## 65+ in the United States: 2010

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By Loraine A. West, Samantha Cole, Daniel Goodkind, and Wan He Issued June 2014

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Cole, Daniel Goodkind, and Wan He under the general direction of James D. Fitzsimmons, Acting Assistant Division Chief, International Programs Center for Demographic and Economic Studies, Population Division. Victoria A. Velkoff, former Chief, Population Division provided overall direction.

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## U.S. CENSUS BUREAU

 John Thompson,Director
Nancy A. Potok,
Deputy Director and Chief Operating Officer
Enrique J. Lamas,
Associate Director for Demographic Programs
Enrique J. Lamas,
Acting Chief, Population Division

## Contents

Preface ..... 1
Highlights ..... 3
Chapter 1. Growth of the Older Population ..... 5
Numerical and Proportionate Growth ..... 5
The Older Population in the Twentieth and Twenty-First Centuries ..... 5
Aging of the Oldest Old ..... 6
Population Dynamics ..... 8
Median Age. ..... 8
Age Structure ..... 9
Sex Imbalances ..... 11
Dependency Ratios ..... 11
Race and Hispanic Origin ..... 15
The Distribution of the Older Population by Race and Hispanic Origin in 2010. ..... 15
Aging Trends by Race and Hispanic Origin ..... 16
Our Aging World. ..... 18
Growth of the Older Population by Country. ..... 18
"The Crossing" ..... 20
Regional Differences ..... 20
Chapter 1 References ..... 23
Chapter 2. Longevity and Health ..... 25
Life Expectancy ..... 25
Basic Levels and Trends. ..... 25
Differences by Sex and Race Group ..... 26
Comparison of United States With Selected Countries ..... 27
Death and Death Rates ..... 28
Trends in Death Rates by Age ..... 28
Age Structure of Deaths. ..... 29
Death Rates by Age, Sex, Race, and Hispanic Origin ..... 30
Leading Causes of Death ..... 31
Health Risks Among Older People. ..... 33
Smoking ..... 34
Alcohol Consumption ..... 34
Weight ..... 35
Chronic IIInesses and Impairments ..... 36
Arthritis. ..... 36
Heart Disease and Stroke. ..... 37
Hypertension ..... 38
Diabetes ..... 38
Cancer ..... 39
Osteoporosis ..... 39
Cognitive Impairments ..... 40
Sensory Impairments ..... 40
Suicide and Depression ..... 41
Functional Limitations and Disability ..... 42
Major Disabilities ..... 43
Prevalence of Disability by Various Characteristics ..... 44
Disability Trends ..... 44
Impact of Falls on Disability ..... 44
Health Insurance and Expenditures ..... 45
Providers of Health Insurance ..... 47
Health Care Utilization ..... 47
Health Care Expenditures ..... 48
Long-Term Care ..... 49
Type of Long-Term Care ..... 49
Providers of Long-Term Care ..... 50
The Cost and Funding of Long-Term Care ..... 51
Growth of Home and Community-Based Care Living ..... 52
Chapter 2 References ..... 54
Chapter 3. Economic Characteristics ..... 65
Work and Retirement ..... 65
Labor Force Participation ..... 65
Age Structure of the Labor Force ..... 66
Work Status and Type of Employment ..... 68
Retirement Planning ..... 69
Income and Poverty ..... 72
Sources of Income ..... 72
Social Security ..... 74
Private Pensions ..... 76
Poverty by Age, Sex, Race, and Hispanic Origin ..... 78
Poverty by State ..... 83
Impact of the 2007-2009 Recession on Older Americans ..... 83
Housing Impact ..... 84
Financial Market Impact ..... 89
Unemployment Impact ..... 91
Household Wealth Impact ..... 94
Chapter 3 References ..... 97
Chapter 4. Geographic Distribution ..... 103
States and Regions ..... 103
States With the Largest Older Populations ..... 103
States With the Largest Oldest-Old Populations ..... 106
Regional Distribution of the Older Population ..... 106
Growth of the Older and Oldest-Old Populations by Region and State ..... 108
Distribution by Race and Hispanic Origin ..... 110
Region and State Distribution by Race and Hispanic Origin ..... 110
State Composition by Race and Hispanic Origin ..... 111
Counties ..... 116
Counties With the Largest Older Populations ..... 116
Counties With the Largest Oldest-Old Populations ..... 118
Metropolitan and Micropolitan Statistical Areas ..... 118
Migration ..... 121
Mobility of Older People ..... 121
Reasons for Moving by Age ..... 123
Chapter 4 References ..... 125
Chapter 5. Social and Other Characteristics ..... 127
Marital Status ..... 127
Marital Status Differentials by Sex ..... 127
Decline in Widowhood ..... 128
Rise in Divorce Rates ..... 129
Impact of Widowhood and Divorce on Health ..... 129
Variation in Marital Status by Race and Hispanic Origin ..... 129
Living Situations ..... 130
Differences in Living Arrangements by Sex ..... 130
Trends in Living Alone by Age and Sex ..... 131
Living Alone by State and Region ..... 132
Household Size by Race and Hispanic Origin ..... 132
Institutions ..... 134
Long-Term Care Facility Residence by Age, Sex, Race, and Hispanic Origin ..... 136
Nursing Home Residency for States and Regions ..... 139
Educational Attainment ..... 140
Trends of Educational Attainment by Sex ..... 140
Educational Attainment by Race and Hispanic Origin ..... 141
Educational Attainment of the Older Population in the Future ..... 142
Foreign Born ..... 142
Nativity and Citizenship ..... 142
Region of Birth ..... 144
Year of Entry ..... 145
Language Spoken at Home ..... 145
Non-English Language Spoken at Home ..... 145
English Proficiency ..... 146
Veterans ..... 146
Veterans by Age and Sex ..... 147
Voting ..... 148
Voting Rates by Age ..... 148
Voting Rates by Race and Hispanic Origin ..... 149
Voting Rates by Region ..... 151
Voting Rates by Education ..... 151
Internet Usage ..... 152
Internet Use Trends. ..... 152
Type of Internet Use ..... 152
Chapter 5 References ..... 154
Appendix A. Sources of Data ..... A-1
Appendix B. Accuracy of the Estimates ..... B-1
Appendix C. Detailed Tables ..... C-1

## Figures

Figure 1-1. Population Aged 65 and Over: 1900 to 2050 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
Figure 1-2. Average Annual Growth Rate of the Total Population and Population Aged 65 and Over by Decades:1900-1910 through 2040-2050 ..... 7
Figure 1-3. Population Aged 85 and Over: 1900 to 2050 ..... 8
Figure 1-4. Median Age: 1900 to 2050 ..... 9
Figure 1-5. Population by Age and Sex: 1900. ..... 10
Figure 1-6. Population by Age and Sex: 1970. ..... 10
Figure 1-7. Population by Age and Sex: 2010. ..... 10
Figure 1-8. Population by Age and Sex: 2030 ..... 11
Figure 1-9. Population by Age and Sex: 2050 ..... 11
Figure 1-10. Sex Ratio by Age: 2010 ..... 12
Figure 1-11. Difference Between Male and Female Populations by Age: 2010. ..... 12
Figure 1-12. Dependency Ratios: 1980 to 2050 ..... 13
Figure 1-13. Dependency Ratios by Race and Hispanic Origin: 2010 ..... 14
Figure 1-14. Percentage Distribution of the Population Aged 65 and Over by Race and Hispanic Origin: 2000 and 2010. ..... 15
Figure 1-15. Percentage Aged 65 and Over Among the Total Population for Each Race and Hispanic Origin Group: 2000 and 2010 ..... 16
Figure 1-16. Percentage Distribution of the Population Aged 65 and Over by Age for Each Race and Hispanic Origin: 2010 ..... 18
Figure 1-17. Percentage of Population Aged 65 and Over by Country: 2010 and 2050 ..... 19
Figure 1-18. Percentage of World Population Under Age 5 and Aged 65 and Over: 1950 and 2050 ..... 20
Figure 1-19. Percentage Aged 65 and Over Among the Total Population for Each World Region: 2010, 2030, and 2050. ..... 21
Figure 1-20. Percentage Aged 65 and Over by Age for Developed and Developing Countries: 2010 to 2050 ..... 22
Figure 2-1. Life Expectancy at Older Ages by Age and Sex: 2010 ..... 26
Figure 2-2. Life Expectancy at Birth for Whites and Blacks by Sex: 1990 and 2010. ..... 27
Figure 2-3. Death Rates for Both Sexes by Age: 2010. ..... 29
Figure 2-4. Death Rates by Age, Race, and Hispanic Origin: 2010 ..... 30
Figure 2-5. Causes of Death for the Population Aged 65 and Over: 2010 ..... 31
Figure 2-6. Seven Leading Causes of Death and Other Causes for the Population Aged 65 and Over: 2000 and 2010 ..... 32
Figure 2-7. Share of Deaths Due to Cancer and Heart Disease by Age and Sex: 2007. ..... 33
Figure 2-8. Current Smoking Rates Among the Population Aged 65 and Over by Sex: 1965 to 2010 ..... 35
Figure 2-9. Limitation of Activity Caused by Chronic Health Condition by Age: 2006-2007 ..... 36
Figure 2-10. Population Aged 60 and Over With Heart Disease or Stroke by Age and Sex: 2005-2006. ..... 37
Figure 2-11. Percentage of Population Aged 65 and Over With Cognitive Impairments by Age, Race, and Hispanic Origin: 2006 ..... 40
Figure 2-12. Suicide Rates by Age Group: 1991 to 2010 ..... 41
Figure 2-13. Suicide Rates for the Population Aged 65 and Over by Sex, Race, and Hispanic Origin: 2005-2010 ..... 42
Figure 2-14. Functional Limitations in the Population Aged 65 and Over by Age: 2010 ..... 43
Figure 2-15. Percentage Without Any Health Insurance by Age: 2010 ..... 45
Figure 2-16. Percentage Distribution of Health Care Spending by Type of Service and Age Group: 2009 ..... 47
Figure 2-17. Percentage Distribution of Health Care Spending by Source of Payment and Age Group: 2009. ..... 48
Figure 2-18. Functional Limitations for the Population Aged 65 and Over by Institutional Status: 2010 ..... 49
Figure 2-19. Long-Term Care Funding by Source: 2006 ..... 51
Figure 2-20. Percentage Distribution of Medicaid Funding for Long-Term Care by Type of Care: 1990 to 2007 ..... 52
Figure 3-1. Labor Force Participation Rates for the Population Aged 65 and Over by Sex: 1948 to 2010 ..... 65
Figure 3-2. Percentage of Population Aged 65 and Over in the Labor Force: 2009-2011 ..... 67
Figure 3-3. Percentage Distribution of the Labor Force by Age: Selected Years, 1950 to 2010 ..... 67
Figure 3-4. Employment Status of the Employed Population Aged 55 and Over by Sex and Age: March 2009 ..... 68
Figure 3-5. Workers' Planned Retirement Age: 2000, 2005, and 2010 ..... 70
Figure 3-6. Retirees’ Actual Retirement Age: 2000, 2005, and 2010. ..... 70
Figure 3-7. Workers Aged 55 and Over Who Are Very Confident About Retirement: 2000 and 2010. ..... 72
Figure 3-8. Median Income for Population Aged 65 and Over by Marital Status, Race, Hispanic Origin, and Age: 2010 ..... 73
Figure 3-9. Share of Aggregate Income for the Population Aged 65 and Over by Source: 2010 ..... 73
Figure 3-10. Share of Money Income for the Lowest and Highest Income Quintiles for the Population Aged 65 and Over by Source: 2010 ..... 74
Figure 3-11. Percentage of the Population Aged 65 and Over Receiving Income From Specific Sources: 2010 ..... 75
Figure 3-12. Percentage Distribution of Social Security Beneficiaries by Age: 2010 ..... 75
Figure 3-13. People in Poverty by Age: 1959 to 2010 ..... 79
Figure 3-14. Population Aged 65 and Over in Poverty by Sex, Race, and Hispanic Origin: 2010 ..... 80
Figure 3-15. Population Aged 75 and Over in Poverty by Sex, Race, and Hispanic Origin: 2010 ..... 81
Figure 3-16. People Aged 65 and Over in Poverty by Living Arrangement, Race, and Hispanic Origin: 2010 ..... 81
Figure 3-17. Percentage of Population Aged 65 and Over in Poverty: 2010 ..... 83
Figure 3-18. Homeownership Rates of All Householders and Householders Aged 65 and Over: 1990 to 2011 ..... 85
Figure 3-19. Homeownership Rate for Householders Aged 65 and Over by Race and Hispanic Origin: 2009 ..... 87
Figure 3-20. Housing-Cost Burden of Households With a Householder Aged 65 and Over: 2001 and 2009 ..... 89
Figure 3-21. Investment Losses by Age: 2009 ..... 90
Figure 3-22. Households in Financial Distress by Age of Householder: November 2008- January 2010 ..... 90
Figure 3-23. Unemployed Population by Age and Sex: 2010 ..... 91
Figure 3-24. Unemployment Duration for Population Aged 16 and Over by Age: February 2010 ..... 93
Figure 3-25. Employed Among Population Aged 16 and Over by Age: 2005 and 2010 ..... 94
Figure 3-26. Median Net Worth of Households by Age of Householder: 2005 and 2010 ..... 95
Figure 3-27. Percentage Change in Median Net Worth and Components of Net Worth of Households by Age of Householder: 2005-2010 ..... 96
Figure 4-1. Population Aged 65 and Over by State: 2010 ..... 103
Figure 4-2. Percentage Aged 65 and Over of State Population: 2010 ..... 105
Figure 4-3. Percentage Aged 85 and Over of State Population: 2010 ..... 107
Figure 4-4. Percentage Change in State Population Aged 65 and Over: 2000-2010 ..... 108
Figure 4-5. Percentage Change in State Population Aged 85 and Over: 2000-2010 ..... 109
Figure 4-6. Percentage White Alone of State Population Aged 65 and Over: 2010 ..... 111
Figure 4-7. Percentage Black Alone of State Population Aged 65 and Over: 2010 ..... 112
Figure 4-8. Percentage American Indian and Alaska Native Alone of State Population Aged 65 and Over: 2010 ..... 113
Figure 4-9. Percentage Asian Alone of State Population Aged 65 and Over: 2010 ..... 113
Figure 4-10. Percentage Native Hawaiian and Other Pacific Islander Alone of State Population Aged 65 and Over: 2010 ..... 114
Figure 4-11. Percentage Some Other Race Alone of State Population Aged 65 and Over: 2010 ..... 115
Figure 4-12. Percentage Two or More Races of State Population Aged 65 and Over: 2010 ..... 115
Figure 4-13. Percentage Hispanic of State Population Aged 65 and Over: 2010 ..... 116
Figure 4-14. Population Aged 65 and Over Residing in Metropolitan or Micropolitan Statistical Areas by Race and Hispanic Origin: 2010. ..... 121
Figure 4-15. Net Migration for Regions by Age: 2009-2010 ..... 123
Figure 5-1. Widowed Among the Population Aged 65 and Over by Sex: 1960 to 2010 ..... 128
Figure 5-2. Population Aged 55 and Over Living Alone by Age and Sex: 2010 ..... 132
Figure 5-3. Percentage of State Population Aged 65 and Over Living Alone: 2010 ..... 133
Figure 5-4. Percentage Distribution of Medicare Enrollees Aged 65 and Over in Selected Residential Settings by Age Group: 2009 ..... 136
Figure 5-5. Percentage Distribution of Medicare Enrollees Aged 65 and Over by Functional Limitations and Residential Setting: 2009. ..... 137
Figure 5-6. Nursing Home Population Aged 65 and Over by Age and Sex: 2010 ..... 138
Figure 5-7. Nursing Home Population Aged 65 and Over by Sex, Race, and Hispanic Origin: 2010 ..... 138
Figure 5-8. Nursing Home Population Aged 65 and Over as a Percentage of State Population Aged 65 and Over: 2010 ..... 139
Figure 5-9. Educational Attainment of the Population Aged 65 and Over by Sex: 1950 to 2010 ..... 140
Figure 5-10. Educational Attainment of the Population Aged 65 and Over by Race and Hispanic Origin: 2010. ..... 141
Figure 5-11. Educational Attainment by Age and Sex: 1970, 2010, and 2040 ..... 143
Figure 5-12. Foreign-Born Population Aged 65 and Over by World Region of Birth: 2010 ..... 144
Figure 5-13. Foreign-Born Population Aged 65 and Over by World Region of Birth and Period of Entry: 2010 ..... 144
Figure 5-14. Percentage Speaking a Language Other Than English at Home by Age: 2010 ..... 145
Figure 5-15. Percentage Proficient in English Among Those Not Speaking English at Home by Age and Language Group: 2010 ..... 146
Figure 5-16. Veteran Population by Age: 2010 ..... 146
Figure 5-17. Percentage Veteran by Age and Sex: 2010 ..... 147
Figure 5-18. Population Aged 18 and Over Who Reported Voting in the Presidential Election by Age: 2012 ..... 149
Figure 5-19. Population Aged 65 and Over Who Reported Voting in Presidential Elections by Race and Hispanic Origin: 2004, 2008, and 2012 ..... 150
Figure 5-20. Population That Uses the Internet by Age: Selected Years, 2000 to 2010 ..... 152
Figure 5-21. Type of Internet Use Among the Population That Uses the Internet by Age: 2010 ..... 153
Tables
Table 1-1. Population Aged 65 and Over by Age: 1900 to 2050 .....  5
Table 2-1. Life Expectancy at Birth, Age 65, Age 75, and Age 85 by Race and Sex: 1900 to 2010 ..... 25
Table 2-2. Life Expectancy at Birth, Age 65, and Age 85 for Selected Countries and Areas by Sex: 2010 ..... 28
Table 2-3. Percentage Decline in Death Rates by Age and Sex: 2000-2010 ..... 29
Table 2-4. Death Rates for the Population Aged 65 and Over by Age, Sex, Race, and Hispanic Origin: 2010 ..... 30
Table 2-5. Death Rates for the Population Aged 65 and Over by Age and Cause of Death: 2009 ..... 32
Table 2-6. Percentage of the Population Aged 65 and Over With Risk Factors by Sex: Various Years, 2003-2008. ..... 34
Table 2-7. Percentage of the Population Aged 65 and Over With Health Conditions by Age, Sex, Race, and Hispanic Origin: 2004-2007 ..... 38
Table 2-8. Population Diagnosed With Cancer at All Ages and Percentage of Cases in Population Aged 65 and Over by Cancer Type: 2003-2007 ..... 39
Table 2-9. Percentage of Population Aged 65 and Over With Clinically Relevant Depressive Symptoms by Age and Sex: 2008 ..... 42
Table 2-10. Coverage by Type of Health Insurance for the Population Aged 65 and Over: 2000 and 2010 ..... 47
Table 2-11. Average Cost of Long-Term Care by Care Setting: 2010. ..... 51
Table 3-1. Labor Force Participation Rates for the Population Aged 50 and Over by Age, Sex, Race, and Hispanic Origin: 2010 ..... 66
Table 3-2. Employed Population Aged 16 and Over by Employment Type, Age, and Sex: 2010 ..... 69
Table 3-3. Workers With Retirement Benefits by Type of Worker: March 2010 ..... 76
Table 3-4. Replacement Rates by Birth Cohort, Age at Retirement, and Year in Retirement: 1931-41 Birth Cohort ..... 77
Table 3-5. Population in Poverty and Near Poverty by Age and Sex: 2010 ..... 79
Table 3-6. Poverty Status by Age, Race, and Hispanic Origin: 2010 ..... 80
Table 3-7. Homeownership Rates by Age of Householder: 2006 to 2012. ..... 86
Table 3-8. Homeowners With Mortgages and Mortgage-Related Activities by Age Group: 1998-2001 to 2004-2007 ..... 88
Table 3-9. Unemployment by Age, Sex, Race, and Hispanic Origin: 2007 and 2010 ..... 92
Table 4-1. Population Aged 65 and Over Ranked by State: 2010 ..... 104
Table 4-2. Percentage Aged 65 and Over and Percentage Aged 85 and Over by Region and State: 2000 and 2010 ..... 106
Table 4-3. Population Aged 65 and Over by Region, Race, and Hispanic Origin: 2010 ..... 107
Table 4-4. Top Ten States With Populations Aged 65 and Over by Race and Hispanic Origin: 2010 ..... 110
Table 4-5. Top 50 Counties Ranked by Population and Percentage Aged 65 and Over: 2010 ..... 117
Table 4-6. Top 50 Counties Ranked by Population and Percentage Aged 85 and Over: 2010 ..... 119
Table 4-7. Population Aged 65 and Over Residing Inside and Outside Metropolitan or Micropolitan Statistical Areas by Age, Sex, Race, and Hispanic Origin: 2010 ..... 120
Table 4-8. Geographic Mobility of the Population Aged 65 and Over by Sex, Age, Race, Hispanic Origin, and Type of Move: 2009-2010 ..... 122
Table 4-9. Primary Reason for Moving by Age: 2009-2010 ..... 123
Table 5-1. Marital Status of the Population Aged 65 and Over by Age and Sex: 1960 to 2010 ..... 127
Table 5-2. Marital Status of the Population Aged 65 and Over by Race and Hispanic Origin: 2010. ..... 130
Table 5-3. Living Arrangements of the Household Population Aged 65 and Over: 2010 ..... 131
Table 5-4. Household Size by Race and Hispanic Origin of Householder Aged 65 and Over: 2010 ..... 133
Table 5-5. Population Aged 65 and Over Residing in a Nursing Home by Region and State: 1980 to 2010 ..... 135
Table 5-6. Educational Attainment of the Population Aged 65 and Over by Race and Hispanic Origin: 2010 ..... 142
Table 5-7. Foreign-Born Population Aged 65 and Over by Period of Entry, Citizenship Status, and Region: 2010 ..... 143
Table 5-8. Population Aged 65 and Over Who Registered and Reported Voting in Presidential Elections by Age and Sex: 1964 to 2012 ..... 148
Table 5-9. Voters Aged 65 and Over in the Presidential Election by Age, Region, and Education Level: 2012 ..... 151
Text Boxes
Box 1-1. Definition of Race and Hispanic Origin ..... 17
Box 2-1. Medicare and Its Parts ..... 46
Box 3-1. Social Security ..... 76
Box 3-2. Pension Plan Types ..... 76
Box 3-3. Supplemental Poverty Measure ..... 82
Box 3-4. Major Dimensions of the Great Recession ..... 84
Appendix TablesAppendix Table C-1. Population Size and Balance of Males and Females for the PopulationAged 65 and Over by Age, Sex, Race, and Hispanic Origin: 2010C-1
Appendix Table C-2. Labor Force Participation Rates for the Population Aged 50 and Over by Age, Sex, Race, and Hispanic Origin: 1980 to 2010 ..... C-4
Appendix Table C-3. Poverty Status by Age, Race, and Hispanic Origin: 1980 to 2010 ..... C-5
Appendix Table C-4. Population Aged 65 and Over and Percentage Change by Region and State: 2000 and 2010 ..... C-7
Appendix Table C-5. Population Aged 85 and Over and Percentage Change by Region and State: 2000 and 2010 ..... C-8
Appendix Table C-6. Population Aged 65 and Over by Region, State, Race, and Hispanic Origin: 2010 ..... C-9
Appendix Table C-7. Estimates and Margins of Error for Key Indicators for the PopulationAged 65 and Over: Selected Years, 2000 to 2010C-12

## Preface

In 2011, the Baby Boom generation, people born from 1946 to 1964, began to turn age 65. As the large Baby Boom cohort ages, the United States will experience rapid growth in both the number aged 65 and older and their share of the total population. The social and economic implications of the aging of the U.S. population will be of significant interest to policy makers, the private sector, and individuals.

This report examines a range of topics concerning the population aged 65 and older in five chapters. Chapter 1-Growth of the Older Population-discusses the age structure of the older population and its distribution by race and Hispanic origin. Chapter 2Longevity and Health—addresses mortality, health behaviors and risks, chronic conditions and disability, long-term care, and health insurance. Chapter 3Economic Characteristics-covers work and retirement, income and poverty, and the impact of the 2007-2009 recession on the older population. Chapter 4-Geographic Distribution-describes the geographic distribution of the older population across regions and states by race and Hispanic origin
along with older people's migration patterns. Chapter 5-Social and Other Characteristics—looks at a range of sociodemographic characteristics of the older population, including marital status, education, living arrangements, and veterans status.

The topics highlighted in the report update trends documented in previous versions of this report. The first edition was written by Cynthia M. Taeuber with Bonnie L. Damon and published in 1993. The second, titled 65+ in the United States, was prepared by Frank B. Hobbs with Bonnie L. Damon and published in 1996, and the third was $65+$ in the United States: 2005, written by Wan He, Manisha Sengupta, Victoria A. Velkoff, and Kimberly A. DeBarros and published in 2005. All three earlier editions as well as the current one were commissioned by the National Institute on Aging, Division of Behavioral and Social Research, Richard M. Suzman, Director.

Compared to previous reports, this report expands on the discussion of long-term care and nursing homes and includes an assessment of the impact of the December

2007 to June 2009 recession on older Americans.

Data used in this report draw heavily from the 2010 Census; nationally representative surveys such as the Current Population Survey, the American Community Survey, and National Health Interview Survey; the national vital statistics system; and recent population projections for the United States and other countries. This report also incorporates survey data and analytical findings from numerous studies about the older population prepared by the Census Bureau, other federal agencies, and private researchers, including research funded by the National Institute on Aging, Division of Behavioral and Social Research. For a more detailed discussion of data sources, see Appendix A: Sources of Data.

Statistics from surveys are subject to sampling and nonsampling error. All comparisons of characteristics based on U.S. sample data have taken sampling error into account and are significant at the 90 percent confidence interval. For a more detailed discussion of data accuracy, see Appendix B: Accuracy of the Estimates.

- In 2010, there were 40.3 million people aged 65 and older, 12 times the number in 1900.
- The percentage of the population aged 65 and over among the total population increased from 4.1 percent in 1900 to 13.0 percent in 2010 and is projected to reach 20.9 percent by 2050.
- From 2010 onwards, the older dependency ratio is expected to rise sharply as the Baby Boomers enter the older ages. In 2030, when all Baby Boomers will have already passed age 65, the older dependency ratio is expected to be 37, which translates into fewer than three people of working age (20 to 64) to support every older person.
- The older population has become more racially and ethnically diverse, with those identifying their race as White alone comprising 84.8 percent in 2010, down from 86.9 percent in 2000.
- The United States is not the only country experiencing population aging. In 2010, 50 countries had a higher proportion of people aged 65 and over than the United States, and by 2050, this number is projected to reach 98, almost half the countries in the world.
- In 2010, Alzheimer's disease was the fifth leading cause of death among the older population, up from seventh position in 2000. In contrast to declining mortality from most other causes of death, the death rate
for Alzheimer's rose more than 50 percent from 1999 to 2007.
- Over 38 percent of those aged 65 and over had one or more disabilities in 2010, with the most common difficulties being walking, climbing stairs, and doing errands alone.
- The share of the older population residing in skilled nursing facilities declined from 4.5 percent in 2000 to 3.1 percent in 2010. The share in other long-term care facilities, such as assisted living, has been growing.
- Medicaid funds for long-term care have been shifting away from nursing homes with funding for home- and communitybased services increasing from 13 percent of total funding in 1990 to 43 percent in 2007.
- Labor force participation rates rose for both older men and older women in the first decade of the twenty-first century, reaching 22.1 percent for older men and 13.8 percent for older women. In contrast, the labor force participation rates for the population aged 25 to 34 fell from 2000 to 2010 for both men and women.
- The older White alone population was less likely than the older Black alone and Asian alone populations to live in poverty. Older Hispanics were more likely to live in poverty than older non-Hispanic White alone residents.
- Following the housing price peak in 2006, homeownership rates declined for the population under age 65
but remained flat for older householders.
- Housing costs were slightly less of a burden in 2009 compared with 2001 for older householders.
- While the 2010 unemployment rates for people aged 55 and over were lower than for their younger counterparts, the older group still experienced a doubling of unemployment rates compared to just prior to the 2007-2009 recession. For example, the unemployment rate for the age group 65 to 69 rose from 3.3 percent in 2007 to 7.6 percent in 2010. Also, once unemployed, it took workers aged 55 and older longer to find new employment.
- Many older workers managed to stay employed during the recession. In fact, the population aged 65 and over was the only age group not to see a decline in their employment share from 2005 to 2010. In 2010, 16.2 percent of the population aged 65 and over were employed, up from 14.5 percent in 2005.
- Eleven states had more than 1 million people aged 65 and older in 2010.
- States with the highest proportions of older people in their populations in 2010 included Florida, West Virginia, Maine, and Pennsylvania (all above 15 percent).
- The West and South regions experienced the fastest growth in their 65 -plus and 85 -plus populations between 2000 and 2010.
- In 2010, more than 7 out of 10 older Hispanics lived in four states: California (26.9 percent), Texas (19.2 percent), Florida (15.7 percent), and New York (9.0 percent).
- The vast majority of older people do not move, but their moving rates remained stable between 2000 and 2010 in contrast to the slowdown in migration among younger populations.
- Changing marital trends, such as the rise of divorces, as well as the increase in living alone among the 65-and-over population, will likely alter the social support needs of aging Baby Boomers.
- Between 2000 and 2010, the number and percentage of older minorities in nursing homes increased.
- The population aged 65 and over was the only age group to see an increase in voter participation in the 2012 presidential election compared with the 2008 presidential election.
- In 2010, Internet usage among the older population was up 31 percentage points from a decade prior.


## Chapter 1. Growth of the Older Population

The population aged 65 and over continues to grow more rapidly than the population under age 65, and hence its proportion of the total population is also increasing. The oldest-old subgroup of the older population outpaced their younger counterparts in growth, resulting in the aging of the older population itself.' With the first Baby Boomers becoming age 65 in 2011, the U.S. population is poised to experience a population aging boom over the next 2 decades. ${ }^{2}$ This chapter examines the numerical and proportionate growth of the older population, its age structure, and distribution by race and Hispanic origin. This chapter also discusses the U.S. population

[^0]aging in the context of global aging trends.

## Numerical and Proportionate Growth

## The Older Population in the Twentieth and Twenty-First Centuries

The population aged 65 and older has grown faster than the population under age 65 over the period of 1900 to 2010. In 1900, people aged 65 and older numbered 3.1 million, and by 2010, their number had grown 12 -fold to 40.3 million (Table 1-1 and Figure 1-1). During the same interval, the population under age 65 grew from 72.9 million to 268.5 million, or 3.7 times as large. The older population has grown relatively fast over the past century due to fertility declines in the first half of the twentieth century and to decreases
in mortality, with medical advancements contributing to particularly large decreases in mortality among the oldest old, those aged 85 and older.

The disproportionate growth of older age groups, known as "population aging," is expected to continue into the future. In absolute numbers, the older population is projected to more than double from 40.3 million in 2010 to 83.7 million in 2050. Between 1900 and 2010, the percentage of the population aged 65 and over among the total population increased from 4.1 percent to 13.0 percent. Their proportion is projected to rise further in the coming decades. By 2050, the percentage of the population aged 65 and over is projected to reach 20.9 percent, with the steepest increase occurring between 2010 and 2030.

Table 1-1.

## Population Aged 65 and Over by Age: 1900 to 2050

(Numbers in thousands. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Source, year, and reference date | Total population | 65 and over |  | 65 to 74 |  | 75 to 84 |  | 85 and over |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Census |  |  |  |  |  |  |  |  |  |
| 1900 (June 1). | 75,995 | 3,080 | 4.1 | 2,187 | 2.9 | 771 | 1.0 | 122 | 0.2 |
| 1910 (April 15) | 91,972 | 3,950 | 4.3 | 2,793 | 3.0 | 989 | 1.1 | 167 | 0.2 |
| 1920 (January 1) | 105,711 | 4,933 | 4.7 | 3,464 | 3.3 | 1,259 | 1.2 | 210 | 0.2 |
| 1930 (April 1) | 122,775 | 6,634 | 5.4 | 4,721 | 3.8 | 1,641 | 1.3 | 272 | 0.2 |
| 1940 (April 1) | 131,669 | 9,019 | 6.8 | 6,376 | 4.8 | 2,278 | 1.7 | 365 | 0.3 |
| 1950 (April 1) | 150,697 | 12,270 | 8.1 | 8,415 | 5.6 | 3,278 | 2.2 | 577 | 0.4 |
| 1960 (April 1) | 179,323 | 16,560 | 9.2 | 10,997 | 6.1 | 4,633 | 2.6 | 929 | 0.5 |
| 1970 (April 1) | 203,212 | 20,066 | 9.9 | 12,435 | 6.1 | 6,119 | 3.0 | 1,511 | 0.7 |
| 1980 (April 1) | 226,546 | 25,549 | 11.3 | 15,581 | 6.9 | 7,729 | 3.4 | 2,240 | 1.0 |
| 1990 (April 1) | 248,710 | 31,242 | 12.6 | 18,107 | 7.3 | 10,055 | 4.0 | 3,080 | 1.2 |
| 2000 (April 1) | 281,422 | 34,992 | 12.4 | 18,391 | 6.5 | 12,361 | 4.4 | 4,240 | 1.5 |
| 2010 (April 1) | 308,746 | 40,268 | 13.0 | 21,713 | 7.0 | 13,061 | 4.2 | 5,493 | 1.8 |
| Projection |  |  |  |  |  |  |  |  |  |
| 2020 (July 1) | 333,896 | 55,969 | 16.8 | 32,796 | 9.8 | 16,480 | 4.9 | 6,693 | 2.0 |
| 2030 (July 1) | 358,471 | 72,774 | 20.3 | 38,593 | 10.8 | 25,236 | 7.0 | 8,946 | 2.5 |
| 2040 (July 1) | 380,016 | 79,719 | 21.0 | 35,465 | 9.3 | 30,140 | 7.9 | 14,115 | 3.7 |
| 2050 (July 1) | 399,803 | 83,739 | 20.9 | 37,554 | 9.4 | 28,206 | 7.1 | 17,978 | 4.5 |

[^1]Figure 1-1.

## Population Aged 65 and Over: 1900 to 2050

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


Sources: 1900 to 1940, and 1960 to 1980, U.S. Bureau of the Census, 1983; 1950, U.S. Bureau of the Census, 1953; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, 2011 ; 2020 to 2050, U.S. Census Bureau, 2012a; 1900 to 2010, decennial census; 2020 to 2050, 2012 National Population Projections, Middle series.

Over the last century, however, the average annual growth rate of the older population has varied from decade to decade (Figure 1-2). The older population grew fastest from the 1920s to the 1950s, when the average annual growth rate was around 3 percent, more than double the overall population growth. After the 1960s, the growth of the older population slowed down, although it remained higher than the total population growth in all decades except 1990-2000, during which the proportion of older people actually fell (Table 1-1 and Figure 1-1). This anomaly was due partly to the decline in fertility during the Great Depression, which occurred in late 1929 through the
early 1930s. The cohort born during this baby bust era reached age 65 in the 1990s. ${ }^{3}$

The subsequent rise in fertility between 1946 and 1964 resulted in a large generation known as Baby Boomers. They started to reach age 65 in 2011, portending rapid population aging over the next 20 years. Between 2010 and 2020, the older population is projected to grow more rapidly than in any other decade since 1900 (3.2 percent average annual growth), while the total population will grow about as slowly as in any other past decade since 1900

[^2](0.8 percent), a difference of 2.4 percentage points. This difference will be among the largest in the past century.

## Aging of the Oldest Old

Population aging has been remarkable in the oldest-old population, those aged 85 and over. For example, the proportion of people aged 65 to 74 (the youngest 10-year age group of the older population) grew from 2.9 percent of the total population in 1900 to 7.0 percent in 2010 , and the proportion aged 75 to 84 grew from 1.0 percent in 1900 to 4.2 percent in 2010 (Table 1-1). In contrast, the proportion of people aged 85 and above reached

Figure 1-2.


1900- 1910- 1920- 1930- 1940- 1950- 1960-1970-1980-1990-2000-2010-2020-2030-2040$\begin{array}{lllllllllllllll}1910 & 1920 & 1930 & 1940 & 1950 & 1960 & 1970 & 1980 & 1990 & 2000 & 2010 & 2020 & 2030 & 2040 & 2050\end{array}$

Note: Average annual growth rates for 1900-1910 through 2000-2010 are based on reported census populations. Average annual growth rate for 2010-2020 is based on 2010 census data and projections data; 2020-2030 through 2040-2050 are based on projected populations.
Sources: 1900 to 1940, and 1960 to 1980, U.S. Bureau of the Census, 1983; 1950, U.S. Bureau of the Census, 1953; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, $2011 ; 2020$ to 2050, U.S. Census Bureau, 2012a; 1900 to 2010, decennial census; 2020 to 2050, 2012 National Population Projections, Middle series.
1.8 percent in 2010, 9 times their share in 1900. Additionally, those aged 85 and over as a proportion of the 65 -and-over population increased from under 4 percent from 1900 to 1940 to 13.6 percent in 2010 (Figure 1-3). The older population itself has been aging since the 1940s. However, the proportion aged 85 and over of the older population is projected to decline between 2010 and 2020 and remain below the 2010 level in 2030 as Baby Boomers join the ranks of the 65 and older and swell the younger segments of the older population.

The population aged 90 and over has become an increasingly large
population group. The 90 -and-over population has grown more rapidly than those aged 85 to 89 as well as other younger age groups within the older population. Data from 1980 to 2010 show that the number of people aged 90 and older has steadily grown and is projected to more than quadruple from 2010 to 2050, compared with a doubling of the population aged 65 to 89, according to He and Muenchrath (2011).

People aged 90 and over are more likely to live in skilled-nursing facilities/nursing homes and to have a disability than those aged 85 to 89 or those of other, younger age groups within the 65-and-over
population. ${ }^{4}$ While the likelihood of living in a nursing home is extremely low at ages 65 to 69 ( 1.0 percent) and ages 75 to 79 (3.0 percent), it dramatically rises to 11.2 percent at ages 85 to 89 , 19.8 percent at ages 90 to $94,31.0$ percent at ages 95 to 99, and 38.2 percent at 100 years of age and over (He and Muenchrath, 2011). The prevalence of disabilities is about 13 percentage points higher in people aged 90 to 94 compared

[^3]Figure 1-3.

## Population Aged 85 and Over: 1900 to 2050

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)


Sources: 1900 to 1940, and 1960 to 1980, U.S. Bureau of the Census, 1983; 1950, U.S. Bureau of the Census, 1953; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, 2011 ; 2020 to 2050, U.S. Census Bureau, 2012a; 1900 to 2010, decennial census; 2020 to 2050, 2012 National Population Projections, Middle series.
with those aged 85 to 89 , and this difference is consistent for both men and women.

Improved health is a key reason for the rapid growth of the older population, particularly the oldest old. Reduced mortality has increased the number of centenarians, those living to age 100 or beyond. About 50,500 centenarians were counted in Census 2000. In 2010, that number was over 53,400 , about 6 percent higher. The growth of centenarians between the two censuses was relatively modest compared with the other age groups among the older population. This may reflect historical factors (e.g., increased mortality during World War II). It
could also reflect age misreporting, which is often observed at the very oldest ages, or other data quality issues arising from question and form design problems or misallocation of extreme ages during data processing (Gavrilov and Gavrilova, 2011; Meyer, 2012; Preston, Elo, and Stewart, 1999). All these issues may bias interpretations of actual trends for the centenarian population.

## Population Dynamics

## Median Age

As the number and proportion of people aged 65 and older increase, the U.S. population as a whole is getting older. One measure of the population age structure is the
median age-the age that divides a population into two groups, half younger and half older.

In 1900, the median age in the United States was 22.9 years (Figure 1-4), reflecting a young population comparable to moderately high-fertility populations found in the less developed world today. Due primarily to a decline in fertility during the first half of the twentieth century, the U.S. population then became progressively older. By 1950, the median age was 30.2 years. The baby boom era was a high-fertility period with the largest number of births in the twentieth century. The baby boom created a brief respite from the aging trend, as the median age

Figure 1-4.
Median Age: 1900 to 2050
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)
Age


Sources: 1900 to 1940, and 1960 to 1980, U.S. Bureau of the Census, 1983; 1950, U.S. Bureau of the Census, 1953; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, 2011 ; 2020 to 2050, U.S. Census Bureau, 2012a; 1900 to 2010 decennial census; 2020 to 2050, 2012 National Population Projections, Middle series.
of the population declined during the 1950s and 1960s and did not return to the 1950 level until 1980. However, as smaller birth cohorts followed the Baby Boomers, the median age has been rising since the 1970s, reaching 37.2 years in 2010, and it is projected to increase to 39.6 years in 2030 before leveling off.

## Age Structure

Population aging can be illustrated graphically with a population pyramid that compares cohorts of males and females at successive age groups, beginning with the youngest cohorts at the bottom. Age structure is determined by three demographic factors-births, deaths, and migration-as well
as changes in these factors over time. In the past, high levels of fertility and mortality resulted in an age structure that resembled a pyramid, due to large birth cohorts at the base and a rapid narrowing of the population as people aged. Historically, the medical field was not as advanced as today and, as a result, more people died from diseases at younger ages. More recently, declines in both fertility and mortality (see Chapter 2) have caused the shape of the population age structure to shift from pyramidal to rectangular. In general, fertility plays a more important role than mortality in determining population age structure, particularly in cases when fertility shifts rapidly over time.

The age structure of the U.S. population in 1900 had a classic pyramid shape; wider at the bottom and narrower at the top (Figure 1-5). This classic shape changed around the Great Depression, when a constriction in the age structure was introduced due to the decline of births around that time. As a result, the population born in the late 1920s and 1930s was relatively smaller than those born earlier or later. This can be seen in Figure 1-6 with the contraction of the 30 to 34 and 35 to 39 age groups (cohorts born during the 1930s).

The Baby Boom generation, born between the years of mid-1946 to 1964, is highlighted in red bars in Figures 1-6 through 1-9 to better track its aging through past and

Figure 1-5.
Population by Age and Sex: 1900
(For information on confidentiality protection, nonsampling error, and definitions, see
www.census.gov/prod/cen2010/doc/sfl.pdf)


Source: U.S. Bureau of the Census, 1983; 1900 Census.
future decades. In 1970, the Baby Boomers were aged 6 to 24 (Figure 1-6). By 2010, Baby Boomers were aged 46 through 64 (Figure 1-7).

The age-sex structure displayed on these figures sheds light on the trends in population aging. From now through 2030, when Baby Boomers will be between the ages of 66 and 84 , that generation will continue to contribute to rapid population aging (Figure 1-8). Consequently, the country's age structure is expected to resemble a rectangle for the most part and to be top-heavy. The sheer numbers of older people will be much larger than in prior years, and there will be a higher proportion of older people represented in the total population. In 2050, the Baby Boomers will be aged 86 and over, which will result in a larger population in the oldest-old age groups than in the age groups 70 to 74,75 to 79 , and 80 to 84 (Figure 1-9). This age structure will be unprecedented in U.S. history.

The aging of the Baby Boom cohort will have an enormous impact on our society, partially due to the medical, economic, and social needs of this population. The greater proportion of people at older ages will result in a greater portion of the population living on fixed incomes with higher medical expenditures

Figure 1-6.
Population by Age and Sex: 1970
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


Source: U.S. Bureau of the Census, 1983; 1970 Census.

Figure 1-7.
Population by Age and Sex: 2010
(For information on confidentiality protection,
nonsampling error, and definitions, see
www.census.gov/prod/cen2010/doc/sf1.pdf)


Source: U.S. Census Bureau, 2011; 2010 Census.


Figure 1-9.
Population by Age and Sex: 2050


Source: U.S. Census Bureau, 2012 a; 2012 National
Population Projections, Middle series.
per person and increased needs for long-term care, family caregiving, and support for caregivers (see Chapter 2). At the same time, the number of volunteers and caregivers may increase substantially. According to the 2002 Health and Retirement Study, among the population aged 65 to $74,35.3$ percent engaged in formal volunteering, 52.1 percent informally volunteered, and 37.8 percent provided caregiving (Zedlewski and Schaner, 2005). Among adults aged 75 and older, participation in these activities was 27.9 percent for formal volunteering, 34.5 percent for informal volunteering, and 19.2 percent for caregiving. An estimate of the value of these unpaid activities by the population aged 65 and over was $\$ 83.4$ billion in 2002 (Johnson and Schaner, 2005).

## Sex Imbalances

Older women outnumber older men, while younger men outnumber younger women (Figure 1-10). In 2010, for instance, the sex ratio for each 5-year age group from ages 0 to 4 to ages 30 to 34 showed a greater number of males than females. ${ }^{5}$ Above age 35 , however, women outnumber men. There were 89 men per 100 women among those aged 65 to 69 and 38 men per 100 women among those aged 90 and over.

In numerical terms, women outnumbered men by 0.7 million among those aged 65 to 69 , by 1.0 million among those aged 75 to 79 , and by 1.9 million among those aged 85 and over (Figure 1-11). The reason for the increasing sex imbalance at older ages is higher male mortality in the older age groups, although the gap between male and female life expectancies is narrowing, as is the mortality gap at birth (see Chapter 2).

The disproportion of women among the older population has implications for social support mechanisms. Women are not only increasingly more numerous than men in older age groups, but they are also more likely to be widowed and to live alone (see Chapter 5). Their greater proportion among the oldest old indicates that they may be more likely to require long-term care (Martikainen et al., 2009).

## Dependency Ratios

A key measure of the impact of population aging is the dependency ratio. It provides a broad view of the relative sizes of dependent-age groups to a working-age group. The younger (aged 0 to 19) and older (aged 65 and over) populations are less likely to work and are more often dependent on those in

[^4]Figure 1-10.
Sex Ratio by Age: 2010
(Males per 100 females. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


Source: U.S. Census Bureau, 2011; 2010 Census.

Figure 1-11.
Difference Between Male and Female Populations by Age: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


Note: Calculation is female population minus male population for each age group.
Source: U.S. Census Bureau, 2011; 2010 Census.
their primary working ages (aged 20 to 64). ${ }^{6}$ An aging society may cause the older dependency ratio to increase, while lower infant and child mortality can impact both the number of surviving children as well as the number of pregnancies women have, which can shape the youth dependency ratio.

The dependency ratio provides a gross estimate of the pressure on the productive population in a society. Social programs in the United States, such as Social Security and

[^5]Medicare, are largely used by the older population, and government expenditures on education primarily benefit children and youth. Working-age individuals usually finance these programs through taxes levied by various levels of government. The dependency ratio also offers an indication of a society's caregiving burden by estimating the potential supply of caregivers and the potential demand for care (care recipients).

However, the dependency ratio does not account for older or younger people who work or have financial resources, nor does it capture those in their "working ages" who are not working. Also, while in the past people were able to receive full Social Security benefits at age 65, the eligibility age to
receive full Social Security benefits has risen since the 1990s and a portion of the population aged 65 and older continues to work. Furthermore, many caregivers are found among the older population. Therefore, there may be many different dependency ratios based on alternative age groups.

Figure 1-12 shows trends in the older, youth, and total dependency ratios from 1980 to 2010 as well as projected trends through 2050. In 2010, the total dependency ratio was 67, composed of 45 people younger than age 20 and 22 people aged 65 or older for every 100 people aged 20 to 64. Therefore, from a societal perspective, there were four and a half working-age people in 2010 to support each older person; however, if

Figure 1-12.
Dependency Ratios: 1980 to 2050
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


[^6]support for youth is also included, then there were only one and a half working-age people to support each dependent.

From an individual perspective, the same working-age individual may be supporting both younger and older family members. This phenomenon is referred to as the "sandwich generation" and translates into greater responsibility for those who are currently working (Cravey and Mitra, 2011). As the older dependency ratio increases, people of "working age" will more likely provide financial, physical, and/or emotional support to both a child and a parent or grandparent.

Changes in dependency ratios provide an indirect indication of how societal needs have shifted in the
past and what may be the future needs for housing, consumer products, and services. Youth dependency declined from 56 in 1980 to 45 in 2010, easing the burden on the population aged 20 to 64 . Over the same period, older dependency increased from 20 to 22 (Figure 1-12). Because the increase of the older dependency ratio was not as large as the decrease of the youth dependency ratio during these 30 years, the total dependency ratio in 2010 (67) actually was lower than the 1980 ratio (76), reflecting a lighter societal support burden. From 2010 onwards, the older dependency ratio is expected to rise sharply as the Baby Boomers enter the older ages. In 2030, when all Baby Boomers will have passed age 65 , the older dependency
ratio is expected to be 37 , which translates into fewer than three people of working age to support every older person. From 2030 to 2050, the total dependency ratios are projected to remain relatively stable at about 82 , with the older dependency ratio around 38 and the youth dependency ratio around 44.

Dependency ratios vary across race and Hispanic-origin groups. Among the race groups, the White alone population had the highest older dependency ratio in 2010 (25; Figure 1-13), largely due to higher life expectancy at birth and at age 65 than other race and Hispanicorigin groups. It was followed by Black alone (15), Asian alone (14), American Indian and Alaska Native alone (12), Two or More Races

Figure 1-13.
Dependency Ratios by Race and Hispanic Origin: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see $w w w . c e n s u s . g o v / p r o d / c e n 2010 / d o c / s f 1 . p d f)$


[^7](10), Native Hawaiian and Other Pacific Islander alone (9), and Some Other Race alone (6). ${ }^{7}$ For the nonHispanic population, about four working-age individuals support each older person (older dependency ratio is 24 ; Figure 1-13). Conversely, for Hispanics, ten working-age individuals support each older person (older dependency ratio is 10). ${ }^{8}$

## Race and Hispanic Origin

The Distribution of the Older Population by Race and Hispanic Origin in 2010

Figure 1-14 shows the percentage distribution of the population aged 65 and over by race and Hispanic

[^8]origin in the 2010 Census. Nearly 85 percent of the older population identified their race as White alone. They were followed by Black alone (8.5 percent), Asian alone (3.4 percent), Some Other Race alone (1.7 percent), Two or More Races (1.0 percent), American Indian and Alaska Native alone ( 0.5 percent), and Native Hawaiian and Other Pacific Islander alone ( 0.1 percent). While the White alone older population decreased from 86.9 percent to 84.8 percent between 2000 and 2010 , all other race groups increased or maintained the same percentages over the intercensal period. The Black alone population increased from 8.1 percent to 8.5 percent between 2000 and 2010, and the Asian alone population increased from 2.3 percent to 3.4 percent. The percentage of

Hispanics increased from 5.0 percent to 6.9 percent between 2000 and 2010.

Unlike the total population, in which the non-Hispanic White population will no longer be a majority by 2043, non-Hispanic Whites will remain a majority among the older population for longer (U.S. Census Bureau, 2012a). While the non-Hispanic White population is projected to continue to account for the majority of the older population at least through 2050, the population aged 65 and over is expected to become more racially and ethnically diverse over the next 40 years- 18.4 percent of the population aged 65 and over is projected to be Hispanic by 2050, more than double the percentage in 2010 , and 77.3 percent are projected to be members of the

Figure 1-14.
Percentage Distribution of the Population Aged 65 and Over by Race and Hispanic Origin: 2000 and 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


Sources: 2000, U.S. Census Bureau, 2001 and 2011; 2000 and 2010 Censuses.

White alone population, a 7 per-centage-point decline from 2010 (U.S. Census Bureau, 2012a). While the 85 and over population is less racially diverse than the 65 to 84 population, it is projected to also increase in diversity between 2010 and 2050.

## Aging Trends by Race and Hispanic Origin

In the 2010 Census, the proportion aged 65 and over of their respective total population varied across race and Hispanic-origin groups. Just over 15 percent of the White alone population was aged 65 and over (Figure 1-15). They were followed by the Asian alone (9.4 percent), Black alone (8.8 percent), American Indian and Alaska Native alone (7.1 percent), Native Hawaiian and Pacific Islander alone
(5.8 percent), Two or More Races (4.4 percent), and Some Other Race alone (3.5 percent) populations. The proportion of the Hispanic population aged 65 and over was 5.5 percent, while the proportion of the non-Hispanic population aged 65 and over was 14.5 percent. Variation across race and Hispanic-origin groups reflects migration, fertility, and mortality differences.

All race and Hispanic-origin groups, except for Two or More Races, saw an increase in the proportion aged 65 and over from the 2000 Census to the 2010 Census. These changes were not uniform across race and ethnic groups. The White alone older population experienced a 6.2 percent growth over the decade (from 14.4 percent to
15.3 percent). The percentage change of the older population in all other race groups exceeded the growth of the White-alone population. The American Indian and Alaska Native-alone older population had the most growth (26.3 percent), and was followed by Asian alone (20.9 percent), Some Other Race alone (17.1 percent), Native Hawaiian and Other Pacific Islander alone (10.7 percent), and Black alone ( 8.4 percent). During the same 10 years, the older Hispanic population grew 12.2 percent and the non-Hispanic older population grew 7.4 percent. The differential growth of the older population in race and ethnic groups reflects, once again, historical demographic changes and more recent shifts in demographic behavior.

Figure 1-15.
Percentage Aged 65 and Over Among the Total Population for Each Race and Hispanic Origin Group: 2000 and 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)


Sources: 2000, U.S. Census Bureau, 2001 and 2011; 2000 and 2010 Censuses.

## Box 1-1.

## Definition of Race and Hispanic Origin

The U.S. Census Bureau collects information on race and Hispanic origin following the guidance of the U.S. Office of Management and Budget (OMB)'s 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity.* These federal standards mandate that race and Hispanic origin (ethnicity) are separate and distinct concepts and that when collecting these data via self-identification, two different questions must be used. "Hispanic or Latino" refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. Hispanic origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be any race.

The 2010 Census question on race included 15 separate response categories and three areas where respondents could write-in detailed information about their race. The response categories and write-in answers can be combined to create the five minimum OMB race categories (White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander), plus Some Other Race.
"White" refers to a person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who

[^9]indicated their race(s) as "White" or reported entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian.
"Black or African American" refers to a person having origins in any of the Black racial groups of Africa. It includes people who indicated their race(s) as "Black, African Am., or Negro" or reported entries such as African American, Kenyan, Nigerian, or Haitian.
"American Indian or Alaska Native" refers to a person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicated their race(s) as "American Indian or Alaska Native" or reported their enrolled or principal tribe, such as Navajo, Blackfeet, Inupiat, Yup'ik, or Central American Indian groups or South American Indian groups.
"Asian" refers to a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. It includes people who indicated their race(s) as "Asian" or reported entries such as "Asian Indian," "Chinese," "Filipino," "Korean," "Japanese," "Vietnamese," and "Other Asian" or provided other detailed Asian responses.
"Native Hawaiian or Other Pacific Islander" refers to a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicated their race(s) as "Pacific Islander" or reported entries such as "Native Hawaiian," "Guamanian or Chamorro," "Samoan," and "Other Pacific

Islander" or provided other detailed Pacific Islander responses.
"Some Other Race" includes all other responses not included in the White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander race categories described above. Respondents reporting entries such as multiracial, mixed, interracial, or a Hispanic or Latino group (for example, Mexican, Puerto Rican, Cuban, or Spanish) in response to the race question are included in this category.

Individuals who responded to the question on race by indicating only one race are referred to as the racealone population or the group that reported only one race category. Six categories make up this population: White alone, Black or African American alone, American Indian and Alaska Native alone, Asian alone, Native Hawaiian and Other Pacific Islander alone, and Some Other Race alone. Individuals who chose more than 1 of the 6 race categories are referred to as the Two or More Races population. All respondents who indicated more than one race can be collapsed into the Two or More Races category, which combined with the six race-alone categories, yields seven mutually exclusive and exhaustive categories. Thus, the six race-alone categories and the Two or More Races category sum to the total population.

For more information on the concepts of race and Hispanic origin, see Humes, K., N. Jones, and R. Ramirez. 2011. "Overview of Race and Hispanic Origin: 2010." 2010 Census Briefs.
U.S. Census Bureau. Available at <www.census.gov/prod /cen2010/briefs/c2010br-02.pdf>.

Age composition within the 65-and-over population varied by race and Hispanic origin (Figure 1-16). ${ }^{9}$ Among the race groups, the White alone population had the "oldest" 65-and-over population, with the lowest shares in the age groups 65 to 69 ( 30.2 percent) and 70 to 74 ( 22.7 percent) and the highest shares in the age groups 75 to 79 ( 18.2 percent), 80 to 84 (14.7 percent), 85 to 89 ( 9.4 percent), and 90 and over (4.8 percent). The second-oldest 65 -and-over population belonged to the Black alone population. The two race groups with the "youngest" 65-and-over population were Native Hawaiian and Other Pacific Islander alone and American Indian and Alaska Native alone. These two race groups had the largest shares in the age groups 65 to 69 (38.7 percent and 38.2 percent, respectively) and 70 to 74 ( 26.1 percent

[^10]and 26.0 percent, respectively) and among the smallest shares in other older age groups.

A higher proportion of the 65-andover Hispanic population was in the "younger" age ranges as compared with non-Hispanics (Figure 1-16). Hispanics aged 65 to 74 represented 59.3 percent of the total older population compared with 53.5 percent of non-Hispanics. Conversely, Hispanics aged 85 and over were 9.8 percent of all Hispanics aged 65 and over, while the same figure for non-Hispanics was 14.0 percent.

