572	7,701 3,232 4,469 950	15.6 19.0 13.7 5.7	8,782 2,989 5,793 3,705	4,068 1,633 2,436 803	46.3 54.6 42.0 21.7	6,738 2,469 4,270 1,888	2,642 1,080 1,562 333	39.2 43.7 36.6 17.7
PERSONS IN MARRIED- COUPLE FAMILIES												
Both Sexes												
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	171,514 48,567 14,094 26,275 28,633 20,988 7,755 7,498 17,704 11,973 5,731	12,830 5,284 1,181 2,026 1,496 964 380 406 1,093 681 412	7.5 10.9 8.4 7.7 5.2 4.6 4.9 5.4 6.2 5.7	150,715 41,932 12,120 23,027 25,184 18,596 6,906 6,794 16,156 10,863 5,292	10,053 4,152 917 1,614 1,150 754 312 318 838 516 321	6.7 9.9 7.6 7.0 4.6 4.1 4.5 4.7 5.2 4.8 6.1	13,555 4,190 1,407 2,112 2,182 1,520 564 478 1,103 818 285	1,942 764 195 296 230 137 51 55 216 147	14.3 18.2 13.8 14.0 10.5 9.0 9.0 11.5 19.6 17.9 24.3	14,624 5,266 1,584 2,669 2,228 1,374 472 353 679 488 191	3,136 1,505 338 543 347 181 71 67 86 60 26	21.4 28.6 21.3 20.3 15.6 13.2 15.0 18.9 12.7 12.3 13.6

Table 8-3.

Poverty Status of Persons by Age, Sex, Household Relationship, Race, and Hispanic Origin: 1992—Continued

		All races			White			Black		Hi	spanic ori	gin ¹
Characteristic		Below lev	poverty vel			poverty vel			poverty vel			poverty vel
	Total	Number	Percent of total	Total	Number	Percent of total	Total	Percent of total	Number	Total	Number	Percent of total
PERSONS IN MARRIED- COUPLE FAMILIES—Con.												
Male												
Total	87,646 24,947 7,005 12,879 14,335 10,755 3,989 3,956 9,780 6,418 3,362	6,570 2,721 520 991 801 504 198 196 639 376 263	7.5 10.9 7.4 7.7 5.6 4.7 5.0 4.9 6.5 5.9 7.8	77,003 21,595 5,987 11,238 12,587 9,566 3,544 3,572 8,915 5,816 3,099	5,148 2,165 391 789 610 396 161 153 482 286 196	6.7 10.0 6.5 7.0 4.8 4.1 4.5 4.3 5.4 4.9 6.3	7,082 2,137 731 1,084 1,144 783 304 263 637 467 169	1,005 372 102 148 134 71 28 19 130 81	14.2 17.4 14.0 13.7 11.7 9.1 9.2 7.4 20.5 17.2 29.4	7,483 2,728 778 1,347 1,122 714 237 194 363 253 110	1,599 771 139 278 191 101 34 34 52 36 16	21.4 28.3 17.9 20.6 17.0 14.1 14.2 17.4 14.4 14.2
Female												
Total	83,868 23,621 7,089 13,396 14,298 10,233 3,766 3,542 7,924 5,555 2,369	6,260 2,563 662 1,034 695 461 181 210 454 304 150	7.5 10.9 9.3 7.7 4.9 4.5 4.8 5.7 6.5 5.5 6.3	73,712 20,337 6,134 11,789 12,597 9,030 3,362 3,222 7,241 5,047 2,193	4,905 1,987 527 824 540 357 150 164 355 230 125	6.7 9.8 8.6 7.0 4.3 4.0 4.5 5.1 4.9 4.6 5.7	6,473 2,053 675 1,028 1,038 737 261 215 466 351 115	937 392 92 148 96 66 23 35 86 66	14.5 19.1 13.7 14.3 9.2 8.9 8.7 16.4 18.4 18.9 16.8	7,141 2,538 805 1,321 1,106 661 235 159 315 235 81	1,537 733 199 265 156 80 37 33 34 24	21.5 28.9 24.7 20.1 14.1 12.1 15.9 20.6 10.8 10.3 12.1
Householder												
Total	53,171 2 1,462 10,655 13,522 10,550 3,883 3,791 9,307 6,223 3,084	3,318 2 263 881 722 469 187 207 589 355 234	6.2 (B) 18.0 8.3 5.3 4.4 4.8 5.5 6.3 5.7 7.6	47,601 2 1,311 9,440 11,959 9,426 3,456 3,451 8,557 5,681 2,875	2,631 2 215 711 577 368 148 157 453 273 180	5.5 (B) 16.4 7.5 4.8 3.9 4.3 4.6 5.3 4.8 6.3	3,748 114 794 997 735 293 234 581 440 141	486 - 38 119 89 69 29 25 117 76 41	13.0 (B) 33.6 15.0 9.0 9.4 10.5 20.1 17.3 28.9	3,674 206 1,058 1,028 669 215 187 310 221 89	72 236 172 92 28 33 48 33 15	18.5 (B) 35.2 22.3 16.7 13.7 13.1 17.6 15.4 14.9 16.6

Table 8-3.

Poverty Status of Persons by Age, Sex, Household Relationship, Race, and Hispanic Origin: 1992—Continued

	All races Below poverty				White			Black		Hi	spanic ori	gin ¹
Characteristic			poverty vel		Below lev				poverty vel		1	poverty vel
	Total	Number	Percent of total	Total	Number	Percent of total	Total	Percent of total	Number	Total	Number	Percent of total
PERSONS IN FAMILIES WITH FEMALE HOUSE- HOLDER, NO SPOUSE PRESENT												
Both Sexes												
Total	35,639 14,816 4,404 5,213 4,561 2,556 910 770 2,411	13,716 8,047 1,443 1,868 1,266 452 184 139 318	38.5 54.3 32.8 35.8 27.8 17.7 20.2 18.1 13.2	22,037 8,369 2,695 3,171 2,995 1,792 648 530 1,837	6,656 3,796 692 928 663 256 87 63 171	30.2 45.4 25.7 29.3 22.1 14.3 13.4 11.9 9.3	12,316 5,912 1,553 1,871 1,390 669 225 215 482	6,609 3,968 704 895 561 184 92 73 132	53.7 67.1 45.4 47.8 40.4 27.5 40.8 34.0 27.5	4,207 1,970 540 571 498 269 101 79 179	2,154 1,295 234 268 191 75 28 26 37	51.2 65.7 43.4 47.0 38.4 27.9 28.0 33.0 20.6
Householder												
Total	11,947 15 989 2,946 3,269 1,957 640 539 1,592	4,171 14 701 1,549 1,059 370 131 99 248	34.9 (B) 70.8 52.6 32.4 18.9 20.5 18.5 15.6	7,848 14 585 1,760 2,100 1,370 458 350 1,211	2,202 13 385 804 567 217 53 38 125	28.1 (B) 65.8 45.7 27.0 15.9 11.6 10.9	3,680 1 362 1,093 1,041 504 159 180 339	1,835 1 289 703 451 141 75 61	49.8 (B) 79.9 64.3 43.3 28.0 47.2 34.0 33.3	1,238 6 141 327 337 196 84 51	604 6 98 208 171 58 25 15	48.8 (B) 69.2 63.7 50.9 29.3 29.6 (B) 25.1
UNRELATED INDIVIDUALS												
Both Sexes												
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	36,734 145 4,453 8,385 5,784 4,125 1,800 2,001 10,041 4,709 5,332	7,991 137 1,476 1,231 926 731 468 525 2,498 1,080 1,418	21.8 94.3 33.2 14.7 16.0 17.7 26.0 26.2 24.9 22.9 26.6	31,176 125 3,801 7,002 4,744 3,428 1,469 1,656 8,949 4,091 4,858	6,087 118 1,216 892 663 507 348 400 1,943 781 1,161	19.5 94.0 32.0 12.7 14.0 14.8 23.7 24.1 21.7 19.1 23.9	4,431 8 398 1,026 831 615 289 305 960 544 417	1,584 8 173 254 216 205 104 113 512 272 240	35.8 (B) 43.3 24.8 26.0 33.3 36.1 37.0 53.3 50.1 57.5	2,278 33 388 712 415 260 87 98 285 165 120	777 32 184 172 120 61 30 43 136 71 65	34.1 (B) 47.4 24.1 29.0 23.6 34.3 43.9 47.6 43.0 54.1

Table 8-3.

Poverty Status of Persons by Age, Sex, Household Relationship, Race, and Hispanic Origin: 1992—Continued

		All races			White			Black		His	spanic ori	gin ¹
Characteristic		Below	poverty /el		Below	,			poverty vel			poverty vel
	Total	Number	Percent of total	Total	Number	Percent of total	Total	Percent of total	Number	Total	Number	Percent of total
UNRELATED INDIVIDUALS—Con.												
Male												
Total Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	17,278 65 2,321 5,232 3,670 2,081 771 783 2,355 1,273 1,082	3,103 61 675 722 570 321 173 142 438 244 193	18.0 (B) 29.1 13.8 15.5 15.4 22.5 18.1 18.6 19.2 17.9	14,290 54 1,969 4,297 2,977 1,727 633 627 2,004 1,062 942	2,229 51 547 497 400 213 120 110 291 157 134	15.6 (B) 27.8 11.6 13.4 12.3 19.0 17.5 14.5 14.8	2,338 3 201 674 574 317 122 138 309 185 125	708 3 86 161 147 100 46 29 137 80 57	30.3 (B) 42.7 23.9 25.7 31.4 37.5 20.7 44.4 43.5 45.8	1,354 11 227 501 296 168 40 32 80 53 26	382 10 97 106 85 32 11 9 32 19	28.2 (B) 42.6 21.1 28.9 19.3 (B) (B) 39.9 (B)
Female												
Total. Under 18 years 18 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 years and over 65 to 74 years 75 years and over	19,456 80 2,132 3,154 2,114 2,044 1,028 1,218 7,686 3,437 4,250	4,888 76 801 508 356 410 294 383 2,061 836 1,225	25.1 94.4 37.6 16.1 16.8 20.1 28.6 31.4 26.8 24.3 28.8	16,886 71 1,832 2,704 1,767 1,700 836 1,029 6,946 3,029 3,916	3,858 67 669 394 264 294 228 290 1,652 625 1,027	22.8 (B) 36.5 14.6 14.9 17.3 27.2 28.2 23.8 20.6 26.2	2,093 5 197 352 257 298 167 167 651 359 292	876 5 87 93 68 106 58 84 374 192 183	41.8 (B) 43.9 26.5 26.7 35.4 35.0 50.5 57.5 53.5 62.5	924 23 161 212 119 91 47 66 205 112 93	396 22 87 66 35 29 19 34 104 52 52	42.8 (B) 54.2 31.2 29.3 31.6 (B) (B) 50.7 46.5 55.7

¹Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, *Poverty in the United States: 1992*, Current Population Reports, P60-185, U.S. Government Printing Office, Washington, DC, 1993, table 5.

Table 8-4.
County Estimates of the Elderly Population by Age for Counties With 10,000 or More Elderly: 1991

	_		65 year		85 year			_		65 year ove		85 years ove	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
1 2 3 4 5 6 7 8 9	Los Angeles Cook Queens San Diego Kings Dade Maricopa Broward Wayne Philadelphia	CA IL NY CA NY FL AZ FL MI PA	865,309 632,961 283,449 278,661 278,056 276,841 275,009 266,547 265,302 238,498	9.6 12.3 14.5 10.9 12.1 14.0 12.7 20.7 12.6 15.2	85,507 58,941 28,851 25,626 26,911 31,187 23,584 26,049 24,718 22,486	1.0 1.1 1.5 1.0 1.2 1.6 1.1 2.0 1.2	61 62 63 64 65 66 67 68 69 70	Jefferson Contra Costa Norfolk Volusia Shelby Delaware Lee Clark Jackson Multnomah	KY CA MA FL TN PA FL NV MO OR	89,853 88,990 87,481 87,117 87,012 85,786 85,696 85,256 82,754 80,836	13.5 10.9 14.2 22.8 10.4 15.6 24.7 10.6 13.0 13.6	9,281 8,034 10,116 8,354 8,571 8,213 6,117 4,667 9,699 9,338	1.4 1.0 1.6 2.2 1.0 1.5 1.8 6 1.5
11 12 13 14 15 16 17 18 19 20	Allegheny Pinellas Orange Cuyahoga Palm Beach Harris New York Nassau Middlesex King.	PA FL CA OH FL TX NY NY MA WA	234,118 225,437 223,136 223,059 214,992 204,589 195,734 183,085 176,444 168,632	17.5 26.1 9.1 15.8 24.3 7.0 13.1 14.2 12.7	20,964 27,857 23,407 20,714 19,181 17,5819 16,438 20,422 17,242	1.6 3.2 1.0 1.5 2.2 .6 1.5 1.3 1.5	71 72 73 74 75 76 77 78 79 80	San Mateo Middlesex Suffolk Montgomery District of Columbia Polk Bristol Union Orange Duval	CA NJ MA DC FL MA NJ FL FL	80,144 79,596 79,190 79,147 77,078 76,292 74,431 74,304 73,829 73,580	12.2 11.8 12.2 10.3 12.9 18.5 14.7 15.1 10.6 10.7	7,537 5,504 9,546 7,741 7,854 6,122 7,692 6,730 6,903 6,419	1.1 .8 1.5 1.0 1.3 1.5 1.5 1.4 1.0
21 22 23 24 25 26 27 28 29 30	Riverside	CA TX NY NY CA NY MO CA WI CA	162,026 155,976 148,167 142,209 136,803 136,506 130,536 130,536 130,124 129,914	13.1 8.3 15.2 10.7 10.6 11.4 13.1 8.7 13.6 8.7	13,489 15,506 13,825 14,255 13,926 16,954 13,843 12,176 14,766 11,323	1.1 .8 1.4 1.1 1.1 1.4 1.4 .8 1.5	81 82 83 84 85 86 87 88 89	Oklahoma Montgomery Summit Monmouth Fresno Hudson DuPage Brevard Hampden Denver Denver	OK OH OH CA CA FL MCO	73,565 73,048 72,601 71,723 70,950 70,430 69,586 68,847 67,735 66,320	12.1 12.7 14.0 12.9 10.3 12.7 8.7 16.6 14.9 13.9	7,578 6,774 7,113 7,308 7,081 6,156 6,702 4,640 7,492 7,847	1.3 1.2 1.4 1.3 1.0 1.1 .8 1.1 1.7
31 32 33 34 35 36 37 38 39 40	Bergen Westchester Oakland, Hartford Bexar New Haven Hennepin Hamilton Sacramento Fairfield	NJ NY MI CT TX CT MN OH CA CT	127,636 125,756 121,073 120,836 120,396 119,226 118,188 117,259 113,681 111,051	15.4 14.3 11.0 14.2 10.0 14.8 11.4 13.5 10.6 13.4	11,944 14,145 11,880 12,934 11,170 12,583 15,184 12,802 10,008 11,790	1.4 1.6 1.1 1.5 .9 1.6 1.5 .9	91 92 93 94 95 96 97 98 99	Luzerne Fulton St. Louis city Westmoreland Orleans Parish Salt Lake Ventura Pierce Camden Onndaga	PA GA MO PA LA UT CA WA NJ NY	65,716 65,471 65,160 64,372 64,267 63,598 63,524 62,969 61,898 61,592	19.9 10.0 16.6 17.3 13.0 8.5 9.4 10.4 12.3 13.0	5,777 6,929 8,332 5,367 6,581 6,136 5,856 6,112 5,394 6,590	1.8 1.1 2.1 1.4 1.3 .8 .9 1.0 1.1
41 42 43 44 45 46 47 48 49 50	San Francisco Montgomery Hillsborough Ocean Baltimore city Tarrant Baltimore Worcester Essex Essex	CA PA FL NJ MD TX MD MA NJ MA	106,818 104,010 103,556 102,901 100,729 100,665 98,941 98,178 97,731 95,393	14.6 15.2 12.3 23.5 13.7 8.4 14.1 13.9 12.6 14.3	12,036 11,139 8,766 9,108 9,679 9,608 8,929 11,129 9,860 10,688	1.6 1.6 1.0 2.1 1.3 .8 1.3 1.6 1.3	101 102 103 104 105 106 107 108 109	Manatee Lucas Bucks Ramsey Tulsa Davidson Lake Passaic Lancaster Kent	FL OH PA MN OK TN IN NJ PA MI	60,795 60,488 60,190 59,732 59,692 59,412 59,104 58,595 57,107 55,588	28.1 13.1 11.0 12.3 11.6 11.6 12.3 12.9 13.3 10.9	6,156 6,152 5,847 7,738 6,237 6,084 4,344 5,916 6,453 6,262	2.8 1.3 1.1 1.6 1.2 1.2 .9 1.3 1.5
51 52 53 54 55 56 57 58 59 60	Franklin Marion Pima Honolulu Providence Pasco Jefferson Sarasota Macomb Monroe footnotes at end of table	OH IN AZ HI RI FL AL FL MI NY	95,282 94,251 94,114 94,102 94,100 92,474 91,852 91,802 90,340 90,207	9.7 11.7 13.9 11.0 15.8 32.4 14.0 32.3 12.5 12.5	9,519 9,567 8,242 7,723 10,405 6,918 9,244 9,076 7,449 10,326	1.0 1.2 1.2 .9 1.7 2.4 1.4 3.2 1.0	111 112 113 114 115 116 117 118 119 120	Fairfax Kern San Joaquin Stark Berks Sonoma Bernalillo New Castle Prince Georges Plymouth	VA CA COH PA CA NM DE MD MA	54,972 54,632 54,608 53,981 53,731 53,152 52,036 51,451 51,353 51,039	6.6 9.6 11.1 14.6 15.8 13.4 10.6 11.5 6.9	3,979 4,312 5,304 5,363 5,451 5,309 4,515 4,504 3,848 5,445	.5 .8 1.1 1.4 1.6 1.3 .9 1.0 .5

