## Affording Boomer Long-Term Care in Minnesota and the Nation What Do Demographics and Health Trends Tell Us?



Peter J. Nelson

Center of the American Experiment is a nonpartisan, tax-exempt, public policy and educational institution that brings conservative and free market ideas to bear on the hardest problems facing Minnesota and the nation.

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## Executive Summary

How to pay for the retirement of 77 million baby boomers will be an intensifying debate. This report-first in a series of threeexamines one slice of the debate: how to meet the escalating long-term care (LTC) needs of the elderly. Specifically, this report examines how the changing demographics and health of the elderly in Minnesota and the nation will impact both the need for LTC and the resources available to provide LTC.

Most LTC reform efforts center on how to get more people to pay for their own LTC. Efforts to encourage greater personal responsibility and more self-financing may indeed be the most important part of the solution, but it is not the only part. Oscillating Twentieth Century birthrates-a cultural phenomenon-is largely responsible for our present problem: Might other cultural shifts and undulations be part of the solution? The demographic and health trends identified in this report suggest yes. The data show that a number of factors, such as a strong work ethic, robust families, fewer widows, and better eating habits, can have real impacts on LTC.

## Demographic Trends and Projections Impacting Long-Term Care:

- Projected aging trends in Minnesota mirror national trends. Minnesota's 65 and older population will double between 2000 and 2030, and the median age will rise from 35.4 to 39.0 . At 18.9 percent, the percent of those over 65 in 2030 in Minnesota is only slightly lower than the national average. Populations of the oldest of the old in Minnesota-those over 85-will not grow quite as fast as the national average, but they will still nearly double.
- More elderly, without more non-elderly workers paying taxes, means the public burden of LTC will be concentrated on fewer and fewer workers as more and
more boomers retire. The national worker-to-retiree ratio, estimated at 4.98 workingage adults per retiree in 2000 , is projected to decline sharply to 2.89 working-age adults by 2030 .
- Higher elderly population growth rates in the South and the West will make the burden of LTC more proportionate by creating a more equal distribution of workers-to-retirees across states.
- Retirees moving south do not appear correlated with more LTC needs. The three states with the highest net migration rate for 65- to 74-year olds-Nevada, Arizona, and Florida-also have some of the lowest rates of aged Medicaid beneficiaries.
- Census data suggest that significant numbers of Minnesotans leave for retirement but move back for LTC. Between 1995 and 2000, 20.2 percent of Minnesotans aged 65 to 74 left the state for warmer climates, but for those 85 and over, the migration flow results in a net gain of 9.4 percent.
- If it were not for the dramatic decline in fertility rates experienced in the 1960s and '70s-which fell from a high of 122.7 live births per 1,000 women age 15 to 44 in 1957 to 65.0 in 1976-we might have enough Generation $X$ workers to cover the costs of the boomer generation. Today, the average U.S. family with children under the age of 18 has 1.86 children-not even enough to replace the parents, let alone those who never have children.
- Elderly widows and widowers use LTC at much higher rates, and so any decline in widows and widowers will also result in fewer people needing LTC. Nationally, the rate of elderly widowed women dropped from 49.4 percent to 45.3 percent between 1990 and 2000. For Minnesota
the rate declined by even more from 48.6 to 44.1 percent.
- Like widows and widowers, those who never marry also use LTC at higher rates. Unfortunately, the elderly never-married population will increase in the future and add to the LTC burden.
- Future LTC costs might also be mitigated by the consistent flow of immigrants entering the United States. Already, the foreign-born population in Minnesota contributes a sizable and increasing share of new-born children. During the 1990s, the proportion of births to foreign-born mothers in Minnesota increased from 5.4 percent to 13.4 percent.


## The Future Health Status of Aging Baby Boomers:

- Between 1982 and 2004 national surveys report consistently lower rates of people over 50 years old self-assessing their health as poor or fair. Overall, Minnesotans report lower rates of poor or fair health than any other state on the most recent state surveys.
- Life expectancies continue to rise, reflecting an overall improvement in the health of Americans. National life expectancies rose from 68.2 years in 1950 to 77.5 years in 2003 , and the life expectancy of those who reach 65 years rose even more dramatically on a proportionate basis, from 13.9 years in 1950 to 18.4 years in 2003. Minnesotans had the second longest life expectancy79.1 years-in 2000.
- Between 1950 and 2000 death rates among the elderly dropped 42 percent among 65to 74-year-olds; 39 percent among 75- to 84 -year-olds; and 23 percent for those 85 and over. Minnesota's overall death rate-713 per 100,000-trails only Hawaii for the lowest rate in the U.S.
- Combined, Alzheimer's disease, senile dementia, and other mental disorders represent the primary diagnosis for 26.6 percent of all nursing home residents. Because the rate of Alzheimer's increases exponentially with age, and more people will survive other diseases allowing them to live longer with Alzheimer's, the prevalence of Alzheimer's and related conditions will likely quadruple by 2050 unless advances in medical technology intervene.
- Recent surveys show upward ticks in the prevalence of many chronic conditions among the elderly, including hypertension, strokes, asthma, breast cancer, prostate cancer, colon/rectal cancer, lung cancer, melanoma, skin cancer, diabetes, kidney disease, and liver disease. Boomers also experienced increasing rates of many of the same chronic conditions.
- Most research on health status of the elderly focuses on disability as disability directly affects independence and the need for LTC. Since the 1980s, most measures of disability among the elderly have declined, with the most pronounced decline taking place in the 1990s. Likely contributors include: improving medical technology, healthier behavior, increasing use of preventative measures, increasing use of aids, higher education levels, rising wealth, and less exposure to disease. Elderly Minnesotans report both lower disability rates and less severe disabilities.
- Slimming America's waistline would go a long way to soothing fears that disability rates might rise. Nonetheless, obesity rates continue to grow rapidly. Between 1990 and 2002, self-reported obesity in population surveys increased nationally from 11.6 percent to 22.1 percent. For Minnesota the numbers were worse, rising from 10.2 percent to 22.3 percent. Some predict disability rates will start increasing once obese boomers start experiencing the
disabling effects of obesity-diabetes, heart disease, hypertension, cancer, and arthritis-which, if true, will be costly.
- Future cost control depends on the largescale adoption of preventative measures. Are today's elderly and baby boomers taking the necessary steps to prevent debilitating and costly disease? Yes and no. When the prevention can be had through a doctor's visit or a drug, like cancer screening and cholesterol lowering drugs, the answer is mostly yes. But when prevention requires more day-to-day self discipline, like diet and exercise, the results come in mixed.
- Despite overall health gains, LTC costs may increase if the diseases that create LTC-related needs become more numerous. This fact highlights how important treating the specific diseases that lead to LTC can be in any strategy to keep boomer LTC budgets affordable.
- Longevity will likely increase LTC costs. Studies find that increasing longevity will impact acute care and LTC expenditures quite differently. In general, the studies find that better health might possibly lower lifetime acute care costs, but that it will most likely raise LTC costs.