## Our Aging World

To provide context for aging in the United States, it is helpful to examine aging trends globally. Fertility and mortality rates have declined and populations are aging in most countries, although the levels and pace vary by geographic
region-and usually within regions. ${ }^{10}$

In 2010, four countries out of the 228 in the Census Bureau's International Data Base (IDB) had an older population that represented 20 percent or more of their total population-Germany, Italy, Japan, and Monaco (Figure 1-17).11 The United States, with an older population of 13.1 percent in 2010 , was relatively young by more developed country standards. ${ }^{12}$

## Growth of the Older Population by Country

With the World War II Baby Boom cohorts in many countries beginning to reach the older ages

[^11]Figure 1-16.

## Percentage Distribution of Population Aged 65 and Over by Age for Each Race and Hispanic Origin Group: 2010

(For information on confidentiality protection, nonsampling error, and definitions, see
www.census.gov/prod/cen2010/doc/sf1.pdf)


Source: U.S. Census Bureau, 2011; 2010 Census.

Figure 1-17.

## Percentage of Population Aged 65 and Over by Country: 2010 and 2050



Source: U.S. Census Bureau, 2012b; International Data Base.
around 2010 and with rapidly falling fertility and mortality levels in many less developed countries, the older population proportion throughout much of the world will jump. In 2050, it is projected that 100 countries will have an older population comprising at least a 20 percent share of the total
population, including Canada (26.3 percent), China (26.8 percent), Russia (25.7 percent), and Thailand (26.0 percent) (U.S. Census Bureau, 2012b). The older population percentage in the United States is projected to rise markedly, likely reaching 20 percent by 2030.

Almost one-third of the IDB countries ( 75 countries) are projected to experience at least a tripling in the share of older people in the total population between 2010 and 2050, including Algeria (4.9 percent to 17.2 percent), Brazil ( 6.7 percent to 21.1 percent), Iran (5.0 percent to 19.7 percent), Mexico
(6.4 percent to 19.0 percent), Taiwan (10.9 percent to 34.9 percent), and Tunisia ( 7.4 percent to 24.3 percent) (U.S. Census Bureau, 2012b). In 2010, 50 countries had a higher proportion of people aged 65 and over than the United States, and by 2050 this number is projected to rise to 98 , almost half of the world. For example, while South Korea's older population made up 11.1 percent of their total population in 2010, slightly lower than the 13.1 percent for the United States, in 2050 this percentage in South Korea is projected to reach 35.9 , much higher than the projection for the United States (20.9 percent). Another example is Chile, where the 8.9 percent of older people in 2010 is projected to rise to 23.2 percent in 2050 , also higher than that projected for the United States.

## "The Crossing"

An unprecedented shift will occur between 2015 and 2020, when the percentage of older people (aged 65 and over) in the global population will surpass the percentage of the very young (aged $0-4$ ) for the first time (Figure 1-18). Historically, children under age 5 have outnumbered older people; however, since 1955, the proportion of children under age 5 has been declining, while the proportion aged 65 and older has been rising. These two trend lines are projected to cross before the year 2020. This "crossing" occurred in the United States in the second half of the 1960s. Projections show that in the coming decades, older people will continue to outnumber the very young. The proportion of the world population aged 65 and above is expected to double from about 8 percent in 2010 to about

16 percent in 2050, while the proportion under age 5 is projected to shrink from about 9 percent to 7 percent over the same time span.

## Regional Differences

Currently, as in past decades, Europe and North America have the highest proportions of older people among major world regions, and this pattern will likely continue well into the twenty-first century. In 2010, 16.3 percent of Europe's population was 65 and older, with the share expected to rise to almost 23 percent by 2030 and about 28 percent by 2050 (Figure 1-19). The proportion of people aged 65 and over was lower in less developed regions in 2010 due to historical conditions of high fertility and mortality. ${ }^{13}$ However,

[^12]Figure 1-18.
Percentage of World Population Under Age 5 and Aged 65 and Over: 1950 to 2050


Note: Data are based on the medium fertility variant of UN population estimates and projections.
Source: United Nations, 2011.
the percentage of older people is expected to more than double in Asia and in Latin America and the Caribbean between 2010 and 2050 as a result of rapid fertility and mortality declines in these regions. In 2010, Africa was the youngest of the world's regions, with 3.4 percent of its population aged 65 and older. While the percentage aged 65 and over is projected to be less than 7 percent in Africa in 2050, there will be a substantial increase in the absolute number of older people, rising from 34 million in 2010 to 70 million in 2030 and to 150 million in 2050 (U.S. Census Bureau, 2012b).

In some less developed countries, the proportion of the total population that is aged 65 and over may be low, but the number is large because of their sizable total population. For example, in 2010 there were 115 million older people living in China, although they made up just 8.6 percent of
the population, about 63 million living in India representing only 5.3 percent of the population, and 13 million in Brazil making up 6.7 percent of the population (U.S. Census Bureau, 2012b). In contrast, in more developed countries, where the percentage of older people was high, many had a small number of older people. For example, in 2010 there were only 1.9 million people aged 65 and over in Portugal, but they made up 17.8 percent of the total population. In Hungary, the older population represented 16.7 percent of the total population but numbered only 1.7 million.

More developed countries have relatively high proportions of people aged 65 and older, but the most rapid increases in older populations are in the less developed world. In 2010, the majority of the world's older population lived in less developed countries (63 percent). The proportion is projected to rise to over 70 percent
by 2030 and to 78 percent by 2050 (U.S. Census Bureau, 2012b). Numerical growth of the older population is also occurring faster in less developed countries than in more developed countries (Figure 1-20). In 2010, 336 million people in less developed countries were 65 and older, and their number is expected to grow nearly 3 times to 1.2 billion by 2050 . In contrast, 199 million people were aged 65 and older in more developed countries in 2010, and their numbers are projected to less than double to 344 million by 2050. In both more developed and less developed countries, the population aged 80 and over is growing more rapidly than those aged 65 to 79 and is thus becoming a larger share of the older population. ${ }^{14}$
${ }^{14}$ For worldwide aging, the focus is on the population aged 80 and over rather than aged 85 and over because many less developed countries have a lower life expectancy and, hence, a smaller proportion aged 85 and over.

Figure 1-19.
Percentage Aged 65 and Over Among the Total Population for Each World Region: 2010, 2030, and 2050


Note: Based on the United Nations regional classification.
Source: U.S. Census Bureau, 2012b; International Data Base.

Figure 1-20.
Population Aged 65 and Over by Age for Developed and Developing Countries: 2010 to 2050


Source: U.S. Census Bureau, 2012 b; International Data Base.

Most of today's more developed nations have had decades to adjust to the changing age structures. For example, it took more than a century for France's population aged 65 and over to increase from 7 percent to 14 percent of the total population (Kinsella and Gist, 1995). Other more developed nations took many decades to experience this same doubling in the share aged 65 and over, including Sweden (85 years), Hungary (53 years), and both Spain and the United Kingdom (45 years). The United States is expected to reach the 14 percent milestone in 2013, 69 years after it reached 7 percent (Kinsella and Gist, 1995; U.S. Census Bureau, 2012a). Japan was an exception among the more developed nations, taking only 26 years to double the share of their older population from 7 percent.

Many less developed nations are expected to follow the pace of Japan rather than that of European countries and the United States, as the doubling of their older
populations from 7 percent to 14 percent is projected to take place often within a single generation. Notable swift increases are expected in eastern and southeastern Asia, impacted by dramatic drops in fertility levels during the last 3 decades. The same demographic aging process that occurred over a century in France will likely occur in China in 23 years, Thailand in 22 years, Brazil in 21 years, Colombia in 18 years, and South Korea in 18 years (U.S. Census Bureau, 2012b).

An often-heard maxim is that more developed countries grew rich before they grew old, while many less developed nations may grow old before they grow rich (OECD, 2013; The Economist, 2009). Many of the more developed countries experienced rapid economic growth during the second half of the twentieth century at the time of gradual population aging, while many less developed countries will experience rapid population aging when the level of economic
development is still low (United Nations, 2009). In response to the rapid pace of aging, institutions in less developed countries will be called upon to adapt quickly to accommodate the new age structure and deal with the social support needs and the reallocation of resources across generations, without the accompanying wealth that characterized the experience of many aging societies in more developed regions.

While global aging represents a triumph of medical, social, and economic advances, it also presents tremendous challenges that affect economic growth, formal and informal social support systems, and the ability of states and communities to provide resources for older citizens (National Institute on Aging and U.S. Department of State, 2007). Both individuals and society need to prepare for population aging; the cost of wait-ing-financial and social-could be overwhelming.

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## Chapter 2. Longevity and Health

Older people comprise a hetero geneous population with a wide range of health states. This chapter examines the health status of people aged 65 and over in the United States, using multiple sources of data. Among the issues addressed are life expectancy and mortality, health behaviors and risks, chronic conditions and disability, long-term care, and health insurance.

## Life Expectancy

## Basic Levels and Trends

As mortality declined in the United States during the twentieth century and early twenty-first century, life
expectancy increased (Table 2-1). ${ }^{1}$ Between 1900 and 1950, life expectancy at birth improved by more than 20 years, from 47.3 years to 68.2 years. Then, between 1950 and 2000, life expectancy at birth improved by more than 8 years, to 76.8 , with another 1.9 years added by 2010. People of all ages have shared in these health improvements for more than a century, although the pace of improvements has differed by age group and time. For instance, improvements in the first half of the twentieth century were due primarily to reductions in
${ }^{1}$ Life expectancy is the probable number of years of life remaining at a given age, as determined by mortality rates.
infectious and childhood diseases, while improvements since then were due primarily to advances in adult health (Centers for Disease Control and Prevention [CDC], 1999). The improvements in adult health translate to increases in life expectancy at older ages. In 1980, individuals who reached age 65 had a remaining life expectancy of 16.4 years under mortality conditions of that year. By 2010, the remaining life expectancy had improved to 19.2 years for 65 -yearolds. Life expectancy at age 75 also increased, rising from 10.4 years in 1980 to 12.2 years in 2010.

Table 2-1.
Life Expectancy at Birth, Age 65, Age 75, and Age 85 by Race and Sex: 1900 to 2010

| Age and year | All races |  |  | White |  | Black |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both sexes | Male | Female | Male | Female | Male | Female |
| At Birth |  |  |  |  |  |  |  |
| $1900{ }^{1,2}$. | 47.3 | 46.3 | 48.3 | 46.6 | 48.7 | 32.5 | 33.5 |
| $1950{ }^{1}$. | 68.2 | 65.6 | 71.1 | 66.5 | 72.2 | 59.1 | 62.9 |
| $1960{ }^{1}$ | 69.7 | 66.6 | 73.1 | 67.4 | 74.1 | 61.1 | 66.3 |
| 1970. | 70.8 | 67.1 | 74.7 | 68.0 | 75.6 | 60.0 | 68.3 |
| 1980. | 73.7 | 70.0 | 77.4 | 70.7 | 78.1 | 63.8 | 72.5 |
| 1990. | 75.4 | 71.8 | 78.8 | 72.7 | 79.4 | 64.5 | 73.6 |
| 2000. | 76.8 | 74.1 | 79.3 | 74.7 | 79.9 | 68.2 | 75.1 |
| 2010. | 78.7 | 76.2 | 81.1 | 76.5 | 81.3 | 71.8 | 78.0 |
| At Age 65 |  |  |  |  |  |  |  |
| 1900-02 ${ }^{1,2}$. | 11.9 | 11.5 | 12.2 | 11.5 | 12.2 | 10.4 | 11.4 |
| $1950{ }^{1}$. | 13.9 | 12.8 | 15.0 | 12.8 | 15.1 | 12.9 | 14.9 |
| $1960{ }^{1}$. | 14.3 | 12.8 | 15.8 | 12.9 | 15.9 | 12.7 | 15.1 |
| 1970. | 15.2 | 13.1 | 17.0 | 13.1 | 17.1 | 12.5 | 15.7 |
| 1980. | 16.4 | 14.1 | 18.3 | 14.2 | 18.4 | 13.0 | 16.8 |
| 1990. | 17.2 | 15.1 | 18.9 | 15.2 | 19.1 | 13.2 | 17.2 |
| 2000. | 17.6 | 16.0 | 19.0 | 16.1 | 19.1 | 14.1 | 17.5 |
| 2010. | 19.2 | 17.7 | 20.3 | 17.8 | 20.4 | 15.9 | 19.3 |
| At Age 75 |  |  |  |  |  |  |  |
| 1980. | 10.4 | 8.8 | 11.5 | 8.8 | 11.5 | 8.3 | 10.7 |
| 1990. | 10.9 | 9.4 | 12.0 | 9.4 | 12.0 | 8.6 | 11.2 |
| 2000. | 11.0 | 9.8 | 11.8 | 9.8 | 11.9 | 9.0 | 11.3 |
| 2010. | 12.2 | 11.0 | 12.9 | 11.0 | 12.9 | 10.2 | 12.5 |
| At Age 85 |  |  |  |  |  |  |  |
| 2010.... | 6.6 | 5.9 | 7.0 | 5.8 | 6.9 | 5.9 | 7.2 |

[^13]
## Differences by Sex and Race Group

Life expectancy differences by sex are distinct. As is typical throughout the world, females in the United States live longer than males, although the difference by sex has often changed over time. In 1970, female life expectancy at birth was 74.7 years compared with 67.1 years for males, an advantage of 7.6 years (Table 2-1). Since then, that advantage has consistently declined. In 2010, the female advantage at birth was 4.9 years. This narrowing of the female advantage was due in large measure to changing life expectancy patterns of older Americans. In 2010, males at age 65 were expected to live another 17.7 years, compared with 14.1 years in 1980, an improvement of 3.6 years. In contrast, the female improvement in life expectancy at age 65 over the same period was only 2.0 years (from 18.3 years to 20.3 years).

The ratio of female to male life expectancy at age 65 has also declined between 1980 and 2010 from 1.30 to 1.15. Studies on life expectancy in the United States point to the slowing in gains of life expectancy for women and a narrowing in the mortality gap at birth as well as at older ages between men and women since the 1980s (Glei, Mesle, and Vallin, 2010; Preston and Wang, 2006). Despite this narrowing in female advantage, older females can still expect to live longer than older males (Figure 2-1). For instance, in 2010 the female advantage in life expectancy at age 65 was 2.6 years ( 20.3 years for women versus 17.7 years for men), at age 75 was 1.9 years ( 12.9 years for women versus 11.0 years for men), and at age 85 was 1.1 years ( 7.0 years for women versus 5.9 years for men). The ratio of female to male life expectancy, however, continues to rise with advancing age up to age 90 .

Among race groups, Whites tend to live longer than Blacks (Table $2-1) .{ }^{2}$ In 2010, life expectancy at birth among White females was 81.3 years, compared with 78.0 years for Black females. In that same year, life expectancy at birth for White males was 76.5 years, compared with 71.8 years for Black males.

As was the case for differences in life expectancy by sex, differences by race group have also shifted over the years. The 1980s, for example, saw only marginal improvements in life expectancy at birth and at age 65 for Blacks compared with Whites. However, between 1990 and 2010, life expectancy at birth for Black males improved from 64.5 years to 71.8 years, an advance of 7.3 years, compared with an advance of 3.8 years for White males (Table 2-1 and Figure 2-2). Similarly, over the

[^14]Figure 2-1.
Life Expectancy at Older Ages by Age and Sex: 2010 (In years)


Note: Data for 2010 are preliminary.
Source: Murphy, Xu, and Kochanek, 2012.

Figure 2-2.


Notes: Mortality data by race are based on death certificates from 50 states and the District of Columbia. Death certificates in most states follow the 1997 Office of Management and Budget (OMB) standards for collecting data by race (permit the reporting of more than one race) while some states follow the 1977 OMB standards (allow only a single race to be reported). This figure reports race according to the 1977 OMB standards. Data for 2010 are preliminary.
Sources: National Center for Health Statistics, 2011 ; Murphy, Xu, and Kochanek, 2012.
same interval, life expectancy at birth for Black females improved from 73.6 years to 78.0 years, an advance of 4.4 years, compared with an advance of 1.9 years for White females. Harper et al. (2007) examined the change in the BlackWhite life expectancy gap from 1993 to 2003. They conclude that the decline in the female gap was due primarily to mortality improvements among Black women aged 20 to 49, followed by Black women aged 65 to 84 . Among males, the narrowing of the life expectancy gap was overwhelmingly due to decreases in mortality among Black males aged 15 to 49.

According to the National Center for Health Statistics, in 2010 life expectancy was 83.8 years among

Hispanic females, which was higher than non-Hispanic White females (81.1 years), Hispanic males (78.8 years), non-Hispanic Black females (77.7 years), non-Hispanic White males ( 76.4 years), and nonHispanic Black males ( 71.4 years) (Minino and Murphy, 2012). In 2010, the difference in life expectancy between the Hispanic population and the non-Hispanic White population was 2.5 years, and between the Hispanic population and the non-Hispanic Black population was 6.6 years.

In addition to race and sex, life expectancy also varies by educational attainment. In 2008, the gap in life expectancy at birth between males with fewer than 12 years of education and males with
a bachelor's degree or above was 14.2 years, and for their female counterparts the disparity was 10.3 years (Olshansky et al., 2012). The disparities by educational attainment in 2008 had increased over the levels in 1990.

## Comparison of United States With Selected Countries

In 2010, Singapore and Japan shared the highest life expectancies at birth in the world (81.1 years for males in Singapore and 86.9 years for females in Japan). Compared with these and other countries with populations of one million or more, the life expectancy at birth of males in the United States ranked 26th, while that of females ranked 31st (Table 2-2). Over the past 25 years, life expectancy has risen at a slower pace in the United States than in many other high-income countries. As a result, the United States has been falling in the rankings of countries with high life expectancies since 1980, even though expenditures on health care exceed those of any other nation (National Research Council, 2011).

A panel of leading experts examined the reasons for this decline in the ranking of U.S. life expectancy and concluded that a history of heavy smoking played a large role, especially for female life expectancy (National Research Council, 2011). The current cohort of older Americans was alive 50 years ago, when Americans smoked more frequently than people living in Japan or Europe. Smoking habits in the United States were likely reinforced by social and economic factors, such as a driving culture, where Americans drove

Table 2-2.
Life Expectancy at Birth, Age 65, and Age 85 for Selected Countries and Areas by
Sex: 2010

| Rank | Country | Male |  |  | Rank | Country | Female |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | At birth | At 65 | At 85 |  |  | At birth | At 65 | At 85 |
| 1 | Singapore | 81.1 | 19.9 | 8.8 | 1 | Japan. | 86.9 | 24.3 | 8.6 |
| 2 | Japan. | 80.0 | 19.1 | 6.4 | 2 | Singapore | 85.3 | 22.8 | 9.1 |
| 3 | Australia. | 79.3 | 18.7 | 6.5 | 3 | Hong Kong. | 84.9 | 22.3 | 8.4 |
| 4 | Hong Kong. | 79.2 | 18.4 | 6.8 | 4 | France | 84.4 | 22.3 | 7.5 |
| 5 | Italy | 79.1 | 18.3 | 6.2 | 5 | Italy | 84.4 | 22.0 | 7.5 |
| 6 | Canada | 78.7 | 18.7 | 6.9 | 6 | Australia. | 84.3 | 22.1 | 7.8 |
| 7 | Israel | 78.7 | 18.1 | 6.0 | 7 | Spain | 84.3 | 21.8 | 6.6 |
| 8 | Netherlands | 78.7 | 17.5 | 5.6 | 8 | Canada | 84.0 | 22.3 | 8.4 |
| 9 | Sweden | 78.7 | 17.5 | 5.0 | 9 | Switzerland | 84.0 | 21.7 | 7.3 |
| 10 | Jordan | 78.6 | 17.8 | 5.3 | 10 | Sweden | 83.4 | 21.0 | 6.7 |
| 11 | New Zealand | 78.5 | 18.3 | 6.5 | 11 | Israel | 83.1 | 20.9 | 7.1 |
| 12 | Spain . | 78.1 | 17.9 | 5.7 | 12 | Norway. | 82.9 | 20.9 | 6.9 |
| 13 | Switzerland | 78.1 | 17.7 | 5.7 | 13 | Finland. | 82.8 | 20.6 | 6.9 |
| 14 | France | 77.9 | 18.1 | 6.0 | 14 | Netherlands . | 82.8 | 20.9 | 6.7 |
| 15 | Ireland | 77.9 | 17.3 | 5.6 | 15 | Austria | 82.7 | 20.7 | 6.7 |
| 16 | United Kingdom. | 77.8 | 17.6 | 6.0 | 16 | Belgium | 82.7 | 20.9 | 7.2 |
| 17 | Germany | 77.7 | 17.5 | 6.0 | 17 | Puerto Rico | 82.6 | 21.7 | 8.0 |
| 18 | Norway. | 77.4 | 17.0 | 5.4 | 18 | Bosnia and Herzegovina . . | 82.5 | 21.2 | 8.5 |
| 19 | Greece. | 77.2 | 17.2 | 6.0 | 19 | Greece. | 82.5 | 20.3 | 7.1 |
| 20 | Austria | 76.7 | 17.1 | 5.7 | 20 | New Zealand | 82.5 | 20.9 | 7.3 |
| 21 | Belgium | 76.2 | 16.5 | 5.5 | 21 | Ireland | 82.4 | 20.4 | 6.6 |
| 22 | Denmark | 76.1 | 16.2 | 5.4 | 22 | Germany | 82.3 | 20.4 | 6.5 |
| 23 | Bahrain | 75.9 | 16.9 | 5.9 | 23 | Korea, South . . . . . . . . . . | 82.3 | 20.2 | 6.7 |
| 24 | Qatar | 75.9 | 16.0 | 5.2 | 24 | United Kingdom. . . . . . . . | 82.1 | 20.4 | 7.0 |
| 25 | Kuwait | 75.8 | 16.0 | 5.3 | 25 | Portugal . . . . . . . . . . . . . | 81.9 | 20.1 | 6.8 |
| 26 | United States. | 75.8 | 17.4 | 6.0 | 31 | United States . . . . . . . . . . | 76.8 | 20.2 | 7.1 |

Note: Rankings are from highest to lowest life expectancy at birth separately for males and females for countries or geographic areas with a population of at least 1 million.

Sources: Life expectancy at birth, U.S. Census Bureau, 2012b; life expectancy at age 65 and at age 85, U.S. Census Bureau, 2012 a.
more and sometimes as a result smoked in their vehicle, local soil conditions well suited for growing tobacco, and the relatively low price of tobacco (National Research Council, 2011). In 2003, smoking accounted for a loss of life expectancy at age 50 of 2.3 years for U.S. females and 2.5 years for U.S. males (Preston, Glei, and Wilmoth, 2010). Smoking was estimated to explain 78 percent of the life expectancy gap for women and 41 percent of the gap for men between the United States and other high-income countries. Among 21 countries considered in the Preston, Glei, and Wilmoth study, once deaths associated with smoking were removed, the ranking of United States life expectancy improved from 15th place to 12 th place for males and
from 17th place to 9th place for females. Other factors identified as contributors to the gap between the United States and other highincome countries include the rising level of obesity in the United States and economic inequality (National Research Council, 2011). The expert panel concluded that the options to address these problems pose a challenge to the nation.

## Death and Death Rates

Trends in Death Rates by Age Death rates have declined dramatically over the past century, as well as the past decade. Table 2-3 shows the decline in death rates from 2000 to 2010. Death rates declined for both males and females at all ages, although the percentage decline was greatest
for the age group 5 to 14 ( 32 percent) followed by the age group 65 to 74 (23 percent).

The pattern of death rates by age is distinctive. Death rates tend to be relatively high in infancy, decline through childhood and young adulthood, increase gradually from mid-adulthood, and then rise sharply among the older population. The death rate in 2010 among those aged 55 to 64, the cohort poised to enter the older population, was 851 per 100,000 people (Figure 2-3). The death rate then more than doubled at each successive 10-year age group of older persons-1,873 per 100,000 people at ages 65 to $74 ; 4,786$ per 100,000 people at ages 75 to 84 ; and 13,918 per 100,000 people at ages 85 and over.

Table 2-3.

## Percentage Decline in Death Rates by Age and Sex: 2000-2010

| Age | Both sexes | Male | Female |
| :---: | :---: | :---: | :---: |
| 0. | 15 | 15 | 14 |
| 1 to 4 | 19 | 19 | 20 |
| 5 to 14 | 32 | 33 | 29 |
| 15 to 24 | 17 | 17 | 17 |
| 25 to 34 | 5 | 6 | 4 |
| 35 to 44 | 15 | 17 | 10 |
| 45 to 54 | 6 | 9 | 1 |
| 55 to 64 | 15 | 14 | 17 |
| 65 to 74 | 23 | 25 | 22 |
| 75 to 84 | 16 | 17 | 16 |
| 85 and over | 9 | 7 | 11 |

Note: Data for 2010 are preliminary.
Sources: 2010 death rates, Murphy, Xu, and Kochanek, 2012; 2000 death rates, Minino et al., 2002.

## Age Structure of Deaths

Since death rates are higher at progressively older ages (Figure 2-3), deaths tend to be concentrated among the older population. In

2010, 1.8 million or 72.8 percent of the total 2.5 million deaths in the United States occurred to people aged 65 and over (Murphy, Xu, and Kochanek, 2012). Of the total deaths, 16 percent occurred to
people aged 65 to 74,25 percent to people aged 75 to 84 , and 31 percent to people 85 years and older.

The number of deaths in a particular age group depends not only on death rates in that age group but also the number of people in that age group. Changes over time in the distribution of deaths reflect these two factors. The size of cohorts entering the older ages can fluctuate substantially due to factors affecting them in the historical past, such as fertility swings, epidemics, and social upheaval. For this reason, health aspects of mortality are more reliably inferred from changes in death rates (or life expectancy) rather than death numbers.

Figure 2-3.
Death Rates for Both Sexes by Age: 2010 (Per 100,000)


Note: Data for 2010 are preliminary.
Source: Murphy, Xu, and Kochanek, 2012.

Death Rates by Age, Sex, Race, and Hispanic Origin

Worldwide, death rates usually are higher for men than women at every age group. Table 2-4 shows death rates by sex and age for the older non-Hispanic White, nonHispanic Black, American Indian and Alaska Native, Asian and Pacific Islander, and Hispanic populations. In all cases, death rates were higher for men than women in 2010. Higher death rates among men lead to increasing proportions of women at older age groups.

Death rates for the older population also differ by race. Figure 2-4 suggests that death rates in 2010 were lower among Whites than Blacks at ages 55 to 84, yet lower among Blacks at ages 85 and over. Researchers have been aware of this "crossover" for many years. Some have attributed it to age misreporting among Blacks at the oldest ages (Elo and Preston,

Table 2-4.
Death Rates for the Population Aged 65 and Over by Age, Sex, Race, and Hispanic Origin: 2010
(Per 100,000)

| Race, Hispanic origin, and age | Both sexes | Male | Female |
| :---: | :---: | :---: | :---: |
| Non-Hispanic White |  |  |  |
| 65 to 74 | 1,874.2 | 2,254.3 | 1,534.3 |
| 75 to 84 | 4,881.6 | 5,763.8 | 4,228.4 |
| 85 and over | 14,267.4 | 15,796.1 | 13,525.7 |
| Non-Hispanic Black |  |  |  |
| 65 to 74 | 2,575.5 | 3,266.0 | 2,062.9 |
| 75 to 84 | 5,464.4 | 6,832.1 | 4,663.9 |
| 85 and over | 13,355.9 | 14,947.1 | 12,737.3 |
| American Indian and Alaska Native |  |  |  |
| 65 to 74 | 1,707.5 | 1,969.7 | 1,478.2 |
| 75 to 84 | 3,811.6 | 4,441.5 | 3,362.5 |
| 85 and over | 9,587.0 | 10,240.5 | 9,249.3 |
| Asian and Pacific Islander |  |  |  |
| 65 to 74 | 986.8 | 1,225.0 | 788.5 |
| 75 to 84 | 2,852.0 | 3,436.6 | 2,445.2 |
| 85 and over | 9,415.4 | 10,822.7 | 8,586.9 |
| Hispanic (of any race) |  |  |  |
| 65 to 74 | 1,391.7 | 1,773.7 | 1,084.6 |
| 75 to 84 | 3,636.5 | 4,461.3 | 3,066.4 |
| 85 and over . . . . . . . . . . . . . . . . . . | 10,775.3 | 11,775.6 | 10,235.6 |

Notes: Mortality data by race are based on death certificates from 50 states and the District of Columbia. Death certificates in most states follow the 1997 Office of Management and Budget (OMB) standards for collecting data by race (permit the reporting of more than one race) while some states follow the 1977 OMB standards (allow only a single race to be reported). This table reports race according to the 1977 OMB standards. Data for 2010 are preliminary.

Source: Murphy, Xu, and Kochanek, 2012.

1997), although other recent studies revive an earlier theory that higher Black death rates below age 85 might select the most unhealthy people and leave behind a healthier cohort of oldest old (Yao and Robert, 2011).

Figure 2-4 also suggests that among those aged 55 and over, Whites and Blacks had higher death rates than the race groups American Indian and Alaska Native, and Asian and Pacific Islander. Non-Hispanic Whites and nonHispanic Blacks also had higher death rates than Hispanics (Table $2-4)$. Although such differentials could indicate better health among the latter population, they may also reflect other factors, such as differential completeness in death
reporting. The dynamics of migration may also be relevant. For instance, international migrants may be particularly healthy (Page et al., 2007). Similarly, researchers have found evidence for the "salmon hypothesis"-if immigrants live their healthiest years in the United States and then return abroad to their country of origin when they become less healthy, their deaths will not be recorded in the United States (Palloni and Arias, 2004).

## Leading Causes of Death

The patterns and differentials in mortality by age, sex, and race may be related in part to specific causes of death. Over the past several hundred years, the United

States, along with other parts of the world, has experienced an "epidemiological transition" during which the main causes of death have shifted from infectious diseases (e.g., smallpox, pneumonia, and tuberculosis) to chronic diseases of the older population, such as heart disease and cancer.

Figure 2-5 shows the leading causes of death in the United States in 2010 among those aged 65 and over. Heart disease and malignant neoplasms (cancer) were the first and second leading causes of death, respectively. In 2010, among those aged 65 and over, nearly 477,000 deaths were due to heart disease, while just over 396,000 deaths were due to cancer.

Figure 2-5.
Causes of Death for the Population Aged 65 and Over: 2010
(Number of deaths)


[^15]Source: Murphy, Xu, and Kochanek, 2012.

Figure 2-6 shows the top seven causes of death in the population aged 65 and over in 2000 and 2010. The share of deaths due to malignant neoplasms (cancer) has remained relatively stable at about 22 percent. In contrast, the share of deaths due to heart disease declined from 33.0 percent in 2000 to 26.5 percent in 2010. That decline of about 7 percentage points was offset by an almost equal increase in the percentage share of deaths due to causes other than the top seven, which rose from 22.2 percent in 2000 to 29.1 percent in 2010.

In 2009, heart disease was the leading cause of death among those aged 85 and above, while cancer was the leading cause of death for those aged 65 to 74 (Table 2-5). Among the population aged 65 to 74 , cancer accounted for 34.8 percent of all male deaths and 36.6 percent of all female deaths in 2007 (Figure 2-7). Among
those aged 85 and over, cancer was responsible for only 16.1 percent of male deaths and 10.3 percent of female deaths. Since the 1970s, there has been a major reduction in the incidence and death rates from cancer (Edwards et al., 2010), especially the three most common cancers among men (lung, prostate, and colorectal) and
two of the three most common cancers among women (breast and colorectal). ${ }^{3}$ The continued decline in death rates among women and men from all cancers may be due to increased screening, reduced risk factors, and improved treatment.
${ }^{3}$ Incidence refers to the number of newly diagnosed cases in a population.

Table 2-5.
Death Rates for the Population Aged 65 and Over by Age and Cause of Death: 2009
(Per 100,000)

| Cause of death | 65 to 74 | 75 to 84 | 85 and over |
| :---: | :---: | :---: | :---: |
| All causes | 1,929 | 4,774 | 13,021 |
| Heart disease | 432 | 1,199 | 4,115 |
| Cancer. | 682 | 1,201 | 1,620 |
| Chronic lower respiratory diseases | 151 | 373 | 653 |
| Cerebrovascular disease. | 85 | 292 | 946 |
| Accidents. | 43 | 103 | 296 |
| Alzheimer's | 20 | 177 | 901 |
| Diabetes | 71 | 144 | 269 |
| Influenza and pneumonia | 30 | 106 | 414 |
| Nephritis | 40 | 114 | 306 |
| Suicide. | 14 | 16 | 16 |
| Other . . . . . . . . . . . . . . . . . . . . | 362 | 1,049 | 3,486 |

Source: Kochanek et al., 2011.

Figure 2-6.
Seven Leading Causes of Death and Other Causes for the Population Aged 65 and Over: 2000 and 2010


[^16]Figure 2-7.
Share of Deaths Due to Cancer and Heart Disease by Age and Sex: 2007 (In percent) ${ }^{1}$

${ }^{1}$ The base of the percentage is the total number of deaths for each age group. Source: Heron, 2011.

Despite variations in the leading cause of death by age, death rates rise progressively at older ages for nearly all causes of death (Table 2-5).

After heart disease and cancer, the third and fourth most common causes of death for older Americans were chronic lower respiratory diseases and cerebrovascular diseases (e.g., stroke), accounting for nearly 118,000 and 110,000 deaths, respectively, in 2010 (Figure 2-5). Such deaths, in comparison with those for the two leading causes, were more concentrated among older Americans. Stroke death rates are higher for Blacks than for Whites, even at younger ages (American Heart Association, 2010). Between 1997 and 2006, researchers found that in-hospital mortality rates decreased among those diagnosed
with a stroke, except for men aged 85 and over (Ovbiagele, Markovic, and Towfighi, 2011).

Between 1999 and 2007, in contrast with declining mortality from most other causes, the death rate for Alzheimer's disease rose more than 50 percent, from 127 to 195 per 100,000 people (National Center for Health Statistics [NCHS], 2011). In contrast to other leading causes of death, Alzheimer's disease is overwhelmingly concentrated among the older population (99 percent) (Murphy, Xu, and Kochanek, 2012). In 2009, death rates due to Alzheimer's among those aged 85 and over were 901 per 100,000 people, 45 times the death rate due to Alzheimer's among those aged 65 to 74 -no other leading cause of death exhibits such a steep increase in death
rates among the older population (Table 2-5).

Since 2000, when Alzheimer's disease was the seventh leading cause of death, it has surpassed influenza/pneumonia and diabetes to become the fifth leading cause of death among the older population in 2010 (Figure 2-6). Above age 85, Alzheimer's is now the fourth leading cause of death (Table 2-5). The increase in the number of Alzheimer's deaths is due in part to the aging of the older population but perhaps more importantly may be due to improved diagnosis of Alzheimer's and increased coding of Alzheimer's as a cause of death.

## Health Risks Among Older People

Health-risk factors can negatively impact health. Some of these risk factors include smoking, alcohol
abuse, being overweight or underweight, lack of physical activity, and inadequate consumption of fruits and vegetables. Table 2-6 shows the prevalence of several health risks among the older population.

## Smoking

Older people are less likely to smoke than younger people. In 2010, less than 10 percent of older people currently smoked, which was under half the currently smoking rate for people aged 18 to 64 (Federal Interagency Forum on Aging-Related Statistics, 2012). Nevertheless, older people who smoke (or used to smoke) face an elevated risk of health problems compared with those who do not smoke and to younger persons who do smoke. This is because older people have a longer history of tobacco use, are heavier smokers, are already suffering from smoking-related health conditions upon entering older ages, and have other health conditions (Burns, 2000; Drum et al., 2009).

Adverse health outcomes faced by smokers include a higher risk of cardiovascular and respiratory diseases (Nicita-Mauro et al., 2010), stroke, and cancer (American Heart Association, 2010)-in particular lung and breast cancer (Cornfield et al., 2009; Xue et al., 2011). Additionally, smoking increases the risk of dementia, osteoporosis, diabetes, erectile dysfunction, senile macular degeneration, nuclear cataracts, and skin alterations in older age groups (Nicita-Mauro et al., 2010). These enhanced risk factors contribute to shorter life expectancy (Bernhard et al., 2007; Strandberg et al., 2008; Weuve et al., 2012). No other single risk factor reduces life expectancy more than smoking (Preston, Glei, and

Table 2-6
Percentage of the Population Aged 65 and Over With Risk Factors by Sex: Various Years, 2003-2008

| Risk factor | Male | Female |
| :---: | :---: | :---: |
| Smoking (2008) |  |  |
| Current smoker | 9.8 | 8.5 |
| Former smoker. | 54.3 | 28.9 |
| Never a smoker | 36.0 | 62.6 |
| Weight (2003-2006) |  |  |
| Overweight or obese (BMI of 25.0 or above) | 72.2 | 66.7 |
| Overweight (BMI of 25.0 to under 30.0). | 43.5 | 36.1 |
| Obese (BMI of 30.0 or above) | 28.7 | 30.6 |
| Underweight (BMI of 18.5 or below) | 0.9 | 1.5 |
| Healthy weight (BMI between 18.5 and 25.0) | 26.9 | 31.8 |
| Alcohol consumption (2008) <br> Five or more drinks in a day at least one day past year. | 9.7 | 2.2 |

Notes: BMI is body mass index. Data on weight are age adjusted and are based on the combined 2003-2006 National Health and Nutrition Examination Surveys. Smoking and alcohol consumption data are from the 2008 National Health Interview Survey. Both surveys cover the civilian noninstitutionalized population.

Source: Crescioni et al., 2010.

Wilmoth, 2010). Yet those who quit smoking can prolong their lives, even those who quit at older ages (Nicita-Mauro et al., 2010).

The share of current smokers in 2008 was slightly higher for older men than older women ( 9.8 percent and 8.5 percent, respectively), and women were more likely to have never smoked than men (62.6 percent versus 36.0 percent; Table 2-6). Although men at present are more likely to suffer the consequences of smoking, that may change in the future since the sex gap in smoking has narrowed for the population aged 65 and over (Figure 2-8).

## Alcohol Consumption

A wide body of research underscores the health benefits of moderate drinking for adults, including older men and women. These benefits include a greater sense of well-being and lower likelihood of depression (Lang et al., 2007), as well as protection against coronary heart disease (Hvidtfeldt et al., 2010). Research suggests that benefits among older women also
include less weight gain, lower risk of becoming overweight or obese (Wang et al., 2010), and improved survival overall (Sun et al., 2010). Fortunately, moderate drinking among the older population became more common in recent decades while excessive drinking declined (Moos et al., 2009).

Although fewer older people drink excessively, excessive alcohol consumption is more prevalent in men (Table 2-6; Platt, Sloan, and Costanzo, 2010; Molander, Yonker, and Krahn, 2010; Moos et al., 2009; Kirchner et al., 2007). Health and Retirement Study (HRS) data reveal that excessive alcohol consumption increased among affluent and better-educated males between 1992 and 2006 (Platt, Sloan, and Costanzo, 2010). Excessive alcohol consumption among the 65 and over population is also more prevalent among Whites as opposed to African Americans or Hispanic/ Latino Americans (Kirchner et al., 2007). Drinking excessively among older drinkers is associated with negative health outcomes such as depression, anxiety, and less social support.

Figure 2-8.
Current Smoking Rates Among the Population Aged 65 and Over by Sex: 1965 to 2010
(In percent)


Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: Federal Interagency Forum on Aging-Related Statistics, 2012; all years, National Health Interview Survey.

## Weight

During the period 2003-2006, 28.7 percent of older men and 30.6 percent of older women were obese, with a body mass index (BMI) greater than or equal to 30 , while another 43.5 percent of older men and 36.1 percent of older women were overweight but not obese (BMI greater than or equal to 25 but less than 30; Table 2-6). ${ }^{4,5}$ Although these rates were marginally lower than for those aged 45 to 64 (Crescioni et al., 2010), only 26.9 percent of older men and 31.8

[^17]percent of older women were considered to have a healthy weight. Moreover, the number of obese older adults has been increasing due to both an increase in the total number of older people and a higher percentage of obese older adults (Villareal et al., 2005).

The older population who are overweight have an increased risk of mortality (Yan et al., 2006). Obesity-related traits, such as a high BMI, are correlated with the risk of type-2 diabetes (Li et al., 2011; Vazquez et al., 2007). Obese people are also more likely to have impaired mobility or limitations in their daily activities (Kramarow et
al., 2007) and to be admitted into a nursing home (Valiyeva et al., 2006). Being underweight is also associated with poor health (Diehr et al., 2008) and a higher risk of mortality among the older population (Lee et al., 2011).

The benefits of intentional weight loss and exercise in the older population are well documented. Weight loss and exercise help obese older people improve their physical functioning (Villareal et al., 2005), including improved mobility for those with knee osteoarthritis (Messier et al., 2004). Exercise reduces the risk factors commonly associated with cardiovascular
disease among overweight older adults, even without weight loss (Shaw, 2006). However, rapid unintentional weight loss can indicate an underlying disease (Miller and Wolfe, 2008).

## Chronic Illnesses and Impairments

Chronic illnesses and impairments, such as arthritis, heart disease, stroke, diabetes, cancer, and osteoporosis, are diseases that have a long duration and generally progress slowly. These conditions need to be managed on a continual basis. Some chronic conditions can limit people's independence and lower their quality of life (Bentler et al., 2009; McKean-Cowdin et al., 2010).

Research based on successive rounds of the HRS conducted in 1998, 2004, and 2008 suggests
that the prevalence of chronic diseases increased over time among the older population (Hung et al., 2011). For example, the prevalence of arthritis, hypertension, and diabetes all rose from 1998 to 2008 (59.1 percent to 68.8 percent, 52.5 percent to 65.0 percent, and 15.2 percent to 22.7 percent, respectively). Among the older population in 2008 , only 8 percent had no chronic conditions, compared with 51 percent who had one or two, and 41 percent who had three or more chronic conditions.

## Arthritis

Arthritis is one of the most common health problems limiting activity among the older population (Figure 2-9), encompassing over 100 diseases and conditions that affect the joints and surrounding tissues. This progressive disorder,
if left untreated, can lead to joint damage, disability, and early mortality (O'Dell et al., 2010). Centers for Disease Control and Prevention analysis of 2007-2009 National Health Interview Survey data found the prevalence of doctor-diagnosed arthritis to be 50 percent among the population aged 65 and over (Cheng et al., 2010). Arthritis and other musculoskeletal disorders are a leading cause of physical limitations. For every 1,000 people aged 65 to 74,122 reported activity limitations caused by arthritis or other musculoskeletal disorder (Figure 2-9). The rate rose to 167 per 1,000 people aged 75 to 84 and to 281 per 1,000 people aged 85 and over. Researchers have found that women have a higher prevalence of arthritis than men (O'Dell et al., 2010).

Figure 2-9.
Limitation of Activity Caused by Chronic Health Condition by Age: 2006-2007 (Per 1,000)


[^18]
## Heart Disease and Stroke

Heart disease is one of the most common chronic health conditions that result in activity limitations in the older population (Figure 2-9). For every 1,000 people aged 65 to 74, 96 report activity limitations caused by heart or other circulatory conditions. This rate rose to 138 per 1,000 people aged 75 to 84 , and 204 per 1,000 people aged 85 and over (Figure 2-9). Among all circulatory conditions, cardiovascular disease was the most common among older adults, although there were some differences by sex and age (Figure 2-10). For instance, among adults aged 80 and over, more women than men had cardiovascular disease (85.9 percent versus 79.3 percent). In contrast, the second most common circulatory condition, coronary heart
disease (insufficient flow of blood to the heart), was more common in older men than older women: among adults aged 80 and over, 36.1 percent of men had coronary heart disease compared with 23.9 percent of women. The prevalence of heart disease and stroke also varies by race and Hispanic origin (NCHS, 2010; Schoenborn and Heyman, 2009). For example, a higher proportion of older nonHispanic Whites had heart disease than did Hispanics (32.9 percent versus 24.5 percent; Table 2-7).

Stroke occurs when the flow of blood to the brain is impeded. Strokes are more common in older adults and are the leading cause of serious, long-term disability (American Heart Association, 2010). The population aged 65 and older were more than ten times
more likely to have reported a stroke than those aged 18 to 44 ( 8.1 percent versus 0.8 percent; Neyer et al., 2007). Nearly three quarters of all strokes occur in people over age 65 , with the risk more than doubling every 10 years after age 55 (American Heart Association, 2010). Researchers found that women were older when they had their first stroke than were men (Appelros, Stegmayr, and Terent, 2009; Petrea et al., 2009). However, women had a higher number of strokes than men due to a longer lifespan and a higher incidence of stroke at ages 85 and over (Reeves et al., 2008; Petrea et al., 2009). Some of the risk factors for stroke include smoking-current smokers are twice as likely to suffer a stroke as nonsmokers-and high blood pressure (American Heart Association,

Figure 2-10.

## Population Aged 60 and Over With Heart Disease or Stroke by Age and Sex: 2005-2006

(In percent)


[^19]Table 2-7.

## Percentage of the Population Aged 65 and Over With Health Conditions by Age, Sex, Race,

 and Hispanic Origin: 2004-2007| Characteristic | Serious psychological distress | Hypertension | Heart disease | Diabetes | Hearing impairment | Vision impairment | Lost all natural teeth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aged 65 to 74 |  |  |  |  |  |  |  |
| Male. | 1.8 | 48.9 | 32.7 | 20.5 | 40.1 | 11.7 | 21.7 |
| Female. | 2.4 | 52.5 | 21.9 | 18.1 | 23.2 | 15.0 | 22.2 |
| Aged 75 to 84 |  |  |  |  |  |  |  |
| Male. | 1.8 | 51.7 | 42.7 | 19.4 | 53.5 | 16.9 | 29.9 |
| Female. | 2.8 | 58.4 | 30.3 | 17.4 | 37.0 | 19.3 | 28.6 |
| Aged 85 and over |  |  |  |  |  |  |  |
| Male. . . | 1.8 | 49.6 | 47.3 | 15.6 | 69.0 | 28.0 | 34.2 |
| Female. | 2.7 | 56.7 | 37.2 | 11.7 | 58.5 | 26.3 | 36.3 |
| Race and Hispanic origin (aged 65 and over) |  |  |  |  |  |  |  |
| Non-Hispanic White. . . . . . | 2.0 | 51.2 | 32.9 | 16.0 | 41.6 | 16.2 | 25.3 |
| Non-Hispanic Black . | 2.4 | 68.5 | 25.6 | 29.6 | 23.6 | 20.4 | 34.4 |
| Non-Hispanic Asian. | 1.5 | 52.8 | 20.6 | 19.8 | 30.1 | 12.7 | 20.7 |
| Hispanic (of any race) | 4.9 | 53.5 | 24.5 | 27.8 | 28.2 | 18.9 | 26.0 |

Notes: Data are combined from the 2004-2007 National Health Interview Surveys, which cover the civilian noninstitutionalized population.
Source: Schoenborn and Heyman, 2009.
2010). ${ }^{6}$ Additionally, depression and memory impairment are associated with increased incidence of stroke (Glymour et al., 2010).

## Hypertension

Hypertension, or high blood pressure, is a chronic illness (Lewanczuk, 2008; World Health Organization, 2012) that can lead to cardiovascular disease (including stroke and coronary heart disease) and heart failure, as well as kidney failure (Lewanczuk, 2008; American Heart Association, 2009; NCHS, 2008; World Health Organization, 2010; Whitworth, 2003). ${ }^{7}$ This illness can be reduced when high blood pressure is controlled (Ong et al., 2007), but because hypertension does not produce obvious symptoms, over one-fifth of people who have hypertension are unaware of it and thus may not seek treatment (NCHS, 2008). Hypertension affects

[^20]about half of those aged 65 and over and tends to be more common in women than men (Table 2-7). Blacks tend to have higher rates of hypertension than other races (Oliva and Bakris, 2012). A higher proportion of older Hispanics than non-Hispanic Whites (53.5 percent versus 51.2 percent) have hypertension, but a higher proportion of non-Hispanic Blacks than Hispanics ( 68.5 percent versus 53.5 percent; Table 2-7) have hypertension.

## Diabetes

Diabetes is a disease characterized by a blood sugar (glucose) level that is too high. Type 2 diabetes accounts for 90 to 95 percent of all diagnosed cases of adult diabetes and is more prevalent in the older population (CDC, 2011). However, in contrast to other ailments, among men and women aged 65 and over, diabetes becomes less common at successive age groups. For instance, the share of diabetes among women was 18.1 percent among those aged 65 to 74 compared with 11.7 percent among
those aged 85 and over (Table 2-7). Among men in these same age groups, the comparable shares of those with diabetes were 20.5 percent and 15.6 percent, respectively. A higher proportion of older Hispanics was diagnosed with diabetes ( 27.8 percent) than the proportion of older non-Hispanic Whites (16.0 percent) or older non-Hispanic Asians (19.8 percent). The lower incidence of diabetes at relatively older ages may be due to the higher mortality associated with diabetes in the older population, where mortality may be up to four times as high for those with diabetes than for those without (Barnett et al., 2006). Therefore, many people with diabetes may not survive to age 85.

In recent years, the prevalence of diabetes has increased at every age, including older ages (CDC, 2012a). In addition to being the sixth leading cause of death in the older population (Figure 2-6), diabetes brings on other serious health problems, including heart disease and stroke (National Diabetes Statistics, 2011).

Additionally, diabetes is the leading cause of new cases of blindness, kidney failure, and nontraumatic lower-limb amputations, and raises the risk of hearing impairment in adults (Bainbridge, Hoffman, and Cowie, 2008). Among people aged 65 and over, diabetes increases the risk of dementia and mild cognitive impairment as well as the risk of progression from those impairments to dementia (Velayudhan et al., 2010). Diabetes was a cause of activity limitations for 41 per 1,000 people aged 65 to 74 and 50 per 1,000 people aged 85 and over (Figure 2-9).

## Cancer

The most common cancers during 2003-2007 are shown in Table 2-8. Among the entire population, the most common cancers are cancers of the digestive system, the male genital system, and female breast cancer. People aged 65 and over account for over 50 percent of the population diagnosed with cancer, although the incidence varies by type of cancer (National Cancer Institute, 2009).

The proportion of those who survive cancer has been increasing in recent years. Those surviving
at least 5 years from their initial cancer diagnosis increased from 50 percent in the late 1970 s to 68 percent in the period 1999 to 2005 (American Cancer Society, 2010). Prostate and breast cancer, despite being among the most common cancers in the older population, also have the highest survival rates, with 90 percent or more expected to live at least 5 years from initial diagnosis. Among the cancers with the lowest survival rates is lung cancer, with only 16 percent expected to live 5 years or more.

## Osteoporosis

Osteoporosis is a disease that causes decreased bone mass, the most common bone disease in humans. Osteoporosis is more common in Caucasians, women, and the older population (National Osteoporosis Foundation, 2010). Osteoporosis often results in bone fractures and causes pain, disability, and increased mortality (Davis et al., 2010). The parts of the body most prone to fractures due to osteoporosis include the spine, hip, and wrist (National Osteoporosis Foundation, 2010).

Hip fractures are particularly debilitating, since they affect mobility. Older adults with a hip fracture are much more likely to lose their independence and to live in a nursing home as a result (Bentler et al., 2009). Older people who experience a hip fracture are four times more likely to die within 3 months than those without, and those who survive often experience quickly worsening health (Department of Health and Human Services, 2004). Researchers have found that between 1990 and 2006, age-adjusted hip fracture hospitalization rates declined significantly (Stevens and Rudd, 2010).

Hip fractures are much more prevalent in relatively older people (Stevens and Olson, 2000; Department of Health and Human Services, 2004). Women aged 85 and over are nearly eight times more likely than women aged 65 to 74 to be hospitalized for a hip fracture (Stevens and Olson, 2000). While African Americans are less frequently diagnosed with osteoporosis, they have the same elevated risk for a fracture when they have the disorder (National Osteoporosis Foundation, 2010).

Table 2-8.
Population Diagnosed With Cancer at All Ages and Percentage of Cases in Population Aged 65 and Over by Cancer Type: 2003-2007

| Cancer type | Population with cancer | Of population dagnosed with cancer, percentage who are aged: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 65 and over | 65 to 74 | 75 to 84 | 85 and over |
| All cancers. | 1,717,500 | 54.2 | 24.7 | 21.8 | 7.7 |
| Digestive systems | 322,348 | 62.1 | 24.5 | 26.2 | 11.4 |
| Male genital system. | 270,179 | 58.2 | 33.9 | 19.9 | 4.4 |
| Breast (female) | 249,658 | 40.9 | 19.5 | 15.8 | 5.6 |
| Respiratory system | 243,951 | 67.1 | 31.0 | 28.3 | 7.8 |
| Colon and rectum | 177,307 | 63.4 | 24.4 | 26.8 | 12.2 |
| Urinary system | 132,680 | 63.5 | 26.1 | 27.3 | 10.1 |
| Female genital system. | 97,835 | 40.2 | 19.2 | 15.1 | 5.9 |
| Lymphoma. | 83,668 | 49.8 | 20.4 | 21.4 | 8.0 |
| Skin | 82,475 | 42.3 | 17.8 | 17.8 | 6.7 |
| Leukemia. | 45,780 | 53.3 | 19.8 | 22.9 | 10.6 |

[^21]
## Cognitive Impairments

Dementia is a condition that affects one's ability to process information. No matter how one measures dementia (Launer, 2011), the condition becomes more prevalent with advancing age, contributes to a loss of independence, and often results in institutional care. According to the National Health Interview Survey, for every 1,000 people aged 65 to 74 , 9 reported activity limitations caused by senility or dementia (Figure 2-9). The rate was 34 per 1,000 people aged 75 to 84 and rose to 83 per 1,000 people aged 85 and over (Figure 2-9). Some older adults have mild cognitive impairment (MCI), which is a milder impairment compared with dementia and puts people at greater risk of progressing to dementia (Plassman et al., 2011).

Alzheimer's disease is a specific form of dementia, a degenerative disease that causes people to lose brain cells gradually, yet permanently. Alzheimer's disease is most common among those aged 85 and over (He et al., 2005). In fact, advancing age is the single largest risk factor for dementia and Alzheimer's disease (Plassman et al., 2007). Because those aged 85 and over constitute the fastest growing segment of the population, the prevalence of Alzheimer's will likely grow (Brookmeyer, et al., 2011). Among a group of people aged 72 and over who participated in the Aging, Demographic, and Memory Study, researchers found that the incidence of dementia was 33.3 per 1,000 people, the incidence of Alzheimer's was 22.9 per 1,000 people, and the incidence of MCl was 60.4 per 1,000 people (Plassman et al., 2011).

The incidence of Alzheimer's is similar for older men and women of the same age. However, women
are more likely than men to have dementia or Alzheimer's disease due to the age distribution of each sex. Since women live longer than men, their age distribution is more skewed towards the older ages, where Alzheimer's is increasingly prevalent (Plassman et al., 2007). Some age-stratified studies have even suggested that MCl is higher among men (Peterson et al., 2010).

All race and ethnic groups show increasing risk of dementia with advancing age, with large differences in overall levels by age (Figure 2-11). In the population aged 65 to $74,2.9$ percent of Whites were cognitively impaired, compared with 12.4 percent of Blacks. Among Hispanics aged 65 to $74,9.3$ percent had cognitive impairments. In the population aged 85 and over, 26.9 percent of Whites, 54.6 percent of Blacks, and 44.8 percent of Hispanics were cognitively impaired.

Some studies have not found significant differences in dementia between Blacks and Whites once other factors, such as education
and genetic predisposition, are considered (Plassman et al., 2007). However, even after considering these factors and other ambiguities involved in racial and ethnic categorization, most studies suggest that Blacks and Hispanics have higher rates of dementia than Whites, although actual differences in brain degeneration by race or ethnicity have yet to be confirmed through medical imaging or autopsies (Manly and Mayeux, 2004).

## Sensory Impairments

Sensory impairments, including visual and hearing impairments, are common in older men and women and place them at greater risk of falls and vehicular accidents (Rubenstein, 2006; Stevens et al., 2006). These impairments, in turn, can lead to isolation and depression.

Visual impairments increase with advancing age and are more common in women than men aged 65 to 84 (Table 2-7). A higher proportion of the older Hispanic population (18.9 percent) had vision

Figure 2-11.
Percentage of Population Aged 65 and Over With
Cognitive Impairments by Age, Race, and Hispanic
Origin: 2006

impairments than non-Hispanic Whites (16.2 percent) and nonHispanic Asians (12.7 percent), although the non-Hispanic Black population had the highest percent with vision impairments (20.4 percent). ${ }^{8}$ Those with severe visual impairment were three times more likely to face limitations in mobility and activities of daily living than those with visual acuity of 20/40 or better (Salive et al., 1994). Limitations of activity due to vision conditions or problems seeing were relatively rare among those aged 65 to 74 , at 17 per 100,000, but the rate rose to 89 per 100,000 at ages 85 and over (Figure 2-9). People with visual impairments or lower visual acuity have a lower quality of life (McKean-Cowdin et al., 2010). Persons in poverty have

[^22]higher rates of visual impairments and balance problems (Dillon et al., 2010).