Table 8-4.

County Estimates of the Elderly Population by Age for Counties With 10,000 or More Elderly: 1991 —Continued

	_		65 years ove		85 year			_		65 year		85 years ove	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
121 122 123 124 125 126 127 128 129 130	El Paso Mecklenburg Spokane Douglas DeKalb Sedgwick Jefferson Parish Santa Barbara Lehigh York.	TX NC WA NE GA KS LA CA PA	50,328 49,655 49,426 48,085 46,975 46,973 46,665 46,169 45,794 45,736	8.2 9.4 13.2 11.4 8.5 11.4 10.3 12.3 15.6 13.2	4,175 4,590 5,362 5,392 4,402 4,746 3,453 5,144 4,545 4,655	.7 .9 1.4 1.3 .8 1.2 .8 1.4 1.5	181 182 183 184 185 186 187 188 189 190	Forsyth Atlantic Washington Caddo Parish Clackamas Kanawha Winnebago El Paso Hernando Orange	2284854845	33,200 33,151 33,089 33,041 33,040 32,714 32,686 32,611 32,540	12.4 14.6 10.1 13.4 11.4 15.8 12.7 8.1 30.7 10.4	3,600 3,373 3,621 3,721 3,418 2,969 3,567 2,930 1,678 3,316	1.3 1.5 1.1 1.5 1.2 1.4 1.4 .7 1.6
131 132 133 134 135 136 137 138 139 140	Mahoning Snohomish Mobile Morris Marion Lake Genesee Lackawanna Knox Travis	OH WA AL NJ FL IL MI PA TN TX	45,543 45,301 45,273 45,019 44,662 44,597 44,408 43,691 43,683 43,560	17.2 9.4 11.8 10.7 22.1 8.4 10.3 19.9 12.8 7.3	3,930 4,195 3,994 4,722 2,753 4,266 4,262 3,979 4,221 4,358	1.5 .9 1.0 1.1 1.4 .8 1.0 1.8 1.2	191 192 193 194 195 196 197 198 199 200	St. Lucie Butte Cumberland. Broome Beaver Lorain Escambia Will Richmond city San Luis Obispo,	FLAENYAHLUSA POFLUSA	32,529 32,419 32,184 32,095 32,060 31,937 31,890 31,708 31,503 31,044	20.9 17.3 13.2 15.1 17.1 11.7 11.9 8.6 15.5 14.2	1,913 2,960 3,633 3,504 2,440 2,762 2,655 2,877 3,507 2,799	1.2 1.6 1.5 1.7 1.3 1.0 1.0 .8 1.7
141 142 143 144 145 146 147 148 149	Lake Albany Burlington Richmond Mercer Guilford Chester Barnstable Stanislaus Pulaski	FL NY NJ NC NC PA MA CA AR	43,392 43,176 43,010 42,831 42,611 42,491 41,908 41,805 41,586 40,464	27.5 14.7 10.8 11.1 13.1 12.0 11.0 22.3 10.8 11.5	3,515 5,037 3,829 3,958 3,900 4,320 4,026 4,037 4,148	2.2 1.7 1.0 1.0 1.2 1.2 1.1 2.3 1.0	201 202 203 204 205 206 207 208 209 210	Seminole	FLACH PAC SISC II FL	30,989 30,988 30,851 30,820 30,782 30,769 30,608 30,420 30,405	10.3 20.3 12.1 10.3 19.0 10.1 9.8 7.5 9.3 31.3	2,747 2,412 3,070 3,057 2,604 2,398 3,389 2,479 3,531 1,969	.9 1.6 1.2 1.0 1.6 .8 1.1 .6 1.1
151 152 153 154 155 156 157 158 159 160	Hidalgo Charlotte Oneida Erie Greenville Hamilton Anne Arundel Polk Northampton Lane	TX FL NY PA SC TN MD IA PA OR	40,009 39,357 39,129 38,819 38,764 38,703 38,531 38,426 37,809 37,670	10.0 33.8 15.5 14.0 12.0 13.4 8.9 11.5 15.1	3,159 2,829 4,161 3,407 3,167 3,918 2,815 4,474 3,240 3,643	.8 2.4 1.7 1.2 1.0 1.4 .6 1.3 1.3	211 212 213 214 215 216 217 218 219 220	Nueces Dutchess. Spartanburg, Cobb Buncombe Solano. Cameron Hinds. Marin Greene	TXY SGA CAX MCA MCA	30,222 29,940 29,424 29,299 29,050 28,893 28,477 28,441 28,432 28,388	10.2 11.5 12.8 6.3 16.3 8.2 10.6 11.2 12.2 13.4	2,553 3,147 2,394 2,186 3,082 2,199 2,308 2,845 2,850 3,322	.9 1.2 1.0 .5 1.7 .6 .9 1.1 1.2
161 162 163 164 165 166 167	Jefferson . Washington . Collier . East Baton Rouge Parish . Hillsborough . St. Joseph . Monterey .	CO PA FL LA NH CA	36,359 36,340 36,119 35,690 35,459 35,257 35,162	8.1 17.7 22.6 9.2 10.6 14.2 9.7	3,346 2,956 2,329 3,115 3,765 3,665 3,461	.7 1.4 1.5 .8 1.1 1.5 .9	221 222 223 224 225 226 227 228 229	Martin Chatham Richland Henrico Washoe Norfolk city Rockland Yavapai	FL GA SC VA NV VA NY AZ PA	28,358 28,055 27,680 27,617 27,281 27,163 27,074 26,892	27.4 12.8 9.5 12.5 10.4 10.7 10.1 24.0 13.5	2,040 2,277 2,312 2,824 1,988 2,307 3,145 1,873	2.0 1.0 .8 1.3 .8 .9 1.2 1.7
168 169 170	Madison	IL NC WI	35,157 34,925 34,920	14.0 7.9 9.3	3,516 3,255 4,153	1.4 .7 1.1	230	Cumberland	WA	26,818 26,666	10.6	2,888 2,440	1.0
171 172 173 174 175 176 177 178 179 180	Tulare Allen Dauphin Johnson Jefferson Marion Niagara St. Louis St. Clair Trumbull footnotes at end of table.	CA IN PA KS TX OR NY MN IL OH	34,761 34,614 34,570 34,493 34,312 33,796 33,736 33,659 33,394 33,351	10.7 11.4 14.4 9.5 14.1 14.3 15.3 16.9 12.7 14.6	3,223 3,749 3,273 3,287 3,304 3,894 3,099 3,540 3,478 2,642	1.0 1.2 1.4 .9 1.4 1.7 1.4 1.8 1.3	231 232 233 234 235 236 237 238 239 240	Somerset Fayette Lake Vanderburgh Peoria McLennan Saginaw Santa Cruz Gloucester Schenectady	ZA O IZ L X M C Z Z X	26,624 26,514 26,364 26,254 26,246 26,156 25,971 25,803 25,348 25,142	10.9 18.1 12.1 15.8 14.3 13.7 12.2 11.3 10.9 16.7	2,808 2,258 2,205 2,812 2,886 2,861 2,611 3,054 2,038 2,738	1.2 1.5 1.0 1.7 1.6 1.5 1.2 1.3 .9

Table 8-4.

County Estimates of the Elderly Population by Age for Counties With 10,000 or More Elderly: 1991 —Continued

			65 years		85 year				0: 1	65 year		85 years ove	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
241 242 243 244 245 246 247 248 249 250	Indian River Litchfield Yakima Sangamon. Ingham Montgomery Kent Jackson. Kalamazoo, Virginia Beach city.	FL CT WA IL MI AL RI OR MI VA	25,088 25,072 24,972 24,847 24,825 24,546 24,546 24,339 24,160 24,025	27.2 14.3 12.9 13.8 8.8 11.6 15.2 16.1 10.8 6.0	1,757 2,670 2,575 2,745 2,791 2,493 2,395 2,136 2,680 1,911	1.9 1.5 1.3 1.5 1.0 1.2 1.5 1.4 1.2	301 302 303 304 305 306 307 308 309 310	Cumberland. La Salle Larimer Calcasieu Parish Northumberland. Madison Calhoun Napa St. Clair Winnebago	ZHOAAZEGES	18,851 18,739 18,727 18,576 18,560 18,550 18,533 18,513 18,479 18,439	13.6 17.4 9.7 10.9 19.2 14.1 13.5 16.6 12.4 12.9	1,682 2,143 2,007 1,409 1,786 1,713 1,849 2,184 1,783 2,227	1.2 2.0 1.0 .8 1.8 1.3 1.3 2.0 1.2
251 252 253 254 255 256 257 258 259 260	Berkshire	MA NE TX FL NH KY NY PA IL MI	23,671 23,667 23,457 23,346 22,869 22,621 22,540 22,530 22,450 22,395	17.2 10.9 10.5 33.3 9.4 9.9 15.9 17.2 15.0 13.9	2,694 2,960 1,905 1,667 2,341 2,385 2,645 2,278 2,266 2,133	2.0 1.4 .9 2.4 1.0 1.0 1.9 1.7 1.5	311 312 313 314 315 316 317 318 319 320	Lycoming. McHenry Benton Dakota Weber Harrison Lawrence Franklin Boulder Rock	PALAR MNT MSPA PACWI	18,352 18,287 18,222 18,187 18,118 18,018 18,002 17,979 17,969 17,846	15.3 9.5 17.9 6.4 11.2 10.8 18.7 14.6 7.7 12.6	1,897 1,838 1,480 1,759 1,765 1,508 1,619 1,839 2,087 2,032	1.6 1.0 1.5 .6 1.1 .9 1.7 1.5
261 262 263 264 265 266 267 268 269 270	Ada Lubbock Madison Washtenaw Ulster Shasta Placer Gaston Brown Racine	ID TX AL MI NY CA CA NC WI	22,358 22,355 21,940 21,792 21,760 21,674 21,559 21,533 21,526 21,449	10.4 10.0 9.0 7.6 13.0 14.1 12.0 12.2 10.8 12.1	2,207 2,185 1,869 2,414 2,283 1,736 2,063 1,790 2,359 2,277	1.0 1.0 .8 .8 1.4 1.1 1.1 1.0 1.2	321 322 323 324 325 326 327 328 329 330	Elkhart. Gwinnett Scott Lebanon Tuscaloosa Hampshire. Rowan Alachua Macon Washington	IN A IA A A A A A A A A A A A A A A A A	17,771 17,749 17,608 17,498 17,460 17,441 17,351 17,338 17,272 17,261	11.3 4.8 11.5 15.2 11.4 11.8 15.5 9.3 14.7 14.0	2,009 1,427 1,844 1,800 1,756 1,732 1,638 1,717 1,965 1,776	1.3 .4 1.2 1.6 1.1 1.2 1.5 .9 1.7
271 272 273 274 275 276 277 278 279 280	Shawnee	KS WA TX MI PA PA ME CO KS AZ	21,438 21,425 21,308 21,210 21,141 21,136 21,082 20,915 20,857 20,853	13.2 10.7 13.9 13.2 17.4 13.7 12.7 7.7 13.0 20.8	2,556 2,013 2,160 2,017 2,111 2,324 2,142 1,662 2,231 1,003	1.6 1.0 1.4 1.3 1.7 1.5 1.3 .6 1.4	331 332 333 334 335 336 337 338 339 340	Penobscot	MEAC SAX LESS AR	17,187 17,028 17,006 16,990 16,784 16,690 16,645 16,638 16,608 16,584	11.7 13.6 6.2 9.2 17.3 8.6 13.4 12.6 12.5 22.2	1,799 1,905 1,091 1,393 2,051 1,286 1,753 1,741 1,833 1,417	1.2 1.5 .4 .8 2.1 .7 1.4 1.3 1.4
281 282 283 284 285 286 287 288 289 290	Linn . Rensselaer . Sullivan . Clark . Durham . Anderson . Arlington . Bibb . Thurston . Sussex	IA NY TN OH NC SC VA GA WA DE	20,785 20,777 20,771 20,717 20,049 20,000 19,714 19,601 19,582 19,551	12.2 13.3 14.3 14.0 10.8 13.7 11.5 12.9 11.6 16.8	2,452 2,289 1,654 2,114 2,068 1,508 1,771 1,746 1,904 1,666	1.4 1.5 1.1 1.4 1.1 1.0 1.0 1.2 1.1	341 342 343 344 345 346 347 348 349 350	Richland Kenton Columbiana Alamance Bell Newport News city Pinal Leon Ouachita Parish. Vigo	OKO KXXXX FLA K	16,584 16,484 16,450 16,413 16,335 16,328 16,324 16,315 16,277 16,233	13.1 11.5 15.0 14.9 8.8 9.4 13.8 8.2 11.3 15.2	1,558 1,634 1,400 1,374 1,689 1,246 983 1,449 1,644 1,793	1.2 1.1 1.3 1.2 .9 .7 .8 .7 1.1
291 292 293 294 295 296 297 298 299 300	Muscogee Cape May Richmond Ottawa Saratoga Middlesex Utah Jackson Horry Pueblo	GA NJ GA MI NY CT UT MI SC CO	19,549 19,476 19,369 19,285 19,117 18,947 18,941 18,935 18,888	10.8 20.4 10.1 10.0 10.4 13.3 7.0 12.5 12.7 15.3	1,620 1,856 1,770 2,077 1,766 2,207 1,731 1,919 1,078 1,808	.9 1.9 .9 1.1 1.0 1.5 .6 1.3 .7	351 352 353 354 355 356 357 358 359 360	Clay. Etowah Rapides Parish Cabell Outagamie. New Hanover Osceola. Grayson Kennebec Hawaii	MO ALA WW WIC FLX ME H	16,207 15,964 15,949 15,935 15,897 15,858 15,855 15,853 15,827 15,815	10.4 16.0 12.1 16.4 11.2 12.7 13.8 16.5 13.5	1,510 1,281 1,572 1,690 1,802 1,332 1,598 1,834 1,787 1,251	1.0 1.3 1.2 1.7 1.3 1.1 1.4 1.9 1.5

Table 8-4.