## Looking broadly at what the demographics and the health of the boomers tell us, three lessons stand out.

- First, a strong economy, by keeping people in the workforce and by keeping their salaries growing, will guarantee more public resources to pay for LTC and, at the same time, constrain demand for those public resources.
- Second, larger families also will add to public resources for LTC, as well as lower demand for it, by adding more people to the workforce and increasing the number of informal caregivers.
- Third, the health of boomers and the elderly is generally improving, but we cannot depend on such improvements to lessen the need for LTC. On one hand, they may lead to less need for LTC since they are tied to declines in circulatory system diseases and disability rates, which in turn, precipitate much less need for LTC. On the other hand, and as noted, studies likewise suggest that healthier, longer-living boomers will require more LTC.

Some may say that it is too late for policy solutions that address demographic and health issues. The boomers are already at retirement's threshold. But, assuming many boomers won't need LTC until they turn 85, the last of them will begin needing it around 2049, a long way off. Policies and personal practices begun today that make working and building businesses more attractive, that make families more robust, and that reduce health problems would indeed make a difference.
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## Foreword

## Mitchell B. Pearlstein, Ph.D. Founder \& President Center of the American Experiment

"Affording Boomer Long-Term Care in Minnesota and the Nation" is the first major study in American Experiment's new multiyear project of research, publications, public programs, and advocacy, "Stopping Boomer Health Care Budgets from Going Bust." It's also the first in a trilogy of reports by Peter J. Nelson, to be released in 2007, focusing specifically on hugely expensive issues surrounding LTC.

The two titles above tell only half the stories; subtitles each time tell the rest.

What exactly about "affording" long-term care do we need to learn? To start, as Peter poses the question: "What Do Demographics and Health Trends Tell Us?"

And how, overall, are we to stop boomer budgets from drowning us in red ink and darker dye? The answer here is wordier and the summons tougher, having to do with "The Imperative of Taking Greater Advantage of Markets, Families, and Faith in Assuring FirstRate and Affordable Health Care for the Coming Surge of Seniors."

Fleshing matters out, why and how must we better rely on free markets, personal responsibility, generous families, and religious organizations if we are to keep immense spending increases as non-crippling as possible in a country with the most expensive health care system in the world already? At root, why and how must citizens retrieve responsibility from governmental agencies for their own wellbeing and that of loved ones as we grow old?

Unless policy-makers take essential but exceedingly difficult steps, Brian Riedl of the Heritage Foundation, for example, envisions
federal revenues down the road totaling 18 percent of Gross Domestic Product (GDP), while federal (non-interest) spending totals 28 percent of GDP. This 10-percentage-point gap, he predicts, would lead to budget deficits large enough to increase the national debt from 40 percent of GDP to more than 300 percent. This, in turn, would "set off a vicious circle of rapidly increasing debt translating into higher net interest spending (exacerbated by higher interest rates), which would increase debt even further-possibly to 500 percent of GDP." Increases in governmental borrowing of this exponential magnitude, he concludes, would "devastate financial markets and eventually could trigger a financial and economic crisis."

The only suspect word in this last paragraph is the qualifier "could" in the last sentence, as there's not the smallest chance that "devastated" financial markets would not result in financial and economic crises.

A favorite rhetorical device of polemicists is predicting that if something is not done immediately to constrain governmental spending in a particular area, before long, every dime of public spending will wind up going to it, be the "it" in question health care, corrections, or another big-ticket item. They're absurd extrapolations, needless to say, which is not to say they can't illuminate. Riedl, for example, predicts that if nothing is done to change Medicare, Medicaid, and Social Security, by 2045, all federal spending would be consumed by those three programs alone, along with interest on the national debt. At that point, and in keeping with the wishes of a famous bumper sticker, the Pentagon really would have to hold bake sales in order to buy battleships.

Brian Riedl is a very good budget analyst for the Heritage Foundation, which is a very good conservative think tank. How might two very good liberal or centrist economists, under the aegis of the liberal and centrist Brookings Institution (which, like Heritage, is an
exceptional policy organization) describe matters?

With the exact same urgency.
Alice Rivlin and Isabel Sawhill, both of whom held senior positions in the Clinton administration, write of what it will take to meet the "unprecedented challenge" of balancing federal budgets as more than 75 million boomers age. Only three options for doing so exist, they argue: reducing current commitments to senior citizens; "slashing" other governmental programs; or getting the public to "accept" higher taxes.

Relying exclusively on even "draconian cutbacks" in programs like Social Security and Medicare, they write, would be insufficient given the sheer increase in the number of elderly. "Squeezing down" most other federal programs would prove inadequate as well as "detrimental to the well-being of younger families and children." And if the preferred route is higher taxes, Rivlin and Sawhill estimate that federal tax bills would consume at least another 6 percent of GDP.

None of these choices, whether employed alone or in combination, would be pretty. In fact, it's tantamount to impossible imagining any of them as politically tenable-at this stage, anyway.

So what to do? What changes in public policies-and perhaps more importantly, in cultural attitudes-are demanded by such severe fiscal prospects? This is what American Experiment seeks to discover and pursue in the next several years, with this first inquiry being a terrific kick-off.

In approach, it's similar to three publications we released last decade: two on "Leading Cultural Indicators," in 1994 and 1999; and one on "Leading Environmental Indicators," also in 1999. Meaning, "Affording Boomer LongTerm Care in Minnesota and the Nation," is big on reams of data and small on editorializing. It
was conceived as a non-ideological and certainly non-polemical resource for all parties, and that's exactly what Mr. Nelson has pulled off. I suspect the fact that he was integral in researching and writing the two 1999 Indexes is no accident.

Just one simply fascinating dynamic this time around: "Census numbers suggest that Minnesotans leave for retirement but move back for long-term care. Between 1995 and 2000, 20.2 percent of Minnesotans aged 65 to 74 left the state for warmer climates, but for those 85 and over, the migration flow resulted in a net gain of 9.4 percent." What might be the fiscal implications of this back and forth (really forth and back) movement? While it's always wonderful to welcome Minnesotans back home, enriching us thereby, if I had to guess, a main implication would be that places like Arizona and Florida are coming out financially gangbusters in the roundtrips.

Peter Nelson, an Edina native, is an American Experiment Policy Fellow. He's also an attorney, having received his degree from the University of Minnesota Law School, where he served on the Law Review. Next up in his three-part package will be a review of additional cost drivers, in Minnesota and countrywide, likely to make long-term care even harder to pay for. To be followed by an analysis of the capacity of both public and private sectors in Minnesota to handle such obligations.

We both trust you will find this first installment useful-no, make that fascinating. And we welcome any comments you may have.

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## Introduction

How to pay for the retirement of 77 million baby boomers will be an intensifying debate. This report-first in a series of threeexamines one slice of the debate: how to meet the escalating long-term care (LTC) needs of the elderly. Specifically, this report examines how the changing demographics and health of the elderly in Minnesota and the nation will impact both the need for LTC and the resources available to provide it.

Problems surrounding Social Security and Medicare generally garner more exposure than those involving Medicaid, the primary payer of elderly LTC. But Medicaid spending has fully arrived as a serious fiscal issue, even before boomers retire. Medicaid now costs more than Medicare and, on average, accounts for the single largest state budget item. LTC accounts for about a third of Medicaid budgets and will increasingly strain state budgets as more boomers begin needing LTC, a demand that will triple by 2050 .