Hearing impairment is more prevalent in older men than older women and becomes more prevalent with advanced age (Table 2-7). Men aged 75 to 84 were about 45 percent more likely than women to have difficulty hearing ( 53.5 percent as opposed to 37.0 percent), according to 2004-2007 data. The sex gap in hearing impairment narrowed for those aged 85 and over ( 69.0 percent for men as opposed to 58.5 percent for women). Additionally, the percentage of the older population with hearing impairments was lower for Hispanics than it was for non-Hispanic Whites ( 28.2 percent versus 41.6 percent), while non-Hispanic Blacks had the lowest proportion with hearing impairments (23.6 percent). Limitations of activity due
to hearing problems were relatively rare among the population aged 65 to 74 , at 9 per 100,000 , but the rate rose to 72 per 100,000 among those aged 85 and over (Figure 2-9).

The vast majority of hearingimpaired adults do not use hearing aids, based on data collected between 1997 and 2004 (Gopinath et al., 2011). Hearing impairment brings about cognitive decline (Lin et al., 2011) and limitations in daily activities (Crews and Campbell, 2004).

## Suicide and Depression

From 1991-2003, suicide rates for the population aged 65 and older exceeded those for the age groups 10 to 24 and 25 to 64 (Figure 2-12). However, in 2004 and 2006-2010, the suicide rate for those aged 25 to 64 surpassed the rate among the population aged 65 and older.

Figure 2-12.
Suicide Rates by Age Group: 1991 to 2010
(Per 100,000)


The age 65-and-over suicide rate declined from 19.7 suicides per 100,000 in 1991 to 14.9 suicides per 100,000 in 2010. In 2010, the rate for those aged 25 to 64 reached 16.8 suicides per 100,000 . During 2005-2010, among the population aged 65 and over, nonHispanic White males had the highest suicide rate, at 32.4 suicides per 100,000, and non-Hispanic Black females had the lowest rate, with 1.0 suicides per 100,000 (Figure 2-13). Risk factors for suicide among the older population include major psychiatric illness, particular personality traits and disorders, physical illness, life event stressors, and functional status (Conwell and Thompson, 2008).

While the literature documents a strong association between depression and suicide (Blazer, 2003), depression also is a risk factor for nonsuicide mortality in the older population (Schulz, Drayer, and Rollman, 2002; Nabi et al., 2011). Among the population aged 65 and over, depression tends to be
more common in women than men and to rise with age. In 2008, 15.7 percent of women and 10.7 percent of men aged 65 and over had clinically relevant depressive symptoms (Table 2-9). The highest share with depressive symptoms was found among men aged 85 and over (18.9 percent).

Depression is associated with not only increased mortality but also increased functional limitations.

Covinsky et al. (2010) followed over 7,000 participants in the 1992 wave of the HRS for 12 years and found that those with depression in middle age had an increased risk for developing limitations in mobility and activities of daily living as they aged.

## Functional Limitations and Disability

Disabilities are key indicators of the health status of the older

Table 2-9.
Percentage of Population Aged 65 and Over With Clinically Relevant Depressive Symptoms by Age and Sex: 2008

| Age group | Both sexes | Men | Women |
| :---: | :---: | :---: | :---: |
| 65 and over | 13.6 | 10.7 | 15.7 |
| 65 to 69 | 12.3 | 9.7 | 14.5 |
| 70 to 74 | 11.9 | 9.6 | 13.7 |
| 75 to 79 | 13.8 | 10.1 | 16.5 |
| 80 to 84 | 14.6 | 9.9 | 17.6 |
| 85 and over | 18.3 | 18.9 | 17.9 |

Notes: The definition of "clinically relevant depressive symptoms" is four or more symptoms out of a list of eight depressive symptoms from an abbreviated version of the Center of Epidemiological Studies Depression Scale (CES-D) adapted by the Health and Retirement Study (HRS). The CES-D scale is a measure of depressive symptoms and is not to be used as a diagnosis of clinical depression. A detailed explanation concerning the "four or more symptoms" cut-off can be found in the following documentation, [http://hrsonline.isrumich.edu/docs/userg/dr-005.pdf](http://hrsonline.isrumich.edu/docs/userg/dr-005.pdf). Proportions are based on weighted data using the preliminary respondent weight from HRS 2008. The reference population for these data is the civilian noninstitutionalized population.

Source: Federal Interagency Forum on Aging-Related Statistics, 2012; Health and Retirement Study, 2008.

Figure 2-13.
Suicide Rates for the Population Aged 65 and Over by Sex, Race, and Hispanic Origin: 2005-2010
(Per 100,000)



Note: Data are not displayed for American Indian and Alaska Native females because the rate is based on less than 20 deaths and therefore considered statistically unreliable.
Source: Centers for Disease Control and Prevention, 2013a.
population. The Institute of Medicine of the National Academy of Sciences defines disability as an umbrella term for impairments, which are a problem in body function or structure; activity limitations, which are difficulties people face executing activities; and participation restrictions, which are problems that an individual may experience in involvement in life situations (Institute of Medicine, 2007). Research shows that age is positively associated with the presence of physical difficulty, and the oldest old have the highest levels of physical and cognitive problems (Pleis, Lucas, and Ward, 2009; Wolf, Mendes de Leon, and Glass, 2007). Some people with disabilities have difficulties performing the most basic tasks of everyday life, such as dressing, bathing, and eating, a set of tasks referred to as activities of daily living (ADLs). They may also have difficulties with their
instrumental activities of daily living (IADLs), such as using the telephone, shopping, and preparing food. ${ }^{9}$

## Major Disabilities

The 2010 American Community Survey (ACS) asked several questions about disabilities, such as difficulties in hearing, seeing, concentrating/remembering or making decisions, dressing/bathing (ADL), walking/climbing, and doing

[^23]errands alone (IADL). ${ }^{10}$ According to the 2010 ACS, 38.6 percent of those aged 65 and over had one or more disabilities (Figure 2-14). ${ }^{11}$ The most common disabilities were difficulty in walking or climbing stairs (25.8 percent) and difficulty doing errands alone (IADL) ( 18.5 percent).

The next most common problem was difficulty hearing, which affected 15.6 percent of the older population. This was followed in prevalence by difficulty remembering, concentrating, and making decisions and difficulty dressing (a key ADL)-impairments that affected 11.2 and 11.0 percent of the older population, respectively. ${ }^{12}$ Difficulty seeing was the sixth most

[^24]Figure 2-14.
Functional Limitations in the Population Aged 65 and Over by Age: 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)
$\square 65$ and over
65 to 74
$\square 75$ to 84
85 and over


Source: U.S. Census Bureau, 2011 a; American Community Survey, 2010, 1-year estimates.
prevalent disability, affecting 7.4 percent of the older population.

## Prevalence of Disability by Various Characteristics

The proportion of older people with disabilities rises sharply with age (Figure 2-14). For instance, 26.2 percent of those aged 65 to 74 had at least one disability, compared with 44.9 percent among those aged 75 to 84 and 72.6 percent for those aged 85 and over. Older men and women both exhibited increases in disabilities by age (U.S. Census Bureau, 2011a).

Disability patterns by race and socioeconomic status sometimes differ, although the direction of such differences is not always clear. Thorpe et al. (2008) found lower rates of physical functioning among women of lower socioeconomic status, yet rates of decline over time did not differ substantially by either poverty status or race. In another study, a group of older Americans with arthritis, who initially reported no ADL disability, was followed over a 6-year period (Song et al., 2007). At the end of 6 years, 17.7 percent had developed an ADL disability. The incidence rates among Blacks (28.0 percent) and Spanish-speaking Hispanics (28.5 percent) were significantly higher than for Whites (16.2 percent). ${ }^{13}$ Finally, Cutler and Lleras-Muney (2010), using the 2002 HRS, identified a link between disability and education among the population aged 65 and over. Among older people without a high school degree, the disability rate was 47 percent and declined
${ }^{13}$ The incidence rate for English-speaking Hispanics was 19.1 percent and is not significantly different from the other groups (Song et al., 2007).
to 31 percent for those with a high school degree and to 27 percent for those with some college or a college degree.

## Disability Trends

Trends in disability have been changing. Research indicates old-age disability declined in the 1980s and 1990s and then remained stable during the first decade of the twenty-first century (Spillman, 2003; Freedman et al., 2008; Manton, 2008; Seeman et al., 2010; Hung et al., 2011; Freedman et al., 2013). Using five waves of the HRS, Freedman and colleagues (2008) found that the prevalence of reporting an ADL limitation declined among the population aged 75 and over between 1995 and 2004 from 30.2 percent to 26.0 percent, while the prevalence of those reporting at least one IADL, but no ADLs, did not change significantly. Hung et al. (2011) detected no change in the prevalence of ADL and IADL disabilities for the population aged 65 and over from 1998 to 2008 in the HRS. Using the National Health and Nutrition Examination Surveys for the years 1988 through 2004, Seeman et al. (2010) found that ADL, IADL, and mobility disability across two periods (1988-1994 and 1999-2004) increased among people reaching their 60s, while disability remained steady among those in their 70 s , and the prevalence of functional limitations decreased among the population aged 80 and over. The study also showed that mobility impairments among those aged 60 to 69 increased significantly over time, with non-Hispanic Blacks and Mexican Americans having greater
increases in disability than nonHispanic Whites. Additionally, there were greater increases in disability for obese and overweight people than for people with a normal weight. Freedman et al. (2013) examined data from five surveys that cover the older population and found no evidence of an increase in disability during the 2000 to 2008 period for those aged 65 to 74 and those aged 75 to $84 .{ }^{14}$ However, for the population aged 85 and over, an ongoing decline in IADL and ADL limitations was found, and for the population aged 55 to 64, an increase in IADL and ADL limitations was reported.

## Impact of Falls on Disability

Falls are common health events that result in disability for older adults (Tinetti and Kumar, 2010). One-third of older people fall annually, with the odds of a resulting injury increasing with age, and 5 percent of falls resulting in a fracture or requiring hospitalization (Schiller, Kramarow and Dey, 2007; Katz and Shah, 2010). About 60 percent of older adults who were injured due to a fall visited an emergency room for advice or treatment. In 2009, 2.2 million fall-related injuries among older adults were treated in emergency departments, with over a quarter requiring hospitalization (CDC, 2012b). People aged 75 and over who had fallen multiple times were four and a half times more likely to be admitted into a long-term care facility within a year than

[^25]Figure 2-15.

## Percentage Without Any Health Insurance by Age: 2010

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: DeNavas-Walt, Proctor, and Smith, 2011 ; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.
those who did not fall (Donald and Bulpitt, 1999). Fall-related injuries are also a leading cause of death among older adults (Stevens and Olson, 2000).

Hip fractures are the most serious injury associated with falls. Half of older adults hospitalized for a hip fracture will never regain their former level of function (Stevens and Rudd, 2010). As a result of falls, nearly one-third of older adults needed help with ADLs, and for the majority help with ADLs were needed for at least 6 months (Schiller, Kramarow, and Dey, 2007). A similar percentage experienced IADL limitations. Researchers have identified many of the risk factors associated with falls for older adults. These include walking posture, balance impairment, and previous falls (Tinetti and Kumar, 2010;

Rubenstein, 2006). Susceptibility to injuries from a fall increases three-fold in elderly individuals with Alzheimer's disease or other dementia (Schiller, Kramarow, and Dey, 2007; Filkenstein, Prabhu, and Chen, 2007). Additionally, people with a visual acuity of $20 / 40$ or worse have an increased risk of falls with injury. Fall rates tend to be higher among women than men and higher among non-Hispanic White older adults than non-Hispanic Black older adults (Schiller, Kramarow, and Dey, 2007). When falls are disaggregated by loca-tion-either indoors or outdoorsdistinct differences in risk factors emerge. In a study of men and women around 70 years and older, Kelsey et al. (2010) found that risk factors for indoor falls included being older, female, and having substantial difficulty performing

ADLs. On the other hand, risk factors for outdoor falls included being younger, male, and relatively physically active and healthy.

## Health Insurance and Expenditures

Those aged 65 and over are far less likely to be without health insurance than those at younger ages (Figure 2-15). In 2010, only 2.0 percent of the older population had no health insurance. In contrast, in the age groups between ages 18 and 54, the proportion without health insurance ranged from 18.0 percent to 28.4 percent. Those under age 18 were the best covered group next to those aged 65 and over. Nevertheless, the share without health insurance among those aged 18 and under was 9.8 percent, almost five times the share among older adults.

## Text Box 2-1.

## Medicare and Its Parts

Medicare, the program that provides health insurance to the vast majority of older people, has four parts. Medicare Part A is hospital insurance that covers inpatient care in hospitals, skilled nursing facilities, hospice, and home health care. Medicare Part B is medical insurance that covers services by doctors and other health care specialists, outpatient care, home health care, and preventative services. Older people who have worked at least 10 years and their spouses are eligible to enroll in these two programs. Medicare Part D provides prescription drug coverage. A Medicare Advantage Plan (Part C) is another Medicare health plan choice offered by private companies approved by Medicare. These plans provide Medicare Parts A and B coverage, usually along with Part D, and in some cases additional coverage for services such as vision, hearing, and dental. Medicare Advantage Plans can function like a Health Maintenance Organization (HMO) or Preferred Provider Organization (PPO).* These plans tend to be more expensive. However, given their convenience, they are increasingly popular. Enrollments in Medicare Advantage Plans grew from 2.3 million in 1994 to 11.7 million in 2011 (Medicare Payment Advisory Commission, 2011).

Because Medicare Parts A and B do not cover the full range of services typically needed by older people, Medigap (Medicare Supplement Health Insurance) is sold by private insurance companies to fill the coverage gaps. Medigap policies are standardized and must follow federal and state laws.

Options to obtain insurance for prescription drugs include an individual buying into Medicare Part D or obtaining employer-provided coverage. Almost 90 percent of Medicare beneficiaries had some type of prescription drug benefit in 2007 (Cubanski et al., 2009). Fifty-seven percent of beneficiaries had plans purchased through Medicare Part D, with another 30 percent provided by employers. As health costs rise, many employers are eliminating drug benefits or tightening the requirements to qualify for them.

In 2007, all but 11 percent of Medicare beneficiaries had supplemental coverage in addition to the basic Medicare Parts $A$ and $B$, although this share varied among socioeconomic groups. Groups with the highest shares lacking supplemental coverage included African Americans (16 percent), rural residents (15 percent), and those with incomes between $\$ 10,000$ and $\$ 20,000$ (16 percent; Cubanski et al., 2009).

In the spring of 2010, Congress passed the Affordable Health Care for America Act, which mandated many changes to the U.S. health system over the next decade. Key goals include improved access to health care (Collins, Doty, and Garber, 2010), better quality of care (Kocher, Emanuel, and DeParle, 2010), and an emphasis on preventative care, such as cancer screenings, at no cost to the beneficiary (Koh and Sebelius, 2010).

The Act contains provisions specifically targeting the older population. First and foremost, it reduces the gap of Medicare prescription drug coverage, a so-called "donut hole" in funding (Centers for Medicare and Medicaid Services, 2012a). Discounts on brand-name drugs and extra coverage for generic drugs are expected to gradually close the gap by 2020, when recipients in the "hole" may expect to save $\$ 1,540$ per year (Shatto, 2010). In addition, changes to the funding structure are projected to reduce Medicare Part B premiums as well as coinsurance under Parts A and B.

* An HMO is group insurance that entitles members to services within a specific network of hospitals, clinics, and physicians. The initial point of contact is a primary care physician, a referral from whom is required for more specialized services. A PPO is group insurance that contracts with different providers, allowing participants to choose providers and services without referral.


## Providers of Health Insurance

Table 2-10 indicates the percentages of those aged 65 and over who had health insurance from various public and private sources in 2000 and 2010. Many older men and women have more than one health insurance provider.

Medicare, the program sponsored by the federal government to provide health care to older people, covered over 93 percent of the older population in 2010. Almost everyone who worked long enough to be eligible for Social Security or whose spouse qualified for Social Security may enroll in Medicare at age 65 . Other government programs include Medicaid, which is funded by federal and state governments to provide health care to poor people, and TRICARE, a military health care program. These two programs each covered less than 10 percent of older people in 2010. Almost 58 percent of older people had private sector health insurance in 2010. The share of older people receiving health insurance from their former and/ or current employers (32.5 percent)

Table 2-10.
Coverage by Type of Health Insurance for the Population Aged 65 and Over: 2000 and 2010
(In percent)

| Coverage type | 2000 | 2010 |
| :---: | :---: | :---: |
| Any private provider. | 62.8 | 57.9 |
| Employment based | 34.9 | 32.5 |
| Direct purchase | 31.7 | 28.8 |
| Any public provider | 96.4 | 93.5 |
| Medicaid. | 9.0 | 9.2 |
| Medicare | 96.1 | 93.1 |
| Military health care. | 4.3 | 8.1 |
| Uninsured . . . . . . . . . . . . | 1.0 | 2.0 |

Note: Individuals may have multiple sources of health insurance.
Source: Denavas-Walt, Proctor, and Smith, 2011.
exceeded slightly the share purchasing health insurance directly (28.8 percent). Although the share of older people without health coverage was very small, that proportion increased from 1.0 to 2.0 percent between 2000 and 2010.

## Health Care Utilization

According to the Medical Expenditure Panel Survey (MEPS), average health care expenses for people aged 65 and older with any health expenses in 2009 were \$10,082, while average expenses for the population under age 65
were $\$ 3,931$ (Kashihara and Carper, 2012). Health care expenses are distributed among various service categories, including hospital inpatient and outpatient care, emergency room services, officebased medical provider services, dental services, home health care, prescription medicines, and other medical services and equipment. Figure 2-16 shows that among those aged 65 and over, the largest share of expenditures was for hospital inpatient service (34.9 percent), with office-based and hospital outpatient services accounting

Figure 2-16.
Percentage Distribution of Health Care Spending by Type of Service and Age Group: 2009


[^26]for the next largest share (28.5 percent). In contrast, among those aged 18 to 64 , the expenditure shares were reversed, with officebased and hospital outpatient services representing 36.7 percent and hospital inpatient services 25.8 percent.

Those without health insurance or independent means are less likely to obtain medical care and more likely to suffer complications later in life. According to a Commonwealth Fund Survey, three-fourths of adults aged 50 to 64 who were uninsured experienced some cost-related problem in accessing healthcare (Collins, Doty and Garber, 2010). Among adults diagnosed with hypertension, diabetes, heart disease, or stroke before reaching age 65, those who were previously uninsured reported significantly greater increases in hospitalizations, number of doctors visits, and total medical costs than those who were previously insured (McWilliams et al., 2007). The near universal enrollment in Medicare at age 65 leads to increased utilization of health care. Between ages 64 and 65 , hospitalization rates were found to increase by 10 percent and health care disparities based
on socioeconomic status were diminished (Card, Dobkin, and Maestas, 2008).

For the civilian noninstitutionalized population, only 5.7 percent of the population aged 1 to 64 years had one or more hospital stays in 2010. The share with one or more hospital stays increased at older ages, reaching 13.6 percent for those aged 65 to $74,18.3$ percent for those aged 75 to 84 , and 20.8 percent for those aged 85 and over (NCHS, 2012).

## Health Care Expenditures

Health spending in the United States as a share of the gross domestic product (GDP) has more than tripled from 5.1 percent in 1960 to 17.4 percent in 2009 (NCHS, 2012). Medicare pays for over 60 percent of all health expenditures among those aged 65 and over, with Medicaid covering an additional 4.2 percent (Figure 2-17). Most other expenditures are covered through private insurance or out of pocket (14.8 percent and 12.5 percent, respectively). In contrast, given the typical minimum age requirement to qualify for Medicare, most health expenditures among those aged 18 to 64
are covered by private insurance (54.8 percent).

As the Baby Boom generation reaches older ages and longevity increases, the health care system is expected to come under increasing financial strain (Spillman, 2005). Median annual out-of-pocket expenses for health care for adults aged 65 and over are projected to more than double in constant 2008 dollars from about \$2,600 in 2010 to \$6,200 in 2040 (Johnson and Mommaerts, 2010). Out-of-pocket health care costs are likely to be higher for older women than older men due to their longer lifespan and because they are less likely to have retiree health benefits from former employers. Webb and Zhivan (2010) use data from the HRS to simulate remaining lifetime health care costs (premiums, copayments, and noncovered services) at age 65. A married couple free of chronic disease at age 65 faces estimated costs of $\$ 197,000$, excluding nursing home care, and $\$ 260,000$, including nursing home care.

Per capita Medicare expenditure varies across U.S. regions, reflecting differences in local prices, rates of illness, poverty, population

Figure 2-17.
Percentage Distribution of Health Care Spending by Source of Payment and Age Group: 2009
$\square$ Medicare $\quad \square$ Private insurance $\quad \square$ Medicaid/CHIP ${ }^{1} \quad \square$ Out of pocket $\quad \square$ Other


Source of payment
${ }^{1}$ Children's Health Insurance Program.
Source: Kashihara and Carper, 2012.
composition, and patient service use. After adjusting for the age, race, and sex composition of the population aged 65 and older in each of 306 Hospital Referral Regions (HRR), Gottlieb et al. (2010) found that price differences explained very little of the total variation. In 2006, the HRR with the highest price-adjusted expenditure per capita was 2.87 times the level of the HRR with the lowest price-adjusted expenditure per capita (\$15,909 in Miami, Florida versus $\$ 5,212$ in Honolulu, Hawaii), only slightly lower than the 3.01:1 ratio for unadjusted expenditures. Another study adjusted 2004-2006 Medicare spending data for differences in Medicare payment rates and in beneficiaries' health status to derive an index of Medicare service use (Medicare Payment Advisory Commission, 2009). A Medicare service use index was calculated for each state's metropolitan statistical areas and an aggregated rest-of-state
nonmetropolitan area. The study found that beneficiaries residing in the 90th percentile areas had 30 percent higher service use than beneficiaries residing in the 10th percentile areas. The area with the least service use was nonmetropolitan Hawaii and the area with the greatest service use was MiamiDade County, with a 1.99:1 ratio between them.

## Long-Term Care

## Type of Long-Term Care

Long-term care services provide assistance to people who have a prolonged physical illness, disability, or severe cognitive impairment that hinders daily functioning. In contrast to medical care, which focuses on preventing, diagnosing, and treating disease, longterm care provides assistance with essential and routine aspects of life. Those who are unable to take care of basic daily tasks (i.e., ADLs) or need help with more complex
tasks (i.e., IADLs) often need ongoing assistance. A large portion of the population over age 65 will need long-term care at some point, and that need is likely to increase dramatically for people aged 85 and over ( Ng , Harrington, and Kitchener, 2010).

Nursing homes and other healthrelated institutional facilities serve people who cannot fully take care of their own needs due to their health (Brault, 2008). Thus, as one might expect, older people residing in long-term care institutions are more likely to have disabilities than those who do not (Figure 2-18). According to the 2010 ACS, 96.1 percent of those residing in institutional group quarters (e.g., nursing homes) had some type of disability, compared with 36.7 percent of the population in noninstitutionalized group quarters and households (e.g., those living in households, group homes intended for adults, and residential treatment facilities for adults). This

Figure 2-18.

## Functional Limitations for the Population Aged 65 and Over by Institutional

 Status: 2010(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


[^27]excess in disabilities among the institutionalized population tends to be largest for ADLs, IADLs, and mobility as opposed to vision and hearing impairments.

Alternatives to nursing home care are also available in other institutions, such as assisted living facilities, and in one's own home by receiving care from a paid provider or informal care provider, such as an adult family member. Furthermore, with the help of assistive devices (such as walkers), some older people may continue to live at home for longer periods either with or without the aid of a caregiver.

## Providers of Long-Term Care

Most of the care provided to older people comes from family members, friends, and others who are unpaid, and most of the care is provided in the recipient's home (Kaye, Harrington, and LaPlante, 2010). For example, in 2007 the older population receiving longterm help with one or more ADLs or IADLs within the community was estimated to be between 3.8 million (according to the 2007 ACS) and 4.9 million (according to the 2007 National Health Interview Survey), while the older population receiving long-term care in nursing homes was estimated to be 1.5 million (2007 ACS).

Based on a survey of caregivers, the vast majority were caring for someone over the age of 50 , with 28 percent of care recipients aged 50 to 74 and 44 percent aged 75 and over (National Alliance for Caregiving, 2009). The majority of caregivers were women (66 percent), who were on average 48 years old, with 7 out of 10 caring for someone aged 50 and over. Compared with caregivers aged 18 to 64 , caregivers aged 65 or over were more likely to care for their
spouse (19 percent versus
3 percent), a sibling ( 12 percent versus 4 percent), or a nonrelative (19 percent versus 13 percent), and were less likely to provide care for a parent or parent-in-law (23 percent versus 48 percent). Asian Americans took care of the oldest care recipients (on average 68.0 years old), while Whites cared for people who were on average 63.8 years old and Blacks cared for people who were on average 53.1 years old. Hispanic caregivers took care of people who were an average of 49.3 years old.

Informal and formal caregiving trends may change in the future. The vacancy rate went up for assisted living facilities after the first quarter of 2007 and remained above the 2007 first quarter level through early 2011 (Valley, 2011). With the decline in housing prices and rise in unemployment, some members of the older population may have decided to rely on informal family care and not move into a long-term care facility or at least postpone such a move. Researchers also point to other factors that may lead to an increase in the demand for formal care, including decreasing family size, fewer older people with stable marriages, and increasing education levels among older people (Uhlenberg and Cheuk, 2008).

Paid care in long-term care facilities, such as nursing homes and assisted living facilities, is less common. Nursing homes offer care for older adults who do not need to be in a hospital but can no longer be cared for in their home, usually because they need help with more than one basic daily task (Metlife Mature Market Institute, 2010). In nursing homes, residents have access to aides and skilled nurses 24 hours a day. Assisted living facilities offer a more limited range
of services to those needing less comprehensive care.

According to the 2010 Census, 3.1 percent of the older population resided in skilled nursing facilities, down from 4.5 percent in 2000 (U.S. Census Bureau, 2011b). ${ }^{15}$ The share of the older population residing in nursing facilities rises progressively at older age groups, from 0.9 percent for the population aged 65 to 74 , to 3.2 percent for those aged 75 to 84 , and to 11.2 percent for those aged 85 and over. In addition to those residing in skilled nursing facilities, another 2.4 percent of older people resided in senior housing facilities that offered one or more special support services (Administration on Aging, 2009).

While the share living in nursing homes is down, the share in other care settings, such as assisted living facilities, has been growing. Among Medicare enrollees residing in a long-term care facility, the proportion living in an assisted living facility increased from 15 percent in 1992 to nearly a quarter in 1998, as based on the Medicare Current Beneficiary Survey (Spillman, Liu, and McGilliard, 2002). Data from the 2010 National Survey of Residential Care Facilities estimated that there were 31,100 residential care facilities such as assisted living facilities and personal care homes, with 971,900 beds nationwide (Park-Lee et al., 2011). ${ }^{16}$ The vast majority of residents in these residential care facilities were nonHispanic White ( 91 percent) and 70 percent were female (Caffrey et al., 2012). Over half of the residents

[^28]were aged 85 and over ( 54 percent), more than a quarter were 75 to 84 years old ( 27 percent), while 9 percent were aged 65 to 74 , and 11 percent were under age 65 .

Aside from nursing homes, assisted living facilities, and senior housing facilities, there are services available to allow older people to live at home. For those who prefer to remain at home but cannot care for themselves, the home care industry provides many options, typically nonmedical or supportive care provided by paraprofessionals such as home health aids, homemakers, and companions (Metlife Mature Market Institute, 2010). In addition, adult day care centers offer services in a community facility for adults who need assistance or supervision but do not need 24 -hour care. Such centers reduce the reliance on regular informal caregivers (Genworth, 2011).

## The Cost and Funding of LongTerm Care

The cost of long-term care varies by care setting. The average cost of a private room in a nursing home was $\$ 229$ per day or $\$ 83,585$ annually in 2010 (Table 2-11). ${ }^{17}$ Average assisted living rates were $\$ 3,293$ per month or $\$ 39,516$ annually. For in-home care, rates averaged \$21 per hour for home health aides and $\$ 19$ per hour for homemakers. Adult day care centers cost on average $\$ 67$ a day. However, as Table 2-11 shows, the average cost varies widely across states. Increases in the costs of these options have also varied. For instance, from 2005 to 2011, the cost of nursing home care and

[^29]Table 2-11.
Average Cost of Long-Term Care by Care Setting: 2010 (In dollars)

| Care setting and type of rate | National average rate | Range of average rate across states |
| :---: | :---: | :---: |
| Nursing home (daily): |  |  |
| Semi-private room | 205 | 123-610 |
| Private room. | 229 | 138-687 |
| Assisted living communities (monthly). | 3,293 | 2,073-5,231 |
| Home care (hourly): |  |  |
| Home health aide. | 21 | 14-30 |
| Homemaker | 19 | 13-25 |
| Adult day service (daily) | 67 | 31-140 |

Source: MetLife Mature Market Institute, 2010.

Figure 2-19.

## Long-Term Care Funding by Source: 2006



Source: Avalere Health, 2008.
assisted living facilities rose by 4.4 percent annually, compared with just 1.4 percent annually for home health aides (Genworth, 2011).

Less than one-fifth of older people have enough personal resources to live in a nursing home for more than 3 years, and almost twothirds cannot afford even 1 year (Engquist, Johnson, and Johnson, 2010). Out-of-pocket expenses accounted for only 28 percent of total long-term care spending in 2006 (Figure 2-19). The largest share of long-term care expenditures was covered by Medicaid (43 percent). This is more than

Medicare (18 percent) and private long-term care insurance and Medigap combined (7 percent). Medicare provides skilled nursing home coverage to aged and disabled patients for only short time periods after hospitalization (Centers for Medicare and Medicaid Services, 2012b).

Evidence indicates that residential care facilities, in general, provide care to a more affluent population. Assisted living facilities largely have residents who self pay (Hawes et al., 2003). In 2010, Medicaid, which is available to low-income individuals, paid for at least some
services for 19 percent of residents in residential care facilities, with Medicaid services more common for younger residents than for older residents (Caffrey et al., 2012). Other researchers found that assisted living facilities are more often located in areas where there is higher educational attainment, higher income, and greater housing wealth (Stevenson and Grabowski, 2010).

A small portion of Americans purchase long-term care insurance to pay for potential long-term care needs if they develop health problems, such as ADL or IADL limitations, which would require longterm care. According to the 2000 HRS, only 10.5 percent of individuals aged 60 and over owned a private long-term care insurance policy (Brown and Finkelstein, 2009). Ownership rates rose with household wealth and were higher for married than single individuals. Private long-term care insurance covers varied expenses depending on the terms of each policy (Genworth, 2011). Many plans pay for costs related to care in nonnursing home settings as well as nursing home care. A survey of purchasers of long-term care insurance who had recently filed a claim or planned to file a claim in the next 60 days revealed that 37 percent were receiving paid care at home, 26 percent were receiving unpaid care at home, 23 percent were in an assisted living facility, and 14 percent were in a nursing home (Doty et al., 2010). Longterm care insurance (including Medigap) is typically purchased by people with lower risk tolerance, who tend to use more preventative care services and do not often end up in a nursing home (Cutler, Finkelstein, and McGarry, 2008).

Researchers often view nursing homes as falling into one of two
tiers based on the key sources of funding (Mor et al., 2004). Medicaid payment rates are typically lower than private payers and Medicare (BDO Seidman, 2002). Although Medicaid provides the most funds for long-term care, institutions with the greatest reliance on Medicaid funding have fewer opportunities to cross-subsidize care for residents. Mor et al. (2004) classified over 14,000 nonhospital-based nursing facilities, which were Medicaid and Medicare certified, into two tiers based on their funding sources. Nursing facilities with 85 percent or more of the residents supported by Medicaid, fewer than 10 percent supported by private payers, and fewer than 8 percent supported by Medicare were classified as lower tier. As of 2000, 13 percent of nursing facilities met the lowertier criteria. The study found that lower-tier facilities, often located in poor areas, tended to have a lower
nurse-to-patient ratio and more health-related deficiencies.

## Growth of Home and Community-Based Care Living

The distribution of Medicaid funds has been shifting towards home- and community-based services (Grabowski et al., 2010). Such options for long-term care are increasingly popular, in part because of the desire to remain in one's own home. Almost 90 percent of adults aged 50 and over want to stay in their own home as long as possible (AARP Public Policy Institute, 2009). In addition, health insurance providers have increasingly funded noninstitutional care options, which are cheaper than institutional care. Medicaid can provide home- and community-based services to three people for the same cost as one patient in a nursing home. Figure 2-20 shows the change in distribution of Medicaid funds for

Figure 2-20.

## Percentage Distribution of Medicaid Funding for Long-Term Care by Type of Care: 1990 to 2007



[^30]long-term care from 1990 to 2007. Funding for home- and communitybased services increased from 13 percent of total funding in 1990 to 43 percent in 2007 . The growth of such options may help to explain the decline in the proportion of older people who reside in nursing homes (NCHS, 2011a).

Assistive devices can help older adults with chronic conditions live in their homes longer, delaying the need for institutional care. Assistive devices are tools that are designed, made, or adapted to make it easier for a person to perform a particular task independently. Examples of common assistive devices include canes and wheelchairs to help with mobility, a shower bench and pull bar to permit independent bathing, and modified cutlery, such as a plastic knife that allows food preparation with a tool that cannot cut skin. Use of assistive devices significantly
diminishes the adverse effects of chronic illness and physical impairment and improves the quality of life of the elderly (Kahana et al., 2003; Agree and Freedman, 2011). In the 1990s, the proportion of the chronically disabled older population with ADL and/or IADL problems who were able to manage their disabilities with only assistive devices rose while use of personal care assistants declined (Spillman, 2005; Freedman et al., 2006). Use of assistive devices may result in an older person being more independent and no longer needing as much assistance from family members or public programs, although the ability of equipment to successfully substitute or supplement personal care depends on the tasks that people struggle with, which devices they use, as well as what assistance they receive from their care providers (Agree and Freedman, 2000).

Commonly used technologies can benefit older adults with special needs. For instance, computer programs and electronic devices can help older adults with visual problems read by enlarging text or providing enhanced contrast. Some devices may even read the book to them. Additionally, older adults with cognitive impairment or arthritis can benefit from modifications of phones and appliances so that they have fewer and larger buttons and simpler instructions (Sterns, 2007). Finally, the field of telemedicine, an active area of research for 30 years, can help patients receive health monitoring in their own homes (LesnoffCaravaglia, 2007; Mishra et al., 2011). As Baby Boomers age, there will likely be an increased demand for technology that can improve both health and independence (Horgas and Abowd, 2003).

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## Chapter 3. Economic Characteristics

Among the older population, labor force participation and retirement patterns have shifted since the start of the twenty-first century. The work trends of the older population also varied by age, sex, race, and Hispanic origin. ${ }^{1}$ This chapter discusses the economic characteristics of the older population in three sections: "Work and Retirement," "Income and Poverty," and the "Impact of the 2007-2009 Recession on Older Americans."

## Work and Retirement

## Labor Force Participation

Between 1950 and the early 1990s, the labor force participation rate gap between older men and women declined, due primarily to the downward trend in the participation rate for men (Figure 3-1). ${ }^{2}$ Labor force participation for men aged 65 and older decreased from 45.8 percent in 1950 to 15.6 percent in 1993 (Figure 3-1). In contrast, older women's participation rates experienced relatively little change from 1950 until the early 2000 s. There was no statistical difference between the 1950 rate of 9.7 percent and the 2003 rate of 10.6 percent for women aged 65 and over. However, in the first decade of the twenty-first century, trends show an increase

[^31]in labor force participation for both older men and women (Figure 3-1). By 2010, the labor force participation rate reached 22.1 percent for older men and 13.8 percent for older women, a significant rise from their levels of 17.7 percent and 9.4 percent, respectively, in 2000. In contrast, the labor force participation rates for the younger population aged 25 to 34 fell from 2000 to 2010 for both men (93.4 to 89.7 percent) and women ( 76.1 to 74.7 percent) (Bureau of Labor Statistics, 2011).

The trend toward earlier retirement in the 1960s, 1970s, and 1980s—made possible in part by the Social Security system and the provision of health insurance through Medicare-began to change in the 1990s for men and in the 2000s for women (Shattuck, 2010; Leonesio et al., 2012). For the past decade or longer, the proportion of older adults in the labor force has been increasing. Heiland and Li (2012) argue that the shift from defined benefit to defined contribution retirement plans is a key factor behind the rise in labor

Figure 3-1.
Labor Force Participation Rates for the Population
Aged 65 and Over by Sex: 1948 to 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see
www.census.gov/cps/methodology/)
Percent


Note: The reference population of the survey is the civilian noninstitutionalized population.
Sources: He et al., 2005; Bureau of Labor Statistics, 2011; all years, Current Population Survey.
force participation rates among the population aged 65 and over. Among older men and women, those with higher educational attainment tended to remain in the labor force longer than those with lower education levels (Shattuck, 2010; Munnell, 2011; Johnson and Mommaerts, 2010b). In addition, older women who were divorced or separated had higher labor force participation rates than older women who were married, widowed, or never married (Shattuck, 2010).

Table 3-1 shows the labor force participation rates for 2010 by age, sex, race, and Hispanic origin for the population aged 50 and over. For the age group 60 to 64 in 2010, labor force participation rates for men who identified as White or as Asian were higher than for men identifying as Black. ${ }^{3}$ For women aged 60 to 64, the only significant difference in 2010 participation rates across races was a higher rate for White (51.7 percent) than Black ( 44.2 percent). The labor force participation rates dropped for those aged 65 to 69 compared with those aged 60 to 64 for both men and women and across all races in 2010. Labor force participation rates for women aged 65 and over across race and Hispanic-origin groups did not differ statistically in 2010. This was also true for older men. Older men had higher participation rates than older women for each race group and for Hispanics of any race in 2010. Appendix Table C-2 provides labor force participation rates for the population aged 50 and over for earlier years.

[^32]Table 3-1.
Labor Force Participation Rates for the Population Aged 50 and Over by Sex, Age, Race, and Hispanic Origin: 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology//

| Sex and age | Total | One race |  |  | Hispanic (of any race) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | White | Black or African American | Asian |  |
| Male |  |  |  |  |  |
| 50 to 54 | 85.1 | 86.5 | 75.1 | 88.7 | 86.7 |
| 55 to 59 | 78.5 | 79.7 | 65.2 | 87.4 | 77.1 |
| 60 to 64 | 60.0 | 61.3 | 46.7 | 66.8 | 57.8 |
| 65 and over | 22.1 | 22.3 | 18.1 | 24.2 | 24.5 |
| 65 to 69 | 36.5 | 37.2 | 27.9 | 42.9 | 38.7 |
| 70 to 74 | 22.0 | 22.5 | 16.3 | 22.1 | 23.4 |
| 75 and over | 10.4 | 10.5 | 9.3 | 8.9 | 10.9 |
| Female |  |  |  |  |  |
| 50 to 54 | 74.6 | 75.3 | 70.6 | 75.9 | 67.7 |
| 55 to 59 | 68.4 | 69.4 | 63.6 | 65.0 | 60.5 |
| 60 to 64 | 50.7 | 51.7 | 44.2 | 49.3 | 44.5 |
| 65 and over | 13.8 | 13.9 | 13.3 | 11.7 | 13.0 |
| 65 to 69 | 27.0 | 27.6 | 24.2 | 21.4 | 24.3 |
| 70 to 74 | 14.7 | 15.0 | 13.0 | 13.8 | 10.4 |
| 75 and over | 5.3 | 5.3 | 5.6 | 4.4 | 5.5 |

Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: Bureau of Labor Statistics, 2011; Current Population Survey, 2010.

Figure 3-2 shows labor force participation rates for the population aged 65 and over by state from the 2009-2011, 3-year American Community Survey (ACS). ${ }^{4}$ Participation rates among those aged 65 and older ranged from 11.5 percent in West Virginia to 23.6 percent in Alaska. ${ }^{5}$ Major retirement destinations, such as Florida and Arizona, had lower labor force participation rates than a number of Midwest states, such as North Dakota, South Dakota, and Nebraska, where a higher share of the older population was still economically active.

[^33]
## Age Structure of the Labor Force

The age structure of the labor force changes over time due to shifts in the age structure of the population and in the labor force participation rates at various ages. Figure 3-3 shows the distribution of the labor force by age in 1950, 1980, 2000, and 2010. In 1950, people aged 55 to 64 represented 12.3 percent of the labor force, and people 65 years and older accounted for 4.9 percent. In 2000, shares of the labor force in the age groups 55 to 64 and 65 and over were lower than their shares in 1950. ${ }^{6}$ In 2010, the labor force shares again rose, with the proportion at ages 55 to 64 and 65 and over reaching 15.1 percent and 4.4 percent, respectively.

[^34]

Figure 3-2.

## Percentage of Population Aged 65 and Over in the Labor Force: 2009-2011

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


Source: U.S. Census Bureau, 2012 a; American Community Survey, 2009-2011, 3-year estimates.

Figure 3-3.

## Percentage Distribution of the Labor Force by Age:

## Selected Years, 1950 to 2010

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Notes: Data for 2000 and 2010 are not strictly comparable with data for earlier years. Totals may not sum to 100.0 due to rounding. The reference population of the survey is the civilian noninstitutionalized population.
Sources: 1950, Toossi, 2002; 1980-2010, U.S. Census Bureau, 2011 d; all years, Current Population Survey.

How old or young the workforce is can also be reflected by the median age of the labor force. ${ }^{7}$ According to Toossi (2012), the entry of the Baby Boomers (those born in mid1946 to 1964) to the work force helped drive the median age to a low of 34.6 years in 1980, when Baby Boomers were 16 to 34 years old. Since 1980, the median age has been rising, reaching 36.4 years in 1990, 39.3 years in 2000, and 41.7 years in 2010 . The Bureau of Labor Statistics projects the median age of the labor force to reach 42.8 years in 2020, when the Baby Boomers will be 56 to 74 years old (Toossi, 2012).

[^35]
## Work Status and Type of Employment

Figure $3-4$ shows the work status of employed workers aged 55 and over by age and sex in 2009. Among workers aged 55 to 61 (just prior to first becoming eligible to receive Social Security benefits), only 10.0 percent of men and 21.8 percent of women were on part-time schedules. As the age of workers rises, the share working part time increases. For workers aged 70 and older, nearly half of all employed men and the majority of employed women were working part time as opposed to full time. For each age group, a higher share of women work part time compared with men.

Many older workers choose to transition from full-time employment to part-time employment before
full retirement for a variety of reasons. Rather than leave a career job and immediately retire, a large portion of men in their 50 s and 60s transition into part-time and/ or part-year "bridge jobs," often in a different industry or occupation, before they officially retire (Macunovich, 2009). Some older employees switch to a new career due to poor health, a desire to try something new, or the inability to find a job in their prior line of work (Johnson, Kawachi, and Lewis, 2009). Jobs that older adults take after retirement tend to be in less demanding occupations with less pay than their former jobs, to be part time, and to involve more flexible schedules. Some older workers prefer to gradually transition into retirement with their current employer rather than change employers or switch from-full
time work to full-time retirement (Eyster, Johnson, and Toder, 2008). An increasingly common transition is to stay within the same occupation but to switch to self-employment (Giandrea, Cahill, and Quinn, 2008). There has also been a rise in full-time, full-year employment among older workers since the mid-1990s (Shattuck, 2010).

Occupations and type of employment vary among the older population, with self-employment more common for older employees than for younger employees. ${ }^{8}$ Among

[^36]Figure 3-4.

## Employment Status of the Employed Population Aged 55 and Over by Sex and Age: March 2009

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: Purcell, 2009; Current Population Survey, 2009.
the employed population aged 16 and over in 2010, 0.6 percent were self-employed in agriculture and related industries, and 6.4 percent were self-employed in nonagricultural industries (Table 3-2). For employed workers aged 65 and over, the self-employed shares rise to 3.9 percent and 13.5 percent in agriculture and nonagricultural industries, respectively. Men had higher self-employment rates than women regardless of age.

## Retirement Planning

The Retirement Confidence Survey (RCS) found that the percentage of workers aged 25 and older planning to retire when they reached age 66 or higher rose from 19 percent in 2000 to 24 percent in 2005 and to 33 percent in 2010 (Figure 3-5). The Health and Retirement Study (HRS) also found a rising expected retirement age over the 2006 to 2010 period (Banerjee, 2011). The median
expected retirement age, though, has remained at age 65 since 1995 due to the continued large share of workers planning to retire at age 65 (Helman, Copeland, and VanDerhei, 2010). In contrast, the median age of actual retirement has been at or very near age 62 since 1991 according to the RCS.

While workers say they plan to retire later, many current retirees left the labor force at younger ages (Figure 3-6). ${ }^{9}$ In 2010, one-third of retirees had retired before reaching age 60 , and only 22 percent had retired at age 66 or older.

Many possible factors can contribute to people working for a different length of time than planned. The 2010 RCS found that people who retired earlier than planned tended to cite negative reasons for leaving their job, with the number

[^37]one factor being health problems or disability, followed by company downsizing or closure, and having to care for a family member or one's spouse (Helman, Copeland, and VanDerhei, 2010). Positive reasons given for retiring early included the ability to afford an early retirement and the desire to do something else.

People who are less confident about their financial security tend to retire later. Working a few years past the early retirement age of 62 increases the likelihood of having enough resources to retire comfortably (Munnell and Sass, 2008). According to a 2009 Pew Research Center study, among the working population aged 50 to 61, 63 percent reported that they may have to push back their expected retirement date due to current economic conditions (Taylor et al., 2009b). Additionally, 4 out of 10 adults who worked past age 62 reported that they delayed their

Table 3-2.

## Employed Population Aged 16 and Over by Employment Type, Age, and Sex: 2010

(Numbers in thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)

| Employment ${ }^{1}$ | Total |  |  | Men |  |  | Women |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 16 and over | 55 to 64 | 65 and | $\begin{array}{r} 16 \text { and } \\ \text { over } \end{array}$ | 55 to 64 | 65 and over | $\begin{array}{r} 16 \text { and } \\ \text { over } \end{array}$ | 55 to 64 | 65 and |
| Number |  |  |  |  |  |  |  |  |  |
| Total | 138,947 | 21,620 | 6,258 | 73,309 | 11,135 | 3,433 | 65,638 | 10,485 | 2,825 |
| Agriculture and related industries | 2,173 | 395 | 329 | 1,648 | 285 | 245 | 525 | 110 | 84 |
| Wage and salary | 1,353 | 171 | 88 | 1,051 | 129 | 66 | 302 | 42 | 22 |
| Self-employed | 821 | 224 | 241 | 598 | 156 | 180 | 223 | 68 | 61 |
| Nonagricultural industries | 136,774 | 21,225 | 5,929 | 71,661 | 10,850 | 3,188 | 65,113 | 10,375 | 2,741 |
| Private wage and salary. | 106,911 | 15,048 | 4,179 | 57,130 | 7,893 | 2,237 | 49,781 | 7,155 | 1,942 |
| Government wage and salary | 21,003 | 4,235 | 903 | 9,059 | 1,770 | 428 | 11,944 | 2,465 | 475 |
| Self-employed | 8,860 | 1,943 | 847 | 5,472 | 1,188 | 524 | 3,388 | 755 | 323 |
| Percent |  |  |  |  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Agriculture and related industries | 1.6 | 1.8 | 5.3 | 2.2 | 2.6 | 7.1 | 0.8 | 1.0 | 3.0 |
| Wage and salary | 1.0 | 0.8 | 1.4 | 1.4 | 1.2 | 1.9 | 0.5 | 0.4 | 0.8 |
| Self-employed | 0.6 | 1.0 | 3.9 | 0.8 | 1.4 | 5.2 | 0.3 | 0.6 | 2.2 |
| Nonagricultural industries | 98.4 | 98.2 | 94.7 | 97.8 | 97.4 | 92.9 | 99.2 | 99.0 | 97.0 |
| Private wage and salary. | 76.9 | 69.6 | 66.8 | 77.9 | 70.9 | 65.2 | 75.8 | 68.2 | 68.7 |
| Government wage and salary | 15.1 | 19.6 | 14.4 | 12.4 | 15.9 | 12.5 | 18.2 | 23.5 | 16.8 |
| Self-employed | 6.4 | 9.0 | 13.5 | 7.5 | 10.7 | 15.3 | 5.2 | 7.2 | 11.4 |

[^38]Figure 3-5.
Workers' Planned Retirement Age: 2000, 2005, and 2010 (In percent)


Note: The reference population of the survey is workers aged 25 and older.
Source: Helman, Copeland, and VanDerhei, 2010.

Figure 3-6.
Retirees' Actual Retirement Age: 2000, 2005, and 2010 (In percent)


Note: The reference population of the survey is retirees aged 25 and older.
Source: Helman, Copeland, and VanDerhei, 2010.
retirement because of the 20072009 recession. Another study found that 89 percent of those whose retirement expectations changed between 2008 and 2009 postponed retirement in order to increase their financial security (Helman, Copeland, and VanDerhei, 2009). A longer discussion of the impact of the 2007-2009 recession is included later in this chapter.

Workers who did not expect to receive employer-provided health insurance in retirement planned to retire later than those who expected this benefit (Mosisa and Hipple, 2006; Helman, Copeland, and VanDerhei, 2010; French and Jones, 2011). Strumpf (2010), using HRS data from 1992 to 2006, estimated that the offer of employer-provided health insurance increased the probability of early retirement by 37 percent. Concerns about health care costs may be warranted, as 40 percent of retirees in the 2009 RCS indicated that health care spending had been higher than expected (Helman, Copeland, and VanDerhei, 2011).

Studies of the effect of retiree health insurance on retirement rates generally have found a positive effect for workers under age 65 (Nyce et al., 2011; Blau and Gilleskie, 2008). That is, workers under age 65 with the option of retiree health insurance generally retire earlier than workers without this option. Blau and Gilleskie (2008) concluded that the availability of subsidized employerprovided health insurance after retirement had a noticeable effect on workers in poor health and a smaller effect on workers in good health. However, even when retiree health insurance is not available and workers need to work to maintain health benefits, some older workers retire before age 65 as a result of poor health (Bound
et al., 1998). Nyce et al. (2011) anticipate a rise in early retirement following the new opportunities for access to group health insurance starting in 2014 under the Patient Protection and Affordable Care Act, assuming the cost is comparable to employer-provided and subsidized retiree coverage.

There are a number of possible factors behind the rise in labor force participation rates among the older population and delayed retirement. First, the population is living longer and, compared with previous generations, the health of the older population is improved, and many jobs are less physically demanding (Mermin, Johnson, and Toder, 2008). Another factor is the rise in the Social Security full retirement age, which reaches age 67 for those born in 1960 and later.

In 2000, the federal government eliminated the earnings test that limited how much workers could earn from paid work and still collect their full monthly Social Security benefit for workers who had reached full retirement age. Research is mixed, however, on whether removing the earnings test affected the labor supply. Friedberg and Webb (2009) found that eliminating the earnings test in 2000 resulted in about a 3.5 per-centage-point increase in employment at age 65 and a 2 percentagepoint rise among those aged 66 to 69. Song and Manchester (2007) found a small rise in work force participation among individuals aged 65 to 69 but attributed the rise to trends already underway and to employers retaining older workers as opposed to older workers reentering the work force. In a study focused on men only, Haider and Loughran (2008) did not find clear evidence that removing the earnings test in 2000 significantly changed the overall rate of labor
force participation. Workers who delay collecting Social Security (up to age 70) receive "delayed retirement credits" which increase their benefit when they do retire (Shattuck 2010).

Another factor underlying the increase in labor force participation among the population aged 55 and over is the shift in responsibility for retirement income from employers to employees (Bureau of Labor Statistics, 2010). The majority of pension plans were defined benefit in 1983 and by 2004 the majority were defined contribution (Munnell and Sunden, 2006). ${ }^{10}$ Researchers found that people who did not expect a definedbenefit plan and who did not save money for retirement planned to retire later (Helman, Copeland, and VanDerhei, 2009).

Current retirees are more likely to have a defined-benefit plan than current employees, and many approaching retirement more often have defined-contribution plans. The percentage of retirees receiving defined-benefit pensions has decreased from 62 percent in 2005 to 52 percent in 2010 (Helman, Copeland, and VanDerhei, 2010). Furthermore, only around onethird of current employees in 2011 reported that they or their spouse currently had a defined-benefit plan from a current or previous employer, while about one-fifth of workers expected a definedbenefit plan from a future employer (Helman, Copeland, and VanDerhei, 2011). Private sector employers, in particular, have cut back on defined-benefit plans for their employees.

[^39]Financial literacy is increasingly important for retirement planning and managing defined-contribution pension plans and personal savings for retirement (van Rooij, Lusardi, and Alessie, 2007). A lack of financial knowledge may impair the ability of workers to save and invest for their retirement (Lusardi and Mitchell, 2007). The MetLife Mature Market Institute has conducted three waves of the Retirement IQ Survey (in 2003, 2008, and 2011) that targets workers within 5 years of retirement. Results across the three waves demonstrate "increases in some areas of knowledge, yet persistent areas of misperception and misunderstanding" (MetLife Mature Market Institute, 2011, p. 2). Results from the 2004 HRS point to low levels of financial literacy and the potential benefit of financial education, such as retirement seminars and financial counseling. Using data from the 2008 HRS, Lusardi, Mitchell, and Curto (2012) found that women, people over age 75, and those with low levels of education were less sophisticated regarding financial matters. According to studies by Bernheim and Garrett (2003), when employers offer financial education, employees have significantly higher retirement accumulation. Martin (2007) finds evidence across a number of studies that financial education has a positive effect on individual financial behavior and outcome. Nevertheless, most individuals rely on informal sources for financial advice, including family and friends, rather than financial experts and professionals and few report using tools, such as retirement calculators (Lusardi and Mitchell, 2008).

Among the population approaching retirement, people have both economic and noneconomic concerns. In 2010, 32 percent of workers aged 55 and over were very confident that they could pay for basic expenses during retirement, down from 41 percent in 2000 (Figure 3-7). Only 11 percent of workers aged 55 and over were very confident that they had enough money for medical expenses in retirement in 2010, down from 25 percent in 2000. The top two retirement concerns among people aged 51 to 57 in 2009 were being able to afford health care ( 25 percent) and staying productive and useful (18 percent; Metlife Mature Market Institute, 2010). Noneconomic reasons for working, such as remaining productive and useful, were also found in a study by Taylor et al. (2009b, p. 1), where participants expressed social reasons for working: "to feel useful;" "to give myself something to do;" and "to be with other people." In that same
study, researchers found that 27 percent of older workers were motivated by both the desire to work and the need for money.

## Income and Poverty

## Sources of Income

The median income for married couples and individuals aged 65 or older was $\$ 25,757$ in 2010 (Social Security Administration, 2012b, p. 3) and varied by marital status, race, Hispanic origin, and age (Figure 3-8). ${ }^{11}$ Married couples had a median income of nearly $\$ 45,000$, compared with just over $\$ 17,000$ for nonmarried persons. Married couples and individuals aged 65 or over who identified their race as White alone had a median income of $\$ 27,214 .{ }^{12}$ They were followed by the Asian alone
${ }^{11}$ The unit of analysis is defined as a married couple with husband or wife aged 65 or over, or a person aged 65 or older who does not live with a spouse.
${ }^{12}$ The race and Hispanic origin of a married couple are determined by the husband.

Figure 3-7.
Workers Aged 55 and Over Who Are Very Confident About Retirement: 2000 and 2010


Source: Retirement Confidence Survey, 2010.

Figure 3-8.

## Median Income for Population Aged 65 and Over by Marital Status, Race, Hispanic Origin, and Age: 2010

(In dollars. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Notes: The reference population of the survey is the civilian noninstitutionalized population. The unit of analysis is the aged unit defined as a married couple with husband or wife aged 65 or over, or a person 65 or older who does not live with a spouse. The race and Hispanic origin of a married couple are determined by the husband. The unit of analysis for median income by age group is all individuals (single or married) aged 65 and over.
Source: Social Security Administration, 2012 b; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.
$(\$ 17,977)$ and Black alone $(\$ 16,463)$ populations. The median income for Hispanics was lower than for non-Hispanics. Median income decreased with age, declining from $\$ 37,200$ for the population aged 65 to 69 to $\$ 19,457$ for those aged 80 and over. ${ }^{13}$

Figure 3-9 shows that total money income for the population 65 and older comes primarily from four sources. In 2010, Social Security payments accounted for the largest share at 36.7 percent, earnings contributed 30.2 percent, pensions provided 18.6 percent, and asset income generated 11.4 percent. A variety of other sources, including public assistance, comprised the remaining 3.1 percent.
${ }^{13}$ The unit of analysis for median income by age is all individuals (single or married) aged 65 and over.

Figure 3-9.

## Share of Aggregate Income for the Population

## Aged 65 and Over by Source: 2010

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology//


Note: The reference population of the survey is the civilian noninstitutionalized population. Source: Social Security Administration, 2012 b; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.

## Social Security

While Social Security provides the largest share of total income for the older population, its relative importance varies by income level. Social Security represented 84.3 percent of total income for those aged 65 and older in the lowest income quintile and only 17.3 percent for those in the highest income quintile (Figure 3-10). ${ }^{14}$ For those in the highest income quintile, earnings accounted for the largest share of income at 44.9 percent.

The overwhelming majority of the older population receives Social Security. In 2010, Social Security paid benefits to 86.3 percent of the population aged 65 and over (Figure 3-11). Asset income was the second most common source of income, received by 51.9 percent of the older population. Four out of 10 received retirement benefits other than Social Security and about 1 in 4 had earnings.