County Estimates of the Elderly Population by Age for Counties With 10,000 or More Elderly: 1991 —Continued

			65 years		85 year				0: 1	65 years		85 years ove	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
361 362 363 364 365 366 367 368 369 370	Harford Wichita Henderson El Dorado Davidson Bay Licking Brazoria Yuma Lexington	MD TX NC CA NC FL OH TX AZ SC	15,782 15,726 15,661 15,638 15,623 15,605 15,605 15,594 15,543 15,501	8.3 12.9 22.1 11.8 12.2 12.0 12.0 7.8 14.0 9.0	1,220 1,880 1,495 1,036 1,203 1,097 1,588 1,245 954 1,152	.6 1.5 2.1 .8 .9 .8 1.2 .6 .9	421 422 423 424 425 426 427 428 429 430	Clermont Greene Crawford, Cabarrus Chesapeake city, Belmont St. Tammany Parish Randolph Chesterfield	011 A C S O P A C S S	13,590 13,582 13,547 13,544 13,521 13,490 13,472 13,464 13,450 13,434	8.8 9.8 15.6 13.4 8.5 19.0 17.1 8.9 12.4 6.2	1,337 1,347 1,327 1,064 1,034 1,281 1,202 1,084 1,034 861	.9 1.0 1.5 1.0 .7 1.8 1.5 .7
371 372 373 374 375 376 377 378 379 380	Baldwin . Champaign . Delaware . Sheboygan . Bay . St. Charles . Merrimack . Ashtabula . Humboldt . Frederick .	AL IIN WI MO NH OH CA MD	15,498 15,321 15,246 15,237 15,188 15,174 15,026 14,925 14,880 14,879	15.2 8.8 12.7 14.6 13.6 6.9 12.5 14.9 12.3 9.6	1,229 1,692 1,491 1,776 1,320 1,499 1,915 1,454 1,351 1,494	1.2 1.0 1.2 1.7 1.2 .7 1.6 1.4 1.1	431 432 433 434 435 436 437 438 439 440	Kankakee Oswego Monroe Josephine Washington Washington Clearfield Windham Armstrong Carroll	IL PA OR TN AR PA PA MD	13,412 13,409 13,263 13,228 13,209 13,188 13,172 13,165 13,137	13.7 10.9 13.2 20.5 14.0 11.3 16.9 12.8 17.8	1,311 1,326 1,143 1,193 1,432 1,377 1,208 1,512 1,249 1,440	1.3 1.1 1.1 1.8 1.5 1.2 1.5 1.7
381 382 383 384 385 386 387 388 389 390	Allen Marathon Marathon Minnehaha Nevada Douglas Steuben Woodbury Jefferson Collin Catawba	OH WI SD CA OR NY IA MO TX NC	14,841 14,835 14,834 14,761 14,698 14,652 14,638 14,578 14,555 14,528	13.6 12.7 11.7 18.1 15.4 14.7 14.7 8.3 5.2 12.1	1,616 1,507 1,891 1,124 1,258 1,550 1,877 1,365 1,373 1,151	1.5 1.3 1.5 1.4 1.3 1.6 1.9 .8 .5	441 442 443 444 445 446 447 448 449 450	Blount Porter Potter Hampton city Florence Wood, Manitowoc Skagit Fond du Lac Tuscarawas	TN TX SC SS SS SS OH	13,097 13,095 13,084 13,080 13,982 12,973 12,960 12,857 12,852	14.8 9.9 13.2 9.6 11.2 14.9 16.0 15.5 14.1 15.1	1,152 1,133 1,474 913 985 1,389 1,532 1,256 1,681 1,401	1.3 .9 1.5 .7 .8 1.6 1.9 1.5 1.8
391 392 393 394 395 396 397 398 399 400	Portsmouth city Denton York. Aiken Chemung Taylor Yellowstone Gregg Calhoun St. Johns.	VA TX SC SC NY TX MT TX AL FL	14,505 14,498 14,476 14,458 14,435 14,414 14,381 14,361 14,343 14,340	14.0 5.1 10.7 11.5 15.2 12.2 12.4 13.4 12.4 16.4	1,097 1,466 1,138 972 1,568 1,737 1,425 1,543 1,194 1,236	1.1 .5 .8 .8 1.6 1.5 1.2 1.4 1.0	451 452 453 454 455 456 457 458 459 460	Cochise Ontario Canyon Steams Iredell Indiana Tom Green La Crosse Moore Rockingham	AZ YD MN PA YS SC N	12,838 12,799 12,779 12,760 12,732 12,664 12,660 12,651 12,623 12,559	12.9 13.3 13.6 10.6 13.4 14.0 12.9 12.8 20.9 14.5	915 1,329 1,426 1,412 1,099 1,104 1,370 1,577 931 1,107	.9 1.4 1.5 1.2 1.2 1.4 1.6 1.5
401 402 403 404 405 406 407 408 409 410	Jasper La Porte Sebastian Lafayette Parish Androscoggin Monroe Mesa Allegany Anoka Vermilion	MO IN AR LA ME MI CO MD MN IL	14,300 14,241 14,228 14,207 14,201 14,140 14,095 14,088 14,076 13,987	15.7 13.2 14.1 8.4 13.6 10.5 14.6 18.8 5.6 15.9	1,545 1,218 1,562 1,387 1,719 1,328 1,373 1,402 1,137 1,441	1.7 1.1 1.5 .8 1.6 1.0 1.4 1.9 .5	461 462 463 464 465 466 467 468 469 470	Tippecanoe Monroe Harrison Warren Dona Ana Jefferson Medina Dubuque Scioto Fairfield	ZH\$ZXXJAJI	12,545 12,541 12,456 12,395 12,390 12,387 12,273 12,248 12,188 12,131	9.5 15.9 17.9 13.4 8.8 11.1 9.8 14.1 15.1 11.4	1,448 716 1,268 1,208 1,064 1,454 1,261 1,551 1,421 1,296	1.1 .9 1.8 1.3 .8 1.3 1.0 1.8 1.8
411 412 413 414 415 416 417 418 419 420	Jefferson McLean Washington Linn Weld St Lawrence Yolo Portage Buchanan Okaloosa	OH RI OR CO NY CA OH MO FL	13,919 13,856 13,835 13,820 13,814 13,810 13,751 13,726 13,721 13,697	17.4 10.5 12.4 14.8 10.3 12.2 9.6 9.5 16.5 9.2	1,083 1,721 1,308 1,234 1,466 1,495 1,372 1,195 1,767 991	1.4 1.3 1.2 1.3 1.1 1.3 1.0 .8 2.1	471 472 473 474 475 476 477 478 479 480	Wayne Cattaraugus. Miami Davis Cleveland Floyd, Sussex Lake Kent Morgan	OHYOTKA SZA CE A	12,125 12,046 12,030 12,022 12,017 11,995 11,956 11,948 11,937	11.8 14.2 12.8 6.2 6.8 14.7 9.0 22.6 10.4 11.7	1,389 1,320 1,209 941 1,085 1,027 1,360 851 1,195 1,033	1.4 1.6 1.3 .5 .6 1.3 1.0 1.6 1.0

Table 8-4.

County Estimates of the Elderly Population by Age for Counties With 10,000 or More Elderly: 1991 —Continued

Donk	Country	Ctata	65 year		85 year		Donk	Country	Ctoto	65 year ove		85 years ove	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
481 482 483 484	Fort Bend	TX HI WV MD	11,930 11,896 11,860 11,854	4.9 11.3 15.4 6.1	1,003 1,028 1,054 967	.4 1.0 1.4 .5	528 529 530	Muskogee	OK WI KY	10,895 10,883 10,872	15.9 14.2 12.9	1,193 1,354 1,043	1.7 1.8 1.2
485 486 487 488 489 490	Bowie, Putnam Clallam Cleveland Adams Tolland	TX FL WA NC IL CT	11,838 11,834 11,816 11,775 11,769 11,745	14.5 17.9 20.3 13.7 17.7 9.1	1,208 776 1,067 1,017 1,553 1,044	1.5 1.2 1.8 1.2 2.3	531 532 533 534 535 536 537	Chittenden. Mercer Clayton Clark Allegan Carbon Eau Claire	VT WV GA IN MI PA WI	10,845 10,841 10,828 10,814 10,775 10,756 10,748	8.2 16.7 5.8 12.2 11.7 18.7 12.5	1,210 1,029 814 1,063 1,090 876 1,254	.9 1.6 .4 1.2 1.2 1.5
491 492 493 494	Alexandria city	VA NY CA OH	11,727 11,720 11,715 11,695	10.4 14.2 10.1 10.3	1,426 1,215 857 1,226	1.3 1.5 .7 1.1	538 539 540	Anderson	TN TN SC	10,723 10,721 10,697	15.5 10.2 12.4	803 1,012 891	1.2 1.0 1.0
495 496 497 498 499 500	Lauderdale Benton Muskingum Dodge Robeson Newport.	AL WA OH WI NC RI	11,613 11,606 11,548 11,530 11,504 11,461	14.4 10.0 14.0 14.9 10.8 13.0	1,056 933 1,295 1,486 903 1,209	1.3 .8 1.6 1.9 .8	541 542 543 544 545 546 547	Johnston	NO GA GOH SY Y	10,673 10,660 10,634 10,603 10,580 10,544 10,516	12.8 9.1 10.8 13.8 14.2 18.3 11.6	792 1,143 873 975 1,275 1,119 1,069	.9 1.0 .9 1.3 1.7 1.9
501 502 503 504	Jefferson	AR TX PA NH	11,432 11,409 11,389 11,349	13.4 19.3 9.1 11.0	1,217 810 1,120 1.091	1.4 1.4 .9 1.1	548 549 550	Rutherford	TN ND OR	10,496 10,484 10,475	8.5 10.1 17.2	1,032 1,448 871	.8 1.4 1.4
505 506 507 508 509 510	Cowlitz Lenawee Aroostook Daviess Williamson, Herkimer	WA MI ME KY TX NY	11,323 11,305 11,305 11,294 11,273 11,252	13.4 12.2 12.9 12.9 7.7 17.0	1,069 1,169 1,151 1,094 1,282 1,177	1.3 1.3 1.3 1.2 .9	551 552 553 554 555 556 557	Santa Fe. Hunterdon Johnson Columbia Washington McCracken Franklin	NM NJ TX NY WI KY MA	10,393 10,385 10,339 10,332 10,328 10,319 10,318	10.2 9.6 10.5 16.4 10.5 16.3 14.7	876 1,038 1,177 1,164 1,156 1,049 1,190	.9 1.0 1.2 1.9 1.2 1.7
511 512 513 514	Madera	CA TX TX OR	11,247 11,233 11,231 11,111	12.1 8.0 9.3 13.8	976 1,124 831 777	1.1 .8 .7 1.0	558 559 560	Sullivan	NY MS IN	10,271 10,261 10,257	14.7 13.5 13.8	919 1,120 1,059	1.3 1.5 1.4
515 516 517 518 519 520	Lynchburg city Pottawattamie Beaufort Adams Pitt Mendocino.	VA IA SC PA NC CA	11,108 11,097 11,067 11,040 11,035 10,983	16.7 13.4 12.4 13.8 10.0 13.5	1,414 1,251 658 1,299 909 991	2.1 1.5 .7 1.6 .8 1.2	561 562 563 564 565 566 567	Houston Reno Grays Harbor Montgomery Columbia. Marshall St. Landry Parish	AL KS NY PA AL LA	10,251 10,211 10,203 10,189 10,176 10,170 10.080	12.4 16.3 15.8 19.6 16.0 14.2	883 1,293 965 1,139 958 924 868	1.1 2.1 1.5 2.2 1.5 1.3
521 522 523 524	Wayne	IN TN NC SC	10,967 10,965 10,961 10,959	15.2 13.9 10.3 11.3	1,222 1,262 840 961	1.7 1.6 .8 1.0	568 569 570	Cascade	MT VA NC	10,080 10,076 10,068 10,061	12.5 12.8 18.8 13.2	1,058 997 803	1.3 1.9 1.1
524 525 526 527	Roanoke	VA MN MS	10,939 10,936 10,935 10,925	13.7 10.0 9.3	1,220 1,550 756	1.5 1.4 .6	571 572 573	Franklin Otter Tail Cullman	MO MN AL	10,011 10,006 10,001	12.2 19.5 14.6	1,059 1,394 911	1.3 2.7 1.3

Source: U.S. Bureau of the Census, Population Division, Estimates of the Population of Counties, by Age, Sex, and Race: 1991, PE-9, November 1993.