With each year we ignore the fiscal problems of Social Security and Medicare, they become more difficult to solve. If we address Medicaid today, we can actually get ahead of the problem, instead of playing catch-up as we do with Social Security and Medicare.

Medicaid was created in 1965 as a safety net for Americans who couldn't afford basic health care, and for those under 65 it largely remains a safety net. But Medicaid has now become the primary funding source for LTC for the elderly.

Unlike the federally run Social Security and Medicare programs, Medicaid operates as a partnership between federal and state governments. States administer Medicaid and the federal government reimburses between 50 and 80 percent of costs as long as federal guidelines are followed. States must apply for waivers from the federal guidelines to make most reforms.

Ironically, the less-pressing and less-debated Medicaid system recently got a major dose of federal fiscal reform with the passage of the Deficit Reduction Act of 2005 (DRA). The DRA set in motion reforms estimated to save Medicaid $\$ 7$ billion over five years and $\$ 28$ billion over ten years. The DRA was an extremely positive first step toward keeping Medicaid affordable, but much more must be done to keep boomers from busting state budgets with their doubling of the elderly population.

Most LTC reform efforts center on how to get more people to pay for their own LTC. Efforts to encourage greater personal responsibility and more self-financing may indeed be the most important part of the solution, but it is not the only part. Oscillating Twentieth Century birthrates-a cultural phenomenon-is largely responsible for our present problem: Might other cultural shifts and undulations be part of the solution? The demographic and health trends identified in this report suggest yes. The data show that a number of factors, such as a strong work ethic, robust families, fewer widows, and better eating habits can have real impacts on LTC.
(Note: Two terms will be peppered throughout this report: boomer and elderly. By definition boomers were born between 1946 and 1964. But when comparing statistics, finding data for that exact age range is difficult and most studies and reports cited here pick more even age ranges of ten- or 20-year increments. This report, therefore, often refers to the 45- to 64-year-old age range as boomers, and though not precise, it is the 20-year age bracket that best captures present-day boomers. The report also discusses different elderly age bracketsmostly the 65 to 74,75 to 84 , and 85 and over brackets-but when this report generically refers to elderly, it refers to those 65 and over.)

## Demographic Trends and Projections Impacting Long-Term Care

The U.S. population has already begun to age en masse. Between 2005 and 2010, U.S. elderly populations will grow at double the rate of the adult population under 65. Once boomers begin reaching retirement age of 65 in 2011, the elderly population growth rate will rise even more, while the remaining adult population growth rate will slow to a near stall.

The U.S. Census Bureau predicts the population of those 65 and older nationally will double between 2000 and 2030, with the number of those 85 and over more than doubling (see Figure 1). ${ }^{1}$ As elderly populations double, adult populations 64 and younger will increase by only 19 percent. This marked disparity in growth will raise the median age from 35.3 to 39.0 and increase the percent of the population 65 and older from 12.4 percent to 19.7 percent. ${ }^{2}$

The retirement belt - the South and the Westwill experience high growth rates in the elderly population (see Figure 3). In Nevada and Arizona elderly populations are projected to

climb by 264 percent and 255 percent, respectively. Overall, growth rates will be highest in the West, but the South will account for the highest portion - 43.6 percent - of total elderly population growth. ${ }^{3}$

## Minnesota Aging Compares Similarly to National Trends

Aging trends in Minnesota (shown in Figure 2) mirror national trends. The population of those 65 and older will double between 2000 and 2030, and the median age will rise from 35.4 to 39.0 . At 18.9 percent, the percent of those over 65 in 2030 in Minnesota will be only slightly lower than the national average. Populations of the oldest of the old in Minnesota-those over 85-will not grow quite as fast as the national average, but they will still nearly double.

## Minnesota will Age Slower than Neighboring States

The Census Bureau projects Minnesota will age slower than its neighbors (see Figure 4). The median age will rise in Minnesota by 10 percent between 2000 and 2030; 15 percent in Iowa; 19 percent in North Dakota; 17 percent



Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005
in South Dakota; and 15 percent in Wisconsin. Minnesota will age slower, despite the fact that Minnesota's elderly population will grow much faster than each of its neighbors, because population growth in younger age groups will help offset the higher growth of its elderly population. Neighboring states actually experience population declines in younger age

Figure 4: Median Age, 2000 and 2030


Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005.
groups. In fact, between 2000 and 2030, two age brackets- 18 to 24 and 25 to 44 -will shrink in each neighboring state.

Because Minnesota's elderly population will grow faster than its neighbors, demand for LTC services will also grow faster, which will put more pressure on Minnesota's LTC infrastructure to grow and to adapt.

## The Ratio of Working-Age Adults to Retirees Declines

High elderly population growth rates do not create problems on their own; it's disproportionately high growth rates that create problems. Taxpayers, by way of Medicaid and Medicare, pay most LTC bills. More elderly without proportionately more non-elderly workers paying taxes, means the public burden of LTC will be concentrated on fewer and fewer workers as more and more boomers retire. Consequently, the main challenge to financing LTC is a shortage of taxpaying workers relative to the tax-subsidized elderly population.

The national worker-to-retiree ratio, estimated at 4.98 working-age adults per retiree in 2000 , is projected to decline sharply to 2.89 workingage adults by $2030 .{ }^{4}$ Table 1 shows that every state will see its ratio decline, with states in the South and the West experiencing the sharpest declines.

Minnesota will do slightly better than average, moving from the $20^{\text {th }}$ best ratio to the $16^{\text {th }}$ best over the 30 -year period. Minnesota's ratio in 2030-3.02-will be a good deal higher than neighboring states, which range from 2.14 in North Dakota to 2.65 in Wisconsin.

## Labor Participation Rates Dropping

Falling worker-to-retiree ratios will contribute to a decline in the adult labor force participation rate, declining from 67.2 percent in 2000 to 60.5 percent in $2030 .{ }^{5}$ Aging, however, may not be the only factor behind
falling labor participation rates. U.S. labor participation rates among men and women aged 25 to 54 dropped between 1990 and 2000, suggesting other factors, beyond aging, might cause the workforce to shrink. ${ }^{6}$

National labor participation rates for men aged 25 to 54 declined from 91.4 percent in 1990 to 85.6 percent in 2000 (see Figure 5). Minnesota rates for men also declined, but remain at a much higher 91.3 percent, the second highest in the country. Likewise, national labor participation rates for women aged 25 to 54 dropped, but in Minnesota the rate increased, resulting in a Minnesota rate almost 10 percentage points higher- 83.0 percent versus 73.5 percent-than the national rate (see Figure 6).

The Minnesota Department of Planning suspects more men claiming disability is responsible for much of the declining labor force participation rate. ${ }^{7}$

On the other hand, more people over age 65 are staying in the workforce, helping to moderate workforce declines. Between 1990 and 2000 the rate of men aged 65 to 69 in the workforce increased from 27.9 percent to 30.2 percent nationally, and Minnesota experienced a greater increase, rising from 28.7 percent to 33.2 percent. Many more women aged 65 to 69 also stayed in the labor force, increasing from 16.9 percent to 19.9 percent, nationally, and 18.2 percent to 24.0 percent in Minnesota.