Most people begin receiving Social Security before they reach their full retirement age. In 2010, 1.3 million men claimed their Social Security entitlement at an average age of 63.8 years (Social Security Administration, 2012a). Among men claiming entitlement, 43.6 percent were aged 62 and 26.1 percent were above age 62 but still below their full retirement age. A total of 1.2 million women claimed Social Security entitlement

[^40]Figure 3-10.

## Share of Money Income for the Lowest and Highest Income Quintiles for the Population Aged 65 and Over by Source: 2010

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Lowest income quintile


## Highest income quintile

Notes: The reference population of the survey is the civilian noninstitutionalized population. The unit of analysis is the aged unit defined as a married couple with husband or wife aged 65 or over, or a person 65 or older who does not live with a spouse. Totals may not sum to 100.0 due to rounding.
Source: Social Security Administration, 2012b; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.

Figure 3-11.
Percentage of the Population Aged 65 and Over Receiving Income From Specific Sources: 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Notes: The reference population of the survey is the civilian noninstitutionalized population. The unit of analysis is the aged unit defined as a married couple with husband or wife aged 65 or over, or a person 65 or older who does not live with a spouse. Source: Social Security Administration, 2012 b ; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.
in 2010 at an average age of 63.7 years. Among women claimants, 49.0 percent were aged 62 and 25.2 percent were above age 62 but below full retirement age. The shares claiming Social Security retirement benefits at age 62 in 2010 were lower than in 2005, when 49.6 percent of men and 54.1 percent of women claimed at age 62. The age distribution of all Old-Age, Survivors, and Disability Insurance (OASDI) beneficiaries as of December 2010 is shown in Figure 3-12. Nearly 80 percent were aged 62 and over with 10 percent aged 85 and over.

Figure 3-12.
Percentage Distribution of Social Security Beneficiaries by Age: 2010


Note: Total does not sum to 100 due to rounding.
Source: Social Security Administration, 2011.

## Private Pensions

Another source of income for retirees is employer-provided pension plans. As of March 2010, 65 percent of private sector workers had access to a retirement benefits plan through their employer, while 90 percent of state and local government employees had access (Table 3-3).

Employers may offer retirement benefits that consist exclusively of a defined-benefit plan or a definedcontribution plan, or they may offer a combination of these plan types. According to the National Compensation Survey, 69 percent of civilian workers had access to a retirement plan through their employer as of 2010 , with 31 percent having access to a definedbenefit plan and 54 percent having access to a defined-contribution plan (Table 3-3). ${ }^{15}$ However, not all employees with access actually participate in the retirement plans offered by their employer. Among all civilian workers, only 55 percent were participating in a retirement plan in 2010, producing a takeup rate, defined as the percentage

[^41]Box 3-1.

## Social Security

The official name of Social Security is the Old-Age, Survivors, and Disability Insurance (OASDI) program. It is intended to provide monthly benefits to replace the loss of earnings due to retirement, death (with benefits going to a spouse), or disability. Social Security retirement benefits are based on a variety of factors, including a person's earnings history and the age at which the initial benefit is claimed. The earliest age for workers to receive Social Security retirement benefits is 62; however, benefits are about 25 percent lower than they would be at the full retirement age. To receive full benefits, the retirement age traditionally was 65 but has been gradually increasing for those born after 1937, reaching age 67 for those born in 1960 and later. For people who delay receiving Social Security benefits beyond the full retirement age, the benefit continues to increase up to age 70 (Social Security Administration, 2012d).

Box 3-2.

## Pension Plan Types

Pension plans generally are one of two main types: defined benefit and defined contribution. Under a defined-benefit plan, the retiree commonly receives a set amount of money yearly, with payments based on salary and years of service (Purcell, 2009). From a definedcontribution plan, retirees receive benefits based on the amount of money that they and their employer contributed along with the rate of return on the investment of the funds (Purcell, 2009). Definedcontribution plans tend to be portable and offer employees a greater amount of control over their investments. However, these plans also involve greater employee risk, with payments based on the success of each employee's investment strategy (Poterba et al., 2007).

Table 3-3.

## Workers With Retirement Benefits by Type of Worker: March 2010

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.bls.gov/opub/hom/homch8.htm)

| Type of worker | All retirement benefits |  |  | Defined benefit |  |  | Defined contribution |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Access | Participation | Take-up rate ${ }^{1}$ | Access | Participation | Take-up rate ${ }^{1}$ | Access | Participation | Take-up rate ${ }^{1}$ |
| Civilian workers | 69.0 | 55.0 | 80.0 | 31.0 | 28.0 | 92.0 | 54.0 | 37.0 | 69.0 |
| Private industry | 65.0 | 50.0 | 76.0 | 20.0 | 19.0 | 91.0 | 59.0 | 41.0 | 70.0 |
| State and local government workers | 90.0 | 85.0 | 95.0 | 84.0 | 79.0 | 94.0 | 29.0 | 17.0 | 57.0 |

[^42]of workers with access to a plan who participate in the plan, of 80 . Access and participation vary across defined-benefit and defined-contribution plans with access being higher for definedcontribution plans but take-up rates being higher for definedbenefit plans.

There also is a difference between state and local government workers and private industry workers in access to retirement plans (Table 3-3). For state and local government workers, 90 percent had access to a retirement plan (84 percent had access to a definedbenefit plan and 29 percent had access to a defined-contribution plan) and 85 percent were participating in 2010. The take-up rate for state and local government workers was 94 percent for defined-benefit plans and 57 percent for defined-contribution plans. In contrast, only 65 percent of private industry workers had access to a retirement plan in 2010, with more having access to a defined-contribution plan (59 percent) than to a defined-benefit plan (20 percent). The take-up rate on defined-contribution plans for private industry workers (70 percent) was higher than for state and local government workers (57 percent), possibly due to the absence of a defined-benefit plan for many private industry workers.

The earnings replacement rate for Social Security benefits depends on the average earnings of retirees. Those retiring at age 65 in 2007 with annual earnings equal to the maximum contribution (\$109,000 in 2007), would receive benefits to replace 28 percent of their earnings; average earners would receive benefits that replaced about 40 percent of prior earnings; and lower earners would receive benefits replacing about

54 percent of prior earnings (Reno and Lavery, 2007). While Social Security benefits constitute 84.3 percent of total income for people in the lowest income quintile (see Figure 3-10), income may be insufficient to maintain the same standard of living and low income earners may not be able to meet basic needs (Reno and Lavery, 2007).

Estimates of the replacement rate needed to maintain a comparable standard of living in retirement vary and depend on the preretirement income level. One expert suggests that 77 percent of preretirement income needs to be replaced for a person earning $\$ 80,000$
annually and 94 percent needs to be replaced for a person earning $\$ 20,000$ annually (Aon Consulting, 2008). Some researchers warn that if out-of-pocket health care costs continue to grow faster than incomes, these replacement rates may well prove to be insufficient (Reno and Lavery, 2007).

The longitudinal nature of the HRS allowed Purcell (2012) to calculate both preretirement income and postretirement income and to use these measures to construct income replacement rates (see Table 3-4) over the course of retirement for the original HRS sample cohort born between 1931 and

Table 3-4.
Replacement Rates by Birth Cohort, Age at Retirement, and Year in Retirement: 1931-41 Birth Cohort ${ }^{1}$

| Cohort, age at retirement, and percentile | Year in retirement |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | First or second year | Third or fourth year | Fifth or sixth year | Seventh or eighth year | Ninth or tenth year |
| Cohort |  |  |  |  |  |
| Born 1931 to 1936: |  |  |  |  |  |
| 75th percentile | 105.2 | 92.8 | 86.9 | 84.2 | 83.0 |
| Median (50th percentile). . | 75.5 | 67.0 | 61.3 | 60.0 | 57.7 |
| 25th percentile | 50.8 | 45.0 | 44.0 | 41.9 | 40.7 |
| Born 1937 to 1941: |  |  |  |  |  |
| 75th percentile | 101.9 | 86.4 | 84.9 | 75.4 | 80.0 |
| Median (50th percentile). . | 71.6 | 62.2 | 60.1 | 55.1 | 57.4 |
| 25th percentile | 47.7 | 42.3 | 38.7 | 40.3 | 42.2 |
| Age at Retirement |  |  |  |  |  |
| Younger than 62: |  |  |  |  |  |
| 75th percentile | 100.6 | 82.4 | 80.0 | 75.4 | 79.1 |
| Median (50th percentile). . | 71.3 | 55.4 | 57.4 | 53.1 | 54.8 |
| 25th percentile | 44.9 | 36.2 | 37.2 | 39.4 | 38.2 |
| 62 to 64: |  |  |  |  |  |
| 75th percentile | 99.9 | 91.1 | 84.9 | 80.7 | 80.7 |
| Median (50th percentile). . | 73.6 | 68.2 | 61.5 | 59.0 | 59.8 |
| 25th percentile | 48.8 | 46.9 | 40.2 | 44.5 | 44.4 |
| 65 or older: |  |  |  |  |  |
| 75th percentile | 107.2 | 89.9 | 88.9 | 84.3 | 86.2 |
| Median (50th percentile). . | 73.8 | 64.5 | 62.8 | 59.9 | 55.3 |
| 25th percentile . . . . . . . . | 49.3 | 45.1 | 44.0 | 41.4 | 39.1 |

[^43]1941. Purcell divided these respondents into two groups-those born from 1931 through 1936 and those born from 1937 through 1941to examine the potential impact of the varying economic conditions prevailing when each group reached retirement age. The older cohort (born 1931 to 1936) reached retirement age during the mid and late 1990s, which were boom years for the economy and stock market. The younger cohort (born 1937 to 1941) reached retirement age in the early 2000s, when the stock market declined. The median replacement rate for the first or second year in retirement was 75.5 for retirees born between 1931 and 1936 and 71.6 for retirees born between 1937 and 1941 (Table 3-4). ${ }^{16}$ By the ninth or tenth year of retirement, the replacement rate for both groups was lower than in the first or second year of retirement. For example, at the 75th percentile, the replacement rate for those born between 1931 and 1936 declined from 105.2 in the first or second year of retirement to 83.0 percent in the ninth or tenth year of retirement.

Because age at retirement affects benefits for Social Security and other pensions, Purcell (2012) also examined replacement rates by age at retirement. The median replacement rate for respondents retiring before age 62 was lower than the rate for respondents retiring at

[^44]ages 62 to 64 and 65 or older. ${ }^{17}$ Each of the retirement age groups experienced a drop in the replacement rate from the first or second year of retirement to the third or fourth year of retirement, with the median replacement rate falling from 71.3 percent to 55.4 percent, 73.6 percent to 68.2 percent, and 73.8 percent to 64.5 percent for the groups retiring before age 62 , at ages 62 to 64 , and at age 65 and older, respectively.

## Poverty by Age, Sex, Race, and Hispanic Origin

Half a century earlier, the poverty rate of the population aged 65 and over was relatively high. In 1959, 35.2 percent of older people lived in poverty. However, by 1975 the poverty rate of the older population had declined to 15.3 percent. The proportion of the older population living in poverty generally declined during the 1960s and early 1970s due to the expansion of Social Security and the introduction of Medicare. Since 1975, the older population's poverty rate has continued a slower downward trend, with fluctuations (Figure 3-13). Prior to the mid-1970s, the poverty rate of the older population exceeded the rates for the population under age 18 and for people aged 18 to 64.

According to data from the 2011 Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC), 9.0 percent of the population aged 65 and over

[^45]lived in poverty in 2010 (Table 3-5). ${ }^{18}$ This proportion was lower than the poverty rate for people under 18 years of age ( 22.0 percent) and age groups 18 to 24 through 60 to 64 .

While 9.0 percent of the population aged 65 and older lived in poverty, an additional 5.7 percent lived "near poverty" (people with incomes at or above their poverty threshold but below 125 percent of their threshold; Table 3-5). Poverty and near-poverty rates differ by age group among the older population. People aged 65 to 74 had a poverty rate of 8.1 percent in 2010 , compared with 10.1 percent for those aged 60 to 64 and 10.0 percent for those aged 75 and older. ${ }^{19}$ Those "near poverty" in 2010 also followed this pattern.

[^46]Figure 3-13.
People in Poverty by Age: 1959 to 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Notes: Data are not available from 1960 to 1965 for the age groups 18 to 64 and 65 and over. The reference population of the survey is the civilian noninstitutionalized population.
Source: DeNavas-Walt, Proctor, and Smith, 2011; Current Population Survey, Annual Social and Economic Supplement (ASEC), various years.

Table 3-5.

## Population in Poverty and Near Poverty by Age and Sex: 2010

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)

| Age | Both sexes |  | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Below 100 percent of poverty threshold | Below 125 percent of poverty threshold | Below 100 percent of poverty threshold | Below 125 percent of poverty threshold | Below 100 percent of poverty threshold | Below 125 percent of poverty threshold |
| Total | 15.1 | 19.8 | 14.0 | 18.3 | 16.2 | 21.2 |
| Under 18 | 22.0 | 27.8 | 22.2 | 28.0 | 21.8 | 27.6 |
| 18 to 24 | 21.9 | 27.3 | 18.8 | 23.7 | 25.2 | 31.1 |
| 25 to 34 | 15.2 | 19.7 | 12.5 | 16.7 | 18.0 | 22.8 |
| 35 to 44 | 12.6 | 16.4 | 11.1 | 14.5 | 14.1 | 18.3 |
| 45 to 54 | 10.6 | 14.0 | 9.6 | 12.9 | 11.5 | 15.1 |
| 55 to 59 | 10.1 | 12.9 | 9.5 | 12.1 | 10.6 | 13.5 |
| 60 to 64 . | 10.1 | 13.9 | 9.3 | 12.6 | 10.8 | 15.1 |
| 65 and over | 9.0 | 14.7 | 6.7 | 11.6 | 10.7 | 17.2 |
| 65 to 74 | 8.1 | 12.8 | 6.5 | 10.7 | 9.5 | 14.7 |
| 75 and over | 10.0 | 17.0 | 7.0 | 12.9 | 12.1 | 19.8 |

Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: U.S. Census Bureau, 2011c; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.

Poverty rates differ between men and women. Higher percentages of older women lived in or near poverty in 2010 than men. As Table 3-5 shows, 10.7 percent of older women were living below the poverty line, compared with 6.7 percent of older men. Additionally, older women were more often living near the poverty threshold than were men ( 6.5 percent and 4.9 percent, respectively; Table 3-5).

Poverty rates for the older population also varied by race and Hispanic origin. In 2010, the older White alone population-with 7.7 percent living in poverty-were less likely than the older Black alone and Asian alone populations to be in poverty ( 18.0 percent and 14.6 percent, respectively; Table 3-6). Older Hispanics were more likely to live in poverty ( 18.0 percent) than older non-Hispanic White alone residents ( 6.8 percent) in 2010. Appendix Table C-3 provides poverty rates by age, race, and Hispanic origin for earlier years.

A difference in poverty rates by sex existed for the older White alone

Figure 3-14.

## Population Aged 65 and Over in Poverty by Sex, Race, and Hispanic Origin: 2010

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: U.S. Census Bureau, 2011 c; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.
and Black alone populations and for Hispanics (Figure 3-14). In 2010, women aged 65 and over who identified their race as White alone were more likely to be in poverty than their male counterparts:
9.3 percent and 5.7 percent, respectively. Among the Black alone population, women aged 65 and over had a poverty rate of 20.5 percent in 2010, while older men faced a poverty rate of 14.2 percent. Also,

Table 3-6.

## Poverty Status by Age, Race, and Hispanic Origin: 2010

(Numbers in thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)

| Age | All races | White alone | Black alone | Asian alone | White alone, not Hispanic | Hispanic (of any race) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Ages |  |  |  |  |  |  |
| Total | 305,688 | 243,013 | 38,965 | 14,324 | 197,203 | 49,869 |
| Number below poverty level | 46,180 | 31,650 | 10,675 | 1,729 | 19,599 | 13,243 |
| Percent below poverty level. | 15.1 | 13.0 | 27.4 | 12.1 | 9.9 | 26.6 |
| Under 18 |  |  |  |  |  |  |
| Total | 74,494 | 56,215 | 11,145 | 3,297 | 40,494 | 17,435 |
| Number below poverty level | 16,401 | 10,492 | 4,362 | 474 | 5,002 | 6,110 |
| Percent below poverty level. | 22.0 | 18.7 | 39.1 | 14.4 | 12.4 | 35.0 |
| 18 to 64 |  |  |  |  |  |  |
| Total | 192,015 | 153,029 | 24,425 | 9,573 | 125,657 | 29,576 |
| Number below poverty level | 26,258 | 18,549 | 5,702 | 1,043 | 12,481 | 6,619 |
| Percent below poverty level. | 13.7 | 12.1 | 23.3 | 10.9 | 9.9 | 22.4 |
| 65 and Over |  |  |  |  |  |  |
| Total . | 39,179 | 33,768 | 3,394 | 1,454 | 31,052 | 2,857 |
| Number below poverty level | 3,520 | 2,608 | 612 | 213 | 2,116 | 514 |
| Percent below poverty level. | 9.0 | 7.7 | 18.0 | 14.6 | 6.8 | 18.0 |

Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: DeNavas-Walt, Proctor, and Smith, 2011; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.
older Hispanic women had higher poverty rates than older Hispanic men. Women's longer life expectancy and higher chance of widowhood increases their risk of poverty (Gillen and Kim, 2009; Lee and Shaw, 2008).

Poverty rates rose with age for the older White alone female and Black alone female populations. ${ }^{20}$ For example, among the Black alone population, older women had about a 1 in 5 chance of living in poverty in 2010 (Figure 3-14), while 1 in 4 women aged 75 and over fell below the poverty threshold (Figure 3-15).

There are significant differences in poverty rates based on whether older people lived as a married couple or lived alone (see Figure 3-16). For the civilian noninstitutionalized population aged 65 and

[^47]Figure 3-15.

## Population Aged 75 and Over in Poverty by Sex, Race, and Hispanic Origin: 2010 <br> (In percent. For information on confidentiality protection, sampling error,

 nonsampling error, and definitions, see www.census.gov/cps/methodology/)

Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: U.S. Census Bureau, 2011 c; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.

Figure 3-16.
People Aged 65 and Over in Poverty by Living Arrangement, Race, and Hispanic Origin: 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Note: Reference population of the survey is the civilian noninstitutionalized population.
Source: U.S. Census Bureau, 2011 c; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2011.

Box 3-3.

## Supplemental Poverty Measure

In 2010, an interagency technical working group (which included representatives from the Bureau of Labor Statistics [BLS], the Census Bureau, the Economics and Statistics Administration, the Council of Economic Advisers, the U.S. Department of Health and Human Services, and the Office of Management and Budget) issued a series of suggestions to the Census Bureau and BLS on how to develop the Supplemental Poverty Measure (SPM). Their suggestions drew on the recommendations of a 1995 National Academy of Sciences report and the extensive research on poverty measurement conducted over the past 15 years.

The new measure based on these suggestions serves as an additional indicator of economic well-being and provides a deeper understanding of economic conditions and policy effects. The new measure creates a more complex statistical picture incorporating additional items such as tax payments and work expenses in its family resource estimates. Income thresholds used in the new measure are derived from Consumer Expenditure Survey expenditure data on basic necessities (food, shelter, clothing, and utilities) and are adjusted for geographic differences in the cost of housing. The new thresholds are not intended to assess eligibility for government programs.

The Census Bureau's statistical experts, with assistance from the BLS and in consultation with other appropriate agencies and outside experts, are responsible for the measure's technical design. Both the Census Bureau and the interagency technical working group consider the SPM a work in progress and expect that there will be improvements to the statistic over time. Additional details can be found at <www.census.gov /hhes/povmeas/methodology/supplemental/overview.html>.

Estimates for 2010 showed that 16.0 percent of all people were in poverty using the SPM compared to 15.1 percent for the official poverty measure (Short, 2012). SPM rates compared to official poverty rates were lower for children ( 18.0 percent versus 22.0 percent) and higher for those aged 18 to 64 ( 15.2 percent versus 13.7 percent) and over 65 years of age ( 15.8 percent versus 9.0 percent).
over, 13.6 percent of women living alone lived in poverty, compared with 6.7 percent of men living alone and 4.1 percent of married couples. Among the older White alone population, a higher percentage of female householders living alone were in poverty ( 11.7 percent), followed by male householders living alone ( 5.4 percent), with the lowest poverty among marriedcouple families ( 3.6 percent). For the older Black alone population, females living alone were more likely to be in poverty ( 18.7 percent) than males living alone (11.9 percent) or married-couple families (6.3 percent). ${ }^{21}$ Among the older Asian alone population, differences

[^48]in living arrangements were not significant but differences by sex existed: females living alone had a higher poverty rate ( 16.8 percent) than males living alone (7.4 percent). Older Hispanic females living alone had higher poverty rates (20.3 percent) compared with older Hispanic males living alone ( 10.6 percent) and with older Hispanic married-couple families (10.2 percent). ${ }^{22}$

When comparing across races for the older population living alone, more female householders identifying as Black alone than those identifying as White alone lived in poverty ( 18.7 percent and

[^49]11.7 percent, respectively). ${ }^{23}$ This pattern also holds for male householders living alone, with 11.9 percent of the Black alone population in poverty compared with 5.4 percent of the White alone population. ${ }^{24}$ Across married-couple families, the Asian alone population had the highest poverty rate (10.9 percent), followed by the Black alone ( 6.3 percent) and White alone (3.6 percent) populations.
${ }^{23}$ There is no statistical difference in the poverty rate between a White alone female householder living alone and an Asian alone female householder living alone and between a Black alone female householder living alone and an Asian alone female householder living alone.
${ }^{24}$ There is no statistical difference in the poverty rate between a White alone male householder living alone and an Asian alone male householder living alone and between a Black alone male householder living alone and an Asian alone male householder living alone.

## Poverty by State

According to the 2010 ACS, 15.3 percent of the U.S. population had income below the poverty threshold, and among the older population, the poverty rate was 9.0 percent (the same as the poverty rate measured by the CPS). Figure 3-17 shows the 2010 poverty rates for the older population
by state (including the District of Columbia). Poverty rates for the older population ranged from 5.7 percent in Alaska to 13.1 percent in the District of Columbia.

Impact of the 2007-2009 Recession on Older Americans

The United States entered a recession in December 2007
and emerged from the recession in June 2009. ${ }^{25}$ This recession, which affected not only the

[^50]

Box 3-4.

## Major Dimensions of the Great Recession

## Housing Prices

According to the Standard and Poor's Case-Shiller U.S. National Home Price Index, housing prices peaked in June 2006, double the level of June 1999 (S\&P Dow Jones, 2012). Prices fell steeply in 2007 and 2008 and then continued a slower decline (Baker, 2008). Areas of the country with the most over-valued housing markets faced the sharpest declines in home prices, resulting in many homeowners going into foreclosure both involuntarily, if they could not afford to make payments, and voluntarily, with people walking away from homes when the market value was lower than the outstanding mortgage balance. Home foreclosures were up 81 percent in 2008 over 2007 levels (Christie, 2009). By the end of 2011, the Standard and Poor's CaseShiller U.S. National Home Price index had fallen back to 2002 levels and housing prices started to flatten.

## Stock Prices

The Dow Jones Industrial Average (DJIA) reached a peak in October 2007 of over 14,000 (Federal Reserve Bank of St. Louis, 2012). A year later it was below 9,000. For investors, October 2008 was especially volatile when the DJIA dropped 3,000 points in a matter of weeks (Ho, Kehoe, and Whitten, 2010; Hudomiet, Kezdi, and Willis, 2011). In March 2009, the DJIA fell below 7,000, half the level of 18 months earlier (Federal Reserve Bank of St. Louis, 2012). By the end of 2009, the DJIA was back over 10,000 and in December 2010 reached 12,000. In 2011, the DJIA continued to fluctuate and reached 13,000 in the first quarter of 2012.

## Unemployment

Unemployment stood at 4.4 percent in May 2007 and then generally began to climb, reaching a peak of 10.0 percent in October 2009 (Bureau of Labor Statistics, 2012). The unemployment rate then declined very slowly, reaching 8.3 percent in January 2012. During the Great Recession, job losses were highest in construction, manufacturing, and natural resources and mining (Engemann and Wall, 2010).

United States, is referred to as the Great Recession (Executive Office of the President, 2010) and the Global Financial Crisis (Reavis, 2012) because of the severity and nature of the recession (Hurd and Rohwedder, 2010a; Reavis, 2012). The bursting of a housing bubble and the collapse of the secondary market for sub-prime mortgages, which triggered a financial crisis, in part, precipitated the recession (Bosworth and Smart, 2009; Baker, 2008). The recession had three major dimensions: falling housing prices, declining stock market prices, and rising unemployment.

As a result of these components and other factors, the recession had a negative impact on consumer spending and the consumer confidence index fell to a then record low of 38.6 in December 2008, less than half the January 2008 level of 87.9 (Gould, 2012). ${ }^{26}$ Gross Domestic Product contracted by 6.2 percent in the last quarter of 2008, the worst contraction since 1946 (Ho, Kehoe, and Whitten, 2010). This section examines the effects on the older population of the Great Recession during the
${ }^{26}$ The Consumer Confidence Index reached an all-time low of 25.3 in February 2009 (Gould, 2012).
period of economic contraction and the subsequent slow recovery.

## Housing Impact

The population aged 65 and over in the United States has a high homeownership rate. According to the American Housing Survey (AHS), there were 23.1 million older households in 2009 (i.e., the householder was aged 65 or older); approximately 18.5 million owned their housing and 4.6 million rented (U.S. Census Bureau, 2011b). ${ }^{27}$ The roughly
${ }^{27}$ For more information on the American Housing Survey, see <www.census.gov /housing/ahs/>.

80 percent homeownership rate for older householders was higher than the 65 percent for householders under age 65 (U.S. Census Bureau, 2011b). Older householders tend to own older housing stock. According to the 2009 AHS, the median year of construction for owner-occupied housing for the older population was 1968, compared with 1975 for all owneroccupied housing.

For the total population, homeownership rates rose from the mid1990s, reaching a peak of about 69 percent in 2004 to 2006 according to the CPS/Housing Vacancy Survey (Figure 3-18). Following 2006 and the peak in housing prices, homeownership rates began to decline, reaching 66.1 percent in 2011, about the level of 1998.

Homeownership rates for householders aged 65 and over did not fluctuate significantly from the early 1990s to 2006, except for a rise from 76.3 percent in 1990 to 78.9 percent in 1996 (Figure 3-18). After 2006, homeownership rates did not decline for older householders. Householders aged 65 and over had a homeownership rate of 80.9 percent in 2011 , also seen in 2006.

Figure 3-18.
Homeownership Rates of All Householders and Householders Aged 65 and Over:
1990 to 2011
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/housing/hvs/files/qtr412/q412src.htm)


Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: U.S. Census Bureau, 201 2b; Current Population Survey/Housing Vacancy Survey, various years.

Table 3-7.
Homeownership Rates by Age of Householder: 2006 to 2012
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/housing/hvs/files/qtr412/q412src.htmI)

| Year/quarter | Total | Under 35 | 35 to 44 | 45 to 54 | 55 to 64 | 65 and over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 |  |  |  |  |  |  |
| Second quarter | 65.5 | 36.5 | 62.2 | 71.4 | 77.1 | 81.6 |
| First quarter. | 65.4 | 36.8 | 61.4 | 71.3 | 77.8 | 80.9 |
| 2011 |  |  |  |  |  |  |
| Fourth quarter . | 66.0 | 37.6 | 62.3 | 72.7 | 79.0 | 80.9 |
| Third quarter | 66.3 | 38.0 | 63.4 | 72.7 | 78.6 | 81.1 |
| Second quarter | 65.9 | 37.5 | 63.8 | 72.3 | 77.8 | 80.8 |
| First quarter. | 66.4 | 37.9 | 64.4 | 73.1 | 78.6 | 81.0 |
| 2010 |  |  |  |  |  |  |
| Fourth quarter . | 66.5 | 39.2 | 63.9 | 72.7 | 79.0 | 80.5 |
| Third quarter . | 66.9 | 39.2 | 65.2 | 73.0 | 79.2 | 80.6 |
| Second quarter | 66.9 | 39.0 | 65.6 | 73.6 | 78.7 | 80.4 |
| First quarter. . | 67.1 | 38.9 | 65.3 | 74.8 | 79.1 | 80.6 |
| 2009 |  |  |  |  |  |  |
| Fourth quarter . | 67.2 | 40.4 | 65.7 | 74.0 | 78.9 | 80.2 |
| Third quarter . | 67.6 | 39.8 | 66.5 | 74.5 | 79.4 | 80.9 |
| Second quarter | 67.4 | 39.0 | 66.8 | 74.5 | 79.9 | 80.4 |
| First quarter. | 67.3 | 39.8 | 65.7 | 74.6 | 79.8 | 80.4 |
| 2008 |  |  |  |  |  |  |
| Fourth quarter . | 67.5 | 40.3 | 66.6 | 74.5 | 79.7 | 80.4 |
| Third quarter . | 67.9 | 41.0 | 67.2 | 75.2 | 80.0 | 80.1 |
| Second quarter | 68.1 | 41.2 | 67.6 | 75.4 | 80.1 | 80.2 |
| First quarter.. | 67.8 | 41.3 | 66.7 | 75.0 | 80.4 | 79.9 |
| 2007 |  |  |  |  |  |  |
| Fourth quarter . | 67.8 | 41.0 | 67.2 | 75.1 | 80.4 | 80.3 |
| Third quarter . | 68.2 | 42.0 | 68.1 | 75.2 | 81.1 | 79.9 |
| Second quarter | 68.2 | 41.9 | 67.6 | 75.5 | 80.6 | 80.5 |
| First quarter.. | 68.4 | 41.7 | 68.3 | 75.8 | 80.4 | 80.9 |
| 2006 |  |  |  |  |  |  |
| Fourth quarter . | 68.9 | 42.8 | 68.9 | 76.4 | 80.7 | 81.2 |
| Third quarter . | 69.0 | 43.0 | 68.8 | 76.4 | 80.7 | 81.5 |
| Second quarter | 68.7 | 42.4 | 68.9 | 76.3 | 81.0 | 80.6 |
| First quarter.. | 68.5 | 42.3 | 68.9 | 75.8 | 81.2 | 80.3 |

Note: The reference population of the survey is the civilian noninstitutionalized population. Source: Callis and Kresin, 2012; all years, Current Population Survey/Housing Vacancy Survey.

For the second quarter of 2012, the homeownership rates were highest for householders aged 65 and older at 81.6 percent and lowest for householders under age 35 at 36.5 percent (Table 3-7). The rates for householders aged under 35, 35 to 44,45 to 54 , and 55 to 64 years old were lower than their respective rates 6 years earlier (second quarter 2006), while rates for householders 65 years and over did not change from their secondquarter 2006 rate.

Figure 3-19 shows homeownership rates for householders aged 65 and over by race and Hispanic origin using 2009 AHS data. Homeownership rates did not vary significantly across many of these groups. Householders aged 65 and over who identified their race as White alone had a homeownership rate of 82.2 percent, and American Indian and Alaska Native alone householders had a
homeownership rate of 82.7 percent. ${ }^{28}$ Older Hispanic householders had a 67.1 percent homeownership rate in 2009 , lower than the 83.3 percent rate for older nonHispanic White householders.

Older householders tended to be less vulnerable to home foreclosures during and after the Great Recession. According to an October

[^51]Figure 3-19.
Homeownership Rate for Householders Aged 65 and Over by Race and Hispanic Origin: 2009
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/housing/ahs/methodology/)


Notes: Householder is the first household member listed on the questionnaire who is an owner or renter of the sample unit and is 18 years or older. The reference population of the survey is the civilian noninstitutionalized population. Source: U.S. Census Bureau, 2011 b; American Housing Survey, 2009.

2010 AARP (American Association of Retired Persons) online survey, during the prior 3 years, nearly one-third of people aged 50 and over had their home value decline substantially (Rix, 2011). However, the HRS showed that those approaching retirement were not likely to be immediately or greatly affected by the decline in housing prices (Gustman, Steinmeier, and Tabatabai, 2010). One reason is that the older population generally owned their homes for a longer period and had built up greater equity. Furthermore, older homeowners were less likely to withdraw their home equity than younger homeowners using a
myriad of options (Bosworth and Smart, 2009). ${ }^{29}$

Table $3-8$ shows mortgage-related activities over time by homeowners under age 50 and those aged 50 and over based on the 2001, 2004, and 2007 Survey of Consumer Finances (Bosworth and Smart, 2009). A smaller share of homeowners aged 50 and older had mortgages compared with

[^52]younger homeowners for all three periods analyzed. In 1998-2001, for example, 87 percent of homeowners under age 50 had a mortgage, compared with 47 percent of homeowners aged 50 and older. For both age groups, mortgagerelated activities were higher in the 2001-2004 period than in the preceding period (1998-2001) and subsequent period (2004-2007), except for the extraction of money from home equity, which continued at these levels in the latter period as well. In the early 2000s, home prices were rising and interest rates remained low, leading to a peak in refinancing and rising equity withdrawal (Bosworth and Smart, 2009). However, for all

Table 3-8.

## Homeowners With Mortgages and Mortgage-Related Activities by Age Group: 1998-2001 to 2004-2007

(In percent)

| Mortgage and related activity | 1998-2001 |  | 2001-2004 |  | 2004-2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 50 | 50 and over | Under $50$ | 50 and over | Under 50 | 50 and over |
| Homeowners (thousands) | 34,928 | 37,126 | 35,049 | 42,365 | 34,818 | 44,888 |
| Homeowners with mortgages | 87 | 47 | 91 | 52 | 89 | 57 |
| Homeowners with recent refinancing of first mortgage | 17 | 9 | 37 | 20 | 20 | 12 |
| Homeowners with recent refinancing or borrowing | 32 | 19 | 47 | 34 | 37 | 30 |
| Homeowners who extracted money from their home equity | 15 | 11 | 27 | 22 | 27 | 24 |
| Homeowners who financed consumption with their home equity | 6 | 5 | 13 | 11 | 13 | 10 |

Notes: Data based on 2001, 2004, and 2007 Survey of Consumer Finances. Homeowners with recent refinancing or borrowing either refinanced or rolled over a first, second, or third mortgage since the prior wave of the Survey of Consumer Finances. Homeowners who extracted money from their home equity either borrowed additional money on their mortgages or secured a line of credit based on home equity. Homeowners who financed consumption used the money for purposes other than home improvements or repairs, home purchases, or business/asset/real estate investment.

Source: Bosworth and Smart, 2009, Table 1.
three periods, homeowners under age 50 were more likely to refinance their home and withdraw equity than were homeowners aged 50 and over. ${ }^{30}$ Specifically, 37 percent of homeowners under age 50 refinanced a first mortgage, compared with 20 percent of homeowners aged 50 or over, during the 3-year period prior to the 2004 Survey of Consumer Finances. During the same period, 27 percent of homeowners under age 50 withdrew money from their home equity, compared with 22 percent of homeowners aged 50 and over (Table 3-8).
Some households, including those maintained by people aged 65 and over, extracted equity from their home as housing prices rose prior to the recession (Hurd and Rohwedder, 2010b). Homeowners aged 50 and over were more likely to withdraw equity if they had debt than if they did not have debt, with two popular methods being an equity line of credit and a reverse

[^53]mortgage, although the number of reverse mortgages remains small (Bosworth and Smart, 2009; Nakajima and Telyukova, 2011). As a result of extracting equity from their home, the mean housing debt increased and continued to rise between 2008 and 2009 (Hurd and Rohwedder, 2010b).

If homeowners are unable to pay the additional costs associated with a home equity line of credit or second mortgage, they can lose their homes, which occurred for some older adults during the recession (Baker, 2008; Young, 2009). Older homeowners, even if they were not at risk of losing their home, may have experienced a negative impact from others who defaulted on their mortgage loans as a result of rising unemployment and rising interest rates on adjustable rate loans (Mayer, Pence, and Sherlund, 2009). These home foreclosures depressed the value of nearby homes and resulted in a reduced tax base for communities (Center for Responsible Lending, 2009).

Households taking out additional loans on their homes saw housing
costs rise. However, housing costs were not a large burden for the majority of households with a householder aged 65 or over, according to the 2009 AHS. ${ }^{31}$ Nearly two-thirds of older householders spent less than 30 percent of their income on housing costs in 2009, up slightly from 63.6 percent in 2001 (Figure 3-20). The share of older householders spending 50 percent or more of their income on housing costs was 18.3 percent in 2009, down slightly from 19.6 percent in 2001. ${ }^{32}$

Another observed impact of the Great Recession, at least in the short run, was a delay in the transition to senior housing, such as assisted living facilities and independent living facilities, because of the decline in housing prices (Valley, 2011). The occupancy rate at independent living facilities fell

[^54]Figure 3-20.

# Housing-Cost Burden of Households With a Householder Aged 65 and Over: 

 2001 and 2009(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/housing/ahs/methodology//


Notes: The reference population of the survey is the civilian noninstitutionalized population. Excludes households with zero or negative income or no cash rent.
Sources: U.S. Census Bureau, 2002 and 2011 b; American Housing Survey, 2001 and 2009.
from a peak of 92.7 percent in the first quarter of 2007 to 87.1 percent in the third quarter of 2010 (National Investment Center, 2010).

While the occupancy rate for assisted living facilities also fell from a peak in the first quarter of 2007 ( 90.7 percent), the rate began to rise after reaching a trough of 87.6 percent in the first quarter of 2010 .

## Financial Market Impact

Those with financial investments were the most likely to be directly affected by the stock market decline. Gustman, Steinmeir, and Tabatabai (2010) point out that because wealthier people owned the majority of stocks and other financial instruments, the wealthiest were hurt the most by the market decline. The poor, who generally could not afford to invest, were
less directly impacted. The older affluent population was potentially more vulnerable than the younger population because of greater savings and investment accumulation over their lifetime and greater reliance on these assets to fund current consumption.

A 2009 Pew Research Center survey, focused on the impact of the recession, found that those aged 50 to 64 reported the biggest investment losses (Taylor et al., 2009b). Nearly two-thirds of adults aged 50 to 64 reported losses in mutual funds, individual stocks, or 401 (k)-type retirement accounts, compared with 28 percent of those aged 18 to 29 , 53 percent of those aged 30 to 49, and 39 percent of those aged 65 and over (Figure 3-21). Among those aged 65 and over, 5 percent lost more than 40 percent of their investments,
compared with 15 percent of the population aged 50 to 64.

Korniotis and Kumar (2011) found that older and more experienced investors made more conservative investment choices than their younger counterparts. Investors aged 65 and over were more likely to follow the "rules of thumb" of investment advisors than were younger investors, including having more diversified portfolios, holding mutual funds with lower expense ratios, and were less likely to hold onto investments that were not doing well. While accumulated investment knowledge may benefit older investors, Korniotis and Kumar (2011) also found evidence of adverse effects of cognitive aging on the implementation of investment choices for investors above age 70.

Figure 3-21.
Investment Losses by Age: 2009
(In percent)


Notes: Totals may not sum to 100 due to rounding. Data collected from telephone interviews during February 23-March 23, 2009. Source: Taylor et al., 2009a.

The 2009 Pew Research Center survey also asked about the affordability of retirement (Taylor et al., 2009b). Three-quarters of people aged 50 to 64 reported that the recession will make it more difficult to meet their financial needs in retirement. In comparison, about half (56 percent) of adults aged 65 and over and two-thirds of adults aged 18 to 49 had the same concerns.

The older population was also less likely to report experiencing financial distress. The January 2010 American Life Panel Survey asked households if they had experienced any of the following since November 2008: more than 2 months behind with mortgage payments, negative home equity, home foreclosure, or respondent or spouse being unemployed (Hurd and Rohwedder, 2010a). The percentage of households in immediate financial distress ranged from 19 percent of households with
householders aged 40 to 49, 16 percent for householders aged 50 to 59,8 percent for those aged 60
to 69, and 3 percent for householders aged 70 and over (Figure 3-22).

Figure 3-22.

## Households in Financial Distress by Age of

 Householder: November 2008-January 2010 (In percent)

[^55]
## Unemployment Impact

Workers were heavily impacted by the Great Recession with sharply reduced employment levels and higher unemployment, although the effect varied by age and sex. In particular, older workers and women experienced a "milder" recession (Sum and McLaughlin, 2010). Figure 3-23 reports the percent unemployed by age and sex in 2010. The unemployment rate averaged 9.6 percent in 2010 with rates highest for the younger age groups- 25.9 percent for the labor force aged 16 to 19 and 15.5 percent for those aged 20 to 24 . In general, unemployment rates declined with age, reaching
a plateau among workers aged 45 and older. ${ }^{33}$

The 2010 unemployment rate for men was 10.5 percent, compared with 8.6 percent for women (Figure 3-23). A higher percentage of men than women were unemployed at each age group, except for the labor force aged 65 to 69, 70 to 74 , and 75 and over. Among these older age groups, there was no significant difference between the unemployment rate for men and women.

[^56]While the unemployment rate for people aged 55 and over was lower than that of their younger counterparts, they still experienced a doubling of unemployment rates compared with just prior to the recession, and unemployment rates reached record-high levels in 2009 (Sok, 2010). In 2010 the unemployment rate for the population aged 55 to 64 averaged 7.1 percent, more than double the 2007 average rate of 3.1 percent (Table 3-9). The unemployment rate for the age group 65 to 69 also rose from 3.3 percent in 2007 to 7.6 percent in 2010. The 2010 unemployment rate for the two oldest age groups (70 to 74 and 75 and over) was only 5.6 percent but still higher than their 2007 rates.

Figure 3-23.

## Unemployed Population by Age and Sex: 2010

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


[^57]Table 3-9.

## Unemployment by Age, Sex, Race, and Hispanic Origin: 2007 and 2010

(Numbers in thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)

| Age, sex, race, and Hispanic origin | 2007 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent of labor force | Number | Percent of labor force |
| AGE |  |  |  |  |
| 55 to 64 | 642 | 3.1 | 1,660 | 7.1 |
| 65 and over | 190 | 3.3 | 449 | 6.7 |
| 65 to 69 | 105 | 3.3 | 287 | 7.6 |
| 70 to 74 | 50 | 3.4 | 90 | 5.6 |
| 75 and over | 35 | 3.0 | 72 | 5.6 |
| SEX |  |  |  |  |
| Men |  |  |  |  |
| 55 to 64 | 349 | 3.2 | 962 | 8.0 |
| 65 and over | 108 | 3.4 | 262 | 7.1 |
| Women |  |  |  |  |
| 55 to 64 | 293 | 3.0 | 698 | 6.2 |
| 65 and over | 81 | 3.1 | 187 | 6.2 |
| RACE <br> White alone |  |  |  |  |
| 55 to 64 | 520 | 2.9 | 1,344 | 6.8 |
| 65 and over. | 164 | 3.2 | 373 | 6.4 |
| Black or African American alone |  |  |  |  |
| 55 to 64 . | 79 | 4.3 | 204 | 9.7 |
| 65 and over | 19 | 4.5 | 47 | 9.2 |
| Asian alone |  |  |  |  |
| 55 to 64 . | 31 | 3.6 | 74 | 7.5 |
| 65 and over | 3 | 1.5 | 22 | 8.9 |
| HISPANIC OR LATINO ORIGIN Hispanic or Latino |  |  |  |  |
| 55 to 64 | 70 | 4.5 | 199 | 10.3 |
| 65 and over . . . . . . . . . . . . . . . . . . . | 19 | 4.9 | 49 | 9.5 |

Note: The reference population of the survey is the civilian noninstitutionalized population. Source: Bureau of Labor Statistics, 2012; Current Population Survey, 2007 and 2010.

Unemployment rates rose for men aged 65 and over from 3.4 percent in 2007 to 7.1 percent in 2010 (Table 3-9). Women aged 65 and over also saw their unemployment rates rise from 2007 (3.1 percent) to 2010 ( 6.2 percent). The older population who identified their race as White, Black, or Asian all saw unemployment rates rise from 2007 to $2010 .{ }^{34}$ In 2010, the unemployment rate for the older White

[^58]population was lower than the rates for older Blacks and Asians. ${ }^{35}$

Research shows that once older workers become unemployed, they face greater difficulty than younger people in getting reemployed (Mulvey, 2011). In February 2010, among the unemployed in the age group 16 to 24 years, 28.5 percent had experienced 27 weeks or longer of unemployment (Figure 3-24). The share with long-term

[^59]unemployment (27 weeks or longer) rose to 41.3 percent for those aged 25 to 54 and 49.1 percent for those aged 55 and over. The average duration of unemployment rose from 23.3 weeks for those aged 16 to 24 , to 30.3 weeks for those aged 25 to 54, and 35.5 weeks for those aged 55 and over.

Due to the recession, not all older workers were able to remain employed and many retired and claimed Social Security benefits early. Based on an AARP survey,

Figure 3-24.

## Unemployment Duration for Population Aged 16 and Over by Age: February 2010

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology//


Note: The reference population of the survey is the civilian noninstitutionalized population. Source: Sok, 2010; Current Population Survey, 2010.
two-thirds (67 percent) of retirees who were out of the labor force and filed to begin receiving Social Security benefits claimed these benefits earlier than planned (Rix, 2011). Johnson and Mommaerts (2010a) also found, based on the their estimates of Social Security data, that, in 2009, people more often claimed Social Security benefits at age 62 than in previous years, possibly due to unemployment and the inability to find new work. In 2009, 1.3 million men aged 62 and over began claiming Social Security retirement benefits, 20 percent more than in 2008 . The 9 percent increase in the number of men turning age 62 accounts for
less than half of this large increase. The retirement benefit take-up rate for men was 25.8 percent in 2009, compared with 22.7 percent in 2008 and 21.2 percent in 2007 (Johnson and Mommaerts, 2010a). ${ }^{36}$ The take-up rate for women reached 36.6 percent in 2009, compared with 34.8 percent in 2008 and 32.9 percent in 2007 (Johnson and Mommaerts, 2010a).

On the one hand, the recession forced some workers to retire sooner than planned. On the other

[^60]hand, the declines in housing and financial asset prices pushed many workers to delay retirement. The decision of when to retire was being influenced by opposing factors: (1) the decline in stock market prices and lowered housing values supported retirement delays, and (2) the rise in unemployment and greater difficulty among older adults in finding another job supported earlier retirement (Hurd and Rohwedder, 2010b). Among those nearing retirement age (age 50 to 61 ), 63 percent reported pushing back their expected retirement date as a result of economic conditions (Taylor et al., 2009a).

Many older workers managed to stay employed during the recession; in fact, the population in age groups 65 and over were the only ones not to see a decline in the employment share from 2005 to 2010 (Figure 3-25). In 2010, 16.2 percent of the population aged 65 and over were employed, up from 14.5 percent in 2005 . In contrast, 60.3 percent of the 20 to 24 age group were employed in 2010, down from 68.0 percent in 2005. Employment shares declined from 2005 to 2010 for all age groups younger than age 55 . There was no statistical change in the employment share for workers aged 55 to 64 nor those aged 70 to 74 .

Engemann and Wall (2010) found that more people aged 55 and over were employed during the recession than would have been if there was no recession. Using the Bureau of Labor Statistics employment data, Engemann and Wall

Figure 3-25.


Note: The reference population of the survey is the civilian noninstitutionalized population.
Source: Bureau of Labor Statistics, 2011; Current Population Survey, 2005 and 2010.
found that during the 2007-2009 period, employment grew by 7.4 percent for the population aged 55 and over. Based on trends prior to the recession, employment for this age group was expected to grow by only 6.1 percent. All younger age groups experienced a decline in employment during the same 2007 to 2009 period. Remaining employed and delaying retirement was one way of lessening the impact of the stock market decline and subsequent loss in retirement savings.

## Household Wealth Impact

The decline in the housing and financial markets and the rise in unemployment negatively impacted the assets and wealth of many households (Levine, 2012; Ratcliffe and Zhang, 2012). According to the Survey of Income and Program Participation (SIPP), median household net worth decreased by 35.1 percent from 2005 ( $\$ 102,844$ ) to $2010(\$ 66,740$; all dollar figures are in 2010
constant dollars). ${ }^{37}$ Excluding home equity, median household net

[^61]Figure 3-26.
Median Net Worth of Households by Age of Householder: 2005 and 2010
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/sipp/source.html)


Note: 2005 is in constant 2010 dollars. The reference population of the survey is the civilian noninstitutionalized population. Source: U.S. Census Bureau, 2013; Survey of Income and Program Participation, 2004 Panel, Wave 6 and 2008 Panel, Wave 7.
worth decreased by 25.1 percent from $2005(\$ 20,028)$ to 2010 (\$15,000).

Median household net worth fell from 2005 to 2010 for householders in all age groups, except for householders aged 65 to 69,
who experienced no significant change in net worth (Figure 3-26). Householders under age 35 saw a drop in net worth of around \$3,000. ${ }^{38}$

[^62]For householders aged 65 and older, median net worth declined from \$195,890 in 2005 to $\$ 170,128$ in 2010, a drop of $\$ 25,762$.

Figure 3-27
Percentage Change in Median Net Worth and Components of Net Worth of Households by Age of Householder: 2005-2010
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/sipp/source.html)


Note: 2005 is in constant 2010 dollars. The reference population of the survey is the civilian noninstitutionalized population. Source: U.S. Census Bureau, 2013; Survey of Income and Program Participation, 2004 Panel, Wave 6 and 2008 Panel, Wave 7.

In percentage terms, younger householders had the largest decreases in net worth (Figure 3-27). Median net worth decreased by 13.2 percent for householders aged 65 and older, compared with a 36.7 percent decline for householders under age 35 and a 58.8 percent decline for householders aged 35 to 44.

For younger households (householders under age 35), the percent decline in home equity from 2005 to 2010 exceeded the drop in net
worth of assets other than their home over the same period (Figure 3-27). In fact, householders under age 35 were the only group to see an increase from 2005 to 2010 in median net worth excluding home equity. In contrast, householders aged 65 and over experienced a smaller decline in home equity (3.6 percent) from 2005 to 2010 than in median net worth excluding home equity (18.2 percent). Wealth is an important source of postretirement income. Therefore, for the population aged 65 and over, even
small decreases in net worth can have adverse implications for their economic security because their primary earning years are behind them.

Drawing on data from a range of surveys, this chapter documented the economic status of the older population before and immediately after the Great Recession. The long run impact of the recession, if any, on underlying economic trends for the older population can be assessed with future survey data.

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## Chapter 4. Geographic Distribution

This chapter examines the distribution of the older population at regional, state, county, and metropolitan and micropolitan statistical area levels in 2010 and changes between 2000 and 2010. The geographic distribution of the population aged 65 and over by race and Hispanic origin across regions and states is presented along with the racial and ethnic composition of each state. This chapter also explores older people's mobility, migration patterns, and main reasons for moving.

## States and Regions

## States With the Largest Older Populations

In 2010, 11 states had more than 1 million people aged 65 and older, with California topping the list at 4.2 million. The other ten states, in order of descending population size, were Florida, New York, Texas, Pennsylvania, Ohio, Illinois, Michigan, North Carolina, New Jersey, and Georgia (Figure 4-1 and Table 4-1). ${ }^{1}$ Compared with 2000 and 1990, two new states-North Carolina and Georgia-joined the 2010 "millionaires" list (see He et

[^63]al., 2005 for the list of 2000). ${ }^{2}$ Not surprisingly, these 11 states had the largest populations overall as well. Each of the four regions of the United States is represented by at least one of these states. ${ }^{3}$

[^64]

Table 4-1.
Population Aged 65 and Over Ranked by State: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Rank | Population 65 and over |  | Rank | Percent 65 and over of state population |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | State | Number |  | State | Percent |
| 1 | California | 4,246,514 | 1 | Florida | 17.3 |
| 2 | Florida | 3,259,602 | 2 | West Virginia | 16.0 |
| 3 | New York | 2,617,943 | 3 | Maine. . | 15.9 |
| 4 | Texas | 2,601,886 | 4 | Pennsylvania | 15.4 |
| 5 | Pennsylvania | 1,959,307 | 5 | lowa. | 14.9 |
| 6 | Ohio. | 1,622,015 | 6 | Montana. | 14.8 |
| 7 | Illinois. | 1,609,213 | 7 | Vermont | 14.6 |
| 8 | Michigan | 1,361,530 | 8 | North Dakota | 14.5 |
| 9 | North Carolina | 1,234,079 | 9 | Rhode Island | 14.4 |
| 10 | New Jersey | 1,185,993 | 10 | Arkansas | 14.4 |
| 11 | Georgia | 1,032,035 | 11 | Delaware | 14.4 |
| 12 | Virginia. | 976,937 | 12 | Hawaii | 14.3 |
| 13 | Massachusetts. | 902,724 | 13 | South Dakota. | 14.3 |
| 14 | Arizona | 881,831 | 14 | Connecticut | 14.2 |
| 15 | Tennessee | 853,462 | 15 | Ohio. | 14.1 |
| 16 | Indiana. | 841,108 | 16 | Missouri | 14.0 |
| 17 | Missouri . | 838,294 | 17 | Oregon. | 13.9 |
| 18 | Washington | 827,677 | 18 | Arizona | 13.8 |
| 19 | Wisconsin | 777,314 | 19 | Massachusetts. | 13.8 |
| 20 | Maryland | 707,642 | 20 | Michigan | 13.8 |
| 21 | Minnesota | 683,121 | 21 | Alabama | 13.8 |
| 22 | Alabama | 657,792 | 22 | Wisconsin | 13.7 |
| 23 | South Carolina. | 631,874 | 23 | South Carolina. | 13.7 |
| 24 | Kentucky | 578,227 | 24 | New Hampshire. | 13.5 |
| 25 | Louisiana | 557,857 | 25 | New York | 13.5 |
| 26 | Colorado | 549,625 | 26 | Oklahoma | 13.5 |
| 27 | Oregon. | 533,533 | 27 | Nebraska | 13.5 |
| 28 | Oklahoma | 506,714 | 28 | New Jersey | 13.5 |
| 29 | Connecticut | 506,559 | 29 | Tennessee. | 13.4 |
| 30 | lowa. | 452,888 | 30 | Kentucky | 13.3 |
| 31 | Arkansas | 419,981 | 31 | New Mexico. | 13.2 |
| 32 | Mississippi . | 380,407 | 32 | Kansas. | 13.2 |
| 33 | Kansas. | 376,116 | 33 | Indiana. | 13.0 |
| 34 | Nevada | 324,359 | 34 | North Carolina | 12.9 |
| 35 | West Virginia | 297,404 | 35 | Minnesota | 12.9 |
| 36 | New Mexico. | 272,255 | 36 | Mississippi . | 12.8 |
| 37 | Utah. | 249,462 | 37 | Illinois. | 12.5 |
| 38 | Nebraska | 246,677 | 38 | Wyoming | 12.4 |
| 39 | Maine. | 211,080 | 39 | Idaho . | 12.4 |
| 40 | Hawaii | 195,138 | 40 | Washington | 12.3 |
| 41 | Idaho | 194,668 | 41 | Louisiana. | 12.3 |
| 42 | New Hampshire. | 178,268 | 42 | Maryland | 12.3 |
| 43 | Rhode Island. | 151,881 | 43 | Virginia. | 12.2 |
| 44 | Montana. | 146,742 | 44 | Nevada | 12.0 |
| 45 | Delaware | 129,277 | 45 | District of Columbia . | 11.4 |
| 46 | South Dakota. | 116,581 | 46 | California | 11.4 |
| 47 | North Dakota . | 97,477 | 47 | Colorado | 10.9 |
| 48 | Vermont. | 91,078 | 48 | Georgia | 10.7 |
| 49 | Wyoming | 70,090 | 49 | Texas | 10.3 |
| 50 | District of Columbia | 68,809 | 50 | Utah. | 9.0 |
| 51 | Alaska . . . . . . . . . . | 54,938 | 51 | Alaska | 7.7 |

[^65]States with the largest number of older people are not necessarily those with the highest percentage of their populations at older ages (Table 4-1 and Figure 4-2). California, for example, had the most older people, yet ranked 46th among the 50 states and the District of Columbia for its population proportion aged 65 and over ( 11.4 percent). The 2.6 million older population of Texas represented
only 10.3 percent of the total state population, ranking it 49th in the nation. Florida and Pennsylvania are notable for ranking among the top five in both the overall size of their older populations as well as the share of older people in their populations.

States with the highest proportions of older people in their populations included Florida, West Virginia,

Maine, and Pennsylvania (all above 15 percent). Among these states, Maine saw the largest increase in its share of population aged 65 and over from 2000 (14.4 percent) to 2010 (15.9 percent; Table 4-2). States with the smallest share aged 65 and over were Alaska (7.7 percent) and Utah (9.0 percent).


Table 4-2.