Table 8-5.
County Estimates of the Elderly Population by Age for Counties With 20 Percent or More Elderly: 1991

		0	65 years over		85 years		Б		0: :	65 years		85 years ove	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
1 2 3 4 5 6 7 8 9	Kalawao Llano Charlotte. Highlands Pasco Sarasota. Sierra Citrus Hernando Keweenaw	HI TX FL FL FL NM FL MI	45 4,015 39,357 23,346 92,474 91,802 3,218 30,405 32,611 516	34.6 34.2 33.8 33.3 32.4 32.3 31.9 31.3 30.7 30.2	7 341 2,829 1,667 6,918 9,076 295 1,969 1,678	5.4 2.9 2.4 2.4 3.2 2.9 2.0 1.6 1.8	61 62 63 64 65 66 67 68 69 70	Gentry Eddy Bedford city Clifton Forge city Roscommon Jewell Cloud Boyd Northumberland Sullivan.	SSASSESSOSSOSSOSSOSSOSSOSSOSSOSSOSSOSSOSSOS	1,730 738 1,578 1,191 5,140 1,033 2,719 688 2,688 1,577	25.4 25.2 25.2 25.2 25.2 25.1 25.0 25.0 25.0 25.0	306 115 257 190 281 141 481 113 208 209	4.5 3.9 4.1 4.0 1.4 3.4 4.4 4.1 1.9 3.3
11 12 13 14 15 16 17 18 19 20	McIntosh. Elk Baxter Pawnee Smith Hickory Republic Manatee McPherson Hamilton	ND KS AR NE KS MO KS FL SD TX	1,150 957 9,360 965 1,353 2,153 1,801 60,795 878 2,091	30.0 29.9 29.4 28.7 28.3 28.2 28.1 27.9 27.7	161 145 754 135 256 187 282 6,156 108 299	4.2 4.5 2.4 4.0 5.4 2.4 4.4 2.8 3.4 4.0	71 72 73 74 75 76 77 78 79	Polk Pierce Bosque Kerr Wells Decatur Haskell Lee Cheyenne Miner	ND XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	3,636 1,234 3,764 9,163 1,399 962 1,661 85,696 808 794	25.0 24.9 24.8 24.8 24.8 24.7 24.7 24.6 24.6	408 200 436 916 207 179 197 6,117 106 125	2.8 4.0 2.9 2.5 3.7 4.6 2.9 1.8 3.2 3.9
21 22 23 24 25 26 27 28 29 30	Osborne Lake Martin Iron Hooker Furnas Sharp Divide Indian River Nelson	KS FL FL MI NE NE AR ND FL ND	1,361 43,392 28,358 3,575 210 1,548 3,968 756 25,088 1,157	27.5 27.5 27.4 27.3 27.3 27.3 27.3 27.2 27.2	230 3,515 2,040 314 36 294 335 93 1,757 201	4.6 2.2 2.0 2.4 4.7 5.2 2.3 3.4 1.9 4.7	81 82 83 84 85 86 87 88 89 90	Gillespie Traverse Ringgold Harrison Alcona Iron Greer Cedar Mason Palm Beach	TX MN MO MI WI OK MO TX FL	4,297 1,064 1,320 2,072 2,512 1,526 1,568 2,954 818 214,992	24.6 24.5 24.5 24.5 24.5 24.5 24.5 24.4 24.4	559 150 186 299 193 160 243 323 112 19,181	3.2 3.5 3.4 3.5 1.9 2.6 3.8 2.7 3.3 2.2
31 32 33 34 35 36 37 38 39 40	Webster	NE TX KS TX KS TX KS IA KS	1,133 1,047 1,159 1,215 1,856 1,072 1,139 593 1,858 931	26.8 26.8 26.7 26.7 26.6 26.6 26.4 26.4 26.4	184 128 149 153 293 145 133 95 297 175	4.4 3.3 3.4 4.2 3.6 3.1 4.2 4.2 5.0	91 92 93 94 95 96 97 98 99	Jerauld . Gogebic . Harmon . Clark . Garden . Griggs . Garfield . Putnam . Taylor . Grant .	SEKS SEED SEED SEED SEED SEED SEED SEED	585 4,391 902 573 574 779 533 1,220 1,718 1,508	24.3 24.3 24.3 24.3 24.3 24.3 24.3 24.2 24.2	85 466 132 93 89 103 82 160 248 225	3.5 2.6 3.6 3.9 3.8 3.2 3.7 3.2 3.5 3.6
41 42 43 44 45 46 47 48 49 50	Franklin Foard Motley Thayer Pinellas. Lancaster Coleman Izard Mercer Donley	NE TX NE FL VA TX AR MO TX	1,042 456 384 1,731 225,437 2,857 2,453 2,997 972 922	26.4 26.2 26.2 26.1 26.1 26.1 26.1 26.0 26.0	171 60 49 296 27,857 312 323 288 128 111	4.3 3.4 3.3 4.5 3.2 2.9 3.4 2.5 3.4 3.1	101 102 103 104 105 106 107 108 109	Russell	KSE OR NE NE NE AZ TX SD	1,895 908 4,749 2,404 2,378 4,512 1,655 26,892 519 1,408	24.2 24.2 24.2 24.0 24.0 24.0 24.0 24.0	223 120 276 358 376 534 161 1,873 56 231	2.8 3.2 1.4 3.6 3.8 2.8 2.3 1.7 2.6 3.9
51 52 53 54 55 56 57 58 59 60	Dickens Hutchinson Sabine Coke Greenwood Rush Worth Prairie Lincoln Flagler	TX SD TX TX KS KS MO MT MN FL	640 2,107 2,487 877 2,027 980 628 344 1,725 7,896	25.8 25.8 25.7 25.7 25.6 25.6 25.5 25.5 25.4 25.4	69 321 179 122 307 126 109 29 265 345	2.8 3.9 1.8 3.6 3.9 3.3 4.4 2.1 3.9 1.1	111 112 113 114 115 116 117 118 119 120	Collingsworth Delta Knox Calhoun Big Stone Comanche Menard Jefferson Van Buren Trego	TX TXE IAN TXX NE AKS	844 1,148 2,243 2,761 1,483 3,165 530 2,068 3,395 858	23.9 23.9 23.9 23.9 23.9 23.8 23.8 23.8 23.8	118 144 347 402 252 406 72 278 238 108	3.3 3.0 3.7 3.5 4.1 3.1 3.2 3.2 1.7 3.0

Table 8-5.

County Estimates of the Elderly Population by Age for Counties With 20 Percent or More Elderly: 1991 —Continued

		0	65 years over		85 years ove				0	65 years		85 years ove	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
121 122 123 124 125 126 127 128 129 130	Hyde. Burke. Marion Johnson Linn Stafford. Nuckolls Sheridan. Fayette Aitkin	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	396 667 3,041 1,116 3,294 1,232 1,360 495 4,720 2,969	23.8 23.7 23.7 23.7 23.7 23.6 23.6 23.6 23.6 23.6	59 75 468 163 463 140 211 45 553 299	3.5 2.7 3.7 3.5 3.3 2.7 3.7 2.1 2.8 2.4	181 182 183 184 185 186 187 188 189	McCook Cottonwood Lake Delta San Augustine Collier Bon Homme Ellsworth Dade Morris	SD MN CA CTX FL SD KS MO KS	1,283 2,823 11,948 4,893 1,773 36,119 1,583 1,474 1,680 1,415	22.7 22.6 22.6 22.6 22.6 22.6 22.5 22.5 22.5	195 440 851 512 203 2,329 240 228 251 181	3.4 3.5 1.6 2.4 2.6 1.5 3.4 3.5 3.4 2.9
131 132 133 134 135 136 137 138 139 140	Edwards. Shelby Chase. Towner Adair. Ocean St. Clair Phillips Harper San Saba	KS MS ND ND NS NS NS NS NS NS NS NS NS NS NS NS NS	862 1,616 687 821 1,982 102,901 1,961 1,518 1,643 1,218	23.5 23.5 23.5 23.5 23.5 23.5 23.4 23.4 23.4	127 268 107 108 288 9,108 256 247 264 168	3.5 3.9 3.7 3.1 3.4 2.1 3.0 3.8 3.8	191 192 193 194 195 196 197 198 199 200	Woods Covington city. Swift Norman Kiowa Knox Sac. Pope Sumter Kent	OK VA MN MN OK TX MN FL TX	2,023 1,568 2,371 1,760 2,505 1,063 2,708 2,400 7,168 217	22.5 22.4 22.4 22.4 22.3 22.3 22.3 22.3 22.3	287 121 304 273 342 146 421 323 406 23	3.2 1.7 2.9 3.5 3.1 3.1 3.5 3.0 1.3 2.4
141 142 143 144 145 146 147 148 149	Audubon. Hardeman Logan. Day. Lac qui Parle Dundy. Schuyler Clay Eastland Marshall	IA TXD SD MN NE MO KS XX KS	1,691 1,155 648 1,608 2,026 584 969 2,098 4,223 2,665	23.3 23.3 23.2 23.2 23.1 23.1 23.1 23.1	253 153 58 249 303 82 123 362 556 411	3.5 3.1 2.1 3.6 3.5 3.2 2.9 4.0 3.0 3.6	201 202 203 204 205 206 207 208 209 210	Barnstable Daniels Montague Hettinger Garfield. Wright Garland Ransom Wilson Wheeler	MA MT TX ND WA IA AR ND KS TX	41,805 476 3,848 733 495 3,149 16,584 1,308 2,229 1,273	22.3 22.3 22.3 22.3 22.2 22.2 22.2 22.2	4,332 50 506 59 53 457 1,417 203 256 198	2.3 2.9 1.8 2.4 3.2 1.9 3.4 2.5 3.5
151 152 153 154 155 156 157 158 159 160	Alfalfa	OK MI NE MO OK CO MO SD TX VA	1,473 2,101 1,272 1,371 1,276 619 1,097 978 424 1,919	23.1 23.0 23.0 23.0 23.0 23.0 23.0 22.9 22.9 22.9	191 204 202 203 173 66 159 153 68 240	3.0 2.2 3.7 3.4 3.1 2.5 3.3 3.6 3.7 2.9	211 212 213 214 215 216 217 218 219 220	McCulloch Linn Grundy Anderson Middlesex Henderson Custer Jefferson Marion Mitchell	TX KS MO KS VA NC NE OK FL KS	1,862 1,864 2,347 1,723 1,959 15,661 2,713 1,541 44,662 1,589	22.2 22.2 22.2 22.2 22.1 22.1 22.1 22.1	253 280 343 249 205 1,495 405 207 2,753 259	3.0 3.3 3.2 3.2 2.3 2.1 3.3 3.0 1.4 3.6
161 162 163 164 165 166 167 168 169 170	Ness. Hughes. Marshall Hamlin Volusia Gregory Ellis DeBaca Valley Benton	KSK OSD FLD KSK SEE SO	917 2,957 2,529 1,142 87,117 1,206 1,011 527 1,149 3,224	22.9 22.9 22.9 22.8 22.8 22.8 22.8 22.8	128 384 238 165 8,354 155 93 81 156 301	3.2 3.0 2.2 3.3 2.2 2.9 2.1 3.5 3.1 2.1	221 222 223 224 225 226 227 228 229 230	Montgomery Brown Grant Dewey Clark Adams Mitchell, Red River Kittson Dickey	IA KSD NOK SIA IA KX MX ND	2,633 2,441 759 1,203 952 1,038 2,395 3,116 1,255 1,320	22.0 22.0 22.0 22.0 22.0 22.0 22.0 22.0	398 397 68 182 113 137 405 438 184 222	3.3 3.6 2.0 3.3 2.6 2.9 3.7 3.1 3.2 3.7
171 172 173 174 175 176 177 178 179 180	Turner. LaMoure. Vilas. Marion Norton Deuel Burnet Greene. Childress Macon	SD ND WI AR KS NE TX IA TX NC	1,928 1,208 4,142 2,771 1,324 505 5,180 2,284 1,354 5,438	22.8 22.8 22.7 22.7 22.7 22.7 22.7 22.7	294 139 360 210 229 73 498 311 200 505	3.5 2.6 2.0 1.7 3.9 3.3 2.2 3.1 3.3 2.1	231 232 233 234 235 236 237 238 239 240	Pocahontas Trinity McIntosh Chariton Howard Armstrong Hamilton Marshall Aurora Fillmore	IA TX OK MO IA TX IL SD SD NE	2,068 2,509 3,700 1,986 2,172 422 1,858 1,042 664 1,554	21.9 21.9 21.9 21.9 21.9 21.9 21.9 21.9	306 226 304 262 322 59 230 153 125 238	3.2 2.0 1.8 2.9 3.2 3.1 2.7 3.2 4.1 3.4

Table 8-5.

County Estimates of the Elderly Population by Age for Counties With 20 Percent or More Elderly: 1991 —Continued