Even more elderly are likely to work in the future. A Merrill Lynch survey found "baby boomers expect to spend a significant portion of their retirement working." 71 percent of adults in the study say they will work in retirement and the two most important reasons boomers want to stay working are to keep mentally active and to keep physically active. ${ }^{8}$ Making money came in third. The study also found that those who work part-time enjoy retirement more than those who work full time or not at all.

|  | $\begin{aligned} & 2000 \\ & \text { Ratio } \end{aligned}$ | State <br> Rank | $\begin{aligned} & 2030 \\ & \text { Ratio } \end{aligned}$ | State <br> Rank | 30 yr . <br> Decline |
| :---: | :---: | :---: | :---: | :---: | :---: |
| North East | 4.50 |  | 2.70 |  | -40.0\% |
| Connecticut | 4.45 | 41 | 2.61 | 36 | -41.5\% |
| Maine | 4.31 | 44 | 2.09 | 48 | -51.5\% |
| Massachusetts | 4.64 | 34 | 2.74 | 30 | -41.0\% |
| New Hampshire | 5.26 | 16 | 2.66 | 31 | -49.4\% |
| New Jersey | 4.68 | 33 | 2.89 | 21 | -38.3\% |
| New York | 4.84 | 28 | 2.87 | 24 | -40.7\% |
| Pennsylvania | 3.88 | 50 | 2.47 | 39 | -36.3\% |
| Rhode Island | 4.25 | 45 | 2.65 | 32 | -37.6\% |
| Vermont | 4.95 | 26 | 2.29 | 43 | -53.7\% |
| Midwest | 4.78 |  | 2.89 |  | -39.5\% |
| Illinois | 5.12 | 19 | 3.22 | 10 | -37.1\% |
| Indiana | 4.99 | 25 | 3.15 | 13 | -36.9\% |
| lowa | 4.03 | 49 | 2.46 | 40 | -39.0\% |
| Kansas | 4.55 | 39 | 2.76 | 27 | -39.2\% |
| Michigan | 5.02 | 24 | 2.97 | 18 | -40.9\% |
| Minnesota | 5.11 | 20 | 3.02 | 16 | -40.9\% |
| Missouri | 4.52 | 40 | 2.79 | 25 | -38.2\% |
| Nebraska | 4.43 | 42 | 2.63 | 34 | -40.7\% |
| North Dakota | 4.09 | 47 | 2.14 | 46 | -47.8\% |
| Ohio | 4.61 | 36 | 2.78 | 26 | -39.7\% |
| South Dakota | 4.11 | 46 | 2.27 | 45 | -44.8\% |
| Wisconsin | 4.69 | 32 | 2.65 | 33 | -43.5\% |
| South | 5.00 |  | 2.84 |  | -43.1\% |
| Alabama | 4.73 | 30 | 2.62 | 35 | -44.6\% |
| Arkansas | 4.33 | 43 | 2.74 | 29 | -36.6\% |
| Delaware | 4.79 | 29 | 2.34 | 42 | -51.2\% |
| D.C. | 5.54 | 11 | 4.71 | 1 | -14.9\% |
| Florida | 3.39 | 51 | 1.95 | 51 | -42.6\% |
| Georgia | 6.66 | 4 | 3.65 | 5 | -45.2\% |
| Kentucky | 5.04 | 22 | 2.90 | 20 | -42.3\% |
| Louisiana | 5.29 | 14 | 2.87 | 23 | -45.7\% |
| Maryland | 5.57 | 10 | 3.29 | 7 | -40.9\% |
| Mississippi | 5.02 | 23 | 2.75 | 28 | -45.2\% |
| North Carolina | 5.28 | 15 | 3.21 | 12 | -39.2\% |
| Oklahoma | 4.61 | 37 | 2.87 | 22 | -37.7\% |
| South Carolina | 5.19 | 17 | 2.53 | 37 | -51.2\% |
| Tennessee | 5.10 | 21 | 2.94 | 19 | -42.3\% |
| Texas | 6.22 | 5 | 3.69 | 4 | -40.7\% |
| Virginia | 5.74 | 8 | 3.07 | 15 | -46.5\% |
| West Virginia | 4.08 | 48 | 2.27 | 44 | -44.3\% |
|  |  |  |  |  |  |
| West | 5.67 |  | 3.09 |  | -45.4\% |
| Alaska | 11.22 | 1 | 3.86 | 3 | -65.6\% |
| Arizona | 4.64 | 35 | 2.42 | 41 | -47.8\% |
| California | 5.85 | 6 | 3.27 | 8 | -44.1\% |
| Colorado | 6.69 | 3 | 3.53 | 6 | -47.3\% |
| Hawaii | 4.70 | 31 | 2.49 | 38 | -47.1\% |
| Idaho | 5.34 | 12 | 3.11 | 14 | -41.8\% |
| Montana | 4.56 | 38 | 2.10 | 47 | -54.0\% |
| Nevada | 5.79 | 7 | 3.02 | 17 | -47.8\% |
| New Mexico | 5.17 | 18 | 1.96 | 50 | -62.1\% |
| Oregon | 4.88 | 27 | 3.21 | 11 | -34.1\% |
| Utah | 6.96 | 2 | 4.27 | 2 | -38.7\% |
| Washington | 5.62 | 9 | 3.26 | 9 | -42.0\% |
| Wyoming | 5.33 | 13 | 2.05 | 49 | -61.5\% |
|  |  |  |  |  |  |
| United States | 4.98 |  | 2.89 |  | -41.9\% |
| Source: Author calculations derived from U.S. Census Bureau, Population Division, Interim State Population Projections, 2005. |  |  |  |  |  |

Figure 5: Labor Force Participation Rates for Men Aged 25-54 in the U.S. and in Minnesota



Source: Martha McMurry, Minnesota Labor Force Trends: 1990-2000, Minnesota State Demographic Center, December 2002.

Though more elderly might work, many who want to work may choose not to work because current policies often discourage the elderly from working. For example, many elderly might like to continue working their present job in a diminished role at a lower salary. But U.S. pension law requires companies to calculate pensions based on the last five years of earnings and, therefore, working at a lower salary will lower their pension.

## Higher Growth Rates will Make the Burden of LTC More Proportional

Some worry that uneven elderly population growth might result in some states shouldering a disproportionate share of America's LTC costs, suggesting that the current heavy reliance on state government should be reconsidered.

But the burden is already disproportionate. Table 1 shows fewer workers per retiree currently live in the Northeast and the Midwest, meaning the average Midwestern and Northeastern worker must pay a higher portion of each retiree's LTC bill. Higher elderly growth rates in the South and the West will make the burden of LTC more proportional by

Figure 6: Labor Force Participation Rates for Women Aged 25-54 in the U.S. and in Minnesota


Source: Martha McMurry, Minnesota Labor Force Trends: 1990-2000, Minnesota State Demographic Center, December 2002.
creating a more equal distribution of worker-toretirees across states.

However, a state's share of the LTC burden rests on many other factors beyond raw population numbers. Some states get only 50 percent of Medicaid costs reimbursed from the federal government while others can get up to 80 percent reimbursed. Moreover, some states provide more Medicaid LTC benefits than others and some states have lower rates of LTC utilization. Therefore, proportionality may still be a problem in the future, but it will be caused more by differing financing and eligibility policies across states than by uneven populations.