## Percentage Aged 65 and Over and Percentage Aged 85 and Over by Region and State: 2000 and 2010

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Region and state | 65 and over |  | 85 and over |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2010 | 2000 | 2010 |
| United States | 12.4 | 13.0 | 1.5 | 1.8 |
| Northeast. | 13.8 | 14.1 | 1.8 | 2.2 |
| Connecticut | 13.8 | 14.2 | 1.9 | 2.4 |
| Maine . | 14.4 | 15.9 | 1.8 | 2.2 |
| Massachusetts. | 13.5 | 13.8 | 1.8 | 2.2 |
| New Hampshire . | 12.0 | 13.5 | 1.5 | 1.9 |
| New Jersey | 13.2 | 13.5 | 1.6 | 2.0 |
| New York | 12.9 | 13.5 | 1.6 | 2.0 |
| Pennsylvania | 15.6 | 15.4 | 1.9 | 2.4 |
| Rhode Island | 14.5 | 14.4 | 2.0 | 2.5 |
| Vermont | 12.7 | 14.6 | 1.6 | 2.0 |
| Midwest . | 12.8 | 13.5 | 1.7 | 2.0 |
| Illinois. | 12.1 | 12.5 | 1.5 | 1.8 |
| Indiana | 12.4 | 13.0 | 1.5 | 1.8 |
| lowa. | 14.9 | 14.9 | 2.2 | 2.5 |
| Kansas. | 13.3 | 13.2 | 1.9 | 2.1 |
| Michigan. | 12.3 | 13.8 | 1.4 | 1.9 |
| Minnesota | 12.1 | 12.9 | 1.7 | 2.0 |
| Missouri | 13.5 | 14.0 | 1.8 | 1.9 |
| Nebraska | 13.6 | 13.5 | 2.0 | 2.2 |
| North Dakota | 14.7 | 14.5 | 2.3 | 2.5 |
| Ohio. | 13.3 | 14.1 | 1.6 | 2.0 |
| South Dakota . | 14.3 | 14.3 | 2.1 | 2.4 |
| Wisconsin. | 13.1 | 13.7 | 1.8 | 2.1 |
| South. | 12.4 | 13.0 | 1.4 | 1.6 |
| Alabama. | 13.0 | 13.8 | 1.5 | 1.6 |
| Arkansas | 14.0 | 14.4 | 1.7 | 1.8 |
| Delaware | 13.0 | 14.4 | 1.3 | 1.8 |
| District of Columbia | 12.2 | 11.4 | 1.6 | 1.7 |
| Florida | 17.6 | 17.3 | 2.1 | 2.3 |
| Georgia | 9.6 | 10.7 | 1.1 | 1.2 |
| Kentucky | 12.5 | 13.3 | 1.4 | 1.6 |
| Louisiana | 11.6 | 12.3 | 1.3 | 1.4 |
| Maryland | 11.3 | 12.3 | 1.3 | 1.7 |
| Mississippi | 12.1 | 12.8 | 1.5 | 1.5 |
| North Carolina | 12.0 | 12.9 | 1.3 | 1.5 |
| Oklahoma. | 13.2 | 13.5 | 1.7 | 1.7 |
| South Carolina . | 12.1 | 13.7 | 1.3 | 1.5 |
| Tennessee | 12.4 | 13.4 | 1.4 | 1.6 |
| Texas | 9.9 | 10.3 | 1.1 | 1.2 |
| Virginia. | 11.2 | 12.2 | 1.2 | 1.5 |
| West Virginia | 15.3 | 16.0 | 1.8 | 1.9 |
| West | 11.0 | 11.9 | 1.3 | 1.6 |
| Alaska | 5.7 | 7.7 | 0.4 | 0.7 |
| Arizona. | 13.0 | 13.8 | 1.3 | 1.6 |
| California | 10.6 | 11.4 | 1.3 | 1.6 |
| Colorado | 9.7 | 10.9 | 1.1 | 1.4 |
| Hawaii | 13.3 | 14.3 | 1.4 | 2.2 |
| Idaho | 11.3 | 12.4 | 1.4 | 1.6 |
| Montana. | 13.4 | 14.8 | 1.7 | 2.0 |
| Nevada. | 11.0 | 12.0 | 0.9 | 1.1 |
| New Mexico | 11.7 | 13.2 | 1.3 | 1.6 |
| Oregon. . | 12.8 | 13.9 | 1.7 | 2.0 |
| Utah. | 8.5 | 9.0 | 1.0 | 1.1 |
| Washington | 11.2 | 12.3 | 1.4 | 1.7 |
| Wyoming . . . . . . . . . | 11.7 | 12.4 | 1.4 | 1.5 |

Sources: U.S. Census Bureau, 2001 and 2011a; 2000 and 2010 Censuses.

## States With the Largest OldestOld Populations

The states with a large number of people aged 65 and over also had a large number of people aged 85 and over, the oldest-old population. In 2010, the top ten states for the number aged 65 and older were also the top ten states for the number aged 85 and older. Among the top three states, the oldest old numbered 601,000 in California, 434,000 in Florida, and 391,000 in New York.

The states with the largest percentage shares of the oldest old in 2010 were Iowa, North Dakota, and Rhode Island (2.5 percent each), as well as Connecticut, Pennsylvania, and South Dakota ( 2.4 percent each), all in the Northeast and Midwest (Table 4-2 and Figure 4-3). They were also among the states with large shares of the older population.

## Regional Distribution of the

 Older PopulationThe South region, with 14.9 million residents aged 65 and older, was home to 37 percent of the U.S. older population in 2010 (Table 4-3), and home to 37 percent of the population of all ages (U.S. Census Bureau, 2011a). The remaining 63 percent of the older population was split fairly equally among the other three regions: 7.8 million in the Northeast (19.4 percent), 9.0 million in the Midwest ( 22.4 percent), and 8.5 million in the West (21.2 percent).


Table 4-3.

## Population Aged 65 and Over by Region, Race, and Hispanic Origin: 2010

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Region | Total | One race |  |  |  |  |  | $\begin{array}{r} \text { Two } \\ \text { or } \\ \text { More } \\ \text { Races } \end{array}$ | Hispanic or Latino (of any race) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | White | Black or <br> African <br> American | American Indian and Alaska Native | Asian | Native Hawaiian and Other Pacific Islander | Some Other Race |  |  |
| Population Size United States. | 40,267,984 | 34,139,237 | 3,438,397 | 207,060 | 1,386,626 | 31,213 | 665,994 | 399,457 | 2,781,624 |
| Northeast. | 7,804,833 | 6,701,435 | 641,102 | 15,483 | 245,821 | 1,211 | 128,539 | 71,242 | 431,175 |
| Midwest | 9,022,334 | 8,155,273 | 617,818 | 28,362 | 117,541 | 1,238 | 50,725 | 51,377 | 174,823 |
| South . | 14,893,985 | 12,427,651 | 1,877,136 | 69,360 | 232,759 | 3,229 | 154,056 | 129,794 | 1,100,296 |
| West | 8,546,832 | 6,854,878 | 302,341 | 93,855 | 790,505 | 25,535 | 332,674 | 147,044 | 1,075,330 |
| Percent of Area United States. | 100.0 | 84.8 | 8.5 | 0.5 | 3.4 | 0.1 | 1.7 | 1.0 | 6.9 |
| Northeast. | 100.0 | 85.9 | 8.2 | 0.2 | 3.1 | 0.0 | 1.6 | 0.9 | 5.5 |
| Midwest | 100.0 | 90.4 | 6.8 | 0.3 | 1.3 | 0.0 | 0.6 | 0.6 | 1.9 |
| South . | 100.0 | 83.4 | 12.6 | 0.5 | 1.6 | 0.0 | 1.0 | 0.9 | 7.4 |
| West | 100.0 | 80.2 | 3.5 | 1.1 | 9.2 | 0.3 | 3.9 | 1.7 | 12.6 |
| Percent of Group United States. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Northeast. | 19.4 | 19.6 | 18.6 | 7.5 | 17.7 | 3.9 | 19.3 | 17.8 | 15.5 |
| Midwest | 22.4 | 23.9 | 18.0 | 13.7 | 8.5 | 4.0 | 7.6 | 12.9 | 6.3 |
| South . | 37.0 | 36.4 | 54.6 | 33.5 | 16.8 | 10.3 | 23.1 | 32.5 | 39.6 |
| West | 21.2 | 20.1 | 8.8 | 45.3 | 57.0 | 81.8 | 50.0 | 36.8 | 38.7 |

Source: U.S. Census Bureau, 2011; 2010 Census.

## Growth of the Older and Oldest-Old Populations by Region and State

The older population in the United States increased by 15.1 percent between 2000 and 2010. However, the growth rates varied widely by region and state (Figure 4-4 and Appendix Table C-4). Among the states with the fastest growth in the older population were Alaska (53.9 percent), Nevada (48.2 percent), Idaho (33.4 percent), Colorado (32.1 percent), Arizona (32.0 percent), Georgia (31.4 percent), Utah (31.1 percent), and South Carolina (30.2 percent), all in
the West and South. In contrast, the older population declined between 2000 and 2010 in the District of Columbia ( -1.6 percent) and Rhode Island ( -0.3 percent), and growth was relatively low in Pennsylvania (2.1 percent), North Dakota (3.2 percent), lowa (3.8 percent), and Massachusetts ( 4.9 percent), all in the Northeast and Midwest (except for the District of Columbia, in the South).

State-level growth of the oldest old varied even more widely than growth of the older population (Figure 4-5 and Appendix Table $\mathrm{C}-5)$. The growth rate of the
oldest old also was fastest among states in the West. The fastest growing oldest-old populations were in Alaska (78.9 percent), Nevada (77.7 percent), and Hawaii (72.2 percent), all in the West. Growth was also fast in Arizona (50.9 percent) in the West and Delaware (49.2 percent) and Maryland (46.7 percent) in the South. While the slowest growing older populations were in the Midwest and Northeast, the states with the slowest growing oldestold populations were all in the South-Mississippi (3.4 percent), Oklahoma (8.3 percent), Arkansas



Sources: U.S. Census Bureau, 2001 and 2011a; 2000 and 2010 Censuses.
(10.6 percent), Louisiana (11.9 percent), and Alabama (12.5 percent).

There are several potential explanations for the differential growth of both the older and oldest-old populations by state from 2000 to 2010. The first is that states considered more desirable as retirement destinations, often those with higher average temperatures, lower crime, lower property and state income tax rates, and higher percentages of recreation/entertainment employment, attract new older residents (AARP, 2005). Second, many rural areas have become "older" due to net outmigration of the young,
working-age population (Johnson, 2012; McGranahan, Cromartie, and Wojan, 2010). Third, international migration also can influence a state's population size and age composition. California received the largest proportion of international migrants arriving from 2005 to 2010 (19.4 percent), followed by Texas (10.8 percent), New York (10.0 percent), and Florida (8.9 percent; Walters and Trevelyan, 2011). Because a smaller share of the foreign born were 65 and older (12.4 percent) compared with the native-born population (13.2 percent), states receiving a large proportion of
international migrants may see slower growth in the older and oldest-old populations (Greico et al., 2012). The fourth potential explanation is differential mortality (NCHS, 1999). Given differences in state resources, health behaviors, and other factors, mortality may differ substantially across regions and states (Kulkarni et al., 2011). A fifth factor that may explain differential growth at older ages is aging in place: for instance, states that had a disproportionately large number of those aged 55 to 64 in 2000 would have larger numbers of those aged 65 to 74 in 2010 (Frey, 1995).

## Distribution by Race and Hispanic Origin

## Region and State Distribution by Race and Hispanic Origin

The geographic distribution of the older population who identified their race as White alone in 2010 was similar to the geographic distribution of the total older population. ${ }^{4}$ The South had the largest share ( 36.4 percent), with 12.4 million older people who reported White alone, while the shares of the other three regions were split more evenly (Table 4-3). The older White alone population size was largest in California, Florida, Texas, and New York, with more than 2 million in each state (Table 4-4).
${ }^{4}$ For the definition of race and Hispanic origin, see Chapter 1, Box 1-1. Appendix C, Table C- 6 contains detailed data on the older population by region, state, race, and Hispanic origin.

Among other race groups, however, the regional distribution was more skewed. For instance, of the 3.4 million members of the older Black alone population, 54.6 percent resided in the South, compared with 8.8 percent in the West. The older Black alone population numbered more than 200,000 in five states: New York, Florida, California, Texas, and Georgia. These five states combined accounted for more than one-third (35.9 percent) of the total older Black alone population.

Nearly 80 percent of the 207,000 older population identifying as American Indian and Alaska Native (AIAN) alone resided in the West (45.3 percent) and the South ( 33.5 percent). Six states in the South and West were home to over half of the older AIAN alone populationCalifornia (12.9 percent), Oklahoma
(11.9 percent), Arizona (9.7 percent), New Mexico ( 7.2 percent), Texas ( 5.2 percent), and North Carolina ( 4.8 percent).

About 57 percent of the 1.4 million older Asian alone population in 2010 lived in the West, with 40.5 percent living in California alone. Two other states, New York and Hawaii, together hosted another 17.4 percent of the older Asian alone population in 2010. The share of the older Asian alone population residing in these three states, however, fell from 65.9 percent in 2000 (He et al., 2005) to 57.9 percent in 2010 due to faster growth of the older Asian alone population in other states. For instance, although the Midwest had the lowest regional share of the older Asian alone population (8.5 percent), that share was up from 7.3 percent in 2000.

Table 4-4.
Top Ten States With Populations Aged 65 and Over by Race and Hispanic Origin: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| White alone |  | Black or African American alone |  | American Indian and Alaska Native alone |  | Asian alone |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| California | 3,098,631 | New York | 321,588 | California | 26,804 | California | 561,229 |
| Florida | 2,903,444 | Florida | 253,139 | Oklahoma | 24,741 | New York | 127,984 |
| Texas | 2,181,099 | California | 224,143 | Arizona | 20,012 | Hawaii | 113,885 |
| New York | 2,049,114 | Texas | 220,837 | New Mexico | 14,853 | Texas | 65,804 |
| Pennsylvania | 1,782,320 | Georgia | 213,160 | Texas | 10,822 | New Jersey | 56,543 |
| Ohio | 1,455,955 | North Carolina | 193,361 | North Carolina | 9,933 | Illinois. | 50,880 |
| Illinois. | 1,336,460 | Illinois. | 181,271 | New York | 7,764 | Washington | 45,033 |
| Michigan | 1,193,299 | Maryland | 152,353 | Alaska | 7,457 | Florida | 40,838 |
| North Carolin | 1,006,831 | Virginia. | 146,754 | Washington | 7,118 | Virginia. | 32,874 |
| New Jersey | 976,694 | Ohio. | 137,840 | Florida | 5,919 | Maryland | 28,592 |
| Native Hawaiian and Other Pacific Islander alone |  | Some Other Race alone |  | Two or More Races |  | Hispanic or Latino (of any race) |  |
| Hawaii | 10,800 | California | 243,571 | California | 82,604 | California | 748,879 |
| California | 9,532 | Texas | 92,780 | New York | 35,195 | Texas | 532,921 |
| Washington | 1,535 | New York | 75,743 | Texas | 29,714 | Florida | 436,198 |
| Nevada | 1,062 | Florida | 27,132 | Florida | 28,418 | New York | 249,893 |
| Utah. | 858 | Illinois. | 26,942 | Hawaii | 18,219 | Arizona | 96,421 |
| Texas | 830 | Arizona | 26,792 | Oklahoma | 13,833 | New Jersey | 93,881 |
| Florida | 712 | New Jersey | 22,135 | New Jersey | 12,003 | New Mexico . | 84,850 |
| Arizona | 613 | New Mexico | 20,455 | Illinois. | 11,014 | Illinois. | 82,650 |
| New York | 555 | Colorado | 13,115 | Washington | 9,632 | Colorado | 54,018 |
| Oregon. | 449 | Massachusetts. | 12,024 | Michigan . . . . . . . . . . | 9,477 | Pennsylvania | 30,178 |

Source: U.S. Census Bureau, 2011a; 2010 Census.

Among the 31,000 people 65 years and over identifying as Native Hawaiian and Other Pacific Islander (NHPI) alone, most were concentrated in the West, especially in Hawaii ( 11,000 or 34.6 percent) and California (9,500 or 30.5 percent). Only 18.2 percent of this population resided in the other three regions in 2010.

The older population reporting Two or More Races also showed regional concentrations. Among the 399,000 older people reporting Two or More Races, 36.8 percent resided in the West and 32.5 percent resided in the South. By state, the older Two or More Races population was most concentrated in California (20.7 percent), New York
(8.8 percent), Texas (7.4 percent), and Florida (7.1 percent).

The South and West were also the regions where most older Hispanics lived in 2010. Of the nearly 2.8 million older Hispanics, about 1.1 million lived in each of these two regions, altogether 78.3 percent of the older Hispanic population. In contrast, the Midwest had only 175,000 older Hispanics, or 6.3 percent of the total. More than 7 out of 10 older Hispanics lived in four states: California ( 26.9 percent), Texas (19.2 percent), Florida (15.7 percent), and New York (9.0 percent).

## State Composition by Race and Hispanic Origin

In addition to the geographic distribution of the older population by race and Hispanic origin across regions and states, it is also interesting to examine the within-state composition of the older population by race and Hispanic origin.

In 2010, the older White alone population represented the majority of the older population in all states except Hawaii (25.7 percent) and the District of Columbia (32.8 percent). This group represented 95 percent or more of the older population in 13 states, most of which were located in the northern half of the country (Figure 4-6 and Table C-4). The five states with the largest percentages of White alone

in their older populations were Maine ( 98.5 percent), Vermont (98.4 percent), New Hampshire (98.0 percent), lowa (97.7 percent), and North Dakota ( 97.2 percent).

In comparison, states that had the highest proportions of Black alone in their older populations were mostly in the South (Figure 4-7). At 62.2 percent, the District of Columbia had the highest proportion of Black alone in its older population (down from 68.8 percent in 2000 ) (He et al., 2005), followed by the southern states of Mississippi (24.2 percent), Louisiana (22.5 percent),

Maryland (21.5 percent), Georgia (20.7 percent), South Carolina (19.9 percent), Alabama (17.7 percent), North Carolina (15.7 percent), and Virginia ( 15.0 percent). In 27 states, the older Black alone population represented less than 5 percent of the older population.

Few states had substantial shares of older populations of race groups other than Blacks and Whites in 2010. For instance, the AIAN alone represented 1 percent or more of the older population in just eight states (Figure 4-8), led by Alaska (13.6 percent), followed by New Mexico (5.5 percent), Oklahoma
(4.9 percent), South Dakota (3.1 percent), Montana ( 2.7 percent), Arizona (2.3 percent), North Dakota (1.9 percent), and Wyoming (1.1 percent).

High shares of older Asians were also concentrated in a few states. Although California had by far the largest number of older people identifying their race as Asian alone, Hawaii had the highest share of Asian alone in its older population ( 58.4 percent; Figure 4-9). Other states where the Asian alone group represented at least 4 percent of the older population were California (13.2 percent),



Source: U.S. Census Bureau, 2011a; 2010 Census.


Figure 4-9.
Percentage Asian Alone of State Population
Aged 65 and Over: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


Source: U.S. Census Bureau, 2011 a; 2010 Census.

Nevada (6.7 percent), Washington (5.4 percent), Alaska ( 5.4 percent), New York (4.9 percent), New Jersey (4.8 percent), and Maryland (4.0 percent).

The NHPI alone population represented 0.08 percent of the U.S. total older population, and in 44 states the proportion was less than 0.08 percent (Figure $4-10$ ). This race group was most prevalent in the older population of Hawaii ( 5.53 percent) and had a proportion higher than the national average in Alaska, California, Nevada, Oregon, Utah, and Washington. These states are all in the West.

The share of the older population reporting Some Other Race alone was highest in New Mexico (7.5 percent), California ( 5.7 percent), Texas (3.6 percent), Arizona (3.0 percent), New York (2.9 percent), Nevada (2.6 percent), and Colorado (2.4 percent) (Figure 4-11). The pattern of a high share of Some Other Race alone across states is similar to the pattern observed for Hispanics (see Figure 4-13). This results from the fact that 96.8 percent of the population who identified as Some Other Race alone also reported themselves as Hispanic (Humes, Jones, and Ramirez, 2011).

In 14 states, mostly in the West, 1.0 percent or more of the older
population reported Two or More Races. All other states had less than 1.0 percent (Figure 4-12). Hawaii had the highest share (9.3 percent), followed by Oklahoma (2.7 percent), and Alaska (2.3 percent).

States with the highest percentage of Hispanics in their older populations were the border states with Mexico (New Mexico, 31.2 percent; Texas, 20.5 percent; California, 17.6 percent; and Arizona, 10.9 percent) and their neighboring states of Colorado ( 9.8 percent) and Nevada ( 8.8 percent; Figure 4-13). Florida (13.4 percent), New York (9.5 percent), New Jersey (7.9 percent), and Illinois ( 5.1 percent)


Source: U.S. Census Bureau, 2011 a; 2010 Census.


Source: U.S. Census Bureau, 2011a; 2010 Census.


Source: U.S. Census Bureau, 2011a; 2010 Census.


Source: U.S. Census Bureau, 2011 a; 2010 Census.
also had relatively high percentages of Hispanic. All these states experienced an increase in the Hispanic share from 2000.

In 2010, California had the most diverse older population. California ranked 48th in the percentage of its older population that was White alone (only District of Columbia, Hawaii, and Maryland ranked lower in proportion White alone). Conversely, the share of several other racial groups in California's older population was well above the national average. California ranked among the top five states in its percentage of older people
reporting themselves as Asian alone, NHPI alone, and Hispanics.

## Counties

## Counties With the Largest Older Populations

Of the 3,143 counties in the United States in 2010, 11 had 250,000 or more people aged 65 and over (Table 4-5). Eleven counties also met this criterion in 2000 (He et al., 2005). These counties included large urban areas in California-Los Angeles, Orange, Riverside, and San Diego; Florida-Miami-Dade and Palm Beach; New York—Kings and Queens;

Arizona-Maricopa; Illinois-Cook; and Texas-Harris. Los Angeles County had the largest number of older people-more than one million. With an increase of almost 63,000 people aged 65 and older, Riverside County jumped from 18th in 2000 to 11th in 2010 to join the counties with an older population of 250,000 or more. It replaced Florida's Broward County, which saw a decline in its older population from 2000 to 2010.

Of the 50 counties with the largest share of older people, most were located in Florida (eight counties), North Dakota (eight counties), Texas (six counties), Kansas

Table 4-5.
Top 50 Counties Ranked by Population and Percentage Aged 65 and Over: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)

| Rank | 65 and over |  |  | Rank | Percentage aged 65 and over of county's total population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | County | State | Number |  | County | State | Percent |
| 1 | Los Angeles County | CA | 1,065,699 | 1 | Sumter County. | FL | 43.4 |
| 2 | Cook County | IL | 620,329 | 2 | Charlotte County | FL | 34.1 |
| 3 | Maricopa County . | AZ | 462,641 | 3 | McIntosh County | ND | 34.0 |
| 4 | Miami-Dade County. | FL | 352,013 | 4 | La Paz County. | AZ | 32.6 |
| 5 | San Diego County . | CA | 351,425 | 5 | Highlands County | FL | 32.2 |
| 6 | Orange County | CA | 349,677 | 6 | Citrus County. . | FL | 31.9 |
| 7 | Harris County. | TX | 333,487 | 7 | Alcona County . | MI | 31.4 |
| 8 | Kings County . | NY | 287,633 | 8 | Lancaster County | VA | 31.2 |
| 9 | Queens County | NY | 286,146 | 9 | Sarasota County | FL | 31.2 |
| 10 | Palm Beach County. | FL | 285,155 | 10 | Llano County . | TX | 31.1 |
| 11 | Riverside County . | CA | 258,586 | 11 | Sierra County. | NM | 30.6 |
| 12 | Broward County. | FL | 249,424 | 12 | Northumberland County | VA | 30.1 |
| 13 | Wayne County | MI | 230,703 | 13 | Sheridan County | ND | 30.0 |
| 14 | Clark County | NV | 220,445 | 14 | McPherson County | SD | 29.8 |
| 15 | New York County | NY | 214,153 | 15 | Hickory County | MO | 29.6 |
| 16 | King County. | WA | 210,679 | 16 | Towns County | GA | 29.2 |
| 17 | Dallas County | TX | 207,972 | 17 | Harding County | NM | 29.2 |
| 18 | Allegheny County | PA | 205,059 | 18 | Wheeler County. | OR | 29.1 |
| 19 | Nassau County | NY | 204,681 | 19 | Wells County . | ND | 29.0 |
| 20 | Suffolk County . | NY | 201,793 | 20 | Kalawao County | HI | 28.9 |
| 21 | Cuyahoga County | OH | 198,541 | 21 | Baxter County | AR | 28.1 |
| 22 | Middlesex County | MA | 197,015 | 22 | Jewell County | KS | 28.0 |
| 23 | Santa Clara County | CA | 196,944 | 23 | Roscommon County | MI | 28.0 |
| 24 | Pinellas County . | FL | 194,099 | 24 | Curry County . | OR | 28.0 |
| 25 | Philadelphia County. | PA | 185,309 | 25 | Logan County | ND | 28.0 |
| 26 | San Bernardino County | CA | 181,348 | 26 | Catron County . | NM | 27.9 |
| 27 | Bexar County. | TX | 175,883 | 27 | Nelson County. | ND | 27.4 |
| 28 | Alameda County | CA | 167,746 | 28 | Emmons County | ND | 27.4 |
| 29 | Tarrant County. . | TX | 161,385 | 29 | Martin County . | FL | 27.3 |
| 30 | Oakland County. | MI | 159,124 | 30 | Decatur County | KS | 27.3 |
| 31 | Sacramento County. | CA | 158,551 | 31 | Aitkin County . . | MN | 27.2 |
| 32 | Pima County | AZ | 151,293 | 32 | Garden County | NE | 27.2 |
| 33 | St. Louis County | MO | 149,493 | 33 | Indian River County . | FL | 27.2 |
| 34 | Bronx County. | NY | 145,882 | 34 | Motley County | TX | 27.1 |
| 35 | Hillsborough County | FL | 145,237 | 35 | Garfield County | NE | 27.1 |
| 36 | Lee County | FL | 145,106 | 36 | Republic County | KS | 27.0 |
| 37 | Erie County | NY | 144,364 | 37 | Montmorency County | MI | 27.0 |
| 38 | Westchester County | NY | 139,122 | 38 | Grant County . | ND | 26.9 |
| 39 | Honolulu County | HI | 138,490 | 39 | Potter County. | SD | 26.9 |
| 40 | Bergen County. . | NJ | 137,103 | 40 | Menard County | TX | 26.9 |
| 41 | Hennepin County. | MN | 130,814 | 41 | Sabine County. | TX | 26.8 |
| 42 | Contra Costa County. | CA | 130,438 | 42 | Rawlins County | KS | 26.7 |
| 43 | Hartford County . | CT | 130,119 | 43 | Divide County . | ND | 26.6 |
| 44 | Fairfield County | CT | 124,075 | 44 | Union County. | GA | 26.6 |
| 45 | New Haven County | CT | 123,972 | 45 | Boyd County | NE | 26.5 |
| 46 | Ocean County . | NJ | 121,104 | 46 | Gillespie County | TX | 26.5 |
| 47 | Montgomery County | PA | 120,727 | 47 | McMullen County. | TX | 26.4 |
| 48 | Macomb County . | MI | 120,180 | 48 | Collier County . | FL | 26.4 |
| 49 | Montgomery County | MD | 119,769 | 49 | Smith County. | KS | 26.4 |
| 50 | Sarasota County . . . | FL | 118,227 | 50 | Ontonagon County | MI | 26.4 |

[^66](five counties), and Michigan (four counties). Older people constituted between 26.4 to 43.4 percent of the populations of these counties, with Sumter County (Florida) topping the list, at 43.4 percent.

Counties with the largest shares of older people in the total population tend to be those with a relatively small number of older people. For instance, among the 50 counties with the largest share of older people, only Sarasota County, Florida (ranked 9th at 31.2 percent) also had one of the largest numbers of older people (ranked 50th at 118,000 ).

Overall, only 47 counties (about 1.5 percent of all counties) had both a high concentration of older people (20 percent or more) and a high number of older people (10,000 or more). Among these counties, 9 of the top 10 (ranked by population size of older people) were in Florida—Palm Beach, Pinellas, Lee, Sarasota, Brevard, Volusia, Pasco, Marion, and Collier counties.

## Counties With the Largest Oldest-Old Populations

Although there was no change in the number of counties with older populations of 250,000 or more (11), the number of counties with oldest-old populations of 25,000 or more increased from 18 in 2000 to 24 in 2010 (He et al., 2005; Table 4-6). Los Angeles County ranked first, with about 152,000 oldest
old, who represented 1.5 percent of the county's overall population.

Of the 50 counties with the largest shares of oldest old in their populations, a majority were in the Midwest, with 36 located in just four states: North Dakota (11 counties), Nebraska (9 counties), Kansas (8 counties), and South Dakota (8 counties; Table 4-6). In addition, these counties tended to have smaller populations. Among the top 50 counties ranked by percentage of the oldest old in the population, Sarasota County (Florida) stood out with 18,000 people aged 85 and older, paralleling that county's status for the population aged 65 and older. The next closest county in this top 50 ranking had fewer than 600 oldest old.

Conversely, none of the 50 counties with the largest number of oldest old was also on the top 50 list by share of the oldest-old population. Only five counties in 2010 had both a high concentration of oldest old (3 percent or more) and a substantial number of oldest old (10,000 or more). These five were in Florida (Palm Beach, Pinellas, Sarasota, and Volusia counties) and New Jersey (Ocean County).

## Metropolitan and Micropolitan Statistical Areas

In 2010, 36.9 million people aged 65 and over lived inside metropolitan or micropolitan statistical
areas, representing 91.7 percent of the total older population (Table 4-7). ${ }^{5}$ This share is lower than the 93.7 percent of the total population of all ages residing in metro or micro areas (Wilson et al., 2012). The older population accounted for 12.8 percent of the total population inside metro or micro areas, compared with the 17.2 percent of the total population outside metro or micro areas (U.S. Census Bureau, 2011a).

Compared with the older population, a slightly larger proportion of the oldest-old population resided in either metro or micro areas92.2 percent. As was the case for the older population, the oldest old accounted for a lower proportion of the total population inside metro or micro areas ( 1.8 percent) compared with the total population outside metro or micro areas (2.2 percent; U.S. Census Bureau, 2011a).

[^67]Table 4-6.
Top 50 Counties Ranked by Population and Percentage Aged 85 and Over: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Rank | 85 and over |  |  | Rank | Percent aged 85 and over of county's total population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | County | State | Number |  | County | State | Percent |
| 1 | Los Angeles. | CA | 151,626 | 1 | Hooker. | NE | 8.3 |
| 2 | Cook | IL | 91,377 | 2 | McIntosh | ND | 7.5 |
| 3 | Maricopa | AZ | 59,054 | 3 | Divide. | ND | 6.5 |
| 4 | San Diego | CA | 53,960 | 4 | Traverse. | MN | 6.2 |
| 5 | Orange... | CA | 49,520 | 5 | Jerauld. | SD | 6.1 |
| 6 | Palm Beach . | FL | 49,205 | 6 | Hutchinson. | SD | 6.1 |
| 7 | Miami-Dade . | FL | 45,866 | 7 | Griggs . | ND | 5.8 |
| 8 | Queens | NY | 42,175 | 8 | Republic. | KS | 5.7 |
| 9 | Broward | FL | 41,526 | 9 | Douglas. | SD | 5.7 |
| 10 | Kings | NY | 40,950 | 10 | Cheyenne | KS | 5.6 |
| 11 | Harris. | TX | 36,688 | 11 | Smith. | KS | 5.6 |
| 12 | Allegheny. | PA | 35,116 | 12 | Wells | ND | 5.6 |
| 13 | Wayne. . | MI | 34,319 | 13 | Thayer | NE | 5.6 |
| 14 | Nassau | NY | 34,057 | 14 | Potter. | SD | 5.5 |
| 15 | King . | WA | 33,784 | 15 | McPherson | SD | 5.4 |
| 16 | Cuyahoga | OH | 33,421 | 16 | Pierce | ND | 5.3 |
| 17 | Riverside | CA | 32,192 | 17 | Decatur | KS | 5.3 |
| 18 | Pinellas | FL | 31,835 | 18 | Daniels. | MT | 5.3 |
| 19 | Middlesex | MA | 30,756 | 19 | Bedford City. | VA | 5.2 |
| 20 | New York | NY | 30,387 | 20 | Eddy . . . . . | ND | 5.2 |
| 21 | Philadelphia. | PA | 28,111 | 21 | Lancaster. | VA | 5.1 |
| 22 | Suffolk | NY | 27,841 | 22 | Gregory | SD | 5.1 |
| 23 | Santa Clara | CA | 27,475 | 23 | Lincoln. | MN | 5.1 |
| 24 | Dallas. | TX | 25,807 | 24 | Ringgold | IA | 5.0 |
| 25 | Alameda | CA | 24,733 | 25 | Osborne. | KS | 5.0 |
| 26 | Oakland. | MI | 23,757 | 26 | Nelson. | ND | 5.0 |
| 27 | Erie | NY | 23,607 | 27 | Rush | KS | 5.0 |
| 28 | St. Louis. | MO | 23,596 | 28 | Perkins. | SD | 5.0 |
| 29 | Sacramento. | CA | 23,063 | 29 | Towner. | ND | 5.0 |
| 30 | Hartford | CT | 22,737 | 30 | Iron | MI | 5.0 |
| 31 | Westchester. | NY | 22,727 | 31 | Pawnee | NE | 5.0 |
| 32 | Bexar. | TX | 22,404 | 32 | Clark | KS | 5.0 |
| 33 | Honolulu | HI | 22,360 | 33 | Webster. | NE | 5.0 |
| 34 | Bergen. | NJ | 22,279 | 34 | Big Stone. | MN | 5.0 |
| 35 | New Haven | CT | 22,113 | 35 | Baca | CO | 4.9 |
| 36 | Hennepin. | MN | 21,822 | 36 | Dickey | ND | 4.9 |
| 37 | San Bernardino . | CA | 20,874 | 37 | Hand . | SD | 4.9 |
| 38 | Baltimore . | MD | 20,681 | 38 | Garfield | NE | 4.8 |
| 39 | Montgomery | PA | 20,615 | 39 | Garden. | NE | 4.8 |
| 40 | Fairfield | CT | 20,462 | 40 | Rawlins | KS | 4.8 |
| 41 | Bronx. | NY | 20,039 | 41 | Sarasota | FL | 4.8 |
| 42 | Pima | AZ | 19,895 | 42 | Harding | NM | 4.7 |
| 43 | Clark | NV | 19,684 | 43 | Lac qui Parle | MN | 4.7 |
| 44 | Ocean | NJ | 19,610 | 44 | Sac... | IA | 4.7 |
| 45 | Tarrant . | TX | 19,467 | 45 | Fillmore | NE | 4.7 |
| 46 | Montgomery | MD | 19,431 | 46 | Boyd | NE | 4.7 |
| 47 | Contra Costa | CA | 19,372 | 47 | Golden Valley. | ND | 4.7 |
| 48 | Milwaukee | WI | 18,987 | 48 | Calhoun. . | IA | 4.6 |
| 49 | Hillsborough. | FL | 18,565 | 49 | Emmons | ND | 4.6 |
| 50 | Macomb. . . . . . . . | MI | 18,285 | 50 | Nuckolls. | NE | 4.6 |

Source: U.S. Census Bureau, 2011a; 2010 Census.

Table 4-7.

## Population Aged 65 and Over Residing Inside and Outside Metropolitan or Micropolitan

 Statistical Areas by Age, Sex, Race, and Hispanic Origin: 2010(For information on confidentiality protection, nonsampling error, and definitions, see
www.census.gov/prod/cen2010/doc/sf1.pdf)


[^68]For all race groups and Hispanics, the vast majority of the older population resided in metro or micro areas (Figure 4-14 and Table 4-7), although the share varied. More than 97 percent of older Asian alone, NHPI alone, Some Other Race alone, and Hispanics lived inside metro or micro areas in 2010, compared with 91 percent for White alone, and only 80 percent for AIAN alone. This low figure for AIAN alone is due in large measure to the location of tribal areas.

For most race groups, the concentration of the oldest-old population in metro or micro areas was almost the same as-or slightly higher than-that of the older population.

The one exception was Black alone, among whom 94.0 percent of the oldest old resided within metro or micro areas, compared with 94.8 percent for the older population overall.

## Migration

This discussion of migration uses data from the 2010 American Community Survey (ACS) as well as the 2011 Current Population Survey Annual Social and Economic Supplement (CPS ASEC). Unlike the 100 percent data from the 2010 Census used in other sections of this chapter, these two sources are national sample surveys. Statistics for certain race and age groups are not shown because the sample size
is too small to derive statistically sound findings from it.

## Mobility of Older People

The vast majority of older people do not move. Among the 40.4 million people 65 years and over in 2010, 2.4 million (or 5.8 percent) lived at a different residence 1 year earlier (Table 4-8). ${ }^{6}$ The percentage of those aged 1 to 64 who moved

[^69]Figure 4-14.
Population Aged 65 and Over Residing In Metropolitan or Micropolitan Statistical Areas by Race and Hispanic Origin: 2010


Source: U.S. Census Bureau, 2011 a; 2010 Census.

Table 4-8.
Geographic Mobility of the Population Aged 65 and Over by Sex, Age, Race, Hispanic Origin, and Type of Move: 2009-2010
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)

| Sex and age | Total number | Nonmovers | Movers | Percent movers of total 65 and over |  |  |  |  | Percent distribution of movers |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{array}{r} \text { All } \\ \text { mov- } \\ \text { ers } \end{array}$ | Same county | Same state |  | From abroad | $\begin{array}{r} \text { All } \\ \text { mov- } \\ \text { ers } \\ \hline \end{array}$ | Same county | Same state | Different state | From abroad |
| Total, 65 and over | 40,433,525 | 38,076,365 | 2,357,160 | 5.8 | 3.4 | 1.1 | 1.0 | 0.3 | 100.0 | 58.7 | 19.6 | 17.2 | 4.6 |
| 65 to 74 | 21,854,035 | 20,690,491 | 1,163,544 | 5.3 | 2.9 | 1.0 | 1.0 | 0.3 | 100.0 | 54.6 | 19.7 | 19.7 | 6.1 |
| 75 to 84 | 13,019,050 | 12,293,126 | 725,924 | 5.6 | 3.4 | 1.1 | 0.9 | 0.2 | 100.0 | 60.7 | 19.5 | 15.6 | 4.2 |
| 85 and over | 5,560,440 | 5,092,748 | 467,692 | 8.4 | 5.5 | 1.6 | 1.1 | 0.1 | 100.0 | 65.6 | 19.3 | 13.6 | 1.4 |
| Male, 65 and over | 17,433,645 | 16,495,266 | 938,379 | 5.4 | 3.1 | 1.1 | 1.0 | 0.3 | 100.0 | 56.8 | 19.6 | 18.7 | 5.0 |
| 65 to 74 | 10,155,596 | 9,632,251 | 523,345 | 5.2 | 2.8 | 1.0 | 1.1 | 0.3 | 100.0 | 53.7 | 19.7 | 20.6 | 6.0 |
| 75 to 84 | 5,483,764 | 5,207,158 | 276,606 | 5.0 | 3.0 | 1.0 | 0.9 | 0.2 | 100.0 | 58.5 | 19.7 | 17.1 | 4.7 |
| 85 and over | 1,794,285 | 1,655,857 | 138,428 | 7.7 | 5.0 | 1.4 | 1.1 | 0.1 | 100.0 | 65.0 | 18.8 | 14.5 | 1.7 |
| Female, 65 and over. . | 22,999,880 | 21,581,099 | 1,418,781 | 6.2 | 3.7 | 1.2 | 1.0 | 0.3 | 100.0 | 59.9 | 19.6 | 16.2 | 4.3 |
| 65 to 74 | 11,698,439 | 11,058,240 | 640,199 | 5.5 | 3.0 | 1.1 | 1.0 | 0.3 | 100.0 | 55.3 | 19.7 | 18.9 | 6.1 |
| 75 to 84 | 7,535,286 | 7,085,968 | 449,318 | 6.0 | 3.7 | 1.2 | 0.9 | 0.2 | 100.0 | 62.1 | 19.4 | 14.6 | 3.9 |
| 85 and over | 3,766,155 | 3,436,891 | 329,264 | 8.7 | 5.8 | 1.7 | 1.2 | 0.1 | 100.0 | 65.9 | 19.6 | 13.3 | 1.3 |
| Race and Hispanic Origin (65 and over) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| White alone | 34,395,659 | 32,456,568 | 1,939,091 | 5.6 | 3.3 | 1.2 | 1.0 | 0.2 | 100.0 | 57.8 | 20.4 | 18.4 | 3.5 |
| Black or African American alone | 3,441,022 | 3,228,370 | 212,652 | 6.2 | 4.2 | 1.0 | 0.7 | 0.2 | 100.0 | 68.6 | 15.8 | 12.1 | 3.5 |
| Asian alone | 185,662 | 173,752 | 11,910 | 6.4 | 3.1 | 1.9 | 1.2 | 0.2 | 100.0 | 48.7 | 29.1 | 19.1 | 3.0 |
| Hispanic or Latino (of any race) | 2,808,339 | 2,607,648 | 200,691 | 7.1 | 4.3 | 1.1 | 0.8 | 0.9 | 100.0 | 60.4 | 15.6 | 11.1 | 13.0 |

Source: U.S. Census Bureau, 2011b; American Community Survey, 2010, 1-year estimates.
is about three times that level (Ihrke, Faber, and Koerber, 2011).

Among all older movers, 59 percent moved within the same county and 20 percent moved to a different county within the same state (Table 4-8). Another 17 percent of older movers arrived from a different state and 5 percent came from abroad. ${ }^{7}$

Although the likelihood of moving is lower among older people, the proportion of older people who

[^70]moved rose progressively at older ages. The proportion of those who moved was 5.3 percent at ages 65 to $74,5.6$ percent at ages 75 to 84 , and 8.4 percent at ages 85 and over. On the other hand, as moving became more common with advancing age, it also became more confined geographically.

Among movers, the share that moved within the same county was 54.6 percent at ages 65 to 74 , 60.7 percent at ages 75 to 84 , and 65.6 percent at ages 85 and over (Table 4-8). This is consistent with the findings from the 2000 Census that, among the older populations, the oldest old were the most mobile, but they were the least
likely to have moved to a different state (He and Schachter, 2003).

The South and West both had net gains from migration of older people (42,000 and 11,000, respectively). ${ }^{8}$ Regional net migration flows of older migrants in 2010 were not statistically different than those of migrants under age 65, with one exception-the West had a net gain of older migrants but a net loss of younger migrants (Figure 4-15). The South had a net migration gain of nearly 300,000 people under age 65, while the

[^71]other three regions all had net migration losses for this age group.

Mover rates for the total population increased slightly in the 1970s and then remained largely unchanged to 2000 (Ihrke and Faber, 2012). The mover rates for the older population also followed this pattern. However, migration rates for all ages decreased post 2000 compared with the 1990s, especially interstate moves (Frey, 2009). In fact, the 5 -year mover rate for 2010 reached the lowest level since the CPS started asking the question in 1975 (Ihrke and Faber, 2012). It appears that economic mobility, the long-standing stimulus for the U.S. population to move-for better jobs, housing, and liveshas been particularly affected by the recent recession and housing market crash (Frey, 2011). Research also pointed out that geographic and occupational mobility may be diminishing because of the homogenized economy and that education rather than geographic mobility is increasingly important for economic advancement (Ferrie, 2005 and 2012). These factors may have contributed to the slowdown in the migration of younger population groups. The normal retirement uptick in interstate migration for the population aged 60 to 64 disappeared in 2008-2009 according to CPS data (Frey, 2009).

## Reasons for Moving by Age

Reasons for moving at various age groups are shown in Table 4-9. They differ for the 55-to-64 population and the 65-and-older population. For those aged 55 to 64, the primary reason for moving was often related to housing (14.0 percent moved to get a new or better home/apartment, 12.9 percent moved for cheaper housing, and

Figure 4-15.
Net Migration for Regions by Age: 2009-2010
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


Source: U.S. Census Bureau, 2011 b; American Community Survey, 2010.

Table 4-9.
Primary Reason for Moving by Age: 2009 to 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)

| Reason for moving | Age |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 and over | $\begin{array}{r} 55 \text { to } \\ 64 \end{array}$ | 65 and over | 85 and over |
| Total movers | 100.0 | 100.0 | 100.0 | 100.0 |
| Family-Related Reasons |  |  |  |  |
| Change in marital status . | 7.3 | 7.3 | 4.5 | 0.9 |
| To establish own household. | 11.2 | 5.1 | 5.9 | 5.5 |
| Other family reason. | 11.7 | 12.2 | 17.0 | 19.3 |
| Work-Related Reasons |  |  |  |  |
| New job or job transfer. | 7.8 | 7.1 | 1.5 | 2.1 |
| To look for work or lost job. | 2.6 | 2.9 | 1.5 | 2.0 |
| To be closer to work/easier commute | 4.2 | 3.4 | 3.1 | 0.1 |
| Retired. | 0.5 | 2.3 | 8.8 | 14.0 |
| Other job related reason | 1.3 | 1.0 | 0.8 | 0.0 |
| Housing-Related Reasons |  |  |  |  |
| Wanted own home, not rent. | 4.6 | 4.4 | 1.4 | 1.6 |
| Wanted new or better home/apartment. | 15.4 | 14.0 | 8.1 | 4.1 |
| Wanted better neighborhood/less crime | 4.1 | 4.3 | 4.8 | 2.0 |
| Wanted cheaper housing. | 10.8 | 12.9 | 9.9 | 5.2 |
| Other housing reason | 8.7 | 10.5 | 11.1 | 9.3 |
| Other Reasons |  |  |  |  |
| To attend or leave college | 2.7 | 0.6 | 0.0 | 0.0 |
| Change of climate. | 0.6 | 2.1 | 1.8 | 0.0 |
| Health reasons | 1.5 | 6.0 | 14.5 | 29.8 |
| Natural disaster | 0.3 | 0.1 | 0.1 | 0.0 |
| Other reasons | 4.4 | 4.0 | 5.2 | 4.1 |

Source: U.S. Census Bureau, 2011c; Current Population Survey, Annual Social and Economic Supplement (ASEC), 2010.
10.5 percent for other housing reasons). ${ }^{9}$ Meanwhile, for those aged 65 and over, the primary reason for moving was health related ( 14.5 percent), along with an "other" category ( 17.0 percent, "other family reason"). Health stood out as the top reason for those 85 and older ( 29.5 percent). ${ }^{10}$ These findings are consistent with studies showing that declines in functional health and increases

[^72]in disability increase the chances that an older person will relocate (Stoller and Longino, 2001; Conway and Rork, 2010). ${ }^{11}$

The older population moves for reasons other than health as well, including retirement. Between 2009 and 2010, 8.8 percent of movers aged 65 and older changed residence because of retirement,

[^73]compared with 2.3 percent of movers aged 55 to 64 . Wanting to move to less expensive housing was also an important reason for older movers ( 9.9 percent). "Other family reasons," a category that might include the loss of a spouse or a move to be closer to other family members, accounted for 17.0 percent of older movers. Research on the older population's domestic migration often shows that older parents want to move closer to their children (Silverstein and Angelelli, 1998). Preferences to live in a more temperate climate may also contribute to the net migration of the older population to the sunbelt areas of the South and West (Figure 4-15).

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## Chapter 5. Social and Other Characteristics

Social-demographic characteristics of the older population, such as marital status, living arrangements, and educational attainment, influence their physical and mental health and rates of institutionalization. This chapter discusses these characteristics, including the older population's nursing-home residency. Other characteristics, such as nativity, language spoken at home, veteran status, voting patterns, and Internet use, are examined as well.

## Marital Status

Marital Status Differentials by Sex

In 2010, 71.7 percent of men aged 65 and over were married and living with their spouse, notably higher than the corresponding share among older women (42.4 percent; Table 5-1). Conversely, a higher percentage of women aged 65 and over were widowed (39.9 percent) compared with the share among older men (12.7 percent). Differences in marital status by sex could be accounted for by various factors, including men's higher
mortality, their tendency to marry slightly younger women, and their greater likelihood to remarry.

Regardless of the differences by sex, the percentages of both older widows and older widowers rise with age. Among women aged 75 and older in 2010, the share of widows was 56.9 percent, more than double the share ( 24.0 percent) among women aged 65 to 74. The proportion of widowers among men aged 75 and over (21.2 percent) was more than three times that among men aged 65 to 74 (6.4 percent).

Table 5-1.
Marital Status of the Population Aged 65 and Over by Age and Sex: 1960 to 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)

| Age and year | Male |  |  |  |  |  | Female |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Never married | Married, spouse present | Married, spouse absent ${ }^{1}$ | Widowed | Divorced | Total | Never married | Married, spouse present | Married, spouse absent ${ }^{1}$ | Widowed | Divorced |
| 65 and Over |  |  |  |  |  |  |  |  |  |  |  |  |
| 1960. | 100.0 | 7.1 | 69.8 | 2.7 | 18.8 | 1.6 | 100.0 | 8.5 | 35.3 | 1.8 | 52.9 | 1.5 |
| 1970. | 100.0 | 7.8 | 68.4 | 3.4 | 18.1 | 2.4 | 100.0 | 7.7 | 33.7 | 1.8 | 54.6 | 2.3 |
| 1980. | 100.0 | 5.1 | 75.5 | 2.0 | 13.6 | 3.7 | 100.0 | 5.9 | 38.0 | 1.7 | 51.0 | 3.4 |
| 1990. | 100.0 | 4.2 | 74.2 | 2.3 | 14.2 | 5.0 | 100.0 | 4.9 | 39.7 | 1.7 | 48.6 | 5.1 |
| 2000. | 100.0 | 4.2 | 72.6 | 2.6 | 14.4 | 6.1 | 100.0 | 3.6 | 41.3 | 2.5 | 45.3 | 7.2 |
| 2010. | 100.0 | 4.1 | 71.7 | 2.8 | 12.7 | 8.7 | 100.0 | 4.5 | 42.4 | 2.1 | 39.9 | 11.1 |
| 65 to 74 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1960. | 100.0 | 6.7 | 76.2 | 2.7 | 12.7 | 1.7 | 100.0 | 8.4 | 43.5 | 2.1 | 44.4 | 1.7 |
| 1970. | 100.0 | 8.5 | 74.6 | 3.0 | 11.0 | 2.9 | 100.0 | 7.9 | 43.8 | 1.6 | 43.7 | 3.0 |
| 1980. | 100.0 | 5.4 | 79.4 | 2.2 | 8.5 | 4.4 | 100.0 | 5.6 | 48.1 | 2.0 | 40.3 | 4.0 |
| 1990. | 100.0 | 4.7 | 78.2 | 2.0 | 9.1 | 6.0 | 100.0 | 4.6 | 51.1 | 2.1 | 36.1 | 6.2 |
| 2000. | 100.0 | 4.3 | 76.7 | 3.0 | 8.3 | 7.8 | 100.0 | 3.7 | 52.9 | 2.7 | 31.3 | 9.3 |
| 2010. | 100.0 | 4.5 | 75.2 | 2.8 | 6.4 | 11.0 | 100.0 | 5.1 | 53.8 | 2.2 | 24.0 | 15.0 |
| 75 and Over |  |  |  |  |  |  |  |  |  |  |  |  |
| 1960. | 100.0 | 7.8 | 56.5 | 2.6 | 31.6 | 1.5 | 100.0 | 8.6 | 20.6 | 1.2 | 68.3 | 1.2 |
| 1970. | 100.0 | 6.6 | 57.5 | 4.0 | 30.4 | 1.5 | 100.0 | 7.4 | 18.9 | 1.9 | 70.5 | 1.3 |
| 1980. | 100.0 | 4.4 | 67.7 | 1.7 | 24.0 | 2.2 | 100.0 | 6.4 | 22.1 | 1.2 | 68.0 | 2.3 |
| 1990. | 100.0 | 3.4 | 67.0 | 2.9 | 23.7 | 3.1 | 100.0 | 5.4 | 24.2 | 1.2 | 65.6 | 3.6 |
| 2000. | 100.0 | 4.1 | 67.1 | 2.3 | 22.7 | 3.9 | 100.0 | 3.5 | 28.8 | 2.4 | 60.5 | 4.9 |
| 2010. ........ | 100.0 | 3.5 | 66.9 | 2.8 | 21.2 | 5.6 | 100.0 | 3.9 | 30.4 | 1.9 | 56.9 | 7.0 |

[^74]
## Decline in Widowhood

Marital status patterns have changed over time. The percentage of older men and women who were widowed declined between 1960 and 2010, with a consistently higher proportion of widowed women than men (Figure 5-1). The percentage of widowed men aged 65 and over has declined from 18.8 percent in 1960 to 12.7 percent in 2010. Widowhood also declined among older women. In 1960, about half of women aged 65 and over were widows ( 52.9 percent), and this proportion decreased to 39.9 percent by 2010 . The difference in the proportion widowed between women and men widened from 1960 to 1980 and then narrowed from 1980 to 2010 (Figure 5-1).

Among the older population, the younger-old had the steepest percentage decline in the proportion who were widowed. Among those aged 65 to 74 , the proportion widowed declined nearly 50 percent from 1960 to 2010 for both men (from 12.7 percent to 6.4 percent) and women (from 44.4 percent to 24.0 percent), notably proportionally larger than the decline for those aged 75 and above (Table 5-1). Among women aged 75 and above, widowhood declined by less than one-fifth, while men aged 75 and above experienced a larger proportional decline of nearly one-third.

Two factors may have contributed to the decline in percentages of widowhood. The first is the rise in divorce. As divorce has become
increasingly common among the younger old, the percentage of widows has declined at older ages (Table 5-1). For instance, among men aged 65 to 74 , the percentage divorced increased by 9 percentage points between 1960 and 2010 (from 1.7 to 11.0 percent), while the percentage widowed fell by more than 6 percentage points (from 12.7 to 6.4 percent). In addition, among women aged 65 to 74 , the percentage widowed fell by 20 percentage points between 1960 and 2010 (from 44.4 to 24.0), which was partially offset by a more than 13 percentagepoint increase in those divorced (from 1.7 percent to 15.0 percent). Another explanation for the decline in widowhood is increased longevity. Longer life expectancy among

Figure 5-1.
Widowed Among the Population Aged 65 and Over by Sex: 1960 to 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see
www.census.gov/cps/methodology/)


Note: The reference population of the survey is the civilian noninstitutionalized population.
Sources: 1960 U.S. Bureau of the Census, 1960; 1970, U.S. Bureau of the Census, 1971; 1980, U.S. Bureau of the Census, 1981; 1990, U.S. Bureau of the Census, 1991; 2000, U.S. Census Bureau, 2000; 2010, U.S. Census Bureau, 2010; all years, Current Population Survey, Annual Social and Economic Supplement (ASEC).
men and women increases the likelihood that both spouses will survive together. In contrast to the impact of divorce, this dynamic is most evident among those aged 75 and older, where the percentage decline in widowhood for women is closely offset by the percentage increase in those married and living with their spouse.

## Rise in Divorce Rates

Divorce rates-the number of persons divorced per 1,000 married persons-among older men and women have been noticeably increasing over the past decades. In contrast to the declining overall divorce rate since the 1980s (Amato, 2010), the divorce rate among the population aged 65 and over rose from 1.8 in 1990 to 4.8 in 2010 (Brown and Lin, 2012). Divorce rates also increased among the population aged 50 to 64, rising from 6.9 in 1990 to 13.1 in 2010. One in 4 persons who divorced in 2010 was aged 50 or over compared with just 1 in 10 in 1990. The divorce rate may continue to rise among the older population as remarriages, which are more likely than first marriages to end through divorce, become a larger share of all marriages.
Older men are more likely to be currently married and less likely to be divorced than older women (Table 5-1). One potential reason for the gender gap is that men remarry more often than women after being divorced (Kreider, 2006).

## Impact of Widowhood and Divorce on Health

Widows, widowers, and divorcees tend to experience negative outcomes following their marital
disruption. Research shows that those divorced or widowed had worse health than their currently married counterparts-as measured by their increased disability, lower self-rated health, and worse cognitive functioning (Hakansson, et al., 2009; Hughes and Waite, 2009; Liu and Umberson, 2008). Widows and widowers report more loneliness, less satisfaction with life, and less optimism compared with people currently married (Ben-Zur, 2012). Furthermore, older people, men in particular, are more likely to enter a nursing home after becoming widowers (Noel-Miller, 2010). One option for reducing the risk of negative outcomes for widows and widowers is increased social participation, such as volunteering (Donnelly and Hinterlong, 2009).

Marital disruption is associated with an increased risk of mortality for the older population. The risk of death is lower for older people who are married than for widows, widowers, and divorcees, reflecting a marriage-related protective influence (Manzoli et al., 2007). However, Eaker et al. (2007) found that women who kept their feelings to themselves during marital conflict were four times more likely to die over a 10-year period than women who did not. The mortality risk of spousal bereavement is greater for men than for women, although the sex difference dissipates as age increases (Shor et al., 2012).

## Variation in Marital Status by Race and Hispanic Origin

Marital status patterns vary across racial and Hispanic-origin groups. ${ }^{1}$

[^75]According to 2010 American Community Survey (ACS) data, a higher proportion of the older Asian alone population was married (61.3 percent) than their White alone ( 56.0 percent) or Black alone (35.3 percent) counterparts (Table 5-2). On the other hand, a higher percentage of the older Black alone population was widowed or divorced (35.0 percent and 16.6 percent, respectively) than the older White alone population (28.1 percent and 10.8 percent, respectively) or the older Asian alone population ( 27.2 percent and 5.9 percent, respectively). For all race groups, older men were more likely than older women to be married, while older women were more likely to be widowed or divorced. For example, among the older Asian alone population, 80.3 percent of men were married, compared with 47.0 percent of women, while 40.2 percent of women were widows, compared with 9.9 percent of men who were widowers.