			65 years over		85 years				2 : .	65 years		85 years	
Rank	County	State	Number	Per- cent	Number	Per- cent	Rank	County	State	Number	Per- cent	Number	Per- cent
241 242 243 244 245 246 247 248 249 250	Rooks Brown Knox Fremont Faribault Sheridan Adams Burt Kinney Emmons	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	1,322 800 968 1,769 3,633 991 672 1,697 676 1,014	21.8 21.8 21.7 21.7 21.7 21.7 21.7 21.7 21.7 21.6	182 113 127 213 509 113 95 249 34 120	3.0 3.1 2.8 2.6 3.0 2.5 3.1 3.2 1.1 2.6	301 302 303 304 305 306 307 308 309 310	Hickman Foster White Chippewa Cleburne Moore, Tillamook Sheridan Faulk Galax city	XD=MRRCREDS	1,176 813 3,444 2,778 4,178 12,623 4,615 1,394 573 1,401	21.0 21.0 21.0 21.0 21.0 20.9 20.9 20.9 20.9 20.9	162 140 385 425 336 931 333 196 81 215	2.9 3.6 2.3 3.2 1.7 1.5 2.9 2.9 3.2
251 252 253 254 255 256 257 258 259 260	Macon Potter Lake Appanoose McHenry Barnes Yellow Medicine Kiowa Taney Barber	MO SMI IA ND ND MX KS KS	3,276 685 1,908 2,972 1,376 2,686 2,512 771 5,702 1,236	21.6 21.6 21.6 21.6 21.6 21.5 21.5 21.5	471 106 175 382 154 377 386 93 502 142	3.1 3.3 2.0 2.8 2.4 3.0 3.3 2.6 1.9 2.5	311 312 313 314 315 316 317 318 319 320	Ottawa Mitchell Harper Dickinson St. Lucie Pike Otoe Runnels Keokuk Gosper	KS TX O IA FL II NE X IA NE	1,172 1,630 825 3,183 32,529 3,660 2,988 2,325 2,430 420	20.9 20.9 20.9 20.9 20.9 20.9 20.9 20.9	179 176 98 367 1,913 482 502 314 347 58	3.2 2.3 2.5 2.4 1.2 2.8 3.5 2.8 3.0 2.9
261 262 263 264 265 266 267 268 269 270	Golden Valley	ND VA TX TX NE MO MO KS MT	427 1,179 883 988 791 2,269 1,595 4,041 719 673	21.5 21.4 21.4 21.4 21.4 21.4 21.3 21.3 21.3	49 124 130 105 93 328 228 596 108 89	2.5 2.2 3.2 2.5 3.1 3.1 3.2 2.8	321 322 323 324 325 326 327 328 329 330	San Juan, Lucas Morgan Clay Steele Redwood Baca Palo Alto Traill	WA AR MAR MAR MAR MAR MAR MAR MAR MAR MAR	2,218 1,903 3,244 3,746 487 3,589 948 2,202 1,812 1,668	20.9 20.8 20.8 20.8 20.8 20.8 20.8 20.8 20.8	167 269 356 374 43 528 111 344 310 155	1.6 2.9 2.3 2.1 1.8 3.1 2.4 3.2 3.6 1.9
271 272 273 274 275 276 277 278 279 280	Huerfano DeWitt Pacific Bottineau Greeley. Hill Wheeler Fannin Ozark Wheatland	CO TX WA ND NE TX OR TX MO MT	1,268 3,900 4,069 1,666 643 5,776 307 5,184 1,841 484	21.3 21.3 21.3 21.3 21.2 21.2 21.2 21.2	139 622 361 234 101 664 33 613 172 61	2.3 3.4 1.9 3.0 3.4 2.4 2.3 2.5 2.0	331 332 333 334 335 336 337 338 339 340	Mohave Nemaha Murray Real Stonewall Henry Fall River Briscoe Butler O'Brien	AZ KS MN TX TX MO SD TX IA	20,853 2,175 2,025 501 422 4,202 1,521 383 3,286 3,208	20.8 20.8 20.8 20.8 20.7 20.7 20.7 20.7 20.7	1,003 310 238 43 50 521 172 29 432 484	1.0 3.0 2.4 1.8 2.5 2.6 2.3 1.6 2.7 3.1
281 282 283 284 285 286 287 288 289 290	Guthrie	IA A E E E E E E E E E E E E E E E E E E	2,363 2,259 787 6,300 4,174 3,374 1,241 3,537 3,178 805	21.2 21.2 21.2 21.2 21.1 21.1 21.1 21.1	323 265 122 657 310 479 196 514 426 92	2.9 2.5 3.3 2.2 1.6 3.0 3.3 3.1 2.8 2.4	341 342 343 344 345 346 347 348 349 350	Broward Monroe. Clay Saline Colfax Polk Lane Shackelford Campbell Perkins.	FLA NCE NEE NEX NEX NEX NEX NEX NEX NEX NEX NE	266,547 1,694 1,505 2,601 1,903 6,569 479 687 400 666	20.7 20.7 20.6 20.6 20.6 20.6 20.6 20.6 20.6	26,049 253 119 425 274 540 74 88 36 91	2.0 3.1 1.6 3.4 3.0 1.7 3.2 2.6 1.9 2.8
291 292 293 294 295 296 297 298 299 300	Caldwell Pipestone Gasconade Keya Paha Phillips Fulton Douglas Sullivan. Harding. Worth	MO MN MO NE CO AR SD PA NIA	1,767 2,207 2,968 214 880 2,103 782 1,284 207 1,656	21.1 21.1 21.1 21.1 21.1 21.1 21.0 21.0	255 330 368 15 138 193 113 172 19 267	3.0 3.2 2.6 1.5 3.3 1.9 3.0 2.8 1.9 3.4	351 352 353 354 355 356 357 358 359 360	Decatur. Bourbon Deuel Kidder. Tyler Forest, Renville South Boston city Graham Ida	IA KS SD ND TX PA MX KS IA	1,685 3,064 928 673 3,470 982 3,614 1,406 721 1,701	20.6 20.6 20.6 20.5 20.5 20.5 20.5 20.5 20.5	267 413 119 63 303 87 506 200 110 257	3.3 2.8 2.6 1.9 1.8 1.8 2.9 2.9 3.1 3.1

Table 8-5.

County Estimates of the Elderly Population by Age for Counties With 20 Percent or More Elderly: 1991 —Continued

Rank	County	State	65 years and over 85 years and over		Rank	County	State	65 years and over		85 years and over			
Nank	County	State	Number	Per- cent	Number	Per- cent	Italik	County	State	Number	Per- cent	Number	Per- cent
361 362 363 364 365 366 367	Jefferson. Josephine. Saline Daviess Butler Logan Fillmore	WA OR IL MO NE KS MN	4,362 13,228 5,428 1,630 1,761 626 4,207	20.5 20.5 20.5 20.5 20.4 20.4 20.4	294 1,193 644 218 273 87 683	1.4 1.8 2.4 2.7 3.2 2.8 3.3	386 387 388 389 390	Mower Luna. Blanco Calhoun Franklin Cotton	MN NM TX IL IA OK	7,601 3,829 1,271 1,061 2,284	20.3 20.2 20.2 20.2 20.2 20.2	916 282 144 118 316	2.4 1.5 2.3 2.2 2.8
368 369 370	Cape May Fulton Renville	NJ KY ND	19,476 1,664 618	20.4 20.4 20.4	1,856 217 71	1.9 2.7 2.3	392 393 394 395	Delaware	OK MD MO VA	5,757 6,308 2,395 518	20.2 20.2 20.1 20.1	475 640 218 46	1.7 2.0 1.8 1.8
371 372 373 374 375 376	Hand Tillman Shelby Marquette Van Buren Gove	SD OK IA WI IA KS	884 2,102 2,708 2,569 1,583 670	20.4 20.4 20.4 20.4 20.4 20.4	130 287 395 225 195 87	3.0 2.8 3.0 1.8 2.5 2.7	396 397 398 399 400	Colorado. Wahkiakum. Musselshell. Las Animas. Kiowa	TX WA MT CO CO	3,681 677 835 2,733 328	20.1 20.1 20.1 20.1 20.1	443 68 69 332 36	2.4 2.0 1.7 2.4 2.2
376 377 378 379 380	Wibaux Grundy Dixon Cuming	MT IA NE NE	236 2,425 1,264 2,041	20.4 20.3 20.3 20.3 20.3	25 280 215 296	2.7 2.2 2.3 3.5 2.9	401 402 403 404 405	Northampton. Boone. Rock. Garvin Fergus	VA NE MN OK MT	2,612 1,336 1,964 5,318 2,484	20.1 20.1 20.0 20.0 20.0	272 187 273 625 328	2.1 2.8 2.8 2.4 2.6
381 382 383 384 385	Clallam Franklin Burnett Schuylkill Rice	WA IL WI PA KS	11,816 8,198 2,669 30,988 2,116	20.3 20.3 20.3 20.3 20.3	1,067 885 255 2,412 294	1.8 2.2 1.9 1.6 2.8	406 407 408 409 410	Edwards Cavalier Marion Presque Isle Jackson	IL ND TX MI MN	1,488 1,176 1,991 2,780 2,332	20.0 20.0 20.0 20.0 20.0 20.0	170 163 165 236 351	2.3 2.8 1.7 1.7 3.0

Source: U.S. Bureau of the Census, Population Division, Estimates of the Population of Counties, by Age, Sex, and Race: 1991, PE-9, November 1993.

Table 8-6.

Marital Status of Persons 15 Years and Over by Age, Sex, Race, Hispanic Origin, and Region: March 1993

			All races				White				
Marital status, sex and region	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	
UNITED STATES											
Male											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	94,854 28,775 54,199 2,634 1,803 831 2,468 6,778 38,021	12,832 568 9,568 284 136 148 1,830 582 2,980	8,114 389 6,316 186 107 79 765 458 1,612	3,925 157 2,826 79 23 55 759 104 1,020	792 23 426 19 5 14 305 20 348	80,755 22,738 48,386 1,919 1,276 642 1,954 5,759 30,451	11,443 500 8,752 199 70 128 1,515 478 2,493	7,187 331 5,735 119 55 64 623 378 1,332	3,553 146 2,622 66 15 51 639 80 865	703 22 395 14 - 14 253 20 295	
Female											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	102,400 23,534 54,199 3,569 2,837 732 11,214 9,883 44,631	18,038 795 7,319 292 172 121 8,578 1,054 10,427	10,249 376 5,359 178 124 54 3,607 728 4,711	5,992 297 1,777 102 45 57 3,548 269 4,114	1,798 122 182 13 4 9 1,424 57 1,603	86,045 17,660 48,340 2,328 1,808 520 9,512 8,205 35,377	16,057 707 6,755 208 111 96 7,499 887 9,093	9,023 317 4,913 117 77 39 3,076 601 3,994	5,391 280 1,669 83 32 51 3,129 230 3,639	1,643 111 172 8 2 6 1,295 57 1,463	
NORTHEAST											
Male											
Total Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried	19,115 6,328 10,597 508 358 150 583 1,099 8,010	2,759 196 1,975 59 27 33 420 108 725	1,746 141 1,309 38 23 16 178 80 399	867 46 593 15 3 11 190 23 259	164 9 73 6 1 6 52 6	16,802 5,300 9,654 375 275 100 503 970 6,773	2,554 182 1,861 44 20 24 373 93 648	1,600 129 1,216 27 18 9 158 70 357	811 43 573 11 2 10 165 18 226	143 9 72 6 - 6 50 6 65	
Female											
Total Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	21,177 5,519 10,597 847 696 151 2,598 1,615 9,732	4,061 293 1,518 68 43 26 1,991 190 2,474	2,238 136 1,104 48 32 16 818 132 1,086	1,406 115 391 18 9 830 51 996	417 42 23 2 1 1 343 6 392	18,421 4,442 9,667 579 479 100 2,329 1,404 8,175	3,745 266 1,435 48 23 24 1,831 166 2,263	2,048 116 1,035 31 17 14 752 115 983	1,305 108 377 14 5 9 761 45 914	392 42 23 2 1 1 318 6 366	

Table 8-6.

Marital Status of Persons 15 Years and Over by Age, Sex, Race, Hispanic Origin, and Region:

March 1993—Continued

			Black			Hispanic origin ¹					
Marital status, sex and region	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	
UNITED STATES											
Male											
Total. Never married Married, spouse present Married, spouse absent. Separated Other Widowed Divorced Unmarried.	10,442 4,750 3,865 566 491 75 426 836 6,012	1,081 63 611 75 64 11 252 80 395	742 52 458 58 51 8 116 58 226	265 10 128 12 8 3 94 21	73 1 25 5 5 - 42 - 43	7,974 2,962 3,966 465 190 276 127 454 3,543	508 20 348 28 18 10 87 25	345 14 244 21 15 6 49 18 81	140 4 91 6 2 4 33 7 44	23 2 14 1 - 1 5 1 8	
Female											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	12,495 4,867 3,720 1,100 962 138 1,401 1,408 7,676	1,579 68 417 73 58 15 877 144 1,089	960 44 332 50 44 5 426 109 579	482 14 77 18 12 6 338 35 387	137 11 8 5 2 3 113 - 124	8,047 2,285 4,080 517 390 127 525 641 3,451	715 59 265 26 20 5 315 50 424	462 25 213 21 18 2 164 39 228	193 25 44 5 2 3 113 6 144	61 10 8 - - 38 4 52	
NORTHEAST											
Male											
Total Never married Married, spouse present Separated Other Widowed Divorced Unmarried	1,707 817 610 103 81 22 67 110	167 14 90 12 7 6 36 16 65	125 11 80 8 4 4 16 10 37	39 3 10 3 1 2 18 5	3 - 1 1 - 2 - 2	1,104 444 499 68 43 25 21 71 537	73 5 41 10 6 3 13 4 22	50 3 28 7 6 1 8 4 15	19 2 11 2 - 2 4 - 6	4 - 2 1 - 1 1 -	
Female											
Total Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	2,134 902 585 240 206 35 219 187 1,308	250 20 69 19 19 - 124 19 162	146 14 56 15 15 - 47 14 75	82 6 13 4 4 - 54 5 65	23 - - - - 23 - 23	1,315 433 497 168 136 32 82 135 651	107 11 28 6 5 1 50 12 73	66 3 22 4 3 1 28 10 41	31 6 4 2 2 - 17 3 25	9 2 2 - - 5 - 7	

Table 8-6.

Marital Status of Persons 15 Years and Over by Age, Sex, Race, Hispanic Origin, and Region:

March 1993—Continued

			All ======		-	White					
			All races					White			
Marital status, sex and region	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	
MIDWEST											
Male											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	22,581 6,983 12,991 465 349 116 518 1,625 9,126	2,975 140 2,247 58 40 19 404 126 670	1,878 77 1,517 37 32 6 148 98 323	875 57 606 13 5 9 176 23 255	222 6 123 8 4 4 80 5	20,124 5,790 12,130 343 245 98 427 1,435 7,652	2,717 124 2,115 30 12 19 344 104 572	1,708 61 1,424 14 8 6 131 78 270	817 57 579 12 3 9 148 21 226	192 6 112 4 - 4 65 5 76	
Female											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	24,406 5,757 12,991 616 498 118 2,640 2,401 10,799	4,218 190 1,688 53 22 32 2,057 230 2,477	2,371 72 1,233 27 13 14 882 157 1,111	1,403 74 396 26 8 17 854 53 981	444 44 58 1 1 - 321 19 385	21,452 4,536 12,151 414 315 99 2,315 2,036 8,886	3,884 179 1,609 40 12 29 1,858 199 2,236	2,172 70 1,176 19 5 14 772 134 976	1,296 74 378 20 6 14 779 45 898	416 35 54 1 1 - 307 19 361	
SOUTH											
Male											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried	32,507 9,230 19,003 986 696 290 871 2,417 12,518	4,410 122 3,357 101 45 55 632 198 952	2,752 90 2,179 67 34 33 257 159 506	1,407 28 1,033 30 10 19 281 36 345	251 4 145 4 1 3 94 3 101	25,957 6,432 16,404 644 414 229 608 1,869 8,909	3,755 91 2,971 68 19 49 478 148 717	2,328 67 1,907 43 14 29 187 124 378	1,220 21 934 21 5 17 224 20 264	207 4 130 3 - 3 67 3 74	
Female											
Total. Never married Married, spouse present Married, spouse absent. Separated Other Widowed Divorced Unmarried	35,461 7,548 19,003 1,381 1,136 244 4,037 3,492 15,077	6,291 208 2,584 125 73 51 3,036 339 3,583	3,627 111 1,891 72 53 18 1,315 239 1,665	2,061 75 641 44 18 25 1,211 91 1,377	603 22 52 9 2 8 510 9 541	27,842 4,835 16,371 762 591 172 3,202 2,672 10,709	5,314 170 2,316 83 45 38 2,496 249 2,915	3,011 81 1,679 43 32 11 1,038 170 1,289	1,779 67 590 35 13 22 1,017 70 1,153	524 22 48 4 - 4 441 9 472	

Table 8-6.