Despite a more proportionate population, Minnesota might still be shouldering a disproportionate future share of LTC costs. Minnesota gets reimbursed only 50 percent of Medicaid costs and has one of the highest nursing home utilization rates.

## Retirees Moving to the South Do Not Appear Correlated with More LTC Needs

Intuition might suggest that states with large numbers of retirees should carry a much larger
share of the LTC burden. However, the three states with the highest net migration rate for 65- to 74-year olds-Nevada, Arizona, and Florida-also have some of the lowest rates of aged Medicaid beneficiaries. ${ }^{9}$ Nevada has the second lowest number of aged Medicaid beneficiaries per 1,000 people, Arizona has the third lowest, and Florida has the 20th lowest. ${ }^{10}$ All three states also have among the lowest nursing home utilization rates for those aged 85 and over; second lowest in Arizona, fifth lowest in Florida, and sixth lowest in Nevada. ${ }^{11}$

Frequently those needing LTC move home to be near their children or other informal care givers, a fact that can help explain why retiree states do not have more LTC burdens. Southern and Western states accrue huge benefits from healthy taxpaying retirees who end up moving home when they become tax burdens.

Census data suggest that significant numbers of Minnesotans leave for retirement but move back for LTC. Between 1995 and 2000, 20.2 percent of Minnesotans aged 65 to 74 left the state for warmer climates. ${ }^{12}$ Yet for those 85 and over, the migration flow resulted in a net
gain of 9.4 percent. A similar pattern plays out in Vermont, Rhode Island, Connecticut, Maryland, Kansas, Wyoming, Colorado, and Washington, and the reverse is true in Florida, Alabama, Mississippi, and Arkansas.

Even if Minnesotans do not move back for LTC, those Minnesotans financially able to retire to other states take their wealth with them and leave behind an elderly population less able to afford LTC on their own.

## Fertility Rates Remain Very Low

High fertility rates in the 1940s and 1950s coupled with very low fertility rates since the late 1960s created today's disproportionate elderly population growth. Indeed, if it were not for the dramatic decline in fertility rates over the 1960s and '70s shown in Figure 7which fell from a high of 122.7 live births per 1,000 women age 15 to 44 in 1957 to 65.0 in 1976-we might have enough Generation X workers to cover the costs of the boomer generation. ${ }^{13}$ The situation might also be different if fertility rates had rebounded, but fertility rates are no higher today than they were in the mid 1970s.

Figure 7: Fertility Rate, Live Births per 1,000 Women Aged 15-44 Years, 1910-2004


Source: National Center for Health Statistics, Vital Statistics of the United States, 2001, Vol. 1, Natality; Minnesota Department of Health, 2004 Minnesota Health Statistics Annual Summary, November 2005.

Today, the average U.S. family with a child under eighteen has 1.86 children. ${ }^{14}$ This is not even enough to replace his or her parents, let alone those adults who never have children.

In Minnesota, fertility rates in the boomer years swelled higher than the national average, but in the late 1980s, Minnesota's rate dipped below the national average. ${ }^{15}$ Minnesota's birth rate is now catching up with the national average.

## Fewer Widows

One of the few demographic trends that will mitigate future LTC costs is the declining number of widows because of the often central role spouses play as live-in care providers.

A number of studies show that having a spouse can dramatically reduce the risk of needing formal LTC services. One study estimates that living alone can multiply the risk of nursing home admissions 1.6 times. ${ }^{16}$ Another study found that having a living spouse can decrease the length of nursing home stays by four months for men and three months for women. ${ }^{17}$ Further, according to the 1994 National LongTerm Care Survey, elderly widows and widowers use LTC at much higher rates than average: 26.2 percent versus 16.7 percent for all elderly. ${ }^{18}$

The percent of elderly widows dropped
significantly in the 1990s and is projected to continue dropping through to 2030. Nationally, the rate of elderly widowed women dropped from 49.4 percent to 45.3 percent between 1990 and 2000. ${ }^{19}$ For Minnesota the rate declined by even more from 48.6 to 44.1 percent. ${ }^{20}$

Not nearly as many elderly men find themselves widowed. In 2000, widowers accounted for only 13.9 percent of elderly men nationally and 12.7 percent in Minnesota.

The public savings from fewer widows can be substantial. By a crude estimate, a 9 percent drop in the rate of widowed elderly women in Minnesota between 1990 and 2000 resulted in a $\$ 46$ million savings in 2000. ${ }^{21}$ Based on projections in Table 2, the rate may drop another 24 percent between 2010 and 2030, resulting in even more savings.

This trend is tightly linked to the decreasing disparity in life expectancies between men and women. And as long as men continue catching up, there will continue to be fewer widowed women, and thus fewer women needing formal LTC services. ${ }^{22}$

## More Elderly will have Never Married

The elderly never-married population will increase in the future and add to the public LTC burden. ${ }^{23}$ Like widows and widowers, those

|  | 2010 | 2030 | 2050 | 2070 |
| :---: | :---: | :---: | :---: | :---: |
| Males |  |  |  |  |
| \% Married | 73.0\% | 68.9\% | 65.9\% | 65.5\% |
| \% Widowed | 14.9\% | 13.0\% | 13.6\% | 12.7\% |
| \% Divorced | 7.3\% | 9.5\% | 8.5\% | 8.5\% |
| \% Never Married | 4.8\% | 8.6\% | 11.9\% | 13.3\% |
| Females |  |  |  |  |
| \% Married | 41.4\% | 44.8\% | 41.9\% | 43.5\% |
| \% Widowed | 45.1\% | 34.2\% | 35.8\% | 33.7\% |
| \% Divorced | 9.1\% | 14.9\% | 13.8\% | 13.4\% |
| \% Never Married | 4.4\% | 6.1\% | 8.5\% | 9.4\% |
| Source: David M. Cutler and Louise Sheiner, Demographics and Medical Care Spending: Standard and Non-Standard Effects, Burch Working Paper No. B98-3, Table 15, November 1998. |  |  |  |  |

who never marry lack live-in care, and so they too use LTC services at higher rates. ${ }^{24}$ Further, those never married are less financially prepared to privately finance LTC. In the 1999 National Nursing Home Survey, 69 percent of those single or never married relied on Medicaid as the primary source of payment, versus 57 percent for widows and 49 percent for married individuals. ${ }^{25}$ Those never married also stay in nursing homes almost a year longer than average. ${ }^{26}$ The added public cost of more elderly never marrying will be substantial.

## Immigration

Barely heard in the heated national debate over immigration, some immigration supporters now argue that increasing inflows of immigrants can ease the country's LTC burden.

Future LTC costs might indeed be mitigated by a consistent flow of immigrants to the United States. Annual immigration - the legal kindhas remained fairly constant since 1992, the year the Immigration Act of 1990 took effect, at an average of 837,000 people annually. ${ }^{27}$ That number bumped up some in recent years and might rise even more if Congress and the president can agree on immigration reform.