A slightly higher proportion of older Hispanics was currently divorced (12.8 percent), compared with the older non-Hispanic popuIation (11.1 percent; Table 5-2). On the other hand, a lower proportion of older Hispanics (49.8 percent) was married, compared with older non-Hispanics (54.6 percent). One explanation for this difference may be that older Hispanics are less likely to be among the oldestold, where divorce rates tend to be lower. In any case, for both Hispanics and non-Hispanics, the share of older women who were widowed was more than three times the share of older men, and men were more likely than women to be married.

Table 5-2.

## Marital Status of the Population Aged 65 and Over by Race and Hispanic Origin: 2010

(In percent. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)

| Race, Hispanic origin, and marital status | Total | Male | Female |
| :---: | :---: | :---: | :---: |
| Total population | 100.0 | 100.0 | 100.0 |
| Married . . . . . . . | 54.2 | 70.9 | 41.6 |
| Widowed | 28.6 | 13.1 | 40.4 |
| Divorced | 11.2 | 9.9 | 12.3 |
| Separated | 1.2 | 1.3 | 1.0 |
| Never married | 4.7 | 4.7 | 4.7 |
| Race |  |  |  |
| White alone | 100.0 | 100.0 | 100.0 |
| Married | 56.0 | 72.3 | 43.5 |
| Widowed | 28.1 | 12.9 | 39.8 |
| Divorced | 10.8 | 9.5 | 11.8 |
| Separated | 0.8 | 0.9 | 0.7 |
| Never married | 4.2 | 4.4 | 4.1 |
| Black or African American alone | 100.0 | 100.0 | 100.0 |
| Married | 35.3 | 54.1 | 23.3 |
| Widowed | 35.0 | 17.2 | 46.4 |
| Divorced | 16.6 | 15.0 | 17.6 |
| Separated | 4.0 | 4.9 | 3.4 |
| Never married | 9.2 | 8.7 | 9.4 |
| Asian alone | 100.0 | 100.0 | 100.0 |
| Married | 61.3 | 80.3 | 47.0 |
| Widowed | 27.2 | 9.9 | 40.2 |
| Divorced | 5.9 | 4.8 | 6.7 |
| Separated | 1.7 | 1.7 | 1.7 |
| Never married | 4.0 | 3.3 | 4.5 |
| Hispanic or Latino Origin |  |  |  |
| Hispanic or Latino | 100.0 | 100.0 | 100.0 |
| Married | 49.8 | 67.9 | 36.5 |
| Widowed | 27.1 | 12.4 | 37.8 |
| Divorced | 12.8 | 10.7 | 14.4 |
| Separated | 3.4 | 3.3 | 3.4 |
| Never married | 6.9 | 5.7 | 7.8 |
| Not Hispanic or Latino . | 100.0 | 100.0 | 100.0 |
| Married | 54.6 | 71.2 | 41.9 |
| Widowed | 28.8 | 13.2 | 40.6 |
| Divorced | 11.1 | 9.8 | 12.1 |
| Separated . | 1.0 | 1.2 | 0.9 |
| Never married . . . . . . . . . . . . . . . . . . . . | 4.6 | 4.7 | 4.5 |

Source: U.S. Census Bureau, 2012a; American Community Survey, 2010, 1-year estimates.

## Living Situations

According to the 2010 Census, 96.4 percent of the population aged 65 and over lived in households, while 3.6 percent resided in group quarters (U.S. Census Bureau, 2011a). The overwhelming majority of the 65 and older group quarters population were residing in skilled-nursing facilities ( 85.9 percent). As age increased among the older population, the share residing in group quarters rose. For the 85 and older population, 87.4 percent resided in households and 12.6 percent lived in group quarters.

## Differences in Living

Arrangements by Sex
An older person's living arrangement is closely related to his or her marital status. The higher widowhood among older women contributes to sharp gender differences in older people's living situations. In 2010, 11.0 million or 28.3 percent of the household population aged 65 and older lived alone (Table $5-3) .{ }^{2}$ Out of the total living alone, 71.2 percent were women and 28.8 percent were men. Among men 65 and older, 18.8 percent lived alone, and 35.7 percent of older women lived alone.

[^76]Table 5-3.

## Living Arrangements of the Household Population Aged 65 and Over: 2010

(Numbers in thousands. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Age and living arrangement | Total |  | Male |  | Female |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent |
| 65 and over | 38,810 | 100.0 | 16,909 | 100.0 | 21,901 | 100.0 |
| Alone . | 10,996 | 28.3 | 3,172 | 18.8 | 7,824 | 35.7 |
| With spouse only. | 16,808 | 43.3 | 9,332 | 55.2 | 7,476 | 34.1 |
| With spouse and other relatives or nonrelatives | 5,174 | 13.3 | 2,631 | 15.6 | 2,544 | 11.6 |
| With other relatives (no spouse) ${ }^{1}$. | 4,520 | 11.6 | 1,122 | 6.6 | 3,398 | 15.5 |
| With nonrelatives only | 1,312 | 3.4 | 653 | 3.9 | 659 | 3.0 |
| 65 to 74 | 21,429 | 100.0 | 9,952 | 100.0 | 11,477 | 100.0 |
| Alone . | 4,635 | 21.6 | 1,591 | 16.0 | 3,043 | 26.5 |
| With spouse only | 10,521 | 49.1 | 5,583 | 56.1 | 4,938 | 43.0 |
| With spouse and other relatives or nonrelatives | 3,236 | 15.1 | 1,742 | 17.5 | 1,494 | 13.0 |
| With other relatives (no spouse) ${ }^{1}$. | 2,212 | 10.3 | 604 | 6.1 | 1,608 | 14.0 |
| With nonrelatives only | 826 | 3.9 | 432 | 4.3 | 393 | 3.4 |
| 75 to 84 | 12,581 | 100.0 | 5,315 | 100.0 | 7,265 | 100.0 |
| Alone . | 4,045 | 32.2 | 1,060 | 20.0 | 2,985 | 41.1 |
| With spouse only. | 5,192 | 41.3 | 3,023 | 56.9 | 2,169 | 29.9 |
| With spouse and other relatives or nonrelatives | 1,440 | 11.4 | 705 | 13.3 | 735 | 10.1 |
| With other relatives (no spouse) ${ }^{1}$. | 1,555 | 12.4 | 357 | 6.7 | 1,198 | 16.5 |
| With nonrelatives only | 349 | 2.8 | 170 | 3.2 | 179 | 2.5 |
| 85 and over | 4,800 | 100.0 | 1,642 | 100.0 | 3,158 | 100.0 |
| Alone . | 2,315 | 48.2 | 520 | 31.7 | 1,796 | 56.9 |
| With spouse only. | 1,095 | 22.8 | 726 | 44.2 | 369 | 11.7 |
| With spouse and other relatives or nonrelatives | 499 | 10.4 | 184 | 11.2 | 315 | 10.0 |
| With other relatives (no spouse) ${ }^{1}$. | 754 | 15.7 | 162 | 9.8 | 593 | 18.8 |
| With nonrelatives only . | 137 | 2.8 | 50 | 3.1 | 86 | 2.7 |

[^77]On the other hand, older men are more likely than their female counterparts to live with their spouse and other relatives. In 2010, 70.8 percent of men aged 65 and older lived with their spouse, compared with 45.7 percent of women (Table 5-3). Women were more likely to live with other relatives (no spouse) than were men (15.5 percent versus 6.6 percent). Among those aged 85 and over, more than half of men lived with their spouse and other relatives compared with one-fifth of women. Far more oldest-old women were living alone ( 1.8 million) than were living in other arrangements-living with
their spouse $(684,000)$ or with others who did not include their spouse $(679,000)$

Trends in Living Alone by Age and Sex

As age increases, the percentage of the population living alone also increases. The proportions of women living alone were 18.6 percent at ages 55 to 64, 26.4 percent at ages 65 to $74,39.0$ percent at ages 75 to 84 , and 47.6 percent at ages 85 to 94 (Figure 5-2). The corresponding figures for men were 15.4 percent, 15.6 percent, 19.1 percent, and 27.2 percent. For the population aged 95 and over, the
proportion of women living alone declined to 36.8 percent, while for men it continued to rise, reaching 33.4 percent.

The proportions of older men and women who live alone show different patterns of change over time. Based on both the institutionalized and noninstitutionalized population, the proportion of older women living alone declined from 39.8 percent in 2000 to 34.2 percent in 2010 (U.S. Census Bureau, 2001; U.S. Census Bureau, 2011a). Conversely, the proportion of older men rose from 15.7 percent in 2000 to 18.3 percent in 2010.

Figure 5-2.


Source: U.S. Census Bureau, 2012 a; American Community Survey, 2010, 1-year estimates.

These trends could partially be due to the change in marital patterns that was discussed earlier in this chapter, particularly the declines in widowhood for both older men and women.

While living alone may be considered desirable by some older people because of the independence it offers, older people living alone are more vulnerable due to limited resources, difficult living situations, and a lack of support (Haslbeck, McCorkle, and Schaeffer, 2012). They are also more likely to suffer from poor health and to experience depression, especially women aged 85 and over (Lin and Wang, 2011; Russell, 2009; Xiu-Ying et al., 2012). Furthermore, those living alone are at high risk of moving
into a long-term care facility (Cai, Salmon, and Rodgers, 2009; Nihtila and Martikainen, 2008). The gender difference in the proportion living alone suggests that more women than men are likely to suffer the negative impacts of living alone.

## Living Alone by State and Region

The proportion of the population aged 65 and older living alone differed among states, with the lowest proportion in Hawaii (18.9 percent) and the highest in the District of Columbia ( 37.7 percent; Figure $5-3) .{ }^{3}$ Another five states had 30.0 percent or more of the older popu-

[^78]lation living alone (North Dakota, South Dakota, and Nebraska in the Midwest; and Massachusetts and Rhode Island in the Northeast). States with the lowest proportion living alone (less than 25 percent) were concentrated in the West.

## Household Size by Race and Hispanic Origin

In 2010, 25.8 million households were maintained by a person (householder) aged 65 or older (Table 5-4). ${ }^{4}$ Of this total, 11.0 million were one-person households, 11.5 million were two-person households, and the remaining

[^79]

Figure 5-3.

## Percentage State Population Aged 65 and Over

 Living Alone: 2010(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)


Source: U.S. Census Bureau, 2011 a; 2010 Census.

Table 5-4.
Household Size by Race and Hispanic Origin of Householder Aged 65 and Over: 2010
(Numbers in thousands. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)

| Race and Hispanic origin | Total households |  | Household size |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | One person |  | Two people |  | Three people |  | Four or more people |  |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total | 25,820 | 100.0 | 10,996 | 42.6 | 11,521 | 44.6 | 1,963 | 7.6 | 1,340 | 5.2 |
| Race |  |  |  |  |  |  |  |  |  |  |
| White alone | 22,136 | 100.0 | 9,520 | 43.0 | 10,258 | 46.3 | 1,504 | 6.8 | 853 | 3.9 |
| Black alone | 2,331 | 100.0 | 1,025 | 44.0 | 746 | 32.0 | 286 | 12.3 | 274 | 11.8 |
| American Indian and Alaska Native alone. | 137 | 100.0 | 51 | 37.1 | 51 | 37.0 | 16 | 11.7 | 20 | 14.3 |
| Asian alone | 624 | 100.0 | 189 | 30.4 | 267 | 42.9 | 80 | 12.8 | 87 | 14.0 |
| Native Hawaiian and Other Pacific Islander alone. | 16 | 100.0 | 4 | 26.7 | 5 | 34.9 | 2 | 13.5 | 4 | 25.0 |
| Some Other Race alone | 321 | 100.0 | 101 | 31.5 | 101 | 31.4 | 46 | 14.5 | 73 | 22.6 |
| Two or More Races | 255 | 100.0 | 105 | 41.1 | 93 | 36.5 | 28 | 10.9 | 29 | 11.5 |
| Hispanic or Latino Origin |  |  |  |  |  |  |  |  |  |  |
| Hispanic or Latino | 1,496 | 100.0 | 507 | 33.9 | 544 | 36.4 | 201 | 13.4 | 244 | 16.3 |
| Not Hispanic or Latino. | 24,324 | 100.0 | 10,489 | 43.1 | 10,977 | 45.1 | 1,762 | 7.2 | 1,096 | 4.5 |

Source: U.S. Census Bureau, 2012b; 2010 Census.
3.3 million households included three or more people. Like many characteristics, household size varies by race and Hispanic origin. Among the race groups, the Black alone and the White alone populations had the highest proportions who lived alone ( 44.0 percent and 43.0 percent, respectively), followed by the Two or More Races (41.1 percent), American Indian and Alaska Native alone (37.1 percent), Some Other Race alone (31.5 percent), Asian alone (30.4 percent), and Native Hawaiian and Other Pacific Islander alone (26.7 percent) populations. Overall, older Hispanic householders were less likely to live alone (33.9 percent) compared with non-Hispanic householders (43.1 percent).

Older householders who identified their race as Asian alone or Native Hawaiian and Other Pacific Islander alone had a substantially larger proportion of two-person households than one-person households (Table 5-4). The opposite was true for the Black alone and Two or More Races populations, among whom the proportion of older households with one person exceeded the proportion with two people.

Members of the older Native Hawaiian and Other Pacific Islander alone population and Some Other Race alone population were more likely than other race groups to live in larger households. In addition, a higher share of households maintained by an older Hispanic had three or more members compared with the non-Hispanic population
(29.7 percent and 11.7 percent, respectively). Differences in household size and living arrangements are attributed to a range of factors, including income, education, health, and cultural preferences. Research has documented a comeback of multigenerational family households and the higher likelihood of Hispanics, Blacks, and Asians than Whites to live in a multigenerational family household (Taylor et al., 2010). The relatively high level of familism, or a strong commitment to family life, and links between familism and traditional family patterns in Latin American and Caribbean-origin countries have played an important role in the higher proportion of Hispanics than non-Hispanic Whites and non-Hispanic Blacks to live in family households (Landal, Orepesa, and Bradatan, 2006).

## Institutions

Nursing homes, a part of the category referred to as "institutional group quarters" by the U.S. Census Bureau, provide skilled care, including 24-hour access to aides and skilled nurses. They are one of several types of settings for long-term care that also include residential care facilities and homeand community-based care. Older adults with comparatively fewer health needs, but who still need care, often live in residential care settings (e.g., assisted living facilities), which offer a more limited range of services than nursing homes. Other care options include long-term or respite care in the home provided by home health
aides and adult day care in community settings (Department of Health and Human Services, 2012). ${ }^{5}$

A number of factors are associated with nursing home residency for the older population. Nursing home residents are more likely to be relatively older among the 65 and over population. Additionally, nursing home residents often face health issues, such as cognitive impairments, depression, incontinence, and ADL dependency, at higher rates than those in other living arrangements (Braunseis et al., 2012; Drame et al., 2012; Gaugler et al., 2007; Waldorff, Siersma, and Waldermar, 2009). Nursing home residents have high rates of widowhood and frequently had been living alone prior to entering the nursing home (Noel-Miller, 2010; Wattmo et al., 2011).

In 2010, 1.25 million people aged 65 and over lived in nursing homes, a nearly 20 percent drop from the 1.56 million in 2000 (Table 5-5). The decline in the share of the 65 and over population living in nursing homes was also large, falling from 4.6 percent in 2000 to 3.1 percent in 2010 (U.S. Census Bureau, 2000; U.S. Census Bureau, 2011a). The downward trend started in the 1990s, with a 2.1 percent decrease in the nursing home population aged 65 and over from 1990 to 2000. The declining trend may partly reflect a growing preference for alternative settings for longterm care.

[^80]Table 5-5.
Population Aged 65 and Over Residing in a Nursing Home by Region and State: 1980 to 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Region and state | Number |  |  |  | Percent change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 | 1990 | 2000 | 2010 | 1980 to 1990 | 1990 to 2000 | 2000 to 2010 |
| United States. . | 1,232,958 | 1,590,763 | 1,557,800 | 1,252,635 | 29.0 | -2.1 | -19.6 |
| Northeast. | 289,740 | 362,058 | 373,921 | 297,844 | 25.0 | 3.3 | -20.3 |
| Connecticut | 23,477 | 27,683 | 29,189 | 22,415 | 17.9 | 5.4 | -23.2 |
| Maine | 8,481 | 9,194 | 8,618 | 7,007 | 8.4 | -6.3 | -18.7 |
| Massachusetts. | 43,930 | 50,852 | 50,962 | 38,257 | 15.8 | 0.2 | -24.9 |
| New Hampshire | 5,964 | 7,741 | 8,917 | 7,098 | 29.8 | 15.2 | -20.4 |
| New Jersey | 30,332 | 42,883 | 46,773 | 38,394 | 41.4 | 9.1 | -17.9 |
| New York | 101,050 | 111,901 | 111,156 | 96,493 | 10.7 | -0.7 | -13.2 |
| Pennsylvania | 65,307 | 97,871 | 105,836 | 77,416 | 49.9 | 8.1 | -26.9 |
| Rhode Island | 7,337 | 9,534 | 8,674 | 7,451 | 29.9 | -9.0 | -14.1 |
| Vermont | 3,862 | 4,399 | 3,796 | 3,313 | 13.9 | -13.7 | -12.7 |
| Midwest. | 406,813 | 490,434 | 459,116 | 361,404 | 20.6 | -6.4 | -21.3 |
| Illinois. | 66,014 | 82,422 | 80,765 | 60,917 | 24.9 | -2.0 | -24.6 |
| Indiana. | 34,288 | 45,375 | 44,402 | 35,316 | 32.3 | -2.1 | -20.5 |
| lowa | 31,199 | 33,429 | 31,399 | 23,796 | 7.1 | -6.1 | -24.2 |
| Kansas. | 21,017 | 24,004 | 23,637 | 18,053 | 14.2 | -1.5 | -23.6 |
| Michigan. | 46,562 | 51,605 | 46,025 | 36,518 | 10.8 | -10.8 | -20.7 |
| Minnesota | 40,316 | 43,475 | 37,542 | 29,703 | 7.8 | -13.6 | -20.9 |
| Missouri . | 33,636 | 46,844 | 44,198 | 36,732 | 39.3 | -5.6 | -16.9 |
| Nebraska | 15,847 | 17,698 | 15,093 | 11,977 | 11.7 | -14.7 | -20.6 |
| North Dakota | 6,578 | 7,459 | 6,749 | 5,833 | 13.4 | -9.5 | -13.6 |
| Ohio. | 62,343 | 84,081 | 83,854 | 67,003 | 34.9 | -0.3 | -20.1 |
| South Dakota | 7,306 | 8,278 | 7,253 | 6,228 | 13.3 | -12.4 | -14.1 |
| Wisconsin. | 41,707 | 45,764 | 38,199 | 29,328 | 9.7 | -16.5 | -23.2 |
| South. | 340,153 | 498,340 | 520,512 | 424,094 | 46.5 | 4.4 | -18.5 |
| Alabama. | 16,539 | 21,965 | 24,318 | 19,844 | 32.8 | 10.7 | -18.4 |
| Arkansas | 15,232 | 19,117 | 19,135 | 15,939 | 25.5 | 0.1 | -16.7 |
| Delaware | 2,534 | 4,330 | 4,405 | 3,824 | 70.9 | 1.7 | -13.2 |
| District of Columbia | 2,380 | 5,336 | 3,447 | 2,487 | 124.2 | -35.4 | -27.9 |
| Florida | 32,455 | 73,490 | 81,271 | 62,135 | 126.4 | 10.6 | -23.5 |
| Georgia | 24,954 | 32,645 | 31,289 | 28,379 | 30.8 | -4.2 | -9.3 |
| Kentucky | 19,817 | 24,436 | 26,198 | 22,041 | 23.3 | 7.2 | -15.9 |
| Louisiana | 18,786 | 27,934 | 27,034 | 19,667 | 48.7 | -3.2 | -27.3 |
| Maryland | 17,905 | 24,663 | 23,843 | 23,210 | 37.7 | -3.3 | -2.7 |
| Mississippi | 10,573 | 14,368 | 16,735 | 13,466 | 35.9 | 16.5 | -19.5 |
| North Carolina | 24,147 | 40,260 | 44,837 | 38,676 | 66.7 | 11.4 | -13.7 |
| Oklahoma. | 21,086 | 26,140 | 24,785 | 17,513 | 24.0 | -5.2 | -29.3 |
| South Carolina . | 10,063 | 16,009 | 19,080 | 16,425 | 59.1 | 19.2 | -13.9 |
| Tennessee | 20,083 | 31,678 | 33,584 | 28,261 | 57.7 | 6.0 | -15.8 |
| Texas | 77,791 | 91,942 | 94,905 | 77,552 | 18.2 | 3.2 | -18.3 |
| Virginia . | 20,253 | 32,947 | 35,154 | 26,142 | 62.7 | 6.7 | -25.6 |
| West Virginia | 5,555 | 11,080 | 10,492 | 8,533 | 99.5 | -5.3 | -18.7 |
| West | 196,252 | 239,931 | 204,251 | 169,293 | 22.3 | -14.9 | -17.1 |
| Alaska | 675 | 1,039 | 660 | 974 | 53.9 | -36.5 | 47.6 |
| Arizona. | 7,228 | 12,743 | 12,163 | 11,161 | 76.3 | -4.6 | -8.2 |
| California | 114,987 | 131,358 | 107,802 | 87,501 | 14.2 | -17.9 | -18.8 |
| Colorado | 13,519 | 16,696 | 16,708 | 14,594 | 23.5 | 0.1 | -12.7 |
| Hawaii | 2,563 | 2,769 | 2,617 | 4,064 | 8.0 | -5.5 | 55.3 |
| Idaho . | 4,427 | 5,798 | 5,275 | 4,003 | 31.0 | -9.0 | -24.1 |
| Montana. | 4,748 | 7,128 | 5,959 | 4,464 | 50.1 | -16.4 | -25.1 |
| Nevada. | 1,915 | 3,062 | 4,336 | 4,032 | 59.9 | 41.6 | -7.0 |
| New Mexico | 2,299 | 5,645 | 6,240 | 4,692 | 145.5 | 10.5 | -24.8 |
| Oregon. | 14,057 | 16,076 | 13,010 | 9,452 | 14.4 | -19.1 | -27.3 |
| Utah. . | 3,780 | 5,441 | 6,006 | 4,263 | 43.9 | 10.4 | -29.0 |
| Washington | 24,122 | 29,735 | 20,887 | 17,903 | 23.3 | -29.8 | -14.3 |
| Wyoming . . . . . . | 1,932 | 2,441 | 2,588 | 2,190 | 26.3 | 6.0 | -15.4 |

[^81]
## Long-Term Care Facility

Residence by Age, Sex, Race, and Hispanic Origin

Age and health needs play a large role in the choice of long-term care settings. As age increases, so does the share of older adults who live in more supportive housing, such as an assisted living facility or a nursing home (Figure 5-4). The vast majority ( 97.4 percent) of Medicare enrollees aged 65 to 74 lived in the traditional community (e.g., in their own home) compared with 77.8 percent of those aged 85 and over. Furthermore, older Medicare enrollees with more care needs tend to live in settings that provide a higher level of care
(Figure 5-5). The majority of older adults living in the traditional community had no functional limitations ( 61.0 percent), while only 8.1 percent had three or more ADL limitations. ${ }^{6}$ In contrast, the vast

[^82]majority of older adults in longterm care facilities ( 68.0 percent) had three or more ADL limitations, while only 5.2 percent had no functional limitations.

Figure 5-4.
Percentage Distribution of Medicare Enrollees Aged 65 and Over in Selected Residential Settings by Age Group: 2009


Note: Long-term care facilities are certified by Medicare or Medicaid; Community housing with services are residences that include a retirement community, continuing care retirement facility, assisted living facility, and other similar situations; and the traditional community is a regular residence. For additional information, see Federal Interagency Forum on Aging-Related Statistics, 2012.
Source: Federal Interagency Forum on Aging-Related Statistics, 2012.

Figure 5-5.

## Percentage Distribution of Medicare Enrollees Aged 65 and Over by Functional Limitation and Residential Setting: 2009



Notes: Long-term care facilities are certified by Medicare or Medicaid; Community housing with services are residences that include a retirement community, continuing care retirement facility, assisted living facility, and other similar situations; and the traditional community is a regular residence. Instrumental Activities of Daily Living (IADL) limitations refer to difficulty performing (or inability to perform, for a health reason) one or more of the following tasks: using the telephone, light housework, heavy housework, meal preparation, shopping, managing money. Only the questions on telephone use, shopping, and managing money are asked of long-term care facility residents. Activities of Daily Living (ADL) limitations refer to difficulty performing (or inability to perform, for a health reason) the following tasks: bathing, dressing, eating, getting in/out of chairs, toileting. Long-term care facility residents with no limitations may include individuals with limitations in certain IADLs such as doing light or heavy housework or meal preparation. For additional information, see Federal Interagency Forum on Aging-Related Statistics, 2012.
Source: Federal Interagency Forum on Aging-Related Statistics, 2012.

Just 3.1 percent of the population aged 65 and over lived in nursing homes in 2010 (Figure 5-6). However, the likelihood of nursing home residency increased sharply with age. Less than 1 percent of
the population aged 65 to 74 lived in a skilled nursing facility, compared with 3.2 percent for the age group 75 to $84,10.4$ percent for those aged 85 to 94 , and 24.7 percent for those aged 95 and over.

Among centenarians, the likelihood is about one in three ( 32.3 percent).

Comparing by sex, a higher share of women than men over the age of 65 lived in skilled nursing facilities ( 3.9 percent versus 2.1 percent; Figure 5-6). For those aged 65 to 74 , an equal share of older women and men lived in nursing homes ( 0.9 percent), but there were differences at ages 75 and over. Sex differences in nursing home residency widened with advancing age, with the greatest differences among those aged 100 and over ( 35.2 percent of women versus 18.2 percent of men).

The proportion of the older population living in nursing homes varies by race and Hispanic origin (Figure 5-7). Among older women, White alone and Black alone each had 4.1 percent living in nursing homes. For older men, the Black alone population had the highest proportion (3.5 percent), followed by Native Hawaiian and Other Pacific Islander alone (2.3 percent), and White alone ( 2.0 percent). The lowest percentage for men was found among Asian alone ( 0.9 percent). A higher share of older non-Hispanics lived in a nursing home than older Hispanics, with a much higher differential for older women ( 4.0 percent and 1.9 percent, respectively) than older men (2.1 percent and 1.6 percent, respectively).

Figure 5-6.
Nursing Home Population Aged 65 and Over by Age and Sex: 2010
(In percent. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)


Source: Werner, 2011; 2010 Census.

Figure 5-7.
Nursing Home Population Aged 65 and Over by Sex, Race, and Hispanic Origin: 2010
(In percent. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)


[^83]While the number and percentage of the older population residing in nursing homes declined from 2000 to 2010, the number and percentage of Hispanics and all race groups except White increased in these settings. Research from a national study on nursing homes shows that between 1999 and 2008, the number of older Hispanics and Asians living in nursing homes grew by 54.9 percent and 54.1 percent, respectively, while the number of older nonHispanic Black residents increased 10.8 percent, and the number of non-Hispanic White nursing home
residents declined by 10.2 percent (Feng et al., 2011).

## Nursing Home Residency for States and Regions

Figure 5-8 shows the state-to-state variations in the proportion residing in nursing homes among the 65 -and-over population in 2010. The percentage residing in nursing homes ranged from 1.2 percent in Nevada to 6.0 percent in North Dakota. The Midwest had the highest number of states ( 9 states) with at least 4 percent of the older population residing in nursing homes, whereas 6 out of the 7 states with
the lowest shares residing in nursing homes (less than 2.0 percent) were in the West.

The trend in nursing home residency varied across regions and states. By region, the Midwest saw the largest percentage decrease in residency from 2000 to 2010 (-21.3 percent), followed by the Northeast ( -20.3 percent), the South ( -18.5 percent), and the West ( -17.1 percent; Table 5-5). The state experiencing the largest percentage decline between 2000 and 2010 was Oklahoma (-29.3 percent), followed by Utah (-29.0 percent).


The only states with increases in the population aged 65 and over residing in nursing homes were Hawaii (55.3 percent) and Alaska (47.6 percent).

## Educational Attainment

## Trends of Educational Attainment by Sex

The educational attainment of the U.S. older population has been increasing for each successive generation of men and women (Figure $5-9$ ). In 1950, 15.3 percent of older men had completed at least 4 years of high school compared with 78.9
percent in $2010 .{ }^{7}$ Furthermore, the percentage of older men completing 4 years of college or more increased from 4.1 percent in 1950 to 27.4 percent in 2010 . Older women also experienced a sharp increase from 1950 to 2010 in both the percentage completing at least 4 years of high school (from 18.5 percent to 77.1 percent) and those who completed 4 or more years of college (from 2.9 percent to 16.8 percent).

[^84]A higher share of older women than men had a high school education between 1950 and 1980, with differences converging to the point of equal proportions in 1990 and 2000 (Figure 5-9). In 2010, a slightly higher proportion of men than women had graduated from high school ( 78.9 percent versus 77.1 percent).

While rates of high school education among older men and women have converged over time, differences in the percentage of older men and women who completed 4 years of college or more have widened. A higher proportion of older men than women had a bachelor's

Figure 5-9.

## Educational Attainment of the Population Aged 65 and Over by Sex:

 1950 to 2010(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


Sources: 1950, U.S. Bureau of the Census, 1953;1960, U.S. Bureau of the Census, 1963; 1970, U.S. Bureau of the Census, 1973 ; 1980, U.S. Bureau of the Census, 1983; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, 2011 b; 1950 to 2000, decennial census; 2010, American Community Survey, 1-year estimates.
degree or higher in 1950, and the difference remained stable until 1970 but started to diverge since 1980 (Figure 5-9). The wider differential between older men and older women in college-level education since 1980 may be attributed to the educational opportunities afforded by the Servicemen's Readjustment Act of 1944 (the GI Bill of Rights). The GI Bill was designed to help veterans return to civilian life after World War II, providing them with educational benefits such as tuition waivers and living allowances to pursue their education. ${ }^{8}$ By July 25, 1956, when the original GI Bill

[^85]ended, 7.8 million out of 16 milIion World War II veterans received some education or participated in a training program (Department of Veterans Affairs, 2010). Because many more men than women served in the military during World War II (see "Veterans" section later in this chapter), more men than women would have benefited from this educational opportunity. Many of these beneficiaries turned 65 in the 1980s.

The widening gap may have also been due in part to the cohorts of women who married young and started families in the period from the early 1950s to the 1960s and
did not achieve higher levels of education.

## Educational Attainment by Race and Hispanic Origin

Educational attainment among the population aged 65 and over also varied by race and Hispanic origin (Figure 5-10 and Table 5-6). Eight out of 10 ( 80.7 percent) of the older White alone population had a high school diploma or higher in 2010. They were followed by the older Native Hawaiian and Other Pacific Islander alone (70.8 percent), Two or More Races (69.9 percent), Asian alone (68.5 percent), Black alone (62.5 percent), American Indian and Alaska Native

Figure 5-10.
Educational Attainment of the Population Aged 65 and Over by Race and Hispanic Origin: 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


Source: U.S. Census Bureau, 2012 a; American Community Survey, 2010, 1-year estimates.

Table 5-6.

## Educational Attainment of the Population Aged 65 and Over by Race and Hispanic Origin: 2010

(Numbers in thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)

| Race and Hispanic origin | Number |  |  |  |  | Percent |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{array}{r} \text { Less } \\ \text { than } \\ \text { high } \\ \text { school } \end{array}$ | High school diploma or equivalent | Some college ${ }^{1}$ | Bachelor's degree or more | Total | $\begin{array}{r} \text { Less } \\ \text { than } \\ \text { high } \\ \text { school } \\ \hline \end{array}$ | High school diploma or equivalent | Some college ${ }^{1}$ | Bachelor's degree or more |
| Race |  |  |  |  |  |  |  |  |  |  |
| White alone | 34,396 | 6,639 | 12,241 | 7,908 | 7,608 | 100.0 | 19.3 | 35.6 | 23.0 | 22.1 |
| Black alone | 3,441 | 1,290 | 1,058 | 663 | 430 | 100.0 | 37.5 | 30.8 | 19.3 | 12.5 |
| America Indian and Alaska Native alone | 186 | 71 | 50 | 42 | 22 | 100.0 | 38.1 | 27.1 | 22.6 | 12.1 |
| Asian alone | 1,413 | 445 | 301 | 210 | 457 | 100.0 | 31.5 | 21.3 | 14.9 | 32.3 |
| Native Hawaiian and Other Pacific Islander alone | 27 | 8 | 11 | 5 | 3 | 100.0 | 29.2 | 40.5 | 18.8 | 11.6 |
| Some Other Race alone | 583 | 382 | 111 | 57 | 33 | 100.0 | 65.6 | 19.1 | 9.8 | 5.6 |
| Two or More Races | 388 | 117 | 102 | 95 | 74 | 100.0 | 30.1 | 26.3 | 24.5 | 19.0 |
| Hispanic or Latino Origin |  |  |  |  |  |  |  |  |  |  |
| Hispanic or Latino . . | 2,808 | 1,565 | 604 | 381 | 258 | 100.0 | 55.7 | 21.5 | 13.6 | 9.2 |
| Not Hispanic or Latino. | 37,625 | 7,386 | 13,271 | 8,599 | 8,369 | 100.0 | 19.6 | 35.3 | 22.9 | 22.2 |

[^86]alone (61.9 percent), and Some Other Race alone (34.4 percent) populations. The older Asian alone population had the highest proportion with a bachelor's degree or higher (32.3 percent). Some Other Race alone stood out in its proportion with less than a high school education (65.6 percent), the highest among all race groups.

In 2010, the proportion of older Hispanics who had completed a bachelor's degree or more (9.2 percent) was about half the proportion of older non-Hispanics (22.2 percent). A higher percentage of the older Hispanic population had less than a high school education (55.7 percent) compared with the older non-Hispanic population (19.6 percent).

Most of the 65-and-older population received their education prior to the passage of the Civil Rights Act of 1964, the landmark legislation prohibiting discrimination in education, employment, housing, and other areas. When the older population attended school, the
prevailing environment of discrimination contributed to the educational attainment disparities by race and Hispanic origin (Collins and Margo, 2006; MacDonald, 2013). Educational attainment may also be affected by nativity, with immigrants who arrived to take low-skilled jobs having limited resources and incentives to pursue further education (Everett, et al., 2011).

## Educational Attainment of the Older Population in the Future

The population aged 65 and older in 2040 will likely be more educated than the older population in 2010. The educational attainment of the population aged 35 to 64 in 2010 can serve as a proxy measure of the education of the older population in $2040 .{ }^{9}$ Using this assumption, in 2040 the proportion of older adults not completing high school is likely to be about 8 percentage points

[^87]lower for men and 11 percentage points lower for women compared to 2010 (Figure 5-11). Furthermore, an additional 2 percentage points of older men and 13 percentage points of older women are expected to have completed a college education or more in 2040, compared with 2010. Therefore, unlike prior years in which a higher percentage of older men than older women had a college education or more, the percentages of older men and women with a bachelor's degree or higher are expected to converge to about 29 percent in 2040.

## Foreign Born

## Nativity and Citizenship

The Census Bureau uses the term foreign born to refer to anyone who is not a U.S. citizen at birth. This includes naturalized citizens, lawful permanent residents, temporary migrants (such as foreign students), humanitarian migrants (such as refugees), and undocumented

Figure 5-11.
Educational Attainment by Age and Sex: 1970, 2010, and 2040
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)

'Proxy data for the $65+$ population in 2040 are calculated based on the current educational attainment of the population aged 35 to 64 in 2010.
Sources: U.S. Bureau of the Census, 1973 and U.S. Census Bureau, 2012a; 1970 Census and American Community Survey, 2010, 1 -year estimates.
migrants. ${ }^{10}$ The term native born refers to anyone born in the United States, Puerto Rico, or a U.S. Island Area, or those born abroad of at least one U.S. citizen parent. ${ }^{11}$

Of the 40.4 million people aged 65 and over in the United States, about 5.0 million, or 12.4 percent, were foreign born. About 72 percent of the older foreign-born population were naturalized citizens (Table $5-7$ ). As of 2010, the largest percentage of the older foreign-born population lived in the West (36.0 percent), followed by the South (29.1 percent) and the Northeast

[^88]Table 5-7.
Foreign-Born Population Aged 65 and Over by Period of Entry, Citizenship Status, and Region: 2010
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)

| Characteristic | Population (in thousands) | Percent |
| :---: | :---: | :---: |
| Total . | 4,963 | 100.0 |
| Period of Entry |  |  |
| Prior to 1990 | 3,769 | 76.0 |
| 1990 to 1999 | 644 | 13.0 |
| 2000 to 2010 | 550 | 11.1 |
| Citizenship Status |  |  |
| Naturalized citizen . | 3,582 | 72.2 |
| Not a U.S. citizen . | 1,381 | 27.8 |
| Region |  |  |
| Northeast. | 1,232 | 24.8 |
| Midwest. | 504 | 10.1 |
| South. | 1,442 | 29.1 |
| West | 1,784 | 36.0 |

Source: U.S. Census Bureau, 2012a; American Community Survey, 2010, 1-year estimates.
(24.8 percent), with the lowest percentage in the Midwest (10.1 percent).

## Region of Birth

The vast majority of the older foreign-born population came from Latin America (36.9 percent), Asia (28.8 percent), or Europe (27.6 percent), with only 2.0 percent from Africa and 4.2 percent from Northern America (Figure 5-12). The ranking of world region of birth in 2010 differs from 2000, when European immigrants constituted the largest proportion of the older foreign born (He, 2002). Increased immigration from Latin America since the 1960s and from Asia beginning in the 1970s has contributed to the reordering of the world region of birth for the foreign-born population aged 65 and over in 2010 (Figure 5-13).

Figure 5-12.
Foreign-Born Population Aged 65 and Over by World Region of Birth: 2010
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


Source: U.S. Census Bureau, 2012a; American Community Survey, 2010, 1 -year estimates.

Figure 5-13.
Foreign-Born Population Aged 65 and Over by World Region of Birth and Period of Entry: 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


[^89]
## Year of Entry

Over three-quarters (76.0 percent) of the foreign-born population aged 65 and over in 2010 entered the United States prior to 1990, while the remainder entered in 1990 or later (Table 5-7). Figure 5-13 shows the shifting regional origin of the older foreign-born population. Those who came to the United States prior to 1990 were primarily born in Latin America (37.0 percent) or Europe (31.5 percent), while those who immigrated in the 1990s or in 2000 to 2010 were mainly born in Latin America or Asia. In each period, the proportion born in Latin America has represented about a third or more of the total older foreign-born population. Among the foreignborn population aged 65 and over residing in the United States in 2010, those arriving in the 1990s were most likely to have been born in Asia (44.2 percent).

## Language Spoken at Home

## Non-English Language Spoken at Home

Figure 5-14 shows that in 2010, 14.2 percent of the population aged 65 and over spoke a language other than English at home, a much smaller percentage than in the younger age groups ( 21.8 percent in ages 5 to 17 and 21.6 percent in ages 18 to 64 ). The proportion speaking a language other than

Figure 5-14.

## Percentage Speaking a Language Other Than <br> English at Home by Age: 2010

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


Source: U.S. Census Bureau, 2012 a ; American Community Survey, 2010, 1-year estimates.

English at home was the smallest among those aged 85 and over, at 12.8 percent.

There is great diversity in the types of non-English languages spoken at home by the older population. Spanish was spoken by the largest percentage of the total population aged 65 and over ( 6.4 percent). Each of the other languages were spoken by less than 1 percent of the older population.

Of the 381 distinct non-English languages coded in the 2006-2010, 5 -year ACS, 169 are Native North American languages (Siebens and Julian, 2011). Among the American Indian and Alaska Native alone population aged 65 and over, 22.3 percent reported a Native North American language spoken at home in 2006-2010, higher than the rate for children aged 5 to 17 (11.0 percent) and for adults aged 18 to 64 (15.2 percent).

## English Proficiency

Among people who speak a language other than English at home, those aged 65 and over were less proficient speakers of English than younger people (Figure 5-15). ${ }^{12}$ Among Spanish or Spanish Creole speakers, 36.3 percent of the older population spoke English very well, compared with half the population aged 18 to 64 ( 50.3 percent) and over three-fourths of the population aged 5 to 17 ( 76.6 percent). ${ }^{13}$ Older speakers of Asian and Pacific Island languages also had very low English proficiency, at 27.8 percent, compared with 55.2 percent of older people who spoke other Indo-European languages or 51.7 percent speaking other languages.

## Veterans

In 2010, people aged 65 and over represented 42.0 percent of the total veteran population, with 19.7 percent aged 65 to 74 and 22.2 percent aged 75 and over (Figure 5-16). ${ }^{14}$ Additionally, about a quarter of the veteran population was approaching older age (aged 55 to 64) in 2010. The proportion of the veteran population aged 55 and over was much higher than the proportion aged 18 to 54 (66 versus 34 percent) due to prior military conflicts that involved a

[^90]Figure 5-15.

## Percentage Proficient in English Among Those Not Speaking English at Home by Age and Language Group: 2010

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


Note: Proficiency in English in this figure refers to the "very well" category.
Source: U.S. Census Bureau. 2011 b; American Community Survey, 2010, 1-year estimates.

Figure 5-16.
Veteran Population by Age: 2010
(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


[^91]very large number of U.S. soldiers, including World War II, the Korean War, and the Vietnam War. Subsequent wars did not involve as many troops as prior wars.

## Veterans by Age and Sex

Figure $5-17$ shows the percentage of the population at different ages, by sex, who were veterans in 2010. Differences by age reflect the conflicts that occurred when each population was at peak military ages. Males aged 85 and over had the largest proportion who served in the military ( 69.0 percent), as a result of having served in World War II. ${ }^{15}$ The Korean conflict contributed to the high proportion of veterans among men in their late seventies to early eighties (62.8

[^92]percent). The Vietnam War contributed to the 41.1 percent of veterans in the male population aged 65 to 74. Following the Vietnam War, there have been a number of conflicts that involved fewer troops, such as the 1990-1991 Gulf War, the Bosnia conflict, and more recently Operation Enduring Freedom in Afghanistan, Operation Iraqi Freedom, and Operation New Dawn in Afghanistan. Given the relatively fewer number of troops involved in more recent wars or conflicts, only 11.7 percent of men aged 18 to 64 are veterans. As younger cohorts move into the older ages, there should be a corresponding decline in the proportion of the older population who are veterans. ${ }^{16}$
${ }^{16}$ Veteran projections for younger popula-
tions are always subject to change based on actual events.

For every age category, a much higher share of men compared than women served in the military (Figure 5-17). For example, 51.0 percent of men aged 65 and over were veterans compared with only 1.1 percent of women. Historically, only men have been drafted for military service. Even today, the Military Selected Service Act requires only men living in the United States aged 18 to 25 to sign up for the draft, with no such requirement for women. ${ }^{17}$ The expanded role of women in the military, including their assignment to combat roles, has changed the composition of the military in recent years. As of 2009, women composed about 14 percent of the military (Department of Defense,

[^93]Figure 5-17.
Percentage Veteran by Age and Sex: 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)


[^94]2009). Thus, as cohorts age, the gap between the proportion of male and female veterans in the older population is expected to narrow.

## Voting ${ }^{18}$

Historical trend data on voting showed that a higher percentage of older people voted in the 2012 election than in 1964 (Table $5-8$ ). However, the trends by sex

[^95]over this period differed-voter participation among older women increased from 60.4 percent in 1964 to 68.0 percent in 2012, while participation rates of older men were not significantly different between the 1964 and 2012 elections. Although voter participation among older men continues to exceed that of older women, the gap has declined from 13.3 percentage points in 1964 to 3.9 percentage points in 2012. ${ }^{19}$

[^96]
## Voting Rates by Age

Voter participation tends to increase with age (Figure 5-18). In 2012, the voting rate was lowest among those aged 18 to 24 (41.2 percent). The percentage voting then increased steadily with age, reaching a peak of 73.5 percent among those aged 65 to 74 . The slight decline at ages 75 and over ( 70.0 percent) may reflect health or mobility issues. In the 2008 election, about 45 percent of nonvoters aged 65 and over cited illness or disability as the primary reason for

Table 5-8.

## Population Aged 65 and Over Who Registered and Reported Voting in Presidential Elections by Age and Sex: 1964 to 2012

(Numbers in thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)

| Year | Total | Registered |  | Reported voting |  |  |  | Reported voting by age |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Both sexes |  | Male | Female <br> Percent | 65 to 74 |  | 75 and over |  |
|  |  | Number | Percent | Number | Percent | Percent |  | Number | Percent | Number | Percent |
| 1964. | 17,269 | N | N | 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 |
| 1996. | 31,888 | 24,547 | 77.0 | 21,356 | 67.0 | 70.9 | 64.1 | 12,748 | 70.1 | 8,608 | 62.8 |
| 2000. | 32,764 | 24,948 | 76.1 | 22,153 | 67.6 | 71.4 | 64.8 | 12,450 | 69.9 | 9,702 | 64.9 |
| 2004. | 34,738 | 26,706 | 76.9 | 23,925 | 68.9 | 71.0 | 66.7 | 13,010 | 70.8 | 10,915 | 66.7 |
| 2008. | 37,458 | 28,100 | 75.0 | 25,520 | 68.1 | 70.2 | 66.5 | 14,176 | 70.1 | 11,344 | 65.8 |
| 2012. | 42,514 | 32,699 | 76.9 | 29,641 | 69.7 | 71.9 | 68.0 | 17,182 | 71.1 | 12,459 | 67.9 |

N Not available.
Notes: The reference population of the survey is the civilian noninstitutionalized population.
Sources: 1964 to 1992, Hobbs and Damon, 1996; 1996, U.S. Bureau of the Census, 1998; 2000, Jamieson, Shin, and Day, 2002; 2004, U.S. Census Bureau, 2006; 2008, U.S. Census Bureau, 2009; 2012, U.S. Census Bureau, 2013; all years, Current Population Survey, Voting and Registration Supplement.

Figure 5-18.

## Population Aged 18 and Over Who Reported Voting in the Presidential Election

 by Age: 2012(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology//


Notes: The reference population of the survey is the civilian noninstitutionalized population. The base of the percentage is the citizen population.
Source: U.S. Census Bureau, 2013; Current Population Survey, Voting and Registration Supplement, 2012.
not voting (File and Crissey, 2012). In terms of number of voters, the largest block of voters in 2012 was aged 45 to 64 ( 52.0 million) -the cohort containing most of the Baby Boom generation.

The population aged 65 and over was the only age group to see an increase in voter participation in the 2012 election compared with the 2008 election. All younger age groups had lower voter rates in 2012.

Voting Rates by Race and Hispanic Origin

Voter turnout also varied across race and Hispanic-origin groups. In the 2012 election, among the population aged 65 and over, 74.7 percent of the Black alone population
and 72.6 percent of the White alone population voted (Figure $5-19) .{ }^{20}$ In contrast, 53.7 percent of the older Asian alone population voted in the election. Among Hispanics aged 65 and over, 59.9 percent voted in the 2012 election. ${ }^{21}$ In an assessment of 2012 electoral behavior that compared a subpopulation's share of the eligible electorate (citizens aged 18 and older) to their share of the

[^97]population that actually voted, File (2013) found differences by race and Hispanic origin. For example, Blacks and non-Hispanic Whites accounted for a larger percentage of votes cast than their share of the eligible electorate, while Hispanics accounted for a smaller percentage of actual votes cast than their proportion of the eligible electorate.

The voting rates for each race group and Hispanics did not change significantly between the 2004 and 2008 elections. However, there were several differences between the 2008 election and the

2012 election. The population aged 65 and over who identified their race as Black alone or Asian alone had higher voter rates in the 2012 election than in earlier elections (Figure 5-19). In both the 2004 and 2008 elections, voter turnout was higher for the older White alone population than the Black alone population. However, in the 2012 election, the older White alone population and Black alone population had voting rates not significantly different from each other. The voter turnout for older Hispanics did not differ in 2004, 2008, and 2012.

Figure 5-19.
Population Aged 65 and Over Who Reported Voting in Presidential Elections by Race and Hispanic Origin: 2004, 2008, and 2012
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


[^98]
## Voting Rates by Region

Voter participation rates among the subgroups aged 65 to 74 and aged 75 and over varied across regions (Table 5-9). Among those aged 65 to 74 , voter participation was highest in the Midwest (77.0 percent), followed by the South (73.2 percent), West (72.5 percent), and Northeast ( 71.2 percent). ${ }^{22}$ Among those aged 75 and over, voter turnout was also highest in

[^99]the Midwest ( 73.5 percent), and there was no statistical difference between the voting rates for the remaining three regions. ${ }^{23}$

## Voting Rates by Education

In 2012, older adults with more education tended to have higher voter participation rates (Table 5-9). The span in voting rates between the least educated (less

[^100]than ninth grade) and the highest educated (advanced degree) was quite large. For instance, among those aged 65 to 74 , voter participation among the least educated was 46.7 percent, compared with 85.9 percent for the most educated (advanced degree). Among the 75 and older population, 48.0 percent of those who had less than a ninthgrade education voted, compared with 83.1 percent of those who had the most education.

Table 5-9.

## Voters Aged 65 and Over in the Presidential Election by Age, Region, and Education Level: 2012

(Numbers in thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/

| Characteristic | Citizen population | Reported voting |  |
| :---: | :---: | :---: | :---: |
|  |  | Number | Percent |
| REGION |  |  |  |
| 65 to 74 |  |  |  |
| Northeast. | 4,264 | 3,034 | 71.2 |
| Midwest. | 5,077 | 3,909 | 77.0 |
| South. | 9,044 | 6,620 | 73.2 |
| West | 4,990 | 3,619 | 72.5 |
| 75 and Over |  |  |  |
| Northeast. | 3,477 | 2,336 | 67.2 |
| Midwest | 4,059 | 2,985 | 73.5 |
| South. | 6,333 | 4,372 | 69.0 |
| West | 3,924 | 2,767 | 70.5 |
| EDUCATION LEVEL |  |  |  |
| 65 to 74 | 23,375 | 17,182 | 73.5 |
| Less than 9th grade. | 1,172 | 547 | 46.7 |
| 9th to 12th grade, no diploma | 1,755 | 1,017 | 57.9 |
| High school graduate. | 7,856 | 5,403 | 68.8 |
| Some college or associate's degree | 5,867 | 4,595 | 78.3 |
| Bachelor's degree | 3,763 | 3,077 | 81.8 |
| Advanced degree | 2,962 | 2,544 | 85.9 |
| 75 and over | 17,794 | 12,459 | 70.0 |
| Less than 9th grade. | 1,870 | 898 | 48.0 |
| 9th to 12th grade, no diploma | 1,894 | 1,148 | 60.7 |
| High school graduate. | 6,832 | 4,707 | 68.9 |
| Some college or associate's degree | 3,517 | 2,745 | 78.0 |
| Bachelor's degree | 2,205 | 1,735 | 78.7 |
| Advanced degree . . . . . . . . . . | 1,476 | 1,226 | 83.1 |

Notes: The reference population of the survey is the civilian noninstitutionalized population. The base of the percentage is the citizen population.
Source: U.S. Census Bureau, 2013; Current Population Survey, Voting and Registration Supplement, 2012.

## Internet Usage

## Internet Use Trends

Between 2000 and 2010, Internet usage for the older population increased dramatically. The percentage of the older population using the Internet rose from 14.3 percent to 44.8 percent (Figure 5-20). ${ }^{24}$ Nevertheless, Internet usage among the older population remained lower than usage among

[^101]the younger population; 75.8 percent of those aged 3 to 64 went online in 2010.

The age gap between Internet users and nonusers appears to be narrowing over time. The 31 percentage-point gap in Internet usage between the older population and the younger population in 2010 was smaller than in any year in the previous decade (Department of Commerce, 2011). Moreover, the older population had the largest growth rate in the use
of broadband between 2009 and 2010, and the disparity between older and younger Americans in broadband use narrowed slightly.

## Type of Internet Use

Older people use the Internet for a variety of purposes. Just as is the case for younger adults, the number one use of the Internet for older adults is to read or send electronic mail (Hilt and Lipschultz, 2004; Jones and Fox, 2009; Madden, 2010). In 2010, among Internet users aged 65 and over,

Figure 5-20
Population That Uses the Internet by Age: Selected Years, 2000 to 2010
(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/)


Notes: Internet usage is measured by whether respondents used the Internet during the year, regardless of frequency of use. The reference population of the survey is the civilian noninstitutionalized population.
Source: Department of Commerce, NTIA, 2012; all years, Current Population Survey, Computer and Internet Use Supplement.
almost 90 percent used e-mail (Figure 5-21), somewhat less than the corresponding percentage among younger Internet users. Older Internet users were also less likely to use the Internet for other purposes, such as online news, travel arrangements, and banking, as well as social networking sites or entertainment (Jones and Fox, 2009; Madden, 2010). However, older adults are more likely to use the Internet for certain purposes, such as to obtain health information (Charness and Holley, 2004; Crabb, Rafie, and Weingardt, 2012; Gervey and Lin, 2000; Jones and Fox, 2009).

While the population aged 65 and over is less likely than younger people to use the Internet for social media, the growth in social networking use among Internet users in this age group has been rapid, doubling from 13 percent in April 2009 to 26 percent in May 2010 (Madden, 2010). For Internet users approaching older ages (aged 50 to 64), social networking use rose from 25 percent to 47 percent during the same period. Older adults who enjoy using the Internet for such purposes were also more likely to be satisfied with their leisure activities (Heo, Kim, and Won, 2011). Among Internet users aged 65 and over, more than
half exchange e-mail messages on a typical day and 34 percent read news online (Madden, 2010).

Not all older people have been eager to adopt the Internet, and there have been efforts to encourage access among the older age group (Xie, 2011). Key reasons cited by older adults for not using the Internet include the lack of need and motivation to use it (Selwyn, 2004; Wagner, Hassanein, and Head, 2010). Other reasons include not being aware of resources available to improve their standard of living such as online support or computer training that may benefit their life (Hough, 2004).

Figure 5-21.
Type of Internet Use Among the Population That Uses the Internet by Age: 2010 (In percent)


[^102]
## Chapter 5 References

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## Appendix A. Sources of Data

The data for this report, which cover a wide range of topics and years, primarily came from the following sources:

- American Community Survey (ACS)
- American Housing Survey (AHS)
- Current Population Survey (CPS)
- Decennial censuses
- Health and Retirement Study (HRS)
- International Data Base (IDB)
- Medicare Current Beneficiary Survey (MCBS)
- Medical Expenditure Panel Survey (MEPS)
- National Health and Nutrition Examination Survey (NHANES)
- National Health Interview Survey (NHIS)
- National Vital Statistics System (NVSS)
- Retirement Confidence Survey (RCS)
- Surveillance Epidemiology and End Results Program (SEER)


## American Community Survey

The American Community Survey (ACS), a nationwide survey sponsored and collected by the U.S. Census Bureau, is designed to provide communities with reliable and timely demographic, social, economic, and housing data every year. The full implementation of the ACS, which began in 2005, originally sampled approximately 2.9 million housing unit addresses annually. In 2011, the ACS sampled approximately 3.3 million housing unit addresses-this corresponds
to an increase in the targeted annual sample size of 3.54 million addresses that began with the June 2011 ACS sample. The 2012 ACS sample is approximately 3.54 million housing unit addresses.
The ACS began in 1996 in a sample of counties across the country. Today the survey is conducted in every county throughout the nation. Beginning in 2006, ACS 1-year estimates for 2005 were released for geographic areas with populations of 65,000 and greater. In 2008, the first set of multiyear estimates was released for data collected between January 2005 and December 2007. These 3-year estimates were published for geographic areas with populations of 20,000 and greater. The Census Bureau released the first 5-year estimates (2005-2009) in late 2010 for the smallest geographic areas based on data collected during the 60 months between January 2005 and December 2009. Singleyear, 3-year, and 5-year estimates from the ACS are all "period" estimates that represent data collected within particular intervals of time- 12 months, 36 months, and 60 months, respectively (in contrast, "point-in-time" estimates, such as the decennial census, collect information as of a specific date). Multiyear ACS estimates are updated annually, with data published for the largest areas in 1-, 3-, and 5-year formats, and for those meeting the 3-year threshold in both 3-and 5-year formats.
The 2010, 1-year data and the 2009-2011, 3-year data used in this report were released in 2011 and 2012, respectively. The 2009-2011, 3 -year data are based on the ACS
sample interviewed in 2009, 2010, and 2011. We primarily use 2010, 1-year data, except for Figure 3-2 where the sample size was not sufficient and we used 3-year data.
Information about the ACS is available online at <www.census.gov /acs/www/>.