Marital Status of Persons 15 Years and Over by Age, Sex, Race, Hispanic Origin, and Region: March 1993—Continued

			Black			Hispanic origin ¹					
Marital status, sex and region	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	
MIDWEST											
Male											
Total Never married Married, spouse present Separated Other Widowed Divorced Unmarried	2,051 1,018 674 108 101 7 83 167 1,269	225 14 111 28 28 - 57 14 86	144 14 75 23 23 - 18 14 46	54 - 25 1 1 - 28 - 28	26 - 11 4 - 12 - 12	599 224 298 36 8 28 4 38 266	31 4 21 - - 3 2 10	23 3 16 - - 2 1 7	8 1 4 - - 1 2 3	1 - 1 - - - -	
Female	,										
Total Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried	2,554 1,089 646 193 177 16 306 319 1,715	305 9 65 13 10 3 191 27 227	177 - 45 7 7 - 106 19 125	100 - 16 6 3 3 71 8 79	28 9 4 - 14 - 23	580 178 298 28 22 6 29 48 255	42 2 13 3 1 2 21 3 25	33 1 12 1 1 - 16 2 19	8 1 1 2 - 2 4 - 5	1 - - - - 1 1	
SOUTH	,										
Male											
Total Never married	5,780 2,534 2,196 312 270 42 247 491 3,272	605 31 359 32 26 5 142 42 214	404 23 263 24 20 4 69 26 118	158 7 82 7 6 2 46 16 69	42 1 14 1 1 - 26 - 27	2,535 840 1,349 172 61 111 48 126 1,014	220 5 167 8 6 2 34 7 46	143 4 111 6 4 2 17 5 26	67 - 50 2 2 - 13 1	11 1 6 - - 3 1 5	
Female											
Total Never married Married, spouse present Separated Other Widowed Divorced Unmarried	6,807 2,542 2,143 585 524 62 782 754 4,078	909 38 246 37 27 10 503 86 627	565 30 196 23 20 4 250 66 346	269 8 46 9 5 3 187 20 215	76 - 4 5 2 3 66 - 66	2,545 611 1,409 116 97 19 206 202 1,019	308 26 123 8 6 1 132 19	185 9 97 8 6 1 57 14 80	90 10 22 - - 55 3 68	33 7 4 - - 19 2 29	

Table 8-6.

Marital Status of Persons 15 Years and Over by Age, Sex, Race, Hispanic Origin, and Region: March 1993—Continued

			All races			White					
Marital status, sex and region	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	
WEST											
Male											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	20,651 6,234 11,609 675 399 275 497 1,637 8,368	2,688 110 1,989 66 24 42 374 150 633	1,738 81 1,310 44 19 25 181 121 384	776 25 595 21 5 16 113 22 161	174 4 84 1 - 1 79 6 89	17,872 5,216 10,198 558 342 215 416 1,484 7,117	2,417 103 1,806 57 20 37 320 133 555	1,551 74 1189 35 15 20 148 106 327	705 25 536 21 5 16 101 21 148	162 4 81 1 - 1 71 6 80	
Female											
Total Never married Married, spouse present Separated Other Widowed Divorced Unmarried	21,356 4,709 11,609 725 507 218 1,939 2,375 9,023	3,468 104 1,529 46 34 12 1,494 295 1,894	2,012 57 1,131 32 25 6 593 200 850	1,122 34 349 14 8 5 652 73 759	334 13 49 - - 249 23 285	18,330 3,847 10,151 573 423 150 1,666 2,094 7,607	3,114 93 1,396 37 32 5 1,315 274 1,681	1,792 50 1,024 23 23 - 514 182 745	1,011 32 325 14 8 5 572 70 673	311 12 47 - - 229 23 263	

Table 8-6.

Marital Status of Persons 15 Years and Over by Age, Sex, Race, Hispanic Origin, and Region:

March 1993—Continued

			Black			Hispanic origin ¹					
Marital status, sex and region	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	Total, 15 years and over	65 years and over	65 to 74 years	75 to 84 years	85 years and over	
WEST											
Male											
Total. Never married Married, spouse present Married, spouse absent Separated Other Widowed Divorced Unmarried.	904 380 385 43 39 4 28 68 476	84 5 51 3 3 - 17 8 30	69 5 40 3 - 13 8 26	13 - 11 - - 2 - 2	2 2 - 2	3,736 1,455 1,820 189 78 112 54 219 1,727	183 6 118 10 5 5 37 12 54	129 4 88 8 5 3 21 8 33	46 1 25 2 - 2 14 4	7 1 5 - - 1 - 2	
Female											
Total Never married	1,000 333 345 81 56 25 93 148 574	115 2 38 4 2 2 59 12 73	73 - 35 4 2 2 23 10 34	31 - 3 - - 26 2 28	11 2 - - - 10 - 11	3,607 1,062 1,876 206 136 70 207 256 1,526	258 21 101 9 7 1 113 16 149	177 12 82 8 7 - 62 13 88	63 8 17 1 - 1 37 1 46	18 1 2 - - 14 1 16	

¹Hispanic origin may be of any race.

Source: U.S. Bureau of the Census, unpublished tables consistent with *Marital Status and Living Arrangements: March 1993*, Current Population Reports, Series P20-478, U.S. Government Printing Office, Washington, DC, May 1994, table 1.

Appendix A.

Definitions and Explanations

Residence inside and outside metropolitan areas. The population residing in metropolitan areas (MA's) constitutes the metropolitan population. MA's are defined by the Office of Management and Budget for use in presentation of statistics by agencies of the Federal Government. An MA is a geographic area consisting of a large population nucleus, together with adjacent communities which have a high degree of economic and social integration with that nucleus. The definitions specify a boundary around each large city so as to include most or all its suburbs. Entire counties form the MA building blocks, except in New England where cities and towns are used.

An area qualifies for recognition as an MA if (1) it includes a city of at least 50,000 population, or (2) it includes a city of at least 50,000 population with a total metropolitan population of at least 100,000 (75,000 in New England). In addition to the county containing the main city or urbanized area, an MA may include other counties having strong commuting ties to the central county. If specified conditions are met, certain large MA's are designated as consolidated MA's (CMA's) and divided into component primary MA's (PMA's).

In July 1985, the CPS began carrying the metropolitan statistical area definitions announced by the Office of Management and Budget on June 30, 1984. Figures published from the CPS in the early 1980's and throughout most of the 1970's referred to metropolitan areas as defined on the basis of the 1970 census. Since there are important differences in the population classified as metropolitan using the 1970 and 1984 definitions, comparisons should be avoided.

The new CPS metropolitan estimates have consistently been higher than independent estimates of the metropolitan population prepared by the Census Bureau; the new CPS estimates of population outside metropolitan areas have been lower than the independent estimates. The apparent overestimation of metropolitan population in the CPS relative to the Census Bureau's independent estimates should be taken into account when using the data.

Age. The age classification is based on the age of the person at his or her last birthday. The adult universe (i.e., population of marriageable age) now comprises persons 15 years and over. Prior to 1980 the adult universe was 14 years old and over.

Race. In most cases the population is divided into four groups on the basis of race: White; Black; American Indian, Eskimo and Aleut; and Asian and Pacific Islanders. In some tables and charts, the term "Other races" is used. This last category includes any other race except White and Black.

Persons of Hispanic origin.

Persons of Hispanic origin in this report were determined on the basis of a question that asked for self-identification of the person's origin or descent. Respondents were asked to select their origin (or the origin of some other household member) from a "flash card" listing ethnic origins. Persons of Hispanic origin, in particular, were those who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. Persons of Hispanic origin may be of any race.

Marital status. The marital status classification identifies four major

categories: never married, married, widowed, and divorced. These terms refer to the marital status at the time of the enumeration.

The category "married" is further divided into "married, spouse present," "separated," and "other married, spouse absent." A person was classified as "married, spouse present" if the husband or wife was reported as a member of the household, even though he or she may have been temporarily absent on business or on vacation, visiting, in a hospital, etc., at the time of the enumeration. Persons reported as separated included those with legal separations, those living apart with intentions of obtaining a divorce, and other persons permanently or temporarily separated because of marital discord. The group "other married, spouse absent" includes married persons living apart because either the husband or wife was employed and living at a considerable distance from home, was serving away from home in the Armed Forces, had moved to another area, or had a different place of residence for any other reason except separation as defined above.

Household. A household consists of all the persons who occupy a housing unit. A house, an apartment or other group of rooms, or a single room is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live and eat with any other persons in the structure and there is direct access from the outside or through a common hall.

A household includes the related family members and all the unrelated persons, if any, such as lodgers, foster children, wards, or employees who

share the housing unit. A person living alone in a housing unit or a group of unrelated persons sharing a housing unit as partners is also counted as a household. The count of households excludes group quarters.

Group quarters. As of 1983, group quarters were defined in the Current Population Survey as noninstitutional living arrangements for groups not living in conventional housing units or groups living in housing units containing ten or more unrelated persons or nine or more persons unrelated to the person in charge. (Prior to 1983, group quarters included housing units containing five or more persons unrelated to the person in charge.) Examples of persons in group quarters include a person residing in a rooming house, in staff quarters at a hospital, or in a halfway house. Beginning in 1972, residents of institutions have not been included in the Current Population Survey.

Householder. The householder refers to the person (or one of the persons) in whose name the housing unit is owned or rented (maintained) or, if there is no such person, any adult member, excluding roomers, boarders, or paid employees. If the house is owned or rented jointly by a married couple, the householder may be either the husband or the wife. The person designated as the householder is the "reference person" to whom the relationship of all other household members, if any, is recorded.

Prior to 1980, the husband was always considered the householder in married-couple households. The number of householders is equal to the number of households. Also, the number of family householders is equal to the number of families.

Head versus householder. Beginning with the 1980 CPS, the Bureau of the Census discontinued the use of the terms "head of household" and "head of family." Instead, the terms "householder" and "family householder" are used. Recent social changes have resulted in greater sharing of household responsibilities among the adult members and, therefore, have made the term "head" increasingly inappropriate in the analysis of household and family data. Specifically, the Census Bureau has discontinued its longtime practice of always classifying the husband as the reference person (head) when he and his wife are living together.

Reference person. The reference person is the person with regard to whom the relationship of other persons in the household is recorded. The household reference person is the person listed as the householder (see definition of "Householder"). The subfamily reference person is either the single parent or the husband/wife in a married-couple situation.

Family. A family is a group of two persons or more (one of whom is the householder) related by birth, marriage, or adoption and residing together; all such persons (including related subfamily members) are considered as members of one family. Beginning with the 1980 CPS, unrelated subfamilies (referred to in the past as secondary families) are no longer included in the count of families, nor are the members of unrelated subfamilies included in the count of family members.

Family household. A family household is a household maintained by a family (as defined above), and any unrelated persons (unrelated

subfamily members and/or secondary individuals) who may be residing there are included. The number of family households is equal to the number of families. The count of family household members differs from the count of family members, however, in that the family household members include all persons living in the household, whereas family members include only the householder and his/her relatives. See the definition of family.

Family group. A family group is any two or more persons (not necessarily including a householder) residing together, and related by birth, marriage, or adoption. A household may be composed on one such group, more than one, or none at all. The count of family groups includes family households, related subfamilies, and unrelated subfamilies.

Married couple. A married couple, as defined for census purposes, is a husband and wife enumerated as members of the same household. The married couple may or may not have children living with them. The expression "husband-wife" or "married-couple" before the term "household," "family," or "subfamily" indicates that the household, family, or subfamily is maintained by a husband and wife. The number of married couples equals the count of married-couple families plus related and unrelated married-couple subfamilies.

Unmarried couple. An unmarried couple is composed of two unrelated adults of the opposite sex (one of whom is the householder) who share a housing unit with or without the presence of children under 15 years old.

Unrelated individuals. Unrelated individuals are persons of any age

who are not members of families or subfamilies.

Nonfamily householder. A nonfamily householder is a person maintaining a household while living alone or exclusively with persons to whom they are not related.

Own children and related children.

"Own" children in a family are sons and daughters, including stepchildren and adopted children, of the householder. Similarly, "own" children in a subfamily are sons and daughters of the married couple or parent in the subfamily. (All children shown as members of related subfamilies are own children of the person(s) maintaining the subfamily.) "Related" children in a family include own children and all other children in the household who are related to the householder by birth, marriage, or adoption. For each type of family unit identified in the CPS, the count of own children under 18 years old is limited to never-married children: however, "own children under 25" and "own children of any age," as the terms are used here, include all children regardless of marital status. The totals include never-married children living away from home in college dormitories.

The count of related children in families was formerly restricted to nevermarried children. However, beginning with data for 1968 the Bureau of the Census includes ever-married children under the category of related children. This change added approximately 20,000 children to the category of related children in March 1968.

Tenure. A housing unit (including cooperative or condominium unit) is "owned" if the owner or co-owner lives in the unit, even if it is mortgaged or

not fully paid for. All other occupied units are classified as "rented," including units rented for cash rent and those occupied without payment of cash rent.

Educational attainment. Educational attainment refers to the highest of school completed or highest degree received. Education is derived from a single question that asks "What is the highest grade or school ... has completed, or the highest degree ... has received?" For persons who attended school beyond high school, highest degree is recorded, rather than years of college.

Labor force and employment status. The definitions of labor force and employment status in this report are related to the civilian population 15 years and over. Persons shown here are classified as in the labor force if they were employed as civilians or unemployed during the survey week.

Employed. Employed persons comprise (1) all civilians who, during the specified week, did any work at all as paid employees or in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers on a farm or in a business operated by a member of the family, and (2) all those who were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, or labor management dispute, or because they were taking time off for personal reasons, whether or not they were paid by their employers for time off, and whether or not they were seeking other jobs. Excluded from the employed group are persons whose only activity consisted of work around the house

(own home housework, painting or repairing own home, etc.) or volunteer work for religious, charitable, and similar organizations.

Unemployed. Unemployed persons are those civilians who, during the survey week, had no employment but were available for work and (1) had engaged in any specific job-seeking activity within the past 4 weeks, such as registering at a public or private employment office, meeting with prospective employers, checking with friends or relatives, placing or answering advertisements, writing letters of application, or being on a union or professional register; (2) were waiting to be called back to a job from which they had been laid off; or (3) were waiting to report to a new wage or salary job within 30 days.

Not in the labor force. All civilians who are not classified as employed or unemployed are defined as "not in the labor force." This group who are neither employed nor seeking work includes persons engaged only in own home housework, attending school, or unable to work because of long-term physical or mental illness; persons who are retired or too old to work. seasonal workers for whom the survey week fell in an off season, and the voluntary idle. Persons doing only unpaid family work (less than 15 hours) are also classified as not in the labor force.

Income. Current Population Survey (CPS), data on income cover money income only, prior to deduction for taxes, received from such sources as wages or salaries, net income from self-employment, Social Security, dividends, interest, public assistance and welfare, unemployment compensation, government pensions, and veterans payments. Certain money

receipts such as capital gains are not included.

In data are from the Survey of Income and Program Participation (SIPP), the cash income concept includes the sum of all income received from any of the sources listed in table A-1. Rebates, refunds, loans and capital gain or loss amounts from the sale of assets, and interhousehold transfers of cash such as allowances are not included.

Accrued interest on Individual Retirement Accounts, KEOGH retirement plans, and U.S. Saving bonds are also excluded. This definition differs somewhat from that used in the annual income reports based on the March CPS income supplement questionnaire. The data in those reports, published in the Current Population Reports, Series P-60, are based only on income received in a regular or periodic manner and, therefore, exclude lump-sum or one-time payments, such as inheritances or insurance settlements which are included as

income in SIPP. Educational assistance, which is included in the March CPS income concept, is not included in the SIPP income concept.

The income amounts represent amounts actually received during the month, before deductions for income and payroll taxes, union dues, Part B Medicare premiums, etc.

The SIPP income definition includes three types of earnings: wages and salary, nonfarm self-employment, and farm self-employment. The definition of nonfarm self-employment and farm self-employment is not based on the net difference between gross receipts or sales and operating expenses, depreciation, etc. The monthly amounts for these income types are based on the salary or other income received from the business by the owner of the business or farm during the 4-month period. Earnings from all jobs and self-employment are included.