Immigration can help mitigate the LTC burden in a number of ways. Immigrants are almost universally hard-working; nationally, much higher rates of foreign-born men ( 81.3 percent) participated in the 2005 labor force than nativeborn men ( 71.9 percent). ${ }^{28}$ This labor infusion helps slow declining ratios of workers to retirees. Immigrant fertility rates also are higher, which will add to future working-age populations. Moreover, immigrants are more willing than native-born workers to take difficult and low-paying jobs in LTC facilities. ${ }^{29}$

Already, the foreign-born population in Minnesota contributes a sizable and increasing share of new-born children. During the 1990s, the proportion of births to foreign-born mothers in Minnesota increased from 5.4 percent to 13.4
percent, thanks to a much higher fertility rate108.3 per 1,000 women aged 15 to 44 versus 58.4 for U.S.-born mothers. ${ }^{30}$

Many argue these new immigrants become a drain on public resources because so many come with low-skill sets and few assets. Some researchers contend a minority of immigrants, due to transplanting amongst the urban poor, assimilate to the pathologies of the native poor and become trapped in poverty. ${ }^{31}$ However, even these pessimistic researchers admit that a majority of today's immigrants assimilate quite well. ${ }^{32}$ And there is much optimistic research showing that second generation immigrants of today assimilate even faster than past waves of immigrants, refuting pessimistic claims that certain segments of immigrants are destined to languish in poverty. ${ }^{33}$

## Demographics Underscore the Importance of a Strong Economy and Strong Families

According to the demographics surveyed above, Minnesota can expect many more elderly in need of LTC and at the same time fewer resources available to pay for it. The future need for LTC in Minnesota will rise in step with a doubling elderly population, about average for the nation, but much bigger than its Midwest neighbors. The demographics also suggest that Minnesota might not gain any reprieve from elderly men and women retiring to the South and West, since many end up moving back. This appears especially true since those who move away tend to be healthier and more able to afford their own LTC.

Demographics also speak to the resources available to pay for LTC and those resources are dwindling. Most troubling, the number of taxpaying workers per retiree, both nationally and in Minnesota, will steadily diminish, meaning public coffers will find it increasingly difficult to fund the public cost of LTC. National population projections estimate there will only be 2.89 taxpaying workers for each retiree by 2030 , a scenario that could be made worse by declines in labor participation rates
among 25 to 54 year olds. Minnesota's public resources won't dwindle quite as much as other states, thanks to higher labor participation rates and higher growth in younger populations, but only marginally so.

Families are the most important resource for LTC at the end of life. Having a living spouse can decrease the length of nursing home stays by four months and having living children can decrease nursing home stays by three months. ${ }^{34}$ But compared to their forebears, boomers marry less and raise fewer children. Fortunately, the number of widows will continue to decline as men's life expectancies catch up to their better halves, helping offset a portion of the family resources lost to less marriage and fewer children.

Demographic trends and projections reveal a number of cultural and economic issues critical to understanding and in some cases combating the future cost of LTC, including:

- Can the LTC market-possibly the most highly regulated market of all-meet future spikes in demand for LTC services?
- Do lower labor participation rates among 25 to 54 year olds reflect a decline in America's work ethic, and if so, what can be done to reinforce it?
- Should the elderly be encouraged to work into retirement?
- If rising numbers of people over the age of 65 are able to work, does that mean that declining numbers should be eligible for retirement benefits?
- Does the present disproportionate population distribution, and resulting disproportionate share of LTC costs among states, suggest problems with the state and federal funding roles?
- Do Minnesotans truly move south for retirement and back home for LTC? If so, do they move simply for the warmth or do Minnesota's high taxes encourage movement as well? And do they primarily move back for LTC, to be near
family or to qualify for public LTC benefits?
- Why have national and Minnesota fertility rates remained so low? Can and should anything be done to influence very personal decisions to have children?
- If the declining rate of widows is due to the decreasing disparity in life expectancies between men and women, is enough being done to promote health among men so that the gap narrows even more?
- Can anything be done to at least halt the rising proportions of those who never marry?
- Would allowing more immigration be a net gain or a net drain to public resources?

The above demographics and the issues they beg and reveal underscore two central lessons. First, a strong economy, by keeping more people in the workforce and by propelling higher wages, will be indispensable to financing tomorrow's LTC bills. Policies, therefore, that make Minnesota a more attractive place to live, work, and build a business will mean more resources available to fund LTC.

Second, if it appears too late for larger families to help reduce problems, consider that a child born today will turn 20 when the first boomers begin turning 80 , right around the time they start needing LTC in larger numbers. Today's newborns, in other words, will be entering the workforce and paying taxes. They'll also be old enough to help care for grandparents.

A strong economy and larger families will both help to fulfill the LTC needs of boomers. But what will those needs be? We know that doubling elderly populations will raise the need, but that is not the whole story. Future LTC needs will largely depend on the health and well-being of boomers as they age, issues the following section of this report addresses in more detail.

## The Future Health Status of Aging Baby Boomers

The health status of aging baby boomers will have profound implications on LTC needs, but overall better health will not necessarily mean less need or less costly LTC. While better health is clearly less expensive for the nonelderly, this does not necessarily hold true for the elderly. Medical advances that lower risks for certain health problems extend life, and any added months or years create new opportunities to develop other, possibly more costly health problems. In fact, recent studies suggest that better health in old age, instead of lowering costs, actually shifts costs from acute care (doctor visits and limited hospital stays) to LTC.

Certain diseases lead to a higher share of LTC costs than others and, therefore, must be understood more carefully. Table 3 shows the results of a study that tracked Veterans Affairs patients'-a very large sample of the nation's elderly LTC users-LTC costs associated with specific chronic conditions. ${ }^{35}$ Of the 29
chronic conditions tracked by the study, dementia-related diseases and circulatory system diseases accounted for the largest portion of LTC costs.

## Self-Reported Health Status

Two surveys-the National Health Interview Survey (NHIS) and the Behavioral Risk Factor Surveillance System (BRFSS)—periodically track a number of U.S. health trends. The NHIS tracks nationwide trends and the BRFSS tracks trends at the state, county, and city levels. Each survey regularly asks respondents almost identical survey questions about whether they rate their general health as excellent, very good, good, fair, or poor.