## American Housing Survey

The American Housing Survey (AHS) is conducted by the Census Bureau for the Department of Housing and Urban Development (HUD) and provides data necessary for evaluating progress made toward a decent home and a suitable living environment for every American family, as legislated in 1949 and 1968. It is the primary source of detailed information on housing in the United States and is used to generate a biennial report to Congress on the conditions of housing in the United States, among other reports. The AHS encompasses a national survey and 60 metropolitan surveys and is designed to collect data from the same housing units for each survey. The national survey, a representative sample of approximately 85,000 housing units since 2011 (60,000 in prior years), is conducted biennially in odd-numbered years; the metropolitan surveys, representative samples of 4,500 housing units, are conducted in odd-numbered years on a 4-year cycle. The AHS collects data about the inventory and condition of housing in the United States and the demographics of its inhabitants. The survey provides detailed data on the types of housing in the United States and its characteristics and conditions; financial data on
housing costs, utilities, mortgages, equity loans, and market value; and demographic data on family composition, income, education, and race and ethnicity. Other information collected in rotating supplements to the survey address the following topics: neighborhood quality, walkability, public transportation and recent movers; the health and safety aspects of a home; accommodations for older and disabled household members; doubling up of households; working from home; and energy efficiency.

Information about the AHS is available online at <www.census.gov /housing/ahs/>.

## Current Population Survey

The Current Population Survey (CPS) is a nationally representative sample survey of about 60,000 households conducted monthly for the Bureau of Labor Statistics (BLS) by the U.S. Census Bureau. The CPS base survey is the primary source of information on the labor force characteristics of the civilian noninstitutionalized population aged 16 and over. It provides a comprehensive body of monthly data on the labor force, employment, unemployment, persons not in the labor force, hours of work, earnings, and other demographic and labor force characteristics.

The CPS uses a multistage probability sample based on the results of the decennial census, with coverage of all 50 states and the District of Columbia. The sample is updated continuously to account for new residential construction. When files from the most recent decennial census become available, the Census Bureau introduces a new sample design for the CPS.

In most months, CPS supplements provide additional demographic and social data. Data obtained
for this report from the CPS are primarily from the Annual Social and Economic Supplement (ASEC). The ASEC is the primary source of detailed information on income and poverty in the United States. The ASEC, historically referred to as the March supplement, is currently conducted in February, March, and April with a sample of about 100,000 addresses. The questionnaire asks about income from more than 50 sources and records up to 27 different income types, including receipt of many noncash benefits, such as food stamps and housing assistance. In addition to poverty measurement, the ASEC is used to generate other tables on various topics, as well as reports on geographical mobility and educational attainment.

In November of election years, in addition to the basic CPS questions, interviewers ask supplementary questions of all persons 18 years of age and older on voting and registration.

The Computer and Internet Use Supplement collected household information from all eligible CPS households as well as person information from household members 3 years old and over. Data are provided about the household's computer and Internet use and about each household member's use of the Internet from any location in the past year.

The Housing Vacancy Survey, another supplement of the CPS, provides current information on the rental and homeowner vacancy rates, and characteristics of units available for occupancy. These data are used extensively by public and private sector organizations to evaluate the need for new housing programs and initiatives. In addition, the rental vacancy rate is a component of the index of leading economic indicators and is used
by the federal government and economic forecasters to gauge the current economic climate.

Rental and homeowner vacancy rates and homeownership rates are available for the United States, regions, states, and for the 75 largest Metropolitan Statistical Areas (MSAs). Data for all geographies are available both quarterly and annually. Homeownership rates are also tabulated by age of householder and by family status for the United States and regions and by race/ethnicity of householder and by median family income for the nation. In addition, estimates of the total housing inventory and percent distributions of vacant for-rent and for-sale-only units are available for the United States and regions.

Information about the CPS is available online at <www.census.gov /cps/about/>.

## Decennial Census

Every 10 years, beginning with the first census in 1790, the United States government conducts a census, or count, of the entire population as mandated by the U.S. Constitution. Since 1930, Census Day has been April 1 of the respective year.

For the 2010 Census, the Census Bureau devised a short-form questionnaire that asked for the age, sex, race, and ethnicity (Hispanic or non-Hispanic) of each household resident, his or her relationship to the person filling out the form, and whether the housing unit was rented or owned by a member of the household. The census long form, which for decades collected detailed socioeconomic and housing data from a sample of the population on education, housing, jobs, etc., was replaced by the ACS, an ongoing survey of about 250,000 households per month
that gathers largely the same data as its predecessor.

Information about the decennial census is available online at <http://2010.census .gov/2010census/about/>.

## Health and Retirement Study

The University of Michigan Health and Retirement Study (HRS) is a longitudinal panel study that surveys a representative sample of more than 26,000 Americans over the age of 50 every 2 years. Supported by the National Institute on Aging (NIA U01AG009740) and the Social Security Administration, the HRS explores the changes in labor force participation and the health transitions that individuals undergo toward the end of their work lives and in the years that follow.

Since its launch in 1992, the study has collected information about income, work, assets, pension plans, health insurance, disability, physical health and functioning, cognitive functioning, and health care expenditures. Through its unique and in-depth interviews, the HRS provides an invaluable and growing body of multidisciplinary data that researchers can use to address important questions about the challenges and opportunities of aging.

Information about the HRS is available online at <http://hrsonline.isr. umich.edu/>.

## International Data Base

The U.S. Census Bureau produces the International Data Base (IDB), which includes regularly updated population estimates and projections for over 200 countries and areas. The series of estimates and projections provide a consistent set of demographic indicators,
including population size and growth, mortality, fertility, and net migration. The IDB is accessible via the Internet at <www.census.gov /population/international/data /idb>.

## Medicare Current Beneficiary Survey

The Medicare Current Beneficiary Survey (MCBS) is a continuous, multipurpose survey of a representative sample of the Medicare population conducted by the Office of Information Products and Data Analysis (OIPDA) of the Centers for Medicare and Medicaid Services (CMS) through a contract with Westat. MCBS is designed to help the CMS administer, monitor, and evaluate the Medicare program. The MCBS collects information on health care use, cost, and sources of payment; health insurance coverage; household composition; sociodemographic characteristics; health status and physical functioning; income and assets; access to care; satisfaction with care; usual source of care; and how beneficiaries get information about Medicare.

MCBS data enable CMS to determine sources of payment for all medical services used by Medicare beneficiaries, including copayments, deductibles, and noncovered services; develop reliable and current information on the use and cost of services not covered by Medicare (such as long-term care); ascertain all types of health insurance coverage and relate coverage to sources of payment; and monitor the financial effects of changes in the Medicare program. Additionally, the MCBS is the only source of multidimensional person-based information about the characteristics of the Medicare population and their access to and satisfaction with Medicare services and information
about the Medicare program. The MCBS sample consists of Medicare enrollees in the community and in institutions.

The survey is conducted in three rounds per year, with each round being 4 months in length. MCBS has a multistage, stratified, random sample design and a rotating panel survey design. Each panel is followed for 12 interviews. In-person interviews are conducted using computer-assisted personal interviewing. A sample of approximately 16,000 people are interviewed in each round. However, because of the rotating panel design, only 12,000 people receive all three interviews in a given calendar year. Information collected in the survey is combined with information from CMS administrative data files and made available through public-use data files.

Information about the MCBS is available online at <www.cms .gov/Research-Statistics-Data-and -Systems/Research/MCBS/index .html>.

## Medical Expenditure Panel Survey

The Medical Expenditure Panel Survey (MEPS), which began in 1996, is a set of large-scale surveys of families and individuals, their medical providers (doctors, hospitals, pharmacies, etc.), and employers across the United States. MEPS collects data on the specific health services that Americans use, how frequently they use them, the cost of these services, and how they are paid for, as well as data on the cost, scope, and breadth of health insurance held by and available to U.S. workers.

MEPS currently has two major components: the Household Component and the Insurance Component. The Household Component collects data from a
sample of families and individuals in selected communities across the United States, drawn from a nationally representative subsample of households that participated in the prior year's National Health Interview Survey. During the household interviews, MEPS collects detailed information for each person in the household on the following: demographic characteristics, health conditions, health status, use of medical services, charges and source of payments, access to care, satisfaction with care, health insurance coverage, income, and employment.

The panel design of the survey, which features several rounds of interviewing covering two full calendar years, makes it possible to determine how changes in respondents' health status, income, employment, eligibility for public and private insurance coverage, use of services, and payment for care are related.

The Insurance Component collects data from a sample of private and public sector employers on the health insurance plans they offer their employees. The survey is also known as the Health Insurance Cost Study. The collected data include the number and types of private insurance plans offered (if any), premiums, contributions by employers and employees, eligibility requirements, benefits associated with these plans, and employer characteristics.

Information about the MEPS is available online at <http://meps .ahrq.gov/mepsweb/about_meps /survey_back.jsp>.

## National Health and Nutrition Examination Survey

The National Health and Nutrition Examination Survey (NHANES), conducted by the National Center
for Health Statistics, is a family of cross-sectional surveys designed to assess the health and nutritional status of the noninstitutionalized civilian population through a combination of health interviews, physical examinations, and laboratory tests. The health interviews are conducted in respondents' homes and health measurements are performed in specially designed and equipped mobile examination centers, which travel to locations throughout the country. The study team consists of a physician, medical and health technicians, as well as dietary and health interviewers. Many of the study staff are bilingual (English/Spanish). All health information gathered is held in strict confidentiality.

Each survey's sample was selected using a complex, stratified, multistage, probability sampling design. Interviewers obtain information on personal and demographic characteristics, including age, household income, and race and ethnicity, directly from sample persons (or their proxies). In addition, dietary intake data, biochemical tests, physical measurements, and clinical assessments are collected.

The NHANES program began in the early 1960s and has been conducted as a series of surveys focusing on different population groups or health topics. In 1999, the survey became a continuous program that has a changing focus on a variety of health and nutrition measurements to meet emerging needs. The survey examines a nationally representative sample of about 5,000 persons each year. These persons are located in counties across the country, 15 of which are visited each year. To produce reliable statistics, NHANES over-samples persons aged 60 and older, Asian Americans, African Americans, and Hispanics.

NHANES has collected data on chronic disease prevalence and conditions (including undiagnosed conditions) and on risk factors such as obesity, smoking, elevated serum cholesterol levels, hypertension, diet and nutritional status, immunization status, infectious disease prevalence, health insurance, and measures of environmental exposures. Other topics addressed include hearing, vision, mental health, anemia, diabetes, cardiovascular disease, osteoporosis, oral health, pharmaceuticals and dietary supplements used, and physical fitness.

Information about the NHANES is available online at <www.cdc.gov /nchs/nhanes/about_nhanes.htm>.

## National Health Interview Survey

The National Health Interview Survey (NHIS), a cross-sectional household survey conducted since 1960, is the principal source of information on the health of the civilian noninstitutionalized population of the United States and is one of the major data collection programs of the National Center for Health Statistics (NCHS), which is part of the Centers for Disease Control and Prevention (CDC). A major strength of this survey lies in the ability to analyze health measures by many demographic and socioeconomic characteristics. Data are collected by interviewers employed and trained by the U.S. Census Bureau according to procedures specified by the NCHS.

Sampling and interviewing are continuous throughout each year. The sampling plan follows a multistage area probability design that permits the representative sampling of households and noninstitutional group quarters (e.g., college dormitories). The sampling plan is redesigned after every decennial census. The current NHIS sample
design oversamples Asian, Black, and Hispanic persons. The NHIS sample is drawn from each State and the District of Columbia.

Interviewers collect data on illnesses, injuries, impairments, and chronic conditions; activity limitation caused by chronic conditions; utilization of health services; and other health topics. Information is also obtained on personal, social, economic, and demographic characteristics, including race and ethnicity and health insurance status. The survey is reviewed each year, core questionnaire items are revised every 10-15 years (with major revisions occurring in 1982 and 1997), and special topics are added or deleted annually.

Information about the NHIS is available online at <www.cdc.gov/nchs /nhis/about_nhis.htm>.

## National Vital Statistics System

Through the National Vital Statistics System (NVSS), the NCHS collects and publishes data on births, deaths, fetal deaths, and, prior to 1996, marriages and divorces occurring in the United States based on U.S. standard certificates. The Division of Vital Statistics obtains information on births and deaths from the registration offices of each of the 50 states, New York City, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and Northern Mariana Islands. Geographic coverage for births and deaths has been complete since 1933. By law, the registration of deaths is the responsibility of the funeral director. The funeral director obtains demographic data for the death certificate from an informant. The physician in attendance at the death is required to certify the cause of death. Where death is from other than natural causes, a
coroner or medical examiner may be required to examine the body and certify the cause of death. The mortality data file is a fundamental source of cause-of-death information by demographic characteristics and for geographic areas such as states. The mortality file is one of the few sources of comparable health-related data for smaller geographic areas in the United States and over a long period. Mortality data can be used not only to present the characteristics of those dying in the United States but also to determine life expectancy and to compare mortality trends with those of other countries.

Information about the NVSS is available online at <www.cdc.gov /nchs/nvss/about_nvss.htm>.

## Retirement Confidence Survey

The Retirement Confidence Survey (RCS) is the longest-running annual retirement survey of its kind in the nation. Sponsored by the Employee Benefit Research Institute (EBRI), the American Savings Education Council (ASEC), and Mathew Greenwald \& Associates (Greenwald), the annual RCS is a random, nationally representative survey of 1,000 individuals aged 25 and over.

The survey contains a core set of questions that is asked annually, allowing key attitudes and selfreported behavior patterns to be tracked over time. Sample questions include: how confident are Americans about their retirement income prospects, including Social Security and Medicare; how much money have they saved for their future and where are they putting their money; who they turn to for retirement investment information and advice; and why individuals are not saving more and what would motivate them to do so. The RCS also strives to be timely by
covering issues that are of current interest to policymakers and retirement benefits specialists; past examples include participant education in $401(\mathrm{k})$ plans and understanding of IRA eligibility. Starting with the 2001 wave of the RCS, all data are weighted by age, sex, and education to reflect the actual proportions in the adult population.

Information about the RCS is available online at <www.ebri.org /surveys/rcs/>.

## Surveillance Epidemiology and End Results Program

The Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI) is an authoritative source of information on cancer incidence and survival in the United States. Data collection began in 1973 with a limited amount of registries and continues to expand to include more areas and demographics. SEER currently collects and publishes cancer incidence and survival data from population-based cancer registries covering approximately 28 percent of the U.S. population. SEER coverage includes 26 percent of African Americans, 41 percent of Hispanics, 43 percent of American Indians and Alaska Natives, 54 percent of Asians, and 71 percent of Hawaiian/Pacific Islanders.

The SEER Program registries routinely collect data on patient demographics, primary tumor site, tumor morphology and stage at diagnosis, first course of treatment, and follow-up for vital status. The SEER Program is the only comprehensive source of population-based information in the United States that includes stage of cancer at the time of diagnosis and patient survival data.

Information about the SEER Program is available online at [http://seer.cancer.gov/about/](http://seer.cancer.gov/about/).

## Appendix B. Accuracy of the Estimates

A sample survey estimate has two types of error: sampling and nonsampling. The accuracy of an estimate depends on both types of error. The nature of the sampling error is known given the survey design; the full extent of the nonsampling error is unknown.

## Sampling Error

Sampling error occurs when the characteristics of a sample are measured instead of those of the entire population (as from a census). Note that sample-based estimates will vary depending on the particular sample selected from the population, but all attempt to approximate the actual figures. Since some of the estimates presented in this report come from samples, they may differ from figures from an enumeration of the entire population using the same questionnaires, instructions, and interviewers. For a given estimator, the difference between an estimate based on a sample and the estimate that would result if the sample were to include the entire population is known as sampling error.

Measures of the magnitude of sampling error reflect the variation in the estimates over all possible samples that could have been selected from the population using the same sampling, data collection, and processing methods. Estimates of the magnitude of sampling errors are provided in the form of margins of error (MOE) for selected demographic and socioeconomic estimates included in this report (see Appendix C, Table C-7). The U.S. Census Bureau recommends that data users incorporate this information into their analyses, as sampling error in survey estimates could impact the conclusions drawn from the results. All comparative statements in this report have undergone statistical testing, and comparisons are significant at the 90 percent confidence level unless noted otherwise. This means the 90 percent confidence interval for the difference between the estimates being compared does not include zero.

## Nonsampling Error

In addition to sampling error, nonsampling errors may be introduced during any phase of data collection
or processing. For example, operations such as editing or reviewing data from questionnaires may introduce error into the estimates. For a given estimator, the difference between the estimate that would result if the sample were to include the entire population and the true population value being estimated is known as nonsampling error. To minimize these errors, the Census Bureau and other survey contractors often employ quality control procedures throughout the production process including the overall design of surveys, the wording of questions, the review of the work of interviewers and coders, and the statistical review of reports.

## Comparability of Data

Data obtained from sample surveys and other sources are not entirely comparable. This results from differences in interviewer training and experience, differing survey processes, and differences in the target population. This is an example of nonsampling variability not reflected in the standard errors. Therefore, caution should be used in comparing results from different sources.

## Appendix C. Detailed Tables

Table C-1.

## Population Size and Balance of Males and Females for the Population Aged 65 and Over by Age, Sex, Race, and Hispanic Origin: 2010

(Sex ratio is the number of males per 100 females. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Race, Hispanic origin, and sex | Total, 65 and over | Age |  |  |  |  |  | Total, 85 and over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 65 to 69 | 70 to 74 | 75 to 79 | 80 to 84 | 85 to 89 | 90 and over |  |
| TOTAL POPULATION |  |  |  |  |  |  |  |  |
| Both sexes | 40,267,984 | 12,435,263 | 9,278,166 | 7,317,795 | 5,743,327 | 3,620,459 | 1,872,974 | 5,493,433 |
| Male | 17,362,960 | 5,852,547 | 4,243,972 | 3,182,388 | 2,294,374 | 1,273,867 | 515,812 | 1,789,679 |
| Female | 22,905,024 | 6,582,716 | 5,034,194 | 4,135,407 | 3,448,953 | 2,346,592 | 1,357,162 | 3,703,754 |
| Percent female. | 56.9 | 52.9 | 54.3 | 56.5 | 60.1 | 64.8 | 72.5 | 67.4 |
| Sex ratio | 75.8 | 88.9 | 84.3 | 77.0 | 66.5 | 54.3 | 38.0 | 48.3 |
| RACE |  |  |  |  |  |  |  |  |
| White |  |  |  |  |  |  |  |  |
| White alone: |  |  |  |  |  |  |  |  |
| Both sexes | 34,139,237 | 10,313,002 | 7,740,932 | 6,224,569 | 5,002,427 | 3,203,863 | 1,654,444 | 4,858,307 |
| Male | 14,845,830 | 4,907,200 | 3,581,298 | 2,743,863 | 2,023,094 | 1,134,244 | 456,131 | 1,590,375 |
| Female | 19,293,407 | 5,405,802 | 4,159,634 | 3,480,706 | 2,979,333 | 2,069,619 | 1,198,313 | 3,267,932 |
| Percent female. | 56.5 | 52.4 | 53.7 | 55.9 | 59.6 | 64.6 | 72.4 | 67.3 |
| Sex ratio. | 76.9 | 90.8 | 86.1 | 78.8 | 67.9 | 54.8 | 38.1 | 48.7 |
| White Alone or In Combination |  |  |  |  |  |  |  |  |
| Both sexes. | 34,455,698 | 10,424,314 | 7,818,747 | 6,280,892 | 5,041,278 | 3,225,777 | 1,664,690 | 4,890,47 |
| Male | 14,981,988 | 4,958,194 | 3,616,195 | 2,767,716 | 2,038,407 | 1,142,210 | 459,266 | 1,601,476 |
| Female | 19,473,710 | 5,466,120 | 4,202,552 | 3,513,176 | 3,002,871 | 2,083,567 | 1,205,424 | 3,288,991 |
| Percent female. | 56.5 | 52.4 | 53.7 | 55.9 | 59.6 | 64.6 | 72.4 | 67.3 |
| Sex ratio | 76.9 | 90.7 | 86.0 | 78.8 | 67.9 | 54.8 | 38.1 | 48.7 |
| Non-Hispanic White Alone |  |  |  |  |  |  |  |  |
| Both sexes. | 32,209,431 | 9,682,945 | 7,257,878 | 5,861,366 | 4,746,881 | 3,068,224 | 1,592,137 | 4,660,361 |
| Male | 14,031,867 | 4,624,945 | 3,371,204 | 2,591,681 | 1,921,912 | 1,084,703 | 437,422 | 1,522,125 |
| Female. | 18,177,564 | 5,058,000 | 3,886,674 | 3,269,685 | 2,824,969 | 1,983,521 | 1,154,715 | 3,138,236 |
| Percent female. | 56.4 | 52.2 | 53.6 | 55.8 | 59.5 | 64.6 | 72.5 | 67.3 |
| Sex ratio | 77.2 | 91.4 | 86.7 | 79.3 | 68.0 | 54.7 | 37.9 | 48.5 |
| Black or African American |  |  |  |  |  |  |  |  |
| Black or African American alone: |  |  |  |  |  |  |  |  |
| Both sexes | 3,438,397 | 1,162,577 | 852,317 | 616,789 | 424,592 | 244,879 | 137,243 | 382,122 |
| Male | 1,350,829 | 504,622 | 354,520 | 237,963 | 146,620 | 74,732 | 32,372 | 107,104 |
| Female | 2,087,568 | 657,955 | 497,797 | 378,826 | 277,972 | 170,147 | 104,871 | 275,018 |
| Percent female. | 60.7 | 56.6 | 58.4 | 61.4 | 65.5 | 69.5 | 76.4 | 72.0 |
| Sex ratio. | 64.7 | 76.7 | 71.2 | 62.8 | 52.7 | 43.9 | 30.9 | 38.9 |
| Black or African American alone or in combination: |  |  |  |  |  |  |  |  |
| Both sexes | 3,522,050 | 1,191,992 | 872,582 | 630,948 | 434,553 | 251,063 | 140,912 | 391,975 |
| Male | 1,383,256 | 517,025 | 362,830 | 243,333 | 150,072 | 76,672 | 33,324 | 109,996 |
| Female | 2,138,794 | 674,967 | 509,752 | 387,615 | 284,481 | 174,391 | 107,588 | 281,979 |
| Percent female. | 60.7 | 56.6 | 58.4 | 61.4 | 65.5 | 69.5 | 76.4 | 71.9 |
| Sex ratio. | 64.7 | 76.6 | 71.2 | 62.8 | 52.8 | 44.0 | 31.0 | 39.0 |
| American Indian and Alaska Native |  |  |  |  |  |  |  |  |
| American Indian and Alaska Native alone: |  |  |  |  |  |  |  |  |
| Both sexes | 207,060 | 79,079 | 53,926 | 35,268 | 21,963 | 11,362 | 5,462 | 16,824 |
| Male | 92,470 | 37,828 | 24,828 | 15,222 | 8,887 | 4,038 | 1,667 | 5,705 |
| Female | 114,590 | 41,251 | 29,098 | 20,046 | 13,076 | 7,324 | 3,795 | 11,119 |
| Percent female. | 55.3 | 52.2 | 54.0 | 56.8 | 59.5 | 64.5 | 69.5 | 66.1 |
| Sex ratio. | 80.7 | 91.7 | 85.3 | 75.9 | 68.0 | 55.1 | 43.9 | 51.3 |
| American Indian and Alaska Native alone or in combination: |  |  |  |  |  |  |  |  |
| Both sexes | 379,569 | 143,228 | 96,587 | 64,396 | 41,968 | 22,685 | 10,705 | 33,390 |
| Male | 166,316 | 67,347 | 43,964 | 27,322 | 16,586 | 7,921 | 3,176 | 11,097 |
| Female | 213,253 | 75,881 | 52,623 | 37,074 | 25,382 | 14,764 | 7,529 | 22,293 |
| Percent female. | 56.2 | 53.0 | 54.5 | 57.6 | 60.5 | 65.1 | 70.3 | 66.8 |
| Sex ratio. . . . . | 78.0 | 88.8 | 83.5 | 73.7 | 65.3 | 53.7 | 42.2 | 49.8 |

[^103]Table C-1.

## Population Size and Balance of Males and Females for the Population Aged 65 and Over by Age, Sex, Race, and Hispanic Origin: 2010-Con.

(Sex ratio is the number of males per 100 females. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)

| Race, Hispanic origin, and sex | Total, 65 and over | Age |  |  |  |  |  | Total, 85 and over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 65 to 69 | 70 to 74 | 75 to 79 | 80 to 84 | 85 to 89 | 90 and over |  |
| RACE-Con. |  |  |  |  |  |  |  |  |
| Asian |  |  |  |  |  |  |  |  |
| Asian alone: |  |  |  |  |  |  |  |  |
| Both sexes | 1,386,626 | 474,327 | 354,268 | 251,210 | 168,879 | 93,136 | 44,806 | 137,942 |
| Male | 598,140 | 215,008 | 160,171 | 105,753 | 66,042 | 35,643 | 15,523 | 51,166 |
| Female | 788,486 | 259,319 | 194,097 | 145,457 | 102,837 | 57,493 | 29,283 | 86,776 |
| Percent female | 56.9 | 54.7 | 54.8 | 57.9 | 60.9 | 61.7 | 65.4 | 62.9 |
| Sex ratio. | 75.9 | 82.9 | 82.5 | 72.7 | 64.2 | 62.0 | 53.0 | 59.0 |
| Asian alone or in combination: |  |  |  |  |  |  |  |  |
| Both sexes | 1,483,289 | 508,364 | 378,904 | 268,859 | 180,327 | 99,255 | 47,580 | 146,835 |
| Male | 642,215 | 231,285 | 171,820 | 113,666 | 70,808 | 38,133 | 16,503 | 54,636 |
| Female | 841,074 | 277,079 | 207,084 | 155,193 | 109,519 | 61,122 | 31,077 | 92,199 |
| Percent female. | 56.7 | 54.5 | 54.7 | 57.7 | 60.7 | 61.6 | 65.3 | 62.8 |
| Sex ratio. | 76.4 | 83.5 | 83.0 | 73.2 | 64.7 | 62.4 | 53.1 | 59.3 |
| Native Hawaiian and Other Pacific Islander |  |  |  |  |  |  |  |  |
| Native Hawaiian and Other Pacific Islander alone: |  |  |  |  |  |  |  |  |
| Both sexes | 31,213 | 12,070 | 8,149 | 5,363 | 3,217 | 1,623 | 791 | 2,414 |
| Male | 14,193 | 5,865 | 3,780 | 2,421 | 1,313 | 540 | 274 | 814 |
| Female | 17,020 | 6,205 | 4,369 | 2,942 | 1,904 | 1,083 | 517 | 1,600 |
| Percent female | 54.5 | 51.4 | 53.6 | 54.9 | 59.2 | 66.7 | 65.4 | 66.3 |
| Sex ratio. | 83.4 | 94.5 | 86.5 | 82.3 | 69.0 | 49.9 | 53.0 | 50.9 |
| Native Hawaiian and Other Pacific |  |  |  |  |  |  |  |  |
| Both sexes | 68,225 | 25,413 | 17,271 | 11,843 | 7,626 | 4,003 | 2,069 | 6,072 |
| Male | 30,369 | 12,160 | 7,856 | 5,235 | 3,041 | 1,394 | 683 | 2,077 |
| Female | 37,856 | 13,253 | 9,415 | 6,608 | 4,585 | 2,609 | 1,386 | 3,995 |
| Percent female. | 55.5 | 52.2 | 54.5 | 55.8 | 60.1 | 65.2 | 67.0 | 65.8 |
| Sex ratio. | 80.2 | 91.8 | 83.4 | 79.2 | 66.3 | 53.4 | 49.3 | 52.0 |
| Some Other Race |  |  |  |  |  |  |  |  |
| Some Other Race alone: |  |  |  |  |  |  |  |  |
| Both sexes | 665,994 | 252,195 | 169,574 | 114,114 | 74,076 | 38,644 | 17,391 | 56,035 |
| Male | 290,139 | 116,931 | 75,150 | 47,535 | 29,600 | 14,996 | 5,927 | 20,923 |
| Female | 375,855 | 135,264 | 94,424 | 66,579 | 44,476 | 23,648 | 11,464 | 35,112 |
| Percent female. | 56.4 | 53.6 | 55.7 | 58.3 | 60.0 | 61.2 | 65.9 | 62.7 |
| Sex ratio. | 77.2 | 86.4 | 79.6 | 71.4 | 66.6 | 63.4 | 51.7 | 59.6 |
| Some Other Race alone or in combination: |  |  |  |  |  |  |  |  |
| Both sexes | 790,789 | 295,975 | 200,948 | 136,857 | 89,296 | 46,692 | 21,021 | 67,713 |
| Male | 343,260 | 136,701 | 88,899 | 56,972 | 35,589 | 17,945 | 7,154 | 25,099 |
| Female | 447,529 | 159,274 | 112,049 | 79,885 | 53,707 | 28,747 | 13,867 | 42,614 |
| Percent female | 56.6 | 53.8 | 55.8 | 58.4 | 60.1 | 61.6 | 66.0 | 62.9 |
| Sex ratio. | 76.7 | 85.8 | 79.3 | 71.3 | 66.3 | 62.4 | 51.6 | 58.9 |
| Two or More Races |  |  |  |  |  |  |  |  |
| Both sexes | 399,457 | 142,013 | 99,000 | 70,482 | 48,173 | 26,952 | 12,837 | 39,789 |
| Male . | 171,359 | 65,093 | 44,225 | 29,631 | 18,818 | 9,674 | 3,918 | 13,592 |
| Female | 228,098 | 76,920 | 54,775 | 40,851 | 29,355 | 17,278 | 8,919 | 26,197 |
| Percent female. | 57.1 | 54.2 | 55.3 | 58.0 | 60.9 | 64.1 | 69.5 | 65.8 |
| Sex ratio | 75.1 | 84.6 | 80.7 | 72.5 | 64.1 | 56.0 | 43.9 | 51.9 |
| Hispanic or Latino Origin (of any race) |  |  |  |  |  |  |  |  |
| Hispanic or Latino: |  |  |  |  |  |  |  |  |
| Both sexes | 2,781,624 | 948,576 | 700,142 | 510,808 | 351,488 | 185,428 | 85,182 | 270,610 |
| Male | 1,181,882 | 428,902 | 305,762 | 213,340 | 139,046 | 68,411 | 26,421 | 94,832 |
| Female | 1,599,742 | 519,674 | 394,380 | 297,468 | 212,442 | 117,017 | 58,761 | 175,778 |
| Percent female | 57.5 | 54.8 | 56.3 | 58.2 | 60.4 | 63.1 | 69.0 | 65.0 |
| Sex ratio. | 73.9 | 82.5 | 77.5 | 71.7 | 65.5 | 58.5 | 45.0 | 53.9 |

[^104]
## Table C-1.

## Population Size and Balance of Males and Females for the Population Aged 65 and Over by Age, Sex, Race, and Hispanic Origin: 2010-Con.

(Sex ratio is the number of males per 100 females. For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Race, Hispanic origin, and sex | Total, 65 and over | Age |  |  |  |  |  | Total, 85 and over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 65 to 69 | 70 to 74 | 75 to 79 | 80 to 84 | 85 to 89 | 90 and over |  |
| RACE-Con. |  |  |  |  |  |  |  |  |
| Not Hispanic or Latino |  |  |  |  |  |  |  |  |
| Both sexes | 37,486,360 | 11,486,687 | 8,578,024 | 6,806,987 | 5,391,839 | 3,435,031 | 1,787,792 | 5,222,823 |
| Male. | 16,181,078 | 5,423,645 | 3,938,210 | 2,969,048 | 2,155,328 | 1,205,456 | 489,391 | 1,694,847 |
| Female | 21,305,282 | 6,063,042 | 4,639,814 | 3,837,939 | 3,236,511 | 2,229,575 | 1,298,401 | 3,527,976 |
| Percent female. | 56.8 | 52.8 | 54.1 | 56.4 | 60.0 | 64.9 | 72.6 | 67.5 |
| Sex ratio . . . . . . . . . . . . . . . . | 75.9 | 89.5 | 84.9 | 77.4 | 66.6 | 54.1 | 37.7 | 48.0 |

Source: U.S. Census Bureau, 2011, 2010 Census Summary File 1, Table PCT12, Washington, DC, available at [http://factfinder2.census.gov/](http://factfinder2.census.gov/), accessed on February 20, 2012.

Table C-2.

## Labor Force Participation Rates for the Population Aged 50 and Over by Age, Sex, Race, and Hispanic Origin: 1980 to 2010

(In percent. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology//

| Race, Hispanic origin, and age | Male |  |  |  | Female |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1980 | 1990 | 2000 | 2010 | 1980 | 1990 | 2000 | 2010 |
| All Races |  |  |  |  |  |  |  |  |
| 50 to 54 | 89.3 | 88.8 | 86.8 | 85.1 | 57.8 | 66.9 | 74.1 | 74.6 |
| 55 to 59 | 81.7 | 79.9 | 77.1 | 78.5 | 48.5 | 55.3 | 61.2 | 68.4 |
| 60 to 64 | 60.8 | 55.5 | 54.8 | 60.0 | 33.2 | 35.5 | 40.1 | 50.7 |
| 65 and over | 19.0 | 16.3 | 17.7 | 22.1 | 8.1 | 8.6 | 9.4 | 13.8 |
| 65 to 69 | 28.5 | 26.0 | 30.1 | 36.5 | 15.1 | 17.0 | 19.4 | 27.0 |
| 70 to 74 | 17.9 | 15.4 | 17.9 | 22.0 | 7.5 | 8.2 | 9.9 | 14.7 |
| 75 and over | 8.8 | 7.1 | 8.0 | 10.4 | 2.5 | 2.7 | 3.5 | 5.3 |
| White ${ }^{1}$ |  |  |  |  |  |  |  |  |
| 50 to 54 | 90.1 | 90.0 | 91.8 | 86.5 | 57.9 | 68.0 | 75.8 | 75.3 |
| 55 to 59 | 82.8 | 80.9 | 80.2 | 79.7 | 48.4 | 56.4 | 62.9 | 69.4 |
| 60 to 64 | 61.7 | 56.5 | 56.0 | 61.3 | 33.1 | 36.1 | 41.8 | 51.7 |
| 65 and over | 19.1 | 16.8 | 17.9 | 22.3 | 8.0 | 8.5 | 9.5 | 13.9 |
| 65 to 69 | 28.6 | 26.8 | 30.6 | 37.2 | 14.9 | 17.2 | 20.0 | 27.6 |
| 70 to 74 | 18.2 | 15.8 | 18.2 | 22.5 | 7.5 | 8.0 | 10.4 | 15.0 |
| 75 and over | 8.8 | 7.4 | 8.4 | 10.5 | 2.5 | 2.6 | 3.5 | 5.3 |
| Black or African American ${ }^{2}$ |  |  |  |  |  |  |  |  |
| 50 to 54 | 80.7 | 79.7 | 77.7 | 75.1 | 57.6 | 66.7 | 71.4 | 70.6 |
| 55 to 59 | 70.2 | 67.2 | 67.2 | 65.2 | 52.5 | 51.7 | 59.7 | 63.6 |
| 60 to 64 | 51.2 | 47.4 | 44.2 | 46.7 | 35.6 | 34.3 | 34.6 | 44.2 |
| 65 and over | 16.8 | 13.0 | 14.2 | 18.1 | 9.9 | 9.9 | 9.9 | 13.3 |
| 65 to 69 | 25.3 | 19.1 | 21.5 | 27.9 | 18.7 | 17.7 | 19.0 | 24.2 |
| 70 to 74 | 16.2 | 14.2 | 14.1 | 16.3 | 7.9 | 9.8 | 7.5 | 13.0 |
| 75 and over | 6.7 | 4.9 | 6.7 | 9.3 | 2.6 | 3.2 | 4.2 | 5.6 |
| Asian ${ }^{3}$ |  |  |  |  |  |  |  |  |
| 50 to 54 | 85.7 | 86.8 | 86.9 | 88.7 | 59.8 | 66.8 | 66.0 | 75.9 |
| 55 to 59 | 77.8 | 80.6 | 77.5 | 87.4 | 50.0 | 56.5 | 58.4 | 65.0 |
| 60 to 64 | 71.0 | 62.8 | 60.7 | 66.8 | 31.8 | 30.3 | 39.0 | 49.3 |
| 65 and over | 22.5 | 15.1 | 19.3 | 24.2 | 8.5 | 8.9 | 8.5 | 11.7 |
| 65 to 69 | 30.2 | 25.0 | 35.9 | 42.9 | 17.0 | 14.6 | 13.7 | 21.4 |
| 70 to 74 | 26.5 | 11.1 | 17.4 | 22.1 | 2.5 | 7.6 | 7.4 | 13.8 |
| 75 and over | 9.5 | 6.3 | 4.9 | 8.9 | 4.1 | 2.9 | 4.4 | 4.4 |
| Hispanic (of any race) |  |  |  |  |  |  |  |  |
| 50 to 54 | 91.5 | 86.4 | 85.6 | 86.7 | 55.7 | 53.9 | 66.1 | 67.7 |
| 55 to 59 | 84.0 | 78.0 | 79.3 | 77.1 | 39.6 | 46.3 | 48.6 | 60.5 |
| 60 to 64 | 57.7 | 52.8 | 56.6 | 57.8 | 28.0 | 31.1 | 32.2 | 44.5 |
| 65 and over | 20.6 | 14.0 | 18.2 | 24.5 | 5.5 | 7.2 | 7.8 | 13.0 |
| 65 to 69 | 33.1 | 22.4 | 31.6 | 38.7 | 9.9 | 12.1 | 16.2 | 24.3 |
| 70 to 74 | 16.3 | 9.6 | 18.8 | 23.4 | 4.9 | 8.5 | 8.5 | 10.4 |
| 75 and over | 7.4 | 5.6 | 8.3 | 10.9 | 0.7 | 1.3 | 3.0 | 5.5 |

${ }^{1}$ In 2010, data for White alone; for other years, data for White, non-Hispanic.
${ }^{2}$ In 2010, data for Black or African American alone; for other years, data for persons who identified Black or African American as their single primary race.
${ }^{3}$ In 2010, data for Asian alone; for other years, data are for Asians combined with other race groups not shown in this table.
Notes: Data are not comparable across all years. The reference population of the survey is the civilian noninstitutionalized population
Sources: Wan He, Manisha Sengupta, Victoria A. Velkoff, and Kimberly A. DeBarros, 2005, 65+ in the United States: 2005, Current Population Reports,
P23-209, U.S. Census Bureau, Washington, DC: U.S. Government Printing Office; Bureau of Labor Statistics, 2011, Labor Force Statistics from the Current
Population Survey, available at [http://www.bls.gov/cps/tables.htm](http://www.bls.gov/cps/tables.htm), accessed on October 21, 2012; all years, Current Population Survey.

Table C-3.
Poverty Status by Age, Race, and Hispanic Origin: 1980 to 2010
(In thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/

| Year, race, and Hispanic origin | Total population |  |  | Under 18 |  |  | 18 to 64 |  |  | 65 and over |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Below poverty level |  | Total | Below poverty level |  | Total | Below poverty level |  | Total | Below poverty level |  |
|  |  | Number | Percent |  | Number | Percent |  | Number | Percent |  | Number | Percent |
| All Races |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010. | 305,688 | 46,180 | 15.1 | 74,494 | 16,401 | 22.0 | 192,015 | 26,258 | 13.7 | 39,179 | 3,520 | 9.0 |
| 2005. | 293,135 | 36,950 | 12.6 | 73,285 | 12,896 | 17.6 | 184,345 | 20,450 | 11.1 | 35,505 | 3,603 | 10.1 |
| 2000. | 278,944 | 31,581 | 11.3 | 71,741 | 11,587 | 16.2 | 173,638 | 16,671 | 9.6 | 33,566 | 3,323 | 9.9 |
| 1995. | 263,733 | 36,425 | 13.8 | 70,566 | 14,665 | 20.8 | 161,508 | 18,442 | 11.4 | 31,658 | 3,318 | 10.5 |
| 1990. | 248,644 | 33,585 | 13.5 | 65,049 | 13,431 | 20.6 | 153,502 | 16,496 | 10.7 | 30,093 | 3,658 | 12.2 |
| 1985. | 236,594 | 33,064 | 14.0 | 62,876 | 13,010 | 20.7 | 146,396 | 16,598 | 11.3 | 27,322 | 3,456 | 12.6 |
| 1980. | 225,027 | 29,272 | 13.0 | 62,914 | 11,543 | 18.3 | 137,428 | 13,858 | 10.1 | 24,686 | 3,871 | 15.7 |
| White Alone |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010. | 243,013 | 31,650 | 13.0 | 56,215 | 10,492 | 18.7 | 153,029 | 18,549 | 12.1 | 33,768 | 2,608 | 7.7 |
| 2005. | 235,430 | 24,872 | 10.6 | 56,075 | 8,085 | 14.4 | 148,450 | 14,086 | 9.5 | 30,905 | 2,700 | 8.7 |
| 2002. | 230,376 | 23,466 | 10.2 | 55,703 | 7,549 | 13.6 | 144,694 | 13,178 | 9.1 | 29,980 | 2,739 | 9.1 |
| White |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000. | 227,846 | 21,645 | 9.5 | 55,980 | 7,307 | 13.1 | 142,164 | 11,754 | 8.3 | 29,703 | 2,584 | 8.7 |
| 1995. | 218,028 | 24,423 | 11.2 | 55,444 | 8,981 | 16.2 | 134,149 | 12,869 | 9.6 | 28,436 | 2,572 | 9.0 |
| 1990. | 208,611 | 22,326 | 10.7 | 51,929 | 8,232 | 15.9 | 129,784 | 11,387 | 8.8 | 26,898 | 2,707 | 10.1 |
| 1985. | 200,918 | 22,860 | 11.4 | 51,031 | 8,253 | 16.2 | 125,258 | 11,909 | 9.5 | 24,629 | 2,698 | 11.0 |
| 1980. | 192,912 | 19,699 | 10.2 | 51,653 | 7,181 | 13.9 | 118,935 | 9,478 | 8.0 | 22,325 | 3,042 | 13.6 |
| Non-Hispanic White Alone |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 195,553 | 16,227 | 8.3 | 42,523 | 4,254 | 10.0 | 124,326 | 9,708 | 7.8 | 28,704 | 2,264 | 7.9 |
| 2002. | 194,144 | 15,567 | 8.0 | 43,614 | 4,090 | 9.4 | 122,511 | 9,157 | 7.5 | 28,018 | 2,321 | 8.3 |
| Non-Hispanic White |  |  |  |  |  |  |  |  |  |  |  |  |
| 1995. | 190,951 | 16,267 | 8.5 | 45,689 | 5,115 | 11.2 | 118,228 | 8,908 | 7.5 | 27,034 | 2,243 | 8.3 |
| 1990. | 188,129 | 16,622 | 8.8 | 44,797 | 5,532 | 12.3 | 117,477 | 8,619 | 7.3 | 25,854 | 2,471 | 9.6 |
| 1985. | 183,455 | 17,839 | 9.7 | 44,752 | 5,745 | 12.8 | 114,969 | 9,608 | 8.4 | 23,734 | 2,486 | 10.5 |
| 1980. | 179,798 | 16,365 | 9.1 | 46,578 | 5,510 | 11.8 | 111,460 | 7,990 | 7.2 | 21,760 | 2,865 | 13.2 |
| Black Alone |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010. | 38,965 | 10,675 | 27.4 | 11,145 | 4,362 | 39.1 | 24,425 | 5,702 | 23.3 | 3,394 | 612 | 18.0 |
| 2005. | 36,802 | 9,168 | 24.9 | 11,136 | 3,841 | 34.5 | 22,659 | 4,627 | 20.4 | 3,007 | 701 | 23.3 |
| 2002. | 35,678 | 8,602 | 24.1 | 11,275 | 3,645 | 32.3 | 21,547 | 4,277 | 19.9 | 2,856 | 680 | 23.8 |
| Black |  |  |  |  |  |  |  |  |  |  |  |  |
| 2000. | 35,425 | 7,982 | 22.5 | 11,480 | 3,581 | 31.2 | 21,161 | 3,794 | 17.9 | 2,785 | 607 | 21.8 |
| 1995. | 33,740 | 9,872 | 29.3 | 11,369 | 4,761 | 41.9 | 19,892 | 4,483 | 22.5 | 2,478 | 629 | 25.4 |
| 1990. | 30,806 | 9,837 | 31.9 | 10,162 | 4,550 | 44.8 | 18,097 | 4,427 | 24.5 | 2,547 | 860 | 33.8 |
| 1985. | 28,485 | 8,926 | 31.3 | 9,545 | 4,157 | 43.6 | 16,667 | 4,052 | 24.3 | 2,273 | 717 | 31.5 |
| 1980. | 26,408 | 8,579 | 32.5 | 9,368 | 3,961 | 42.3 | 14,987 | 3,835 | 25.6 | 2,054 | 783 | 38.1 |
| Asian Alone |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010. | 14,324 | 1,729 | 12.1 | 3,297 | 474 | 14.4 | 9,573 | 1,043 | 10.9 | 1,454 | 213 | 14.6 |
| 2005. | 12,580 | 1,402 | 11.1 | 2,871 | 317 | 11.1 | 8,591 | 941 | 11.0 | 1,118 | 143 | 12.8 |
| 2002. | 11,541 | 1,161 | 10.1 | 2,683 | 315 | 11.7 | 7,881 | 764 | 9.7 | 977 | 82 | 8.4 |
| Asian and Pacific Islander |  |  |  |  |  |  |  |  |  |  |  |  |
| 1995. | 12,672 9,644 | 1,258 | 9.9 14.6 | 3,294 | 564 | 12.7 19.5 | 8,500 | 757 | 8.9 12.4 | 878 622 | 82 89 | 9.3 14.3 |
| 1990. | 7,014 | 858 | 12.2 | 2,126 | 374 | 17.6 | 4,375 | 422 | 9.6 | 514 | 62 | 12.1 |

[^105]Table C-3.
Poverty Status by Age, Race, and Hispanic Origin: 1980 to 2010 —Con.
(In thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/cps/methodology/

| Year, race, and Hispanic origin | Total population |  |  | Under 18 |  |  | 18 to 64 |  |  | 65 and over |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Below poverty level |  | Total | Below poverty level |  | Total | Below poverty level |  | Total | Below poverty level |  |
|  |  | Number | Percent |  | Number | Percent |  | Number | Percent |  | Number | Percent |
| Hispanic (of any race) |  |  |  |  |  |  |  |  |  |  |  |  |
| 2010. | 49,869 | 13,243 | 26.6 | 17,435 | 6,110 | 35.0 | 29,576 | 6,619 | 22.4 | 2,857 | 514 | 18.0 |
| 2005. | 43,020 | 9,368 | 21.8 | 14,654 | 4,143 | 28.3 | 26,051 | 4,765 | 18.3 | 2,315 | 460 | 19.9 |
| 2002. | 39,216 | 8,555 | 21.8 | 13,210 | 3,782 | 28.6 | 23,952 | 4,334 | 18.1 | 2,053 | 439 | 21.4 |
| 2000. | 35,955 | 7,747 | 21.5 | 12,399 | 3,522 | 28.4 | 21,734 | 3,844 | 17.7 | 1,822 | 381 | 20.9 |
| 1995. | 28,344 | 8,574 | 30.3 | 10,213 | 4,080 | 40.0 | 16,673 | 4,153 | 24.9 | 1,458 | 342 | 23.5 |
| 1990. | 21,405 | 6,006 | 28.1 | 7,457 | 2,865 | 38.4 | 12,857 | 2,896 | 22.5 | 1,091 | 245 | 22.5 |
| 1985. | 18,075 | 5,236 | 29.0 | 6,475 | 2,606 | 40.3 | 10,685 | 2,411 | 22.6 | 915 | 219 | 23.9 |
| 1980. | 13,600 | 3,491 | 25.7 | 5,276 | 1,749 | 33.2 | 7,740 | 1,563 | 20.2 | 582 | 179 | 30.8 |

[^106]Table C-4.

## Population Aged 65 and Over and Percentage Change by Region and State: 2000 and 2010

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Region and state | 65 and over |  | Change, 2000 to 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2010 | Number | Percent |
| United States. | 34,991,753 | 40,267,984 | 5,276,231 | 15.1 |
| Northeast | 7,372,282 | 7,804,833 | 432,551 | 5.9 |
| Connecticut | 470,183 | 506,559 | 36,376 | 7.7 |
| Maine | 183,402 | 211,080 | 27,678 | 15.1 |
| Massachusetts. | 860,162 | 902,724 | 42,562 | 4.9 |
| New Hampshire | 147,970 | 178,268 | 30,298 | 20.5 |
| New Jersey | 1,113,136 | 1,185,993 | 72,857 | 6.5 |
| New York | 2,448,352 | 2,617,943 | 169,591 | 6.9 |
| Pennsylvania | 1,919,165 | 1,959,307 | 40,142 | 2.1 |
| Rhode Island | 152,402 | 151,881 | -521 | -0.3 |
| Vermont | 77,510 | 91,078 | 13,568 | 17.5 |
| Midwest | 8,259,075 | 9,022,334 | 763,259 | 9.2 |
| Illinois. | 1,500,025 | 1,609,213 | 109,188 | 7.3 |
| Indiana | 752,831 | 841,108 | 88,277 | 11.7 |
| Iowa | 436,213 | 452,888 | 16,675 | 3.8 |
| Kansas. | 356,229 | 376,116 | 19,887 | 5.6 |
| Michigan. | 1,219,018 | 1,361,530 | 142,512 | 11.7 |
| Minnesota | 594,266 | 683,121 | 88,855 | 15.0 |
| Missouri | 755,379 | 838,294 | 82,915 | 11.0 |
| Nebraska | 232,195 | 246,677 | 14,482 | 6.2 |
| North Dakota | 94,478 | 97,477 | 2,999 | 3.2 |
| Ohio . | 1,507,757 | 1,622,015 | 114,258 | 7.6 |
| South Dakota | 108,131 | 116,581 | 8,450 | 7.8 |
| Wisconsin. | 702,553 | 777,314 | 74,761 | 10.6 |
| South. | 12,438,267 | 14,893,985 | 2,455,718 | 19.7 |
| Alabama. | 579,798 | 657,792 | 77,994 | 13.5 |
| Arkansas | 374,019 | 419,981 | 45,962 | 12.3 |
| Delaware | 101,726 | 129,277 | 27,551 | 27.1 |
| District of Columbia | 69,898 | 68,809 | -1,089 | -1.6 |
| Florida | 2,807,597 | 3,259,602 | 452,005 | 16.1 |
| Georgia | 785,275 | 1,032,035 | 246,760 | 31.4 |
| Kentucky | 504,793 | 578,227 | 73,434 | 14.5 |
| Louisiana | 516,929 | 557,857 | 40,928 | 7.9 |
| Maryland | 599,307 | 707,642 | 108,335 | 18.1 |
| Mississippi | 343,523 | 380,407 | 36,884 | 10.7 |
| North Carolina | 969,048 | 1,234,079 | 265,031 | 27.3 |
| Oklahoma. | 455,950 | 506,714 | 50,764 | 11.1 |
| South Carolina . | 485,333 | 631,874 | 146,541 | 30.2 |
| Tennessee | 703,311 | 853,462 | 150,151 | 21.3 |
| Texas | 2,072,532 | 2,601,886 | 529,354 | 25.5 |
| Virginia. | 792,333 | 976,937 | 184,604 | 23.3 |
| West Virginia | 276,895 | 297,404 | 20,509 | 7.4 |
| West | 6,922,129 | 8,546,832 | 1,624,703 | 23.5 |
| Alaska | 35,699 | 54,938 | 19,239 | 53.9 |
| Arizona. | 667,839 | 881,831 | 213,992 | 32.0 |
| California | 3,595,658 | 4,246,514 | 650,856 | 18.1 |
| Colorado | 416,073 | 549,625 | 133,552 | 32.1 |
| Hawaii | 160,601 | 195,138 | 34,537 | 21.5 |
| Idaho | 145,916 | 194,668 | 48,752 | 33.4 |
| Montana | 120,949 | 146,742 | 25,793 | 21.3 |
| New Mexico | 212,225 | 272,255 | 60,030 | 28.3 |
| Nevada. | 218,929 | 324,359 | 105,430 | 48.2 |
| Oregon. | 438,177 | 533,533 | 95,356 | 21.8 |
| Utah . | 190,222 | 249,462 | 59,240 | 31.1 |
| Washington | 662,148 | 827,677 | 165,529 | 25.0 |
| Wyoming | 57,693 | 70,090 | 12,397 | 21.5 |

[^107] available at [http://factfinder2.census.gov/](http://factfinder2.census.gov/), accessed on February 20, 2012; U.S. Census Bureau, 2011, 2010 Census Summary File 1, Table PCT12, Washington, DC, available at [http://factfinder2.census.gov/](http://factfinder2.census.gov/), accessed on February 20, 2012.

Table C-5.

## Population Aged 85 and Over and Percentage Change by Region and State: 2000 and 2010

(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)

| Region and state | 85 and over |  | Change, 2000 to 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2010 | Number | Percent |
| United States. | 4,239,587 | 5,493,433 | 1,253,846 | 29.6 |
| Northeast. | 938,459 | 1,199,702 | 261,243 | 27.8 |
| Connecticut | 64,273 | 84,898 | 20,625 | 32.1 |
| Maine . | 23,316 | 29,136 | 5,820 | 25.0 |
| Massachusetts. | 116,692 | 145,199 | 28,507 | 24.4 |
| New Hampshire | 18,231 | 24,761 | 6,530 | 35.8 |
| New Jersey | 135,999 | 179,611 | 43,612 | 32.1 |
| New York | 311,488 | 390,874 | 79,386 | 25.5 |
| Pennsylvania | 237,567 | 305,676 | 68,109 | 28.7 |
| Rhode Island | 20,897 | 26,750 | 5,853 | 28.0 |
| Vermont | 9,996 | 12,797 | 2,801 | 28.0 |
| Midwest. | 1,064,295 | 1,320,640 | 256,345 | 24.1 |
| Indiana | 91,558 | 115,272 | 23,714 | 25.9 |
| Illinois. | 192,031 | 234,912 | 42,881 | 22.3 |
| lowa | 65,118 | 74,658 | 9,540 | 14.7 |
| Kansas. | 51,770 | 59,318 | 7,548 | 14.6 |
| Michigan. | 142,460 | 191,881 | 49,421 | 34.7 |
| Minnesota | 85,601 | 106,664 | 21,063 | 24.6 |
| Missouri . | 98,571 | 113,779 | 15,208 | 15.4 |
| Nebraska | 33,953 | 39,308 | 5,355 | 15.8 |
| North Dakota | 14,726 | 16,688 | 1,962 | 13.3 |
| Ohio. | 176,796 | 230,429 | 53,633 | 30.3 |
| South Dakota | 16,086 | 19,226 | 3,140 | 19.5 |
| Wisconsin. | 95,625 | 118,505 | 22,880 | 23.9 |
| South. | 1,430,546 | 1,821,982 | 391,436 | 27.4 |
| Alabama. | 67,301 | 75,684 | 8,383 | 12.5 |
| Arkansas | 46,492 | 51,402 | 4,910 | 10.6 |
| Delaware | 10,549 | 15,744 | 5,195 | 49.2 |
| District of Columbia | 8,975 | 10,315 | 1,340 | 14.9 |
| Florida | 331,287 | 434,125 | 102,838 | 31.0 |
| Georgia | 87,857 | 113,823 | 25,966 | 29.6 |
| Kentucky | 58,261 | 69,208 | 10,947 | 18.8 |
| Louisiana | 58,676 | 65,686 | 7,010 | 11.9 |
| Maryland | 66,902 | 98,126 | 31,224 | 46.7 |
| Mississippi | 42,891 | 44,359 | 1,468 | 3.4 |
| North Carolina | 105,461 | 147,461 | 42,000 | 39.8 |
| Oklahoma. | 57,175 | 61,912 | 4,737 | 8.3 |
| South Carolina | 50,269 | 70,717 | 20,448 | 40.7 |
| Tennessee | 81,465 | 99,917 | 18,452 | 22.7 |
| Texas | 237,940 | 305,179 | 67,239 | 28.3 |
| Virginia. | 87,266 | 122,403 | 35,137 | 40.3 |
| West Virginia | 31,779 | 35,921 | 4,142 | 13.0 |
| West | 806,287 | 1,151,109 | 344,822 | 42.8 |
| Alaska | 2,634 | 4,711 | 2,077 | 78.9 |
| Arizona. | 68,525 | 103,400 | 34,875 | 50.9 |
| California | 425,657 | 600,968 | 175,311 | 41.2 |
| Colorado | 48,216 | 69,613 | 21,397 | 44.4 |
| Hawaii | 17,564 | 30,238 | 12,674 | 72.2 |
| Idaho | 18,057 | 25,242 | 7,185 | 39.8 |
| Montana. | 15,337 | 20,021 | 4,684 | 30.5 |
| Nevada. | 16,989 | 30,187 | 13,198 | 77.7 |
| New Mexico | 23,306 | 31,993 | 8,687 | 37.3 |
| Oregon. | 57,431 | 77,872 | 20,441 | 35.6 |
| Utah . | 21,751 | 30,991 | 9,240 | 42.5 |
| Washington | 84,085 | 117,271 | 33,186 | 39.5 |
| Wyoming | 6,735 | 8,602 | 1,867 | 27.7 |

Sources: U.S. Census Bureau, 2001, Census 2000 Summary File 1, Table P12, Washington, DC, available at [http://factfinder2.census.gov/](http://factfinder2.census.gov/), accessed on February 20, 2012; U.S. Census Bureau, 2011, 2010 Census Summary File 1, Table PCT12, Washington, DC, available at [http://factfinder2.census.gov/](http://factfinder2.census.gov/), accessed on February 20, 2012.