While the income amounts from most sources are recorded monthly for the

4-month reference period, property income amounts such as interest, dividends, and rental income, were recorded as totals for the 4-month period. These totals were distributed equally between months of the reference period for purposes of calculating poverty status for SIPP.

Poverty. The poverty definition used here is that adopted for official Government use by the Office of Management and Budget and consists of a set of money income thresholds that vary by family size and composition. Families or individuals with income below a particular threshold are classified as below the poverty level. The poverty thresholds are updated every year to reflect changes in the Consumer Price Index. These thresholds are based on money income only and do not include the value of noncash benefits such as employer-provided health insurance, food stamps, or Medicaid. For a more detailed explanation, see Bureau of the Census, Current Population Reports, Series P-60.

Appendix B.

Source and Accuracy of Estimates

Source of Data

Estimates in this report primarily come from data obtained from the Current Population Survey (CPS) conducted in March of 1980 through 1993. Some estimates come from 1960 through 1990 decennial census data. The Bureau of the Census conducts the CPS survey every month, although this report uses mostly the March survey data. Data from November 1992 were used for the voting estimates. The March and November CPS surveys use two sets of questions: the basic CPS and the supplements.

Basic CPS. The basic CPS collects primarily labor force data about the civilian noninstitutional population. Interviewers ask questions concerning labor force participation about each member 15 years old and over in every sample household.

The present CPS sample was selected from the 1980 Decennial Census files with coverage in all 50 States and the District of Columbia. The sample is continually updated to account for new residential construction. The United States was divided into 1,973 geographic areas. In most states, a geographic area consisted of a county or several contiquous counties. In some areas of New England and Hawaii, minor civil divisions are used instead of counties. A total of 729 geographic areas was selected for sample. About 60,000 occupied housing units are eligible for interview every month. Interviewers are unable to obtain interviews at

Description of Current Population Survey

Townsied		Housing units eligible ¹		
Time period	Number of sample areas	Interviewed	Not inter- viewed	
1990 to 1993 1989. 1986 to 1988 1985. 1982 to 1984 1980 to 1981 1977 to 1979 1973 to 1976 1972. 1967 to 1971	729 729 729 729 2629/729 629 614 461 449	57,400 53,600 57,000 57,000 59,000 65,500 55,000 46,500 45,000 48,000	2,600 2,500 2,500 2,500 2,500 3,000 3,000 2,500 2,000	
1963 to 1966	357 333	33,500 33,500	1,500 1,500	

¹Excludes about 2,500 Hispanic households added in March from the previous November sample.

(See "March Supplement.")

²The CPS was redesigned following the 1980 Decennial Census of Population and Housing. During phase-in of the new design, housing units from the new and old designs were in the sample.

about 2,600 of these units because the occupants are not found at home after repeated calls or are unavailable for some other reason.

Since the introduction of the CPS. the Bureau of the Census has redesigned the CPS sample several times to improve the quality and reliability of the data and to satisfy changing data needs. The most recent changes were completely implemented in July 1985.

Table B-1 summarizes changes in the CPS designs for the years for which data appear in this report.

March Supplement. In addition to the basic CPS questions, interviewers asked supplementary questions in March about marital status, educational attainment, and geographical mobility.

To obtain more reliable data for the Hispanic-origin population, the March CPS sample was increased

by about 2,500 eligible housing units. These housing units were interviewed the previous November and contained at least one sample person of Hispanic origin. In addition, the sample included persons in the Armed Forces living off post or with their families on post.

November Supplement. In addition to the basic CPS questions, interviewers asked supplementary questions in November 1992 about voting in the presidential election.

Estimation Procedure. This survey's estimation procedure inflates weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, sex, race, and Hispanic/non-Hispanic categories. The independent estimates were based on statistics from decennial censuses of population; statistics on births, deaths,

immigration, and emigration; and statistics on the size of the Armed Forces. The independent population estimates used for 1981 to present were based on updates to controls established by the 1980 Decennial Census. Data before 1981 were based on independent population estimates from the most recent decennial census. For more details on the change in independent estimates, see the section entitled "Introduction of 1980 Census Population Controls" in an earlier report (Series P-60, No. 133). The estimation procedure for the March supplement included a further adjustment so the husband and wife of a household received the same weight.

The estimates in this report for 1985 and later also employ a revised survey weighting procedure for persons of Hispanic origin. In previous years, weighted sample results were inflated to independent estimates of the noninstitutional population by age, sex, and race. There was no specific control of the survey estimates for the Hispanic population. Since then, the Bureau of the Census developed independent population controls for the Hispanic population by sex and detailed age groups. Revised weighting procedures incorporate these new controls. The independent population estimates include some, but not all, undocumented immigrants.

Accuracy of Estimates

Since the CPS estimates come from a sample, they may differ from figures from a complete census using the same questionnaires, instructions, and enumerators. A sample survey estimate

has two possible types of errors: sampling and nonsampling. The accuracy of an estimate depends on both types of errors, but the full extent of the nonsampling error is unknown. Consequently, one should be particularly careful when interpreting results based on a relatively small number of cases or on small differences between estimates. The standard errors for CPS estimates primarily indicate the magnitude of sampling error. They also partially measure the effect of some nonsampling errors in responses and enumeration but do not measure systematic biases in the data. (Bias is the average over all possible samples of the differences between the sample estimates and the desired value.)

Nonsampling Variability. There are several sources of nonsampling error including the following:

- Inability to get information about all sample cases.
- Definitional difficulties.
- Differences in interpretation of questions.
- Respondents' inability or unwillingness to provide correct information.
- Respondents' inability to recall information.
- Errors made in data collection, such as recording and coding data.
- Errors made in processing the data.
- Errors made in estimating values for missing data.

 Failure to represent all units with the sample (undercoverage).

CPS undercoverage results from missed housing units and missed persons within sample households. Compared with the level of the 1990 Decennial Census, overall CPS undercoverage is about 7 percent. CPS undercoverage varies with age, sex, and race. Generally, undercoverage is larger for males than for females and larger for Blacks and other races combined than for Whites. As described previously, ratio estimation to independent age-sex-race-Hispanic population controls partially corrects for the bias caused by undercoverage. However, biases exist in the estimates to the extent that missed persons in missed households or missed persons in interviewed households have different characteristics from those of interviewed persons in the same age-sex-race-Hispanic group. Furthermore, the independent population controls have not been adjusted for undercoverage in the 1980 Census.

A common measure of survey coverage is the coverage ratio, the estimated population before the post-stratification ratio estimate divided by the independent population control. Table B-2 shows CPS coverage ratios for age-sex-race groups for a typical month. The CPS coverage ratios can exhibit some variability from month to month. Other Census Bureau household surveys experience similar coverage.

Table B-2.

CPS Coverage Ratios

Age	Non-Black		Black		All Persons		
	Male	Female	Male	Female	Male	Female	Total
0-14	.929 .933 .881 .847 .904 .928 .953 .961	.964 .895 .891 .897 .931 .966 .974 .941	.850 .763 .711 .660 .680 .816 .896 .954	.838 .824 .802 .811 .845 .911 .927 .953 .984	.916 .905 .855 .823 .877 .917 .948 .960	.943 .883 .877 .884 .920 .959 .969 .942 .973	.929 .895 .866 .854 .899 .938 .959
70+ 15+ 0+	.993 .914 .918	1.004 .945 .949	.996 .767 .793	.979 .874 .864	.993 .898 .902	1.002 .927 .931	.998 .918 .921

For additional information on non-sampling error, including the possible impact on CPS data when known, refer to Statistical Policy Working Paper 3, An Error Profile: Employment as Measured by the Current Population Survey, Office of Federal Statistical Policy and Standards, U.S. Department of Commerce, 1978 and Technical Paper 40, The Current Population Survey: Design and Methodology, Bureau of the Census, U.S. Department of Commerce.

Comparability of Data. Data obtained from the CPS and other sources are not entirely comparable. This results from differences in interviewer training and experience and in differing survey processes. This is an example of nonsampling variability not reflected in the standard errors. Use caution when comparing results from different sources.

CPS estimates in this report (which reflect 1980 Census-based population controls) may differ from 1990 Census results. Population controls incorporating 1990 Census results began to be used for CPS estimates beginning with the 1994 surveys.

Caution should also be used when comparing estimates in this report with estimates for 1980 and earlier years (which reflect 1970 censusbased population controls). This change in population controls had relatively little impact on summary measures such as means, medians, and percent distributions. It did have a significant impact on levels. For example, use of 1980based population controls results in about a 2-percent increase in the civilian noninstitutional population and in the number of families and households. Thus, estimates of levels for data collected in 1981 and later years will differ from those for earlier years by more than what could be attributed to actual changes in the population. These differences could be disproportionately greater for certain subpopulation groups than for the total population.

Since no independent population control totals for persons of Hispanic origin were used before 1985, compare Hispanic estimates over time cautiously.

Note When Using Small Estimates. Summary measures (such as medians and percentage distributions) are shown only when the base is 75,000 or greater. Because of the large standard errors involved, summary measures would probably not reveal useful information when computed on a smaller base. However, estimated numbers are shown even though the relative standard errors of these numbers are larger than those for corresponding percentages. These smaller estimates permit combinations of the categories to suit data users' needs. These estimates may not be reliable for the interpretation of small differences. For instance, even a small amount of nonsampling error can cause a borderline difference to appear significant or not, thus distorting a seemingly valid hypothesis test.

Sampling Variability. Sampling variability is variation that occurred by chance because a sample was surveyed rather than the entire population. Standard errors, as calculated by methods described next, are primarily measures of sampling variability, although they may include some nonsampling errors.

Standard Errors and Their Use.

A number of approximations are required to derive, at a moderate cost, standard errors applicable to all the estimates in this report. Instead of providing an individual standard error for each estimate, parameters are provided to calculate standard errors for various types of characteristics. These parameters are listed in table B-3.

Table B-3. a and b Parameters and Factors for Calculating Approximate Standard Errors for Persons, Families, Households, Householders, and Unrelated Individuals 65+ in the USA

Characteristic	Pers	sons	Families, households, householders, and unrelated individuals		
	а	b	а	b	
Educational Attainment—March 1992 and 1993					
Total or White	-0.000021 -0.000247 -0.000371	2,532 3,425 3,425	-0.000011 -0.000071 -0.000142	1,899 1,716 1,716	
Geographical Mobility—March 1993					
Total or White	-0.000025 -0.000025 -0.000589	7,130 7,130 7,130	-0.000011 -0.000071 -0.000142	1,899 1,716 1,716	
Marital Status—March 1993					
Total or White	-0.000026 -0.000283 -0.000567	4,785 6,864 6,864	-0.000011 -0.000071 -0.000142	1,899 1,716 1,716	
Voting—November 1992					
Total or White	-0.000017 -0.000216 -0.000540	3,011 4,408 7,428	-0.000011 -0.000084 -0.000210	1,899 1,716 2,892	
Poverty—1992					
Total or White	-0.000040 -0.000322 -0.000470 -0.000113	9,502 9,502 9,502 3,607	-0.000093 -0.000093 -0.000093 (X)	2,243 2,243 2,243 (X)	
Income—1992					
Total or White	-0.000012 -0.000122 -0.000182	2,254 2,577 2,577	-0.000012 -0.000109 -0.000175	2,058 2,243 2,243	

Note: Multiply the above parameters by 0.83, 0.93, 0.98, and 1.37 for the Northeast, Midwest, South, and West, respectively. Multiply the above parameters by 1.5 for outside metropolitan.

For information on how to calculate standard errors for Census data see the census reports.

The sample estimate and its standard error enable one to construct a confidence interval. A confidence interval is a range that would include the average result of all possible samples with a known probability. For example, if all possible samples were surveyed under essentially the same general conditions and using the same sample design, and if an estimate and its standard error were calculated from each sample, then approximately 90 percent of the intervals from 1.645 standard errors below the estimate to 1.645 standard errors above the estimate would include the average result of all possible samples.

A particular confidence interval may or may not contain the average estimate derived from all possible samples. However, one can say with specified confidence that the interval includes the average estimate calculated from all possible samples.

Some statements in the report may contain estimates followed by a number in parentheses. This number can be added to and subtracted from the estimate to calculate upper and lower bounds of the 90-percent confidence interval. For example, if a statement contains the phrase "grew by 1.7 percent (±1.0)," the 90 percent confidence interval for the estimate, 1.7 percent, is 0.7 percent to 2.7 percent.

Standard errors may be used to perform hypothesis testing. This is

a procedure for distinguishing between population parameters using sample estimates. The most common type of hypothesis appearing in this report is that the population parameters are different. An example of this would be comparing White voters to Black voters.

Tests may be performed at various levels of significance. The significance level of a test is the probability of concluding that the characteristics are different when, in fact, they are the same. All statements of comparison in the text have passed a hypothesis test at the 0.10 level of significance or better. This means that the absolute value of the estimated difference between characteristics is greater than or equal to 1.645 times the standard error of the difference.

Standard Errors of Estimated Numbers. Use the following formula to compute the approximate standard error, s_x , of an estimated number shown in this report.

$$s_x = \sqrt{ax^2 + bx}$$
 (1)

Here, x is the size of the estimate and a and b are the parameters in table B-3 associated with the particular type of characteristic. When calculating standard errors for numbers from cross-tabulations involving different characteristics, use the set of parameters for the characteristic that will give the largest standard error.

Illustration

Suppose that 19,818,000 persons 65 years old and over reported voting in the 1992 presidential

election. Use the appropriate parameters from table B-3 and formula (1) to get

Number, x 19,818,000
a parameter -0.000017
b parameter 3,011
Standard error 230,000
90% conf. int. 19,440,000 to 20,196,000

The standard error is calculated as

$$s_x = \sqrt{-0.000017x19,818,000^2 + 3,011x19,818,000}$$

= 230,000

The 90-percent confidence interval is calculated as $19,818,000 \pm 1.645 \times 230,000$.

A conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 90 percent of all possible samples.

Standard Errors of Estimated Percentages. The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends on the size of the percentage and its base. Estimated percentages are relatively more reliable than the corresponding estimates of the numerators of the percentages, particularly if the percentages are 50 percent or more. When the numerator and denominator of the percentage are in different categories, use the parameter from table B-3 indicated by the numerator.

The approximate standard error, $s_{x,p}$, of an estimated percentage can be obtained by use of the formula

$$s_{x,p} = \sqrt{(b/x) p (100-p)}$$
 (2)

Here, x is the total number of persons, families, households, or unrelated individuals in the base of the percentage, p is the percentage ($0 \le p \le 100$), and b is the parameter in table B-3 associated with the characteristic in the numerator of the percentage.

Illustration

Suppose that of the 17,232,000 females 65 years old and over, 39.7 percent were living with their spouses. Use the appropriate parameter from table B-3 and formula (2) to get

Percentage, p	39.7
Base, x	17,232,000
b parameter	4,785
Standard error	8.0
90% conf. int.	38.4 to 41.0

The standard error is calculated as

$$s_{x,p} = \sqrt{\frac{4,785}{17,232,000} \, x \, 39.7 x (100.0\text{-}39.7)} = 0.8$$

The 90-percent confidence interval for the percentage of females 65 years old and over living with their spouses is calculated as $39.7 \pm 1.645 \times 0.8$.