The elderly and baby boomers both report better health on the NHIS survey. Between 1982 and 2004, Figure 8 shows consistently lower rates of people over 50 years old selfassessing their health as poor or fair in the NHIS survey: 32.4 percent less for those 50 to $64 ; 34.1$ percent less for those 65 to $74 ; 16.5$ percent less for those 75 to 84 ; and 2.5 percent less for those 85 and over. ${ }^{36}$

| 65 to 79 Years |  |  |  | 80 Years and Over |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chronic Condition | Mean LTC Cost | Total LTC Costs | Percent of Total LTC Costs | Chronic Condition | Mean LTC Cost | Total LTC Costs | Percent of Total LTC Costs |
| Dementia | 5,785 | 98,865,650 | 11.23\% | Dementia | 6,934 | 79,304,158 | 15.66\% |
| Cancer | 808 | 95,789,385 | 10.88\% | Alzheimer's disease | 10,522 | 58,239,270 | 11.50\% |
| Congestive heart failure | 1,055 | 77,311,455 | 8.78\% | Congestive heart failure | 2,123 | 53,686,424 | 10.60\% |
| Psychoses | 1,921 | 72,448,594 | 8.23\% | Cancer | 1,330 | 42,215,643 | 8.33\% |
| Renal failure | 2,042 | 71,612,940 | 8.13\% | Renal failure | 3,147 | 36,826,194 | 7.27\% |
| Alzheimer's disease | 9,006 | 64,464,948 | 7.32\% | Psychoses | 3,949 | 30,683,730 | 6.06\% |
| Cerebrovascular disease/stroke | 1,642 | 52,701,632 | 5.98\% | Cerebrovascular disease/stroke | 2,620 | 23,454,240 | 4.63\% |
| Peripheral vascular disease | 705 | 38,041,095 | 4.32\% | Parkinson's disease | 3,879 | 21,691,368 | 4.28\% |
| Chronic obstructive pulmonary disease | 410 | 37,186,590 | 4.22\% | Chronic obstructive pulmonary disease | 1,135 | 21,128,025 | 4.17\% |
| Alcoholism | 1,722 | 37,002,336 | 4.20\% | Peripheral vascular disease | 1,505 | 20,425,860 | 4.03\% |
| Source: Author calculations derived from Wei Yu, et al., "The Relationships Among Age, Chronic Conditions, and Healthcare Costs," The American Journal of Managed Care, Vol. 10, No. 12, December 2004. |  |  |  |  |  |  |  |

Figure 8: Percent Reporting Poor or Fair Health, U.S., 1982-2004


Source: Centers for Disease Control and Prevention, National Health Interview Survey.

Overall, Minnesotans report lower rates of poor or fair health than any other state in the most recent BRFSS surveys. ${ }^{37}$ However, 50- to 64-year-old Minnesotans began reporting higher rates of poor to fair health in 2000-2002 (see Figure 9). But even with a slightly higher rate, that group still reported the second lowest rate (13.0 percent) in the country. Minnesotans also

reported the second lowest rate for those aged 65 to 74 ( 18.5 percent), but Minnesota's ranking dropped to 13 for those 75 and over.

Three issues and inconsistencies stand out from the NHIS and BRFSS surveys. First, while the NHIS consistently reports healthy trends for those over 50, most states in the BRFSS survey report higher rates of poor to fair health for those 50 to 64 .

Second, though NHIS and the BRFSS surveys show declines in the rate of people over 75 who report poor to fair health, they are slight and fall well within the survey's margin of error. Therefore, the self-reported health of the group most in need of LTC appears to be stagnating.

Third, reading the state-level data reveals a wide disparity in reported health status, with Southern states reporting significantly higher rates of poor to fair health in the boomer bracket.

Take note that all three issues suggest the health of boomers and the elderly may not be trending as positive as NHIS surveys indicate.

## Life Expectancies Rising

Life expectancies continue to rise, reflecting an overall improvement in the health of Americans. National life expectancies rose from 68.2 years in 1950 to 77.5 years in 2003, and the life expectancy of those who reach 65 years rose even more dramatically on a proportionate basis, from 13.9 additional years of life in 1950 to 18.4 additional years in 2003, an increase of 32 percent. ${ }^{38}$

Minnesota life expectancy trends mirror national trends. Minnesotans, however, can expect longer lives, and, in fact, Minnesotans had the second longest life expectancy-79.1 years-in $2000 .{ }^{39}$

The discrepancy between the life expectancies of men and women continues to diminish, which, as discussed earlier, directly affects the provision of informal care giving; i.e., more men living long enough to care for their wives. Between 1980 and 2000, the gap narrowed by two years in the U.S.-from 7.4 to 5.4 yearsand, in Minnesota, the gap narrowed by 2.5 years-from 7.3 to 4.8. ${ }^{40}$


[^0]

Gerontologists debate whether the human life span is limited. ${ }^{41}$ Some argue there is no observable limit since life expectancies in the developed world have continually risen by an average of 2.5 years per decade since 1840 and at this point there is no reason to believe that trend will stop. Others, arguing from evolutionary theory, claim that humans have a "biological warranty period"-a statistical limit on life spans regardless of medical advancesbecause the body stops maintaining itself once the reproductive phase of life ends. They argue recent increases in life expectancies came from solving some relatively simple health problems and that future increases will not come so easily or cheaply.

But do rising life expectancies represent more years walking on the beach or more years nodding off in a nursing home lobby? Advances in medical technology have the potential to keep someone alive in a diminished state, which appeared to be more often the case in the 1970s. But in the last 25 years, studies show gains in life expectancy to more likely reflect additional healthy years of living. ${ }^{42}$

## Death Rates Dropping

Along with rising life expectancies, death rates continue to drop year after year. Mostly because of improvements in treating heart and cerebrovascular diseases, between 1950 and 2003 death rates dropped 45 percent among 65to 74 -year-olds; 41 percent among 75 - to 84-year- olds; and 28 percent for those 85 and over. ${ }^{43}$ Though cancer-related death rates are still higher than in 1950, they began declining in 1994 for both the 65 to 74 and the 75 to 84 age groups.

Some elderly death rates, however, are not dropping. Elderly death rates from lung cancer and chronic lower respiratory diseases-two conditions that result in significant LTC costs-steadily rose until 2000 and it remains unclear whether rates have leveled off. Death rates from Alzheimer's disease and hypertension are also rising among elderly populations. ${ }^{44}$

Minnesota's overall age-adjusted death rate713 per 100,000-trails only Hawaii for the lowest rate in the U.S. ${ }^{45}$ Minnesota's lower death rate can mostly be attributed to having the nation's lowest rate of heart disease deaths,


Source: U.S. Department of Health and Human Services, Health, United States, 2005.
but Minnesota death rates are also far lower on many other fronts, including HIV, influenza and pneumonia, lower respiratory disease, and liver disease.

## The Prevalence of Alzheimer's Disease May Rise Even Faster than the Elderly Population

Alzheimer's disease, senile dementia, and other mental disorders deserve special attention because together they result in substantial LTC costs. Combined, these conditions represent the primary diagnosis for 26.6 percent of all nursing home residents. ${ }^{46}$ In the veterans study referenced earlier, Alzheimer's, dementia, and psychoses accounted for 29.1 percent of total elderly LTC costs. ${ }^{47}$ Further, consider the number of new assisted-living facilities entirely devoted to dementia-related conditions.

Most with dementia, however, live at home and receive care from family and friends. One study estimates the annual cost of informal dementia care at $\$ 18,385$ for such patients. ${ }^{48}$ This estimate includes the value of caregivers' time ( $\$ 6,295$ ), caregivers' lost income ( $\$ 10,709$ ), and caregivers' out-of-pocket costs for purchasing formal care.


Without medical breakthroughs, the prevalence of Alzheimer's and related conditions likely will quadruple by 2050. ${ }^{49}$ Alzheimer's prevalence will rise faster than the elderly population because the rate of Alzheimer's increases exponentially with age, and more people will survive other diseases allowing them to live longer with Alzheimer's.