Table C-6.
Population Aged 65 and Over by Region, State, Race, and Hispanic Origin: 2010
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sf1.pdf)

| Region and state |  | One race |  |  |  |  |  | Two or More Races | Hispanic or Latino (of any race) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All races | White | Black or African American | American Indian and Alaska Native | Asian | Native Hawaiian and Other Pacific Islander | Some Other Race |  |  |
| Population Size United States. | 40,267,984 | 34,139,237 | 3,438,397 | 207,060 | 1,386,626 | 31,213 | 665,994 | 399,457 | 2,781,624 |
| Northeast. | 7,804,833 | 6,701,435 | 641,102 | 15,483 | 245,821 | 1,211 | 128,539 | 71,242 | 431,175 |
| Connecticut | 506,559 | 457,176 | 30,529 | 784 | 7,940 | 58 | 6,375 | 3,697 | 22,035 |
| Maine | 211,080 | 207,809 | 594 | 583 | 806 | 16 | 116 | 1,156 | 865 |
| Massachusetts. | 902,724 | 822,623 | 34,819 | 1,373 | 24,346 | 150 | 12,024 | 7,389 | 27,136 |
| New Hampshire | 178,268 | 174,688 | 709 | 228 | 1,419 | 10 | 330 | 884 | 1,359 |
| New Jersey | 1,185,993 | 976,694 | 116,367 | 2,055 | 56,543 | 196 | 22,135 | 12,003 | 93,881 |
| New York | 2,617,943 | 2,049,114 | 321,588 | 7,764 | 127,984 | 555 | 75,743 | 35,195 | 249,893 |
| Pennsylvania | 1,959,307 | 1,782,320 | 132,363 | 2,048 | 24,602 | 198 | 9,091 | 8,685 | 30,178 |
| Rhode Island | 151,881 | 141,429 | 3,903 | 474 | 1,788 | 20 | 2,665 | 1,602 | 5,301 |
| Vermont | 91,078 | 89,582 | 230 | 174 | 393 | 8 | 60 | 631 | 527 |
| Midwest | 9,022,334 | 8,155,273 | 617,818 | 28,362 | 117,541 | 1,238 | 50,725 | 51,377 | 174,823 |
| Illinois. | 1,609,213 | 1,336,460 | 181,271 | 2,429 | 50,880 | 217 | 26,942 | 11,014 | 82,650 |
| Indiana | 841,108 | 777,558 | 48,836 | 1,317 | 5,474 | 99 | 3,387 | 4,437 | 12,783 |
| lowa | 452,888 | 442,659 | 4,493 | 523 | 2,658 | 58 | 1,088 | 1,409 | 4,138 |
| Kansas. | 376,116 | 350,931 | 13,280 | 1,864 | 4,080 | 95 | 3,009 | 2,857 | 10,320 |
| Michigan. | 1,361,530 | 1,193,299 | 133,223 | 4,680 | 15,981 | 153 | 4,717 | 9,477 | 19,693 |
| Minnesota | 683,121 | 654,245 | 10,737 | 3,392 | 10,153 | 86 | 1,676 | 2,832 | 5,880 |
| Missouri | 838,294 | 760,502 | 61,218 | 2,197 | 6,558 | 184 | 1,773 | 5,862 | 8,474 |
| Nebraska | 246,677 | 236,128 | 5,414 | 809 | 1,756 | 46 | 1,610 | 914 | 4,660 |
| North Dakota | 97,477 | 94,737 | 154 | 1,890 | 286 | 9 | 79 | 322 | 384 |
| Ohio | 1,622,015 | 1,455,955 | 137,840 | 2,138 | 13,482 | 204 | 3,582 | 8,814 | 15,564 |
| South Dakota | 116,581 | 111,648 | 232 | 3,629 | 323 | 11 | 160 | 578 | 645 |
| Wisconsin. | 777,314 | 741,151 | 21,120 | 3,494 | 5,910 | 76 | 2,702 | 2,861 | 9,632 |
| South. | 14,893,985 | 12,427,651 | 1,877,136 | 69,360 | 232,759 | 3,229 | 154,056 | 129,794 | 1,100,296 |
| Alabama. | 657,792 | 529,974 | 116,598 | 2,304 | 3,280 | 104 | 1,166 | 4,366 | 5,030 |
| Arkansas | 419,981 | 373,574 | 37,522 | 1,715 | 1,998 | 103 | 1,544 | 3,525 | 4,407 |
| Delaware | 129,277 | 108,593 | 16,559 | 417 | 2,198 | 19 | 657 | 834 | 2,443 |
| District of Columbia . | 68,809 | 22,593 | 42,782 | 216 | 1,354 | 19 | 864 | 981 | 2,805 |
| Florida | 3,259,602 | 2,903,444 | 253,139 | 5,919 | 40,838 | 712 | 27,132 | 28,418 | 436,198 |
| Georgia | 1,032,035 | 784,659 | 213,160 | 1,906 | 19,591 | 208 | 5,241 | 7,270 | 20,080 |
| Kentucky | 578,227 | 542,115 | 28,113 | 812 | 2,763 | 71 | 772 | 3,581 | 3,854 |
| Louisiana | 557,857 | 418,621 | 125,471 | 2,384 | 4,744 | 92 | 2,272 | 4,273 | 11,877 |
| Maryland | 707,642 | 514,425 | 152,353 | 1,492 | 28,592 | 187 | 4,340 | 6,253 | 16,569 |
| Mississippi | 380,407 | 283,062 | 92,151 | 918 | 1,710 | 51 | 543 | 1,972 | 2,768 |
| North Carolina | 1,234,079 | 1,006,831 | 193,361 | 9,933 | 11,715 | 210 | 5,274 | 6,755 | 16,989 |
| Oklahoma. | 506,714 | 437,944 | 22,239 | 24,741 | 4,370 | 144 | 3,443 | 13,833 | 9,596 |
| South Carolina | 631,874 | 495,993 | 125,450 | 1,497 | 4,248 | 86 | 1,472 | 3,128 | 6,601 |
| Tennessee | 853,462 | 754,720 | 84,175 | 1,650 | 5,557 | 127 | 1,827 | 5,406 | 7,058 |
| Texas | 2,601,886 | 2,181,099 | 220,837 | 10,822 | 65,804 | 830 | 92,780 | 29,714 | 532,921 |
| Virginia. | 976,937 | 782,557 | 146,754 | 2,195 | 32,874 | 238 | 4,601 | 7,718 | 19,742 |
| West Virginia | 297,404 | 287,447 | 6,472 | 439 | 1,123 | 28 | 128 | 1,767 | 1,358 |
| West | 8,546,832 | 6,854,878 | 302,341 | 93,855 | 790,505 | 25,535 | 332,674 | 147,044 | 1,075,330 |
| Alaska | 54,938 | 41,533 | 1,144 | 7,457 | 2,977 | 198 | 346 | 1,283 | 1,204 |
| Arizona. | 881,831 | 794,564 | 17,322 | 20,012 | 13,993 | 613 | 26,792 | 8,535 | 96,421 |
| California | 4,246,514 | 3,098,631 | 224,143 | 26,804 | 561,229 | 9,532 | 243,571 | 82,604 | 748,879 |
| Colorado | 549,625 | 501,358 | 14,750 | 3,275 | 10,973 | 250 | 13,115 | 5,904 | 54,018 |
| Hawaii | 195,138 | 50,142 | 861 | 295 | 113,885 | 10,800 | 936 | 18,219 | 6,323 |
| Idaho | 194,668 | 187,609 | 291 | 1,510 | 1,542 | 74 | 2,061 | 1,581 | 5,574 |
| Montana. | 146,742 | 140,582 | 162 | 3,892 | 458 | 47 | 292 | 1,309 | 1,416 |
| New Mexico | 272,255 | 225,611 | 3,690 | 14,853 | 2,447 | 97 | 20,455 | 5,102 | 84,850 |
| Nevada. | 324,359 | 266,664 | 19,073 | 2,555 | 21,711 | 1,062 | 8,453 | 4,841 | 28,593 |
| Oregon. | 533,533 | 502,399 | 4,784 | 3,739 | 12,056 | 449 | 4,178 | 5,928 | 12,700 |
| Utah . | 249,462 | 236,988 | 1,022 | 1,562 | 3,894 | 858 | 3,594 | 1,544 | 11,008 |
| Washington | 827,677 | 741,415 | 14,814 | 7,118 | 45,033 | 1,535 | 8,130 | 9,632 | 21,580 |
| Wyoming | 70,090 | 67,382 | 285 | 783 | 307 | 20 | 751 | 562 | 2,764 |

[^108]Table C-6.
Population Aged 65 and Over by Region, State, Race and Hispanic Origin: 2010-Con.
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)

| Region and state |  | One race |  |  |  |  |  | Two or More Races | Hispanic or Latino (of any race) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All races | White | Black or African American | American Indian and Alaska Native | Asian | Native Hawaiian and Other Pacific Islander | Some Other Race |  |  |
| Percent of Area United States. | 100.0 | 84.8 | 8.5 | 0.5 | 3.4 | 0.1 | 1.7 | 1.0 | 6.9 |
| Northeast. | 100.0 | 85.9 | 8.2 | 0.2 | 3.1 | Z | 1.6 | 0.9 | 5.5 |
| Connecticut | 100.0 | 90.3 | 6.0 | 0.2 | 1.6 | Z | 1.3 | 0.7 | 4.3 |
| Maine . | 100.0 | 98.5 | 0.3 | 0.3 | 0.4 | Z | 0.1 | 0.5 | 0.4 |
| Massachusetts. | 100.0 | 91.1 | 3.9 | 0.2 | 2.7 | Z | 1.3 | 0.8 | 3.0 |
| New Hampshire | 100.0 | 98.0 | 0.4 | 0.1 | 0.8 | Z | 0.2 | 0.5 | 0.8 |
| New Jersey . . . | 100.0 | 82.4 | 9.8 | 0.2 | 4.8 | Z | 1.9 | 1.0 | 7.9 |
| New York | 100.0 | 78.3 | 12.3 | 0.3 | 4.9 | Z | 2.9 | 1.3 | 9.5 |
| Pennsylvania | 100.0 | 91.0 | 6.8 | 0.1 | 1.3 | Z | 0.5 | 0.4 | 1.5 |
| Rhode Island | 100.0 | 93.1 | 2.6 | 0.3 | 1.2 | z | 1.8 | 1.1 | 3.5 |
| Vermont | 100.0 | 98.4 | 0.3 | 0.2 | 0.4 | Z | 0.1 | 0.7 | 0.6 |
| Midwest. | 100.0 | 90.4 | 6.8 | 0.3 | 1.3 | z | 0.6 | 0.6 | 1.9 |
| Illinois. | 100.0 | 83.1 | 11.3 | 0.2 | 3.2 | Z | 1.7 | 0.7 | 5.1 |
| Indiana | 100.0 | 92.4 | 5.8 | 0.2 | 0.7 | z | 0.4 | 0.5 | 1.5 |
| lowa | 100.0 | 97.7 | 1.0 | 0.1 | 0.6 | Z | 0.2 | 0.3 | 0.9 |
| Kansas. | 100.0 | 93.3 | 3.5 | 0.5 | 1.1 | Z | 0.8 | 0.8 | 2.7 |
| Michigan. | 100.0 | 87.6 | 9.8 | 0.3 | 1.2 | Z | 0.3 | 0.7 | 1.4 |
| Minnesota | 100.0 | 95.8 | 1.6 | 0.5 | 1.5 | Z | 0.2 | 0.4 | 0.9 |
| Missouri . | 100.0 | 90.7 | 7.3 | 0.3 | 0.8 | Z | 0.2 | 0.7 | 1.0 |
| Nebraska | 100.0 | 95.7 | 2.2 | 0.3 | 0.7 | Z | 0.7 | 0.4 | 1.9 |
| North Dakota | 100.0 | 97.2 | 0.2 | 1.9 | 0.3 | Z | 0.1 | 0.3 | 0.4 |
| Ohio . | 100.0 | 89.8 | 8.5 | 0.1 | 0.8 | Z | 0.2 | 0.5 | 1.0 |
| South Dakota . | 100.0 | 95.8 | 0.2 | 3.1 | 0.3 | z | 0.1 | 0.5 | 0.6 |
| Wisconsin. | 100.0 | 95.3 | 2.7 | 0.4 | 0.8 | Z | 0.3 | 0.4 | 1.2 |
| South. | 100.0 | 83.4 | 12.6 | 0.5 | 1.6 | z | 1.0 | 0.9 | 7.4 |
| Alabama. | 100.0 | 80.6 | 17.7 | 0.4 | 0.5 | Z | 0.2 | 0.7 | 0.8 |
| Arkansas | 100.0 | 89.0 | 8.9 | 0.4 | 0.5 | Z | 0.4 | 0.8 | 1.0 |
| Delaware | 100.0 | 84.0 | 12.8 | 0.3 | 1.7 | Z | 0.5 | 0.6 | 1.9 |
| District of Columbia | 100.0 | 32.8 | 62.2 | 0.3 | 2.0 | Z | 1.3 | 1.4 | 4.1 |
| Florida | 100.0 | 89.1 | 7.8 | 0.2 | 1.3 | Z | 0.8 | 0.9 | 13.4 |
| Georgia | 100.0 | 76.0 | 20.7 | 0.2 | 1.9 | Z | 0.5 | 0.7 | 1.9 |
| Kentucky | 100.0 | 93.8 | 4.9 | 0.1 | 0.5 | Z | 0.1 | 0.6 | 0.7 |
| Louisiana . | 100.0 | 75.0 | 22.5 | 0.4 | 0.9 | Z | 0.4 | 0.8 | 2.1 |
| Maryland | 100.0 | 72.7 | 21.5 | 0.2 | 4.0 | Z | 0.6 | 0.9 | 2.3 |
| Mississippi . | 100.0 | 74.4 | 24.2 | 0.2 | 0.4 | Z | 0.1 | 0.5 | 0.7 |
| North Carolina | 100.0 | 81.6 | 15.7 | 0.8 | 0.9 | z | 0.4 | 0.5 | 1.4 |
| Oklahoma. | 100.0 | 86.4 | 4.4 | 4.9 | 0.9 | Z | 0.7 | 2.7 | 1.9 |
| South Carolina . | 100.0 | 78.5 | 19.9 | 0.2 | 0.7 | Z | 0.2 | 0.5 | 1.0 |
| Tennessee | 100.0 | 88.4 | 9.9 | 0.2 | 0.7 | Z | 0.2 | 0.6 | 0.8 |
| Texas | 100.0 | 83.8 | 8.5 | 0.4 | 2.5 | z | 3.6 | 1.1 | 20.5 |
| Virginia. . | 100.0 | 80.1 | 15.0 | 0.2 | 3.4 | z | 0.5 | 0.8 | 2.0 |
| West Virginia | 100.0 | 96.7 | 2.2 | 0.1 | 0.4 | Z | Z | 0.6 | 0.5 |
| West | 100.0 | 80.2 | 3.5 | 1.1 | 9.2 | 0.3 | 3.9 | 1.7 | 12.6 |
| Alaska | 100.0 | 75.6 | 2.1 | 13.6 | 5.4 | 0.4 | 0.6 | 2.3 | 2.2 |
| Arizona. | 100.0 | 90.1 | 2.0 | 2.3 | 1.6 | 0.1 | 3.0 | 1.0 | 10.9 |
| California | 100.0 | 73.0 | 5.3 | 0.6 | 13.2 | 0.2 | 5.7 | 1.9 | 17.6 |
| Colorado | 100.0 | 91.2 | 2.7 | 0.6 | 2.0 | Z | 2.4 | 1.1 | 9.8 |
| Hawaii | 100.0 | 25.7 | 0.4 | 0.2 | 58.4 | 5.5 | 0.5 | 9.3 | 3.2 |
| Idaho | 100.0 | 96.4 | 0.1 | 0.8 | 0.8 | Z | 1.1 | 0.8 | 2.9 |
| Montana. | 100.0 | 95.8 | 0.1 | 2.7 | 0.3 | Z | 0.2 | 0.9 | 1.0 |
| New Mexico | 100.0 | 82.9 | 1.4 | 5.5 | 0.9 | Z | 7.5 | 1.9 | 31.2 |
| Nevada. | 100.0 | 82.2 | 5.9 | 0.8 | 6.7 | 0.3 | 2.6 | 1.5 | 8.8 |
| Oregon. | 100.0 | 94.2 | 0.9 | 0.7 | 2.3 | 0.1 | 0.8 | 1.1 | 2.4 |
| Utah. | 100.0 | 95.0 | 0.4 | 0.6 | 1.6 | 0.3 | 1.4 | 0.6 | 4.4 |
| Washington | 100.0 | 89.6 | 1.8 | 0.9 | 5.4 | 0.2 | 1.0 | 1.2 | 2.6 |
| Wyoming . . | 100.0 | 96.1 | 0.4 | 1.1 | 0.4 | Z | 1.1 | 0.8 | 3.9 |

[^109]Table C-6.
Population Aged 65 and Over by Region, State, Race and Hispanic Origin: 2010-Con.
(For information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/sfl.pdf)

| Region and state |  | One race |  |  |  |  |  |  | Hispanic or Latino (of any race) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All races | White | Black or African American | American Indian and Alaska Native | Asian | Native Hawaiian and Other Pacific Islander | Some Other Race | Two or More Races |  |
| Percent of Group United States. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Northeast. | 19.4 | 19.6 | 18.6 | 7.5 | 17.7 | 3.9 | 19.3 | 17.8 | 15.5 |
| Connecticut | 1.3 | 1.3 | 0.9 | 0.4 | 0.6 | 0.2 | 1.0 | 0.9 | 0.8 |
| Maine . | 0.5 | 0.6 | Z | 0.3 | 0.1 | 0.1 | Z | 0.3 | Z |
| Massachusetts. | 2.2 | 2.4 | 1.0 | 0.7 | 1.8 | 0.5 | 1.8 | 1.8 | 1.0 |
| New Hampshire . | 0.4 | 0.5 | Z | 0.1 | 0.1 | Z | Z | 0.2 | Z |
| New Jersey | 2.9 | 2.9 | 3.4 | 1.0 | 4.1 | 0.6 | 3.3 | 3.0 | 3.4 |
| New York . | 6.5 | 6.0 | 9.4 | 3.7 | 9.2 | 1.8 | 11.4 | 8.8 | 9.0 |
| Pennsylvania | 4.9 | 5.2 | 3.8 | 1.0 | 1.8 | 0.6 | 1.4 | 2.2 | 1.1 |
| Rhode Island | 0.4 | 0.4 | 0.1 | 0.2 | 0.1 | 0.1 | 0.4 | 0.4 | 0.2 |
| Vermont | 0.2 | 0.3 | Z | 0.1 | Z | Z | Z | 0.2 | Z |
| Midwest . | 22.4 | 23.9 | 18.0 | 13.7 | 8.5 | 4.0 | 7.6 | 12.9 | 6.3 |
| Illinois. | 4.0 | 3.9 | 5.3 | 1.2 | 3.7 | 0.7 | 4.0 | 2.8 | 3.0 |
| Indiana. | 2.1 | 2.3 | 1.4 | 0.6 | 0.4 | 0.3 | 0.5 | 1.1 | 0.5 |
| Iowa. | 1.1 | 1.3 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.1 |
| Kansas. | 0.9 | 1.0 | 0.4 | 0.9 | 0.3 | 0.3 | 0.5 | 0.7 | 0.4 |
| Michigan. | 3.4 | 3.5 | 3.9 | 2.3 | 1.2 | 0.5 | 0.7 | 2.4 | 0.7 |
| Minnesota | 1.7 | 1.9 | 0.3 | 1.6 | 0.7 | 0.3 | 0.3 | 0.7 | 0.2 |
| Missouri . | 2.1 | 2.2 | 1.8 | 1.1 | 0.5 | 0.6 | 0.3 | 1.5 | 0.3 |
| Nebraska | 0.6 | 0.7 | 0.2 | 0.4 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| North Dakota | 0.2 | 0.3 | Z | 0.9 | Z | Z | Z | 0.1 | Z |
| Ohio. . | 4.0 | 4.3 | 4.0 | 1.0 | 1.0 | 0.7 | 0.5 | 2.2 | 0.6 |
| South Dakota | 0.3 | 0.3 | Z | 1.8 | Z | Z | Z | 0.1 | Z |
| Wisconsin. | 1.9 | 2.2 | 0.6 | 1.7 | 0.4 | 0.2 | 0.4 | 0.7 | 0.3 |
| South. | 37.0 | 36.4 | 54.6 | 33.5 | 16.8 | 10.3 | 23.1 | 32.5 | 39.6 |
| Alabama. | 1.6 | 1.6 | 3.4 | 1.1 | 0.2 | 0.3 | 0.2 | 1.1 | 0.2 |
| Arkansas | 1.0 | 1.1 | 1.1 | 0.8 | 0.1 | 0.3 | 0.2 | 0.9 | 0.2 |
| Delaware | 0.3 | 0.3 | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 |
| District of Columbia | 0.2 | 0.1 | 1.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| Florida | 8.1 | 8.5 | 7.4 | 2.9 | 2.9 | 2.3 | 4.1 | 7.1 | 15.7 |
| Georgia | 2.6 | 2.3 | 6.2 | 0.9 | 1.4 | 0.7 | 0.8 | 1.8 | 0.7 |
| Kentucky | 1.4 | 1.6 | 0.8 | 0.4 | 0.2 | 0.2 | 0.1 | 0.9 | 0.1 |
| Louisiana | 1.4 | 1.2 | 3.6 | 1.2 | 0.3 | 0.3 | 0.3 | 1.1 | 0.4 |
| Maryland | 1.8 | 1.5 | 4.4 | 0.7 | 2.1 | 0.6 | 0.7 | 1.6 | 0.6 |
| Mississippi . | 0.9 | 0.8 | 2.7 | 0.4 | 0.1 | 0.2 | 0.1 | 0.5 | 0.1 |
| North Carolina | 3.1 | 2.9 | 5.6 | 4.8 | 0.8 | 0.7 | 0.8 | 1.7 | 0.6 |
| Oklahoma. | 1.3 | 1.3 | 0.6 | 11.9 | 0.3 | 0.5 | 0.5 | 3.5 | 0.3 |
| South Carolina | 1.6 | 1.5 | 3.6 | 0.7 | 0.3 | 0.3 | 0.2 | 0.8 | 0.2 |
| Tennessee | 2.1 | 2.2 | 2.4 | 0.8 | 0.4 | 0.4 | 0.3 | 1.4 | 0.3 |
| Texas | 6.5 | 6.4 | 6.4 | 5.2 | 4.7 | 2.7 | 13.9 | 7.4 | 19.2 |
| Virginia.... | 2.4 | 2.3 | 4.3 | 1.1 | 2.4 | 0.8 | 0.7 | 1.9 | 0.7 |
| West Virginia | 0.7 | 0.8 | 0.2 | 0.2 | 0.1 | 0.1 | Z | 0.4 | Z |
| West | 21.2 | 20.1 | 8.8 | 45.3 | 57.0 | 81.8 | 50.0 | 36.8 | 38.7 |
| Alaska | 0.1 | 0.1 | Z | 3.6 | 0.2 | 0.6 | 0.1 | 0.3 | Z |
| Arizona. | 2.2 | 2.3 | 0.5 | 9.7 | 1.0 | 2.0 | 4.0 | 2.1 | 3.5 |
| California | 10.5 | 9.1 | 6.5 | 12.9 | 40.5 | 30.5 | 36.6 | 20.7 | 26.9 |
| Colorado | 1.4 | 1.5 | 0.4 | 1.6 | 0.8 | 0.8 | 2.0 | 1.5 | 1.9 |
| Hawaii | 0.5 | 0.1 | Z | 0.1 | 8.2 | 34.6 | 0.1 | 4.6 | 0.2 |
| Idaho. | 0.5 | 0.5 | Z | 0.7 | 0.1 | 0.2 | 0.3 | 0.4 | 0.2 |
| Montana. | 0.4 | 0.4 | Z | 1.9 | Z | 0.2 | Z | 0.3 | 0.1 |
| New Mexico | 0.7 | 0.7 | 0.1 | 7.2 | 0.2 | 0.3 | 3.1 | 1.3 | 3.1 |
| Nevada. . | 0.8 | 0.8 | 0.6 | 1.2 | 1.6 | 3.4 | 1.3 | 1.2 | 1.0 |
| Oregon. | 1.3 | 1.5 | 0.1 | 1.8 | 0.9 | 1.4 | 0.6 | 1.5 | 0.5 |
| Utah.... | 0.6 | 0.7 | Z | 0.8 | 0.3 | 2.7 | 0.5 | 0.4 | 0.4 |
| Washington | 2.1 | 2.2 | 0.4 | 3.4 | 3.2 | 4.9 | 1.2 | 2.4 | 0.8 |
| Wyoming . | 0.2 | 0.2 | Z | 0.4 | Z | 0.1 | 0.1 | 0.1 | 0.1 |

[^110]Table C-7.

## Estimates and Margins of Error for Key Indicators for the Population Aged 65 and Over: Selected Years, 2000 to 2010

| Indicator | Estimate | Margin of error | 90 percent interval |  |
| :---: | :---: | :---: | :---: | :---: |
| With Any Disability in 2010 (in percent) |  |  |  |  |
| Total. | 38.6 | 0.1 | 38.5 | 38.7 |
| Institutionalized | 96.1 | 0.3 | 95.8 | 96.4 |
| Risk Factors (in percent) |  |  |  |  |
| Current smokers (2008): |  |  |  |  |
| Male . | 9.8 | 0.6 | 9.2 | 10.4 |
| Female. | 8.5 | 0.5 | 8.0 | 9.0 |
|  |  |  |  |  |
| Male. | 28.7 | 1.9 | 26.8 | 30.6 |
| Female. | 30.6 | 2.3 | 28.3 | 32.9 |
| Heavy drinkers-5 or more a day (2003-2006): |  |  |  |  |
| Male . | 9.7 | 1.0 | 8.7 | 10.7 |
| Female. | 2.2 | 0.5 | 1.7 | 2.7 |
| Health Conditions |  |  |  |  |
| 2004-2007 (in percent): |  |  |  |  |
| Hypertension: |  |  |  |  |
| Male . | 49.9 | 1.1 | 48.8 | 51.0 |
| Female. | 55.2 | 0.9 | 54.3 | 56.1 |
| Heart disease: |  |  |  |  |
| Non-Hispanic White | 32.9 | 0.8 | 32.1 | 33.7 |
| Hispanic. . . . . . | 24.5 | 2.4 | 22.1 | 26.9 |
| 2006-2007 (per 1,000 people): |  |  |  |  |
| Activity limitation caused by arthritis or other musculoskeletal disorder: |  |  |  |  |
| 65 to 74 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 121.5 | 5.5 | 116.0 | 127.0 |
| 75 to 84 | 166.6 | 7.8 | 158.8 | 174.4 |
| 85 and over | 281.3 | 17.3 | 264.0 | 298.6 |
| In Labor Force (in percent) |  |  |  |  |
| 2000: |  |  |  |  |
| Male . | 17.7 | 2.2 | 15.5 | 19.9 |
| Female. | 9.4 | 1.8 | 7.6 | 11.2 |
| 2010: |  |  |  |  |
| Male . | 22.1 | 1.9 | 20.2 | 24.0 |
| Female. | 13.8 | 1.7 | 12.1 | 15.5 |
| Employed (in percent) |  |  |  |  |
| 2005. | 14.5 | 1.4 | 13.1 | 15.9 |
| 2010. | 16.2 | 1.3 | 14.9 | 17.5 |
| Unemployed in 2010 (in percent) |  |  |  |  |
| 65 to 69 | 7.6 | 1.2 | 6.4 | 8.8 |
| 70 to 74 | 5.6 | 1.6 | 4.0 | 7.2 |
| 75 and over | 5.6 | 1.9 | 3.7 | 7.5 |
| In Poverty in 2010 (in percent) |  |  |  |  |
| Total. . | 9.0 | 0.3 | 8.7 | 9.3 |
| Male: |  |  |  |  |
| White alone | 5.7 | 0.4 | 5.3 | 6.1 |
| Black alone | 14.2 | 2.2 | 12.0 | 16.4 |
| Asian alone | 14.0 | 3.2 | 10.8 | 17.2 |
| Hispanic. . | 14.2 | 2.3 | 11.9 | 16.5 |
| Female: |  |  |  |  |
| White alone | 9.3 | 0.5 | 8.8 | 9.8 |
| Black alone | 20.5 | 2.1 | 18.4 | 22.6 |
| Asian alone | 15.1 | 2.9 | 12.2 | 18.0 |
| Hispanic . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | 20.9 | 2.3 | 18.6 | 23.2 |

[^111]Table C-7.

## Estimates and Margins of Error for Key Indicators for the Population Aged 65 and Over: Selected Years, 2000 to 2010-Con.



[^112]U.S. Department of Commerce

Economics and Statistics Administration
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[^0]:    ${ }^{1}$ In this report, the oldest-old population is defined as those aged 85 and over.
    ${ }^{2}$ The Baby Boomers include people born from mid-1946 to 1964. The Baby Boom is distinguished by a dramatic increase in birth rates following World War II and comprises one of the largest generations in U.S. history.

[^1]:    Note: Data for 1900 to 1950 exclude Alaska and Hawaii.
    Sources: 1900 to 1940, and 1960 to 1980, U.S. Bureau of the Census, 1983; 1950, U.S. Bureau of the Census, 1953; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, 2011; 2020 to 2050, U.S. Census Bureau, 2012b; 1900 to 2010, decennial census; 2020 to 2050, 2012 National Population Projections, Middle series.

[^2]:    ${ }^{3}$ People turning age 65 between 1990 and 2000 were born between 1925 and 1935.

[^3]:    ${ }^{4}$ For definition of disability in the American Community Survey, see <www.census.gov/acs/www/Downloads /data_documentation/SubjectDefinitions /2008_ACSSubjectDefinitions.pdf>. For definition of skilled nursing facility, see <www.census.gov/acs/www /Downloads/data_documentation /GroupDefinitions/2008GQ_Definitions.pdf>.

[^4]:    ${ }^{5}$ Sex ratio is the number of males per 100 females.

[^5]:    ${ }^{6}$ A population's dependency ratio, also known as the age dependency ratio and the total dependency ratio, is the combined youth population (under age 20) and older population (aged 65 and above) per 100 people aged 20 to 64 (people of "labor force age"). The youth dependency ratio is the number of people aged 0 to 19 per 100 people aged 20 to 64 . The older dependency ratio is the number of people aged 65 and over per 100 people aged 20 to 64 .

[^6]:    Note: The total dependency ratio is the number of people aged 0 to 19 and 65 and over per 100 people aged 20 to 64 . The youth dependency ratio is the number of people aged 0 to 19 per 100 people aged 20 to 64 . The older dependency ratio is the number of people aged 65 and over per 100 people aged 20 to 64.
    Sources: 1980, U.S. Bureau of the Census, 1983; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, $2011 ; 2020$ to 2050, U.S. Census Bureau, 2012a; 1980 to 2010, decennial census; 2020 to 2050, 2012 National Population Projections, Middle series.

[^7]:    Note: The total dependency ratio is the number of people aged 0 to 19 and 65 and over per 100 people aged 20 to 64 . The youth dependency ratio is the number of people aged 0 to 19 per 100 people aged 20 to 64 . The older dependency ratio is the number of people aged 65 and over per 100 people aged 20 to 64 .
    Source: U.S. Census Bureau, 2011; 2010 Census.

[^8]:    7 The youth dependency ratio ranged from 38 for Asians to 110 for Two or More Races.
    ${ }^{8}$ The youth dependency ratio was 66 for Hispanics and 41 for non-Hispanics.

[^9]:    *The 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity, issued by OMB, is available at <www.whitehouse.gov/omb /fedreg/1997standards.html>.

[^10]:    ${ }^{9}$ For more detailed data on the older population by age, sex, race, and Hispanic origin, see Appendix C, Table C-1.

[^11]:    ${ }^{10}$ Mortality has decreased in most, but not all, countries of the world. Exceptions include some countries in sub-Saharan Africa that have been highly affected by the AIDS pandemic.
    ${ }^{11}$ The IDB provides estimates and projections through 2050 of countries and areas recognized by the U.S. Department of State with a population of 5,000 or more.
    ${ }^{12}$ Population estimates in the IDB are as of July 1.

[^12]:    ${ }^{13}$ The IDB follows the United Nations classifications for "less developed" and "more developed" countries. See <http://esa.un.org /wup2009/unup/index.asp?panel=5> for more information.

[^13]:    ${ }^{1}$ Includes deaths of persons who were not residents of the United States. For Blacks in these years, data refer to the non-White population
    ${ }^{2}$ Includes death registration only in 10 states and the District of Columbia.
    Notes: Data are not comparable across all years. Data for 2010 are preliminary.
    Sources: 1900-02, Arias, 2002; 1900, 1950 to 2000, National Center for Health Statistics, 2011; 2010, Murphy, Xu, and Kochanek, 2012.

[^14]:    ${ }^{2}$ For more information on the definition of race and Hispanic origin, see Chapter 1, Box 1-1.

[^15]:    Note: Data for 2010 are preliminary.

[^16]:    ${ }^{1}$ The base of the percentage is the total number of deaths for the population 65 years and over. Note: Data for 2010 are preliminary.
    Sources: Anderson, 2002; Murphy, Xu, and Kochanek, 2012.

[^17]:    ${ }^{4}$ Obesity rates for older men and older women are not statistically different.
    ${ }^{5} \mathrm{BMI}=\underline{\text { Weight in kilograms }}$ (Height in meters) ${ }^{2}$

[^18]:    Note: Data are combined from the 2006-2007 National Health Interview Surveys, which cover the civilian noninstitutionalized population. Source: National Center for Health Statistics, 2010.

[^19]:    Note: Data are combined from the 2005-2006 National Health and Nutrition Examination Surveys, which cover the noninstitutionalized population.
    Source: American Heart Association, 2009.

[^20]:    ${ }^{6}$ Nonsmokers include those who have never smoked and those who have quit for more than 10 years.
    ${ }^{7}$ Although hypertension is considered a risk factor for other diseases, for the purposes of this report, it is classified as a health condition.

[^21]:    Note: Cancer cases reported in 5-year period from 2003 to 2007 through the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute. Data in this table are based on the SEER 17 areas.

    Source: National Cancer Institute, 2009.

[^22]:    ${ }^{8}$ The proportion of the older Hispanic population with visual impairment and the proportion of the older non-Hispanic Black population with visual impairment are not statistically different.

[^23]:    ${ }^{9}$ Instrumental Activities of Daily Living (IADL) limitations refer to difficulty performing (or inability to perform, for a health reason) one or more of the following tasks: using the telephone, light housework, heavy housework, meal preparation, shopping, and managing money. Only the questions on telephone use, shopping, and managing money are asked of long-term care facility residents. Activities of Daily Living (ADL) limitations refer to difficulty performing (or inability to perform, for a health reason) the following tasks: bathing, dressing, eating, getting in/ out of chairs, and toileting. Long-term care facility residents with no limitations may include individuals with limitations in certain IADLs such as doing light or heavy housework or meal preparation (Federal Aging Forum, 2012).

[^24]:    ${ }^{10}$ See Brault (2009).
    ${ }^{11}$ Throughout this report, 2010 ACS refers to the 2010, 1-year estimates from the American Community Survey.
    ${ }^{12}$ The prevalence rate for difficulty remembering, concentrating, and making decisions is not statistically different from the prevalence rate for difficulty dressing.

[^25]:    ${ }^{14}$ The five surveys used were the 2000-2008 Health and Retirement Study, 2000-2008 Medicare Current Beneficiary Survey, 2000-2008 National Health Interview Survey, 1999/2000 to 2007/2008 National Health and Nutrition Examination Survey, and 2004 National Long-Term Care Survey.

[^26]:    Source: Kashihara and Carper, 2012.

[^27]:    Source: U.S. Census Bureau, 2011 a ; American Community Survey, 2010, 1-year estimates.

[^28]:    ${ }^{15}$ The 2010 Census does not classify assisted living facilities as skilled nursing facilities. Group quarters includes skilled nursing/nursing facilities only and those residing in assisted living facilities are classified as individual households.
    ${ }^{16}$ Data on residential care facilities, such as assisted living facilities and personal care homes, are limited, in part, because these facilities are not federally regulated (Park-Lee et al., 2011).

[^29]:    ${ }^{17}$ Data cited here are from a Metlife survey conducted via telephone between May and August 2010 by LifePlans for the Metlife Mature Market Institute. The survey covered nursing homes, assisted living communities, and home care agencies in all 50 states and the District of Columbia.

[^30]:    Source: Engquist et al., 2010.

[^31]:    ${ }^{1}$ For more information on the definition of race and Hispanic origin, see Chapter 1, Box 1-1.
    ${ }^{2}$ The Bureau of Labor Statistics defines the civilian labor force participation rate as the percentage of the civilian noninstitutionalized population aged 16 and over that is either employed or unemployed. For more information on how the labor force components are defined, see Bureau of Labor Statistics, <www.bls.gov/gps/gpsfaqs .htm\#Ques2>.

[^32]:    ${ }^{3}$ There is no statistical difference in the labor force participation rate between men aged 60 to 64 in the White population and the Asian population

[^33]:    ${ }^{4}$ The 3-year American Community Survey (ACS) data set is used to obtain statistically robust estimates for the population aged 65 and over. For more information on when to use 1-year, 3-year, or 5-year ACS estimates, please see <www.census.gov/acs/www /guidance_for_data_users/estimates/>.
    ${ }^{5}$ States in this report include the 50 states and the District of Columbia (treated as a state equivalent).

[^34]:    ${ }^{6}$ The share in the labor force in 1950 and 1980 were not significantly different from each other for the age category 65 and over. For the age category 55 to 64, the share in the labor force in 1980 was lower than the share in 1950.

[^35]:    ${ }^{7}$ The median age is that age where half the labor force participants are older and half are younger.

[^36]:    ${ }^{8}$ This discussion does not follow birth cohorts through time but rather examines a snapshot picture of different age groups in 2010. It is assumed that these age cohorts do not follow different work patterns as they age, making it feasible to generalize about work trends as one cohort ages based on the work patterns of the slightly older cohort. The economy might influence work patterns of the older population, and variations such as business cycles are not incorporated into this analysis.

[^37]:    ${ }^{9}$ Workers and retirees surveyed in 2010 represent different cohorts, and the experience of these retirees does not necessarily foreshadow the future for current workers.

[^38]:    ${ }^{1}$ Unpaid family members are not included in this table.
    Note: The reference population of the survey is the civilian noninstitutionalized population.
    Source: Bureau of Labor Statistics, 2011; Current Population Survey, 2010.

[^39]:    ${ }^{10}$ Based on the Surveys of Consumer Finances, 61.6 percent of workers with pension coverage were offered only a definedbenefit plan in 1983 while 62.7 percent were offered only a defined-contribution plan in 2004 (Munnell and Sunden, 2006). See Box 3-2 for a discussion of defined-benefit and defined-contribution pensions.

[^40]:    ${ }^{14}$ Married couples and individuals aged 65 or older are ranked by total money income and divided into five groups of equal size called quintiles.

[^41]:    ${ }^{15}$ Civilian workers include workers in the private nonfarm economy, except those in private households, and workers in the public sector, except the federal government. Retirement plans include defined-benefit pension plans and defined-contribution plans. Employers may offer none, one, or both of these plans, and employees may participate in none, one, or both of these plans.

[^42]:    ${ }^{1}$ The take-up rate is an estimate of the percentage of workers with access to a retirement plan who participate in the plan.
    Note: Civilian workers include workers in the private nonfarm economy, except those employed by private households, and workers in the public sector, except those employed by the federal government. Retirement plans include defined-benefit pension plans and defined-contribution plans. Employers may offer none, one, or both of these plans and employees may participate in none, one, or both of these plans.

    Source: Bureau of Labor Statistics, 2010; National Compensation Survey, 2010.

[^43]:    ${ }^{1}$ Members of the original Health and Retirement Study (HRS) sample cohort were born in 1931-1941. Replacement rates were calculated for members of the original sample cohort who were observed to be working and not retired for at least three consecutive waves in the HRS before they were classified as retired. The replacement rate is total annual household income reported when the respondent was classified as retired divided by the average of annual household income reported in the years prior to retirement (a minimum of three waves of the HRS). All income values are indexed to 2007 dollars based on the annual percentage change in the Consumer Price Index for all Urban Consumers.

    Note: The reference population of the survey is the civilian noninstitutionalized population. Source: Purcell, 2012; Health and Retirement Study, 1992-2008.

[^44]:    ${ }^{16}$ The median replacement rate for retirees born between 1931 and 1936 did not differ significantly from the median retirement rate for retirees born between 1937 and 1941.

[^45]:    ${ }^{17}$ The median replacement rate of those who retired at ages 62 to 64 did not differ significantly from those who retired at age 65 or older.

[^46]:    ${ }^{18}$ The Office of Management and Budget (OMB) determined the official definition of poverty in Statistical Policy Directive 14. For more information on how the Census Bureau uses this definition to measure poverty and the poverty threshold in 2010 by size of family and number of related children under 18 years, see DeNavas-Walt, Proctor, and Smith, 2011 . Official poverty levels are based on money income and do not include nonmonetary benefits, such as food stamps, public housing, and Medicaid. A person is considered to be living in poverty if his or her before-tax cash income is below a defined level of need or threshold. Poverty thresholds were originally devised by the Social Security Administration in the 1960 s based on a minimum cost to obtain a nutritionally adequate diet, as defined by the Department of Agriculture, taking into account both family size and the number of children in the household. The thresholds are updated annually for inflation using the consumer price index for urban consumers. They do not vary by geographic locale. In 2010, the poverty threshold was set at $\$ 10,458$ for an older ( 65 and older) householder living alone. For older householders living in a two-person household with no related children under 18 years of age, the threshold was \$13,180. The Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS) is the source of official national poverty estimates.
    ${ }^{19}$ There is no statistical difference in the poverty rate between the population aged 60 to 64 and those aged 75 and older.

[^47]:    ${ }^{20}$ There is no statistical difference in the poverty rate between the population aged 65 and older and the population aged 75 and older for Asian women, Hispanic women, White men, Black men, Asian men, and Hispanic men.

[^48]:    ${ }^{21}$ There is no statistical difference in the poverty rate between a male householder living alone and married-couple families among the older Black alone population.

[^49]:    ${ }^{22}$ There is no statistical difference in the poverty rate between a male householder living alone and married couple families among older Hispanics.

[^50]:    ${ }^{25}$ The start and end of the recession is as defined by the National Bureau of Economic Research (NBER). According to NBER, "A recession is a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income, and other indicators. A recession begins when the economy reaches a peak of activity and ends when the economy reaches its trough. Between trough and peak, the economy is in an expansion." See <www.nber.org/cycles /dec2008.html>.

[^51]:    ${ }^{28}$ The homeownership rate for Native Hawaiian and Other Pacific Islander alone (67.4 percent) is not statistically different from the rate for White alone and American Indian and Alaska Native alone.

[^52]:    ${ }^{29}$ Homeowners can refinance their home and change the terms of their mortgage, such as lowering the interest rate and changing the term of the loan. They may also take out cash when refinancing, secure a second mortgage, or opt to take out a home equity loan or line of credit. Finally, reverse mortgages are available for households with an owner aged 62 or older, in which one borrows against equity, with debt repaid after the owner moves out of the home (Nakajima and Telyukova, 2011).

[^53]:    ${ }^{30}$ Bosworth and Smart (2009) also examined data from the Panel Study of Income Dynamics and concluded that, conditional on having a mortgage, homeowners aged 50 and over and younger homeowners were equally likely to withdraw equity.

[^54]:    ${ }^{31}$ Housing-cost burden is defined as the proportion of household income that goes towards housing costs. Thirty percent of household income is often considered the standard for housing affordability; less than 30 percent is considered low, 30 to 49 percent is considered moderate, and 50 percent or more is considered severe.

    32 There is no significant difference in the share of households with moderate housingcost burdens in 2001 and 2009.

[^55]:    Note: Financial distress is defined as experiencing at least one of the following: being more than 2 months behind with mortgage payments, negative home equity, foreclosure, or the respondent and/or spouse being unemployed.
    Source: Hurd and Rohwedder, 2010a.

[^56]:    ${ }^{33}$ The labor force aged 45 to 54 averaged a 7.7 percent unemployment rate in 2010, not significantly different from the unemployment rates for those aged 55 to 64 ( 7.1 percent), 65 to 69 ( 7.6 percent), 70 to 74 ( 5.6 percent), and 75 and over (5.6 percent). The 2010 unemployment rates for both sexes in age groups 45 to 54, 55 to 64, 65 to 69,70 to 74 , and 75 and over are not statistically different.

[^57]:    Note: The reference population of the survey is the civilian noninstitutionalized population.
    Source: Bureau of Labor Statistics, 2011; Current Population Survey, 2010.

[^58]:    ${ }^{34}$ There is no statistical difference in unemployment for older Hispanics between 2007 and 2010.

[^59]:    ${ }^{35}$ There is no statistical difference in unemployment rates between older Blacks and older Asians in 2010.

[^60]:    ${ }^{36}$ The retirement benefit take-up rate is defined as the number of new retirement awards in a given year divided by the number of adults aged 62 and older who had not yet begun collecting benefits at the start of the year (Johnson and Mommaerts, 2010a).

[^61]:    ${ }^{37}$ Net worth is defined as the value of all assets minus all liabilities. In the SIPP, assets included in net worth are: interest-earning assets held at financial institutions, other interest-earning assets, regular checking accounts, stocks and mutual fund shares, equity in business or profession, equity in motor vehicles, equity in own home, rental property equity, other real estate equity, U.S. savings bonds, IRA or KEOUGH accounts, 401 (k) and Thrift Savings Plans, and other assets. Liabilities included in determining net worth are mortgages on own home, mortgages on rental property, vehicle loans, debt on business or profession, credit card debt, educational loans, and medical debt not covered by insurance. For more information on net worth see <www.census.gov/people /wealth/about/faq.html>.

[^62]:    ${ }^{38}$ The change in net worth for household ers under age 35 is not significantly different from the change for householders aged 65 to 69 .

[^63]:    ${ }^{1}$ States in this report include the 50 states and the District of Columbia, which is treated as a state equivalent.

[^64]:    ${ }^{2}$ The 2000 list of the nine states with more than 1 million 65 -and-older population is the same as the 1990 list (He et al., 2005).
    ${ }^{3}$ The four regions of the United States are: Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; and West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

[^65]:    Source: U.S. Census Bureau, 2011a; 2010 Census.

[^66]:    Source: U.S. Census Bureau, 2011a; 2010 Census,

[^67]:    ${ }^{5}$ Metropolitan and micropolitan statistical areas (metro and micro areas) are geographic entities delineated by the U.S. Office of Management and Budget (OMB) for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics. The term "Core Based Statistical Area" (CBSA) is a collective term for both metro and micro areas. A metro area contains a core urban area of 50,000 or more population, and a micro area contains an urban core of at least 10,000 (but less than 50,000 ) population. Each metro or micro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core.

[^68]:    Notes: Metropolitan and micropolitan statistical areas are geographic entities delineated by the U.S. Office of Management and Budget for use by federal statistical agencies in collecting, tabulating, and publishing federal statistics. A metro area contains a core urban area of 50,000 or more population, and a micro area contains an urban core of at least 10,000 (but less than 50,000 ) population. In censuses prior to 2010, micropolitan statistical areas were not identified. In 2010, among those aged 65 and over, 4,763,218 resided inside micropolitan statistical areas.

    Source: U.S. Census Bureau, 2011a; 2010 Census.

[^69]:    ${ }^{6}$ Note that caution must be taken when comparing migration figures across different surveys. For example, the 2010, 1 -year ACS indicated that 5.8 percent of the older population moved between 2009 and 2010 (Table 4-8); because of systematic differences in the phrasing of questions, this figure is not directly comparable to the 3.5 percent of the older population recorded to have moved in the 2010 CPS (Ihrke, Faber, and Koerber, 2011).

[^70]:    ${ }^{7}$ To help users understand and interact with statistics, the Census Bureau has developed an online mapping tool called Census Flows Mapper. This application allows users to select a county in the United States and view the outbound, inbound, and net migration flows for that county. Additionally, users can choose flows based on characteristics such as age, sex, race, or Hispanic origin.

[^71]:    ${ }^{8}$ These net migration figures may mask shifts within the regions, since many of the major state-to-state migration streams occur within the West region and the South region (Ihrke, Faber, and Koerber, 2011 ; Table 4).

[^72]:    ${ }^{9}$ Differences are not statistically significant.
    ${ }^{10}$ For those aged 55 to 64, the 14.0 percent for "wanted new or better home/ apartment," 12.9 percent for wanted cheaper housing," and 10.5 percent for "other housing reason" are not statistically different from the 12.2 percent for "other family reason." For those 85 and older, the 29.5 percent for "health" is not statistically different from the 19.1 percent for "other family reason."

[^73]:    ${ }^{11}$ Disability is commonly measured as difficulty in performing activities of daily living (ADLs), which include personal care tasks such as bathing, eating, toileting, dressing, and transferring out of a bed or a chair; or instrumental activities of daily living (IADLs), which include household management tasks like preparing one's own meals, doing light housework, managing one's own money, using the telephone, and shopping for personal items. For more discussion on health and disability, see Chapter 2 "Longevity and Health."

[^74]:    ${ }^{1}$ Includes separated.
    Note: The reference population of the survey is the civilian noninstitutionalized population. Totals may not sum to 100.0 due to rounding.
    Sources: 1960 U.S. Bureau of the Census, 1960; 1970, U.S. Bureau of the Census, 1971; 1980, U.S. Bureau of the Census, 1981; 1990, U.S. Bureau of the Census, 1992; 2000, U.S. Census Bureau, 2000; 2010, U.S. Census Bureau, 2010; all years, Current Population Survey, Annual Social and Economic Supplement (ASEC).

[^75]:    ${ }^{1}$ For more information on the definition of race and Hispanic origin, see Chapter 1, Box 1-1.

[^76]:    ${ }^{2}$ The data in Table 5-3 use the household population as the base and exclude the group quarters population aged 65 and older, while the total population from the 2010 Census includes the group quarters population. This difference leads to a slightly higher percentage of the population aged 65 and older living alone based on household population (28.3 percent, Table $5-3$ ) than based on the total population ( 27.3 percent). For those 85 and older, the differential is larger-48.2 percent living alone based on household population (Table 5-3) and 42.1 percent based on the total population.

[^77]:    ${ }^{1}$ Living with other relatives indicates no spouse was present; includes relatives other than spouse and possible nonrelatives.
    Source: U.S. Census Bureau, 2012b; 2010 Census

[^78]:    ${ }^{3}$ States in this report include the 50 states and the District of Columbia (treated as a state equivalent).

[^79]:    ${ }^{4}$ The householder is the person designated as the individual who owns or rents the housing unit. In a case of joint ownership, one individual is chosen as the householder. If this choice cannot be made, the first person 15 years or over listed on the census form is chosen as the householder.

[^80]:    ${ }^{5}$ See Chapter 2 for additional discussion of long-term care.

[^81]:    Sources: 1980 and 1990, Hobbs and Damon, 1996; 2000, U.S. Census Bureau, 2001; 2010, U.S. Census Bureau, 2011a; all years, decennial census.

[^82]:    ${ }^{6}$ Instrumental Activities of Daily Living (IADL) limitations refer to difficulty performing (or inability to perform, for a health reason) one or more of the following tasks: using the telephone, light housework, heavy housework, meal preparation, shopping, managing money. Only the questions on telephone use, shopping, and managing money are asked of long-term care facility residents. Activities of Daily Living (ADL) limitations refer to difficulty performing (or inability to perform, for a health reason) the following tasks: bathing, dressing, eating, getting in/ out of chairs, toileting. Long-term care facility residents with no limitations may include individuals with limitations in certain IADLs such as doing light or heavy housework or meal preparation (Federal Interagency Forum on Aging-Related Statistics, 2012).

[^83]:    Source: U.S. Census Bureau, 2012a; 2010 Census.

[^84]:    ${ }^{7}$ For censuses prior to 1990, categories for education included 4 years of high school and 4 years of college. For the 1990 Census and later, these categories became high school graduate and bachelor's degree, respectively. In this report, when comparisons are made across time, these categories are used interchangeably.

[^85]:    ${ }^{8}$ For information on the Servicemen's Readjustment Act of 1944, visit <www.archives.gov/historical-docs/>.

[^86]:    ${ }^{1}$ Category includes people who received an Associate's degree or attended some college, but did not receive a Bachelor's degree. Source: U.S. Census Bureau, 2012a; American Community Survey, 2010, 1-year estimates.

[^87]:    ${ }^{9}$ The educational composition of the population aged 35 to 64 in 2010 could change by 2040 due to mortality or migration, and some people in this age range could obtain additional education.

[^88]:    ${ }^{10}$ For more information, see <www.census.gov/population/foreign /about/faq.html>.
    ${ }^{11}$ The U.S. Island Areas include U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

[^89]:    Source: U.S. Census Bureau, 2012 a; American Community Survey, 2010, 1-year estimates.

[^90]:    ${ }^{12}$ Proficiency in English in Figure 5-15 refers to the "very well" category.
    ${ }^{13}$ People who speak English at a level below the "very well" category may need English assistance in some situations (see ACS report, Shin and Kominski, 2010).
    ${ }^{14}$ The ACS defines veterans as men and women who served (even for a short time), but are not currently serving, on active duty in the U.S. Army, Navy, Air Force, Marine Corps, or the Coast Guard, or who served in the U.S. Merchant Marine during World War II. People who served in the National Guard or Reserves are classified as veterans only if they were ever called or ordered to active duty, not counting the 4-6 months for initial training or yearly summer camps. <www.census.gov/acs/www/data _documentation/documentation_main/>.

[^91]:    Note: Totals do not sum to 100.0 due to rounding.
    Source: U.S. Census Bureau, 2011 b; American Community Survey, 2010,
    1-year estimates.

[^92]:    15 The World War II military cohort was in their late eighties to early nineties in 2010.

[^93]:    ${ }^{17}$ See <www.sss.gov/wmbkgr.htm> for further discussion.

[^94]:    Source: U.S. Census Bureau, 2012a; American Community Survey, 2010, 1-year estimates.

[^95]:    18 Voter rates presented in this "Voting" section are based on the citizen population, except for Table 5-8, which is based on the total population.

[^96]:    ${ }^{19}$ Table 5-8 shows voting data based on the total civilian noninstitutionalized population.

[^97]:    ${ }^{20}$ The voter participation rates for Black alone and White alone are not statistically different.
    ${ }^{21}$ Differences between Asians and Hispanics are not statistically different from each other.

[^98]:    Notes: The base of the percentage is the citizen population aged 65 and over. The reference population of the survey is the civilian noninstitutionalized population.
    Sources: U.S. Census Bureau, 2006, 2009, and 2013; all years, Current Population Survey, Voting and Registration Supplement.

[^99]:    ${ }^{22}$ There is no statistical difference in the voter participation rates for those aged 65 to 74 in the South, West, and Northeast.

[^100]:    ${ }^{23}$ There is no statistical difference between the voter participation rates of those aged 75 and over in the Northeast ( 67.2 percent), South ( 69.0 percent), and West (70.5 percent).

[^101]:    ${ }^{24}$ Internet usage is measured by whether respondents used the Internet during the year, regardless of frequency of use.

[^102]:    Source: PEW Research Center, 2012.

[^103]:    See source at end of table.

[^104]:    See source at end of table.

[^105]:    See notes at end of table.

[^106]:    Notes: Data are not comparable across all years. The reference population of the survey is the civilian noninstitutionalized population. The Current Population Survey, Annual Social and Economic Supplement collects poverty data for the previous calendar year. Starting in 2003 (data reference year of 2002), the Current Population Survey allowed respondents to choose more than one race. For 2002 and earlier years (corresponding to data reference years of 2001 and earlier), the Current Population Survey allowed respondents to report only one race group (White, Black, or Asian and Pacific Islander).

    Source: Carmen DeNavas-Walt, Bernadette D. Proctor, and Jessica C. Smith, 2011, Income, Poverty, and Health Insurance Coverage in the United States: 2010, Current Population Reports, P60-239, U.S. Census Bureau, Washington, DC: U.S. Government Printing Office; all years, Current Population Survey, Annual Social and Economic Supplement (ASEC).

[^107]:    Sources: U.S. Census Bureau, 2001, Census 2000 Summary File 1, Table P12, Washington, DC,

[^108]:    See notes at end of table.

[^109]:    See notes at end of table.

[^110]:    Z Rounds to zero.
    Note: Totals may not sum to 100.0 due to rounding.
    Source: U.S. Census Bureau, 2011, 2010 Census Summary File 1, Table PCT12, Washington, DC, available at [http://factfinder2.census.gov/](http://factfinder2.census.gov/), accessed on February $20,2012$.

[^111]:    See notes at end of table.

[^112]:    ${ }^{1}$ Based on race or Hispanic origin of the householder.
    Sources: Bureau of Labor Statistics, Current Population Survey (CPS), CPS, Annual Social and Economic Supplement (ASEC), and CPS, Computer and Internet Use Supplement; National Center for Health Statistics, National Health and Nutrition Examination Survey and National Health Interview Survey; U.S. Census Bureau, American Community Survey.