Standard Error of a Difference.

The standard error of the difference between two sample estimates is approximately equal to

$$s_{x-y} = \sqrt{s_x^2 + s_y^2}$$
 (3)

where s_x and s_y are the standard errors of the estimates, x and y. The estimates can be numbers, percentages, ratios, etc. This will represent the actual standard error quite accurately for the difference between estimates of the

same characteristic in two different areas, or for the difference between separate and uncorrelated characteristics in the same area. However, if there is a high positive (negative) correlation between the two characteristics, the formula will overestimate (underestimate) the true standard error.

Illustration

Suppose that 2,747,000 persons 70-74 years old, x, and 3,051,000 persons 75 years old and over, y, completed high school. Use the appropriate parameters from table B-3 and formulas (1) and (3) to get

	x	У	difference
Number	2,747,000	3,051,000	304,000
a parameter	-0.000021	-0.000021	-
b parameter	2,532	2,532	-
Standard error	82,000	87,000	120,000
90% conf. int.	2,612,000 to 2,882,000	2,908,000 to 3,194,000	107,000 to 501,000

The standard error of the difference is calculated as

$$s_{x-y} = \sqrt{82,\!000^2 + 87,\!000^2} = 120,\!000$$

The 90-percent confidence interval around the difference is calculated as $304,000 \pm 1.645 \text{x} 120,000$. Since this interval does not contain zero, we can conclude, at the 10-percent significance level, that the number of persons 75 years old and over who completed high school is greater than the number of persons 70-74 years old who did.

Quality and Types of Data Available on the Elderly in the 1990 Census

A decennial census provides rich subject-matter and geographic

detail generally not possible from a sample survey. Census counts by age, sex, and race are used as the denominator of many health, mortality, and other measures. Thus, the quality of census data is critical. First, we discuss the quality of data available on the elderly population, particularly as it affects denominators of measures. Second, we discuss some types of data available from the 1990 census and evaluation studies.

Data Quality

Data users always should carefully consider the quality of the information they are using from censuses, surveys, and vital statistics. All data, whether from a complete enumeration of the population or from a sample, are subject to coverage and content errors. Data based on a sample are also subject to sampling error. Data on the older population have some particular problems with respect to these sources of error.

Errors in the data are of two types: sampling errors and nonsampling errors. Sampling error affects those items collected from a sample of the population in a census or survey. Sampling error occurs when a portion of the population is surveyed to represent the entire population. Data based on a sample are estimates that would differ somewhat from data based on a complete enumeration of all households or persons. Sampling error can be measured based on the actual sample observed. In the census, about one in six households and one in six persons in group quarters received the sample form.

The deviation of the sample estimate from the average of all possible samples (which approximates a complete enumeration) is called "sampling error." The sampling error is a function of the observed sampling size; as the sample size becomes smaller, sampling error increases. Thus, for local areas with a small population, or when the group of interest is small, such as the population 85 years and over, sampling error may be quite large and should be accounted for in analysis. Each census report with sample data contains an appendix explaining the calculation of sampling error and its interpretation.

Nonsampling errors occur in the collection and processing of data. They are often difficult to measure and identify. Nonsampling errors may be random or in a consistent direction which biases the data. Nonsampling errors are of two basic types: coverage and content errors. Coverage errors result in persons being missed or counted erroneously (for example, counted more than once). Content errors include errors by respondents and interviewers, processing errors, and those occurring when the data item is not completed (that is, nonresponse). Errors in age data include misstatement of age, a preference for giving an age or year of birth that ends in "0" or "5," and ages that are not known or not given.

Coverage errors occur when whole households are missed and when persons within households are missed or counted more than once. For example, an older couple may be traveling in their

trailer and not receive their census form in the mail. In another type of coverage error, the same household may be counted twice. This might occur, for example, if a retired couple from the Northeast goes to their second home in Florida for the winter. There are census procedures to catch persons who may be travelling and to avoid counting in both places, but such errors do occur.

Evaluation studies performed after the 1980 census showed there was a net overcount of persons in the age groups 65 to 69 and 70 to 74, for both Blacks and Whites. Some of this was likely due to errors in reporting age as well as coverage error. At ages 75 and over, the studies concluded there was a net undercount of 0.6 percent for Black males, 6.4 percent for Black females, 0.9 percent for White males and 2.6 percent for White females.1

For 1990, results from demographic analysis show different coverage patterns for males and females. For females, estimates indicate a net overcount for age groups 65 to 69, 70 to 74, and 75 to 79, for both Blacks and races other than Black (Nonblack). Net undercounts occur at ages over 79 and the results indicate a relatively large undercount of persons 85 years and over. For males, results indicate a net undercount for most age groups (with the exception of a net overcount for

ages 75 to 79 for Black and Nonblack males and at ages 80 to 84 for Nonblack males only). These results, especially for the group 85 years and over are subject to change based on further research. There are problems with the files used for comparison (for example, Medicare files do not purge all deaths).²

Some nonsampling errors occur during data collection and processing. The Census Bureau mailed forms to most households. In most households, one household member fills out the questionnaire even though they may not know accurate information (such as age) for every household member. Sometimes, census takers visited respondents door-to-door. If a census taker does not understand a question, he or she may give seemingly authoritative but incorrect advice to respondents on how to answer. This can affect the data. In institutions such as nursing homes, the questionnaires are often filled out by staff using administrative records and their own knowledge and guesses. In larger institutions, the extra work can be a tedious, burdensome process and nonresponse to particular questions is often quite high. Clerical processing of forms in census offices can also lead to errors if workers make clerical errors or do not follow procedures. For the 1990 census, much of the processing has been automated to reduce the extent of clerical error.

¹U.S. Bureau of the Census, "The Coverage of Population in the 1980 Census," Evaluation and Research Reports, PHC80-E4, Washington, DC, U.S. Government Printing Office, 1988, table 3.3.

²J. Gregory Robinson, Bashir Ahmed, Prithwis Das Gupta, and Karen A. Woodrow, "Estimating Coverage of the 1990 United States Census: Demographic Analysis," Proceedings of the Social Statistics Section of the American Statistical Association, 1992.

Questionnaires may be returned with incomplete or inconsistent information. Nonresponse may be total, in which a respondent does not complete any items on the questionnaire, or partial, in which only some questions that should have been answered actually are answered. In institutions, such as nursing homes, the information may not be available in the administrative records and nonresponse rates, especially for social and economic characteristics, may be unusually high. For example, neither a patient nor the institution staff may be aware of an income source that goes directly to the patient's family.

If efforts to obtain missing information fail, the computer "imputed," or filled in, the missing or inconsistent information. This imputation for missing data is based on the observed responses of a household with similar characteristics such as household size and race. In group quarters, it is based on the responses of others in the group guarters. In the 1990 census, if there had been no imputation for missing data, 14.7 percent of the population for which age was observed would have been shown as aged 65 or older; after imputation, however, the proportion of the population aged 65 or older decreased to 12.6.

Nonresponse can introduce bias into the data, as the characteristics of the nonrespondents have not been observed directly and may be different from those imputed. Each census report contains an appendix with a table showing the percentage of

responses to particular items that were imputed. Data users should consult these appendices, especially when using information subject to nonresponse or misreporting, such as income. A high percentage of allocation indicates that particular caution is warranted in using the information.

Additional errors occur that affect the quality of census data. A respondent may misreport information, either intentionally or by misunderstanding the intent of the question. For example, respondents may misreport income intentionally. Or, they may simply not have understood that they should have included income amounts from a particular source such as self-employment.

Errors in the statement of age may affect total error in data for the elderly more than coverage errors. This is especially true in data before the 1990 census around age 65 and among the oldest old (especially centenarians) because of the misreporting of age. In modern censuses, "year of birth" is asked in addition to "age" which has reduced this error considerably. Nevertheless, reporting error remains. Age reporting error found in the 1990 census data is described in Appendix C. Sometimes people misreport their age because they do not know or remember their age. Some give a "rounded-off" age and numbers ending in "0" or "5" occur more frequently than they should, a phenomenon known as "age heaping." These errors are especially important when data are for single years of age and less

important when grouped in 5-or 10-year age groups. Historical data may need to be adjusted as the errors are often sufficient to affect death rates.³

Age seems to be exaggerated the most at the oldest ages and among those with lower levels of education. This affects both census and mortality data on the extreme aged. Traditionally, death rates have been unreliable for persons 85 years and older. There have, however, been improvements in these data and we can expect vast improvements as more people reach these ages with higher education and with birth certificates that document vear of birth. There also remains plenty of room for additional improvement.

Census error is measured by reinterviews, record matching studies, and demographic analysis. In addition, reinterviews and matching studies are one way to partially measure the effect of imputations for missing data. Another way is to compare the reported census age with death certificate information for those who die close to the time of the census. Neither method is a perfect check as age may be misstated in both

³Greville developed an adjustment technique described in Mortimer Speigelman, Introduction to Demography, rev. ed., Cambridge, MA: Harvard University Press, 1968. Speigelman discusses an adjustment technique developed by Greville for historical age data (p. 67) and a blending method for age heaping (pp. 71-75). For death rates, Spiegelman recommends choosing an age grouping for which the death rates would be essentially correct if both population and deaths were biased in the same direction and in about the same proportion.

a reinterview and on death certificates. Demographic analysis develops estimates of population largely from administrative records such as vital statistics, Medicare data, and immigration statistics.⁴ For example, census age distributions can be compared with those from demographic analysis to determine if systematic errors have skewed the distribution.

In summary, data users should be aware of the errors to which the data are subject. Users should review the data to make sure they make sense historically. Census estimates can often be compared with survey estimates to see if the reported trends differ significantly. While census operations include procedures to minimize errors, it is impossible to avoid some data problems, such as adamant refusal to respond to the census form. Some census procedures themselves, such as clerical

checking and computer editing and imputation, introduce error into the data. Knowledge of the types and extent of errors that may be present contributes to more meaningful understanding of the census results.

Types of Data Available

The census asks everyone basic demographic questions on household relationship, sex, race, age, marital status, and Hispanic origin and social and economic questions of a sample of households and persons in group quarters. For the 1990 census, counts of persons, by sex, race, and Hispanic origin are available for single years to the end category, "105 years and over" for the United States, and sub-state statistical and administrative divisions.

There are nine main report series from the census as well as summary tape files and public-use microdata files. Public-use microdata samples (PUMS) are computer data files that contain the edited responses from a sample

of individual households. The records contain no identifying information and only large geographic areas are identified to protect the confidentiality of respondents. In addition to the PUMS for the entire population, a file that focuses specifically on the population 60 years and over is available (and is known as "PUMSO").

Finally, reports have been issued that evaluate the quality of 1990 census data. These reports focus on coverage and content evaluation and provide additional insight into the uses and limitations of data on America's population. These reports include a Content Reinterview Study (response bias and variance); the Integrated Evaluation of Error Study (evaluates the magnitude of all sources of error, including item nonresponse); Coverage Sampling Research (alternative coverage questions to improve coverage within households); Outreach Survey (respondent attitudes towards and the census); and ethnographic studies on response and coverage problems.

⁴J. Gregory Robinson, Prithwis Das Gupta, and Bashir Ahmed, U.S. Bureau of the Census, "Evaluating the Quality of Estimates of Coverage Based on Demographic Analysis," paper presented at the 1990 annual meeting of the Population Association of America, May 3-5, 1990.

Table B-4 Items in the 1990 Census

I. Information collected from households:¹

Population Household relationship Sex Race Age Marital status Spanish/Hispanic origin

Housing

Number of units in structure
Number of rooms in unit
Own or rent housing
Business at residence
Value of owned unit or
rent paid
Congregate housing
(meals included in rent)
Vacancy characteristics

II. Information collected from a sample of households:¹

Population

Social characteristics Place of birth, citizenship, year of entry Education—enrollment and attainment Ancestry Migration, residence 5 years ago Language spoken at home, ability to speak English Military status Disability limiting work, ability to go outside, or care for personal needs **Fertility Economic Characteristics** Employment and unemployment, year last worked Place of work and commuting to work Occupation, employer, and type of work Work experience, income in 1989, and sources of income

Housing

Year moved into residence
Number of bedrooms
Plumbing and kitchen facilities
Telephone
Autos, light trucks and vans
Fuel use
Source of water and method of
sewage disposal
Age of building
Condominium or mobile
home status
Farm residence
Shelter costs, including utilities
Real estate taxes and insurance
Mortgages and loans

¹Persons in group quarters, including institutions, are asked population items only.

Age-Race Modifications to the 1990 Census

(CPH-L-74 Series)

C-1

Where possible, 1990 census data in this report are from a special Modified Age, race, and Sex (MARS) file, the CPH-L-74 series. Age and race data have been modified in this series to meet the needs of many users of census data. Essentially, the race statistics were modified to be consistent with the classification used in data sets other than the census, while the age data were adjusted to correspond with the April 1, 1990 census data. These modified data are consistent with the counts of the 1990 census as enumerated. Information about modified data for states, counties, census tracts and MCD's are available from Data Users Services Division (301-457-4100). Further information about the modifications in the CPH-L-74 series are available from David L. Word (301-457-2103) or Gregory Spencer (301-457-2428).

Race Modification

There were 9.8 million "Other race" persons included in the 1990 census. Over 95 percent were of Hispanic origin. Such non-specified race persons are not found in data sources other than the census and the category is inconsistent with the Office of Management and Budget Directive 15. The CPH-L-74 series assigns each "other race" person to a specified

race. The race assignment rule was: assign each "other race" person to the specified race reported by a nearby person with an identical response to the Hispanic origin question.

The assignment of a specified race was made on an individual basis. That is, no effort was made to minimize racial heterogeneity within households.

Age modification

The following is a portion of the text of a user note which is incorporated in 1990 census products:

Review of detailed 1990 information indicated that respondents tended to provide their age as of the date of completion of the questionnaire, not their age as of April 1, 1990. In addition, there may have been a tendency for respondents to round up their age if they were close to having a birthday. It is likely that approximately 10 percent of persons in most age groups are actually one year younger. For most single years of age, the misstatements are largely offsetting. The problem is most pronounced at age 0 because persons lost to age 1

may not have been fully offset by the inclusion of babies born after April 1, 1990 and because there may have been more rounding up to age 1 to avoid reporting age as 0 years. Age in completed months was not collected for infants under age 1. The reporting of age one year older than age on April 1, 1990 is likely to have been greater in areas where the census data were collected later in 1990.

About 95 percent of the population provided acceptable birth year responses where were adjusted with the following procedures. The age data for individuals in households were modified by adjusting the reported birth year data by race and sex to correspond with the national level quarterly distribution of births available from the National Center for Health Statistics. Approximately 100 million persons have an age in this modified file which is one year different from what they marked in the 1990 census.

The modification procedure was done separately for each birth year, by sex, for the White, Black, Asian and Pacific Islander; and American Indian, Eskimo, and Aleut populations.