There is some cause for hope. Recent scientific discoveries of a gene associated with a higher risk of Alzheimer's, as well as certain experimental drugs, show promise in delaying the onset of Alzheimer's. Another study found the possibility of an upper bound to how high the Alzheimer's rate can climb, and so the rate of Alzheimer's may actually begin declining at age 93 for men and age 97 for women, rather than continuing to rise exponentially. ${ }^{50}$ If true,
rising life expectancies will have less of an impact on the rate of Alzheimer's than present estimates project.

Despite hopeful developments, no solid breakthrough exists to either cure or prevent Alzheimer's. Diagnoses of Alzheimer's continue to increase. ${ }^{51}$ Therefore, we must assume Alzheimer's and other dementias will create even higher demand for LTC once boomers begin turning 75 .

## Higher Prevalence of Chronic Conditions among the Elderly

Recent surveys show upward ticks in the prevalence of many chronic conditions among the elderly. Table 4 shows hypertension, strokes, asthma, breast cancer, prostate cancer,

| Condition | 45-64 Years |  | 65-74 Years |  | 75-84 Years |  | 85+ Years |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997-1998 | 2003-2004 | 1997-1998 | 2003-2004 | 1997-1998 | 2003-2004 | 1997-1998 | 2003-2004 |
| All types of heart disease | 13.4 | 12.5 | 27.8 | 27.3 | 36.0 | 36.1 | 40.7 | 39.0 |
| Coronary heart disease | 7.0 | 6.7 | 18.7 | 18.2 | 23.9 | 24.9 | 24.5 | 25.1 |
| Hypertension | 27.0 | 30.1 | 45.0 | 49.3 | 49.0 | 56.2 | 45.7 | 50.2 |
| Stroke | 2.3 | 2.4 | 6.7 | 7.1 | 9.7 | 10.6 | 10.5 | 14.8 |
| Emphysema | 2.1 | 1.9 | 5.3 | 5.0 | 5.4 | 5.6 | 3.8 | 4.8 |
| Asthma | 9.1 | 9.9 | 8.2 | 9.6 | 7.3 | 8.7 | 6.4 | 6.5 |
| Hay fever | 9.8 | 10.1 | 7.2 | 7.9 | 6.1 | 6.5 | 6.1 | 5.0 |
| Sinusitis | 19.2 | 17.0 | 16.3 | 15.3 | 13.6 | 14.0 | 12.3 | 9.8 |
| Chronic bronchitis | 5.5 | 4.9 | 7.0 | 6.2 | 6.2 | 6.3 | 4.8 | 4.3 |
| Any cancer | 7.2 | 7.9 | 17.0 | 18.3 | 20.8 | 22.8 | 20.2 | 24.1 |
| Breast cancer | 1.2 | 1.4 | 3.0 | 3.5 | 4.1 | 4.1 | 5.3 | 5.7 |
| Cervical cancer | 1.3 | 1.1 | 1.1 | 1.0 | 0.8 | 0.9 | - | - |
| Prostate cancer | 0.8 | 1.0 | 5.8 | 5.6 | 9.9 | 11.1 | 7.0 | 11.2 |
| Colon/Rectal cancer | 0.4 | 0.4 | 1.4 | 1.9 | 2.7 | 2.8 | 2.4 | 4.2 |
| Uterine cancer | 1.1 | 0.8 | 1.3 | 1.0 | 1.9 | 1.4 | 1.4* | 1.5 |
| Lung cancer | 0.2 | 0.2 | 0.7 | 0.9 | 0.7 | 1.2 | - | - |
| Melanoma | 0.4 | 0.7 | 0.9 | 0.9 | 0.6 | 1.2 | 1.2* | 1.3 |
| Skin cancer | 2.0 | 2.2 | 5.1 | 5.3 | 5.3 | 6.3 | 5.1 | 6.0 |
| Diabetes | 7.8 | 9.5 | 14.1 | 18.1 | 12.6 | 16.8 | 9.1 | 12.3 |
| Ulcer | 11.1 | 8.3 | 13.6 | 11.3 | 14.5 | 12.6 | 13.7 | 12.4 |
| Kidney disease | 1.8 | 1.7 | 2.8 | 3.2 | 3.5 | 4.1 | 5.5 | 6.5 |
| Liver disease | 1.6 | 2.0 | 1.4 | 1.3 | 1.0 | 1.6 | 1.0 | 1.3 |

[^1]colon/rectal cancer, lung cancer, melanoma, skin cancer, diabetes, kidney disease, and liver disease generally increased across the elderly population between 1997 and 2004. ${ }^{52}$

Boomers also experienced increasing rates of many of the same chronic conditions, including hypertension, stroke, asthma, hay fever, breast cancer, prostate cancer, melanoma, skin cancer, diabetes, and liver disease. But, the rates of some chronic conditions that increased among the elderly-colon/rectal cancer, lung cancer, and kidney disease-stabilized or fell among boomers.

Higher rates of chronic disease do not necessarily mean diminished health. It might indicate advances in medical treatments that allow people to survive longer with chronic disease and provide more time for additional chronic disease to develop. This explains how declining stroke death rates and declining cancer incidence can coexist with rising prevalence of cancer and strokes. This reasoning fits best for the elderly (who have had more time to live with their disease), but not as well for the younger boomers. For boomers, who have spent less time with
chronic conditions, more prevalent chronic disease could indeed mean diminished health.

Higher disease prevalence suggests higher acute care costs. To the extent medical advances are responsible for higher disease prevalence, such advances add significant costs. More specifically, beyond the cost of the specific medical technology, the longer life may result in more trips to the doctor, pharmacy, and hospital for other health care needs.

Trends in chronic conditions send more mixed signals on LTC costs. More people with Alzheimer's disease, kidney disease, strokes, and lung cancer suggest higher LTC costs. On the other hand, lower rates of heart disease, chronic bronchitis, emphysema, and kidney disease among boomers should moderate LTC costs.

## Disability Rates Dropping

Most research on the health status of the elderly focuses on disability, as disability directly affects independence and the need for LTC. Disability measures usually rely on population

Figure 14: Percent of Elderly with Difficulty Performing Activities of Daily Living, U.S., 1992-2003


surveys that ask people to report any physical or cognitive impairments they might have. The two measures most commonly used in surveys are activities of daily living (ADL), which is a measure of personal care abilities such as bathing and dressing; and instrumental activities of daily living (IADL), which is a measure of abilities necessary to maintain independence, such as money management and preparing meals. ADL is the more severe disability associated with needing LTC services.

Since the 1980s, most measures of disability among the elderly have declined, with the most pronounced decline taking place in the 1990s. ${ }^{53}$ Likely contributors include improving medical technology, healthier behavior, increasing use of preventative measures, increasing use of aids, higher education levels, rising wealth, and less exposure to disease. ${ }^{54}$ One review of the literature found average annual declines in the prevalence of any disability among older adults ranged from -1.55 percent to -0.92 percent in studies measuring trends in the 1980s and '90s. ${ }^{55}$ Studies show that decreases in IADL disability account for most- 80 percent according to one study-of the decline,
meaning there has been far less of a decline in the severe disabilities that require costlier LTC services. ${ }^{56}$

In the 2000 Census, elderly women reported having two or more disabilities at higher rates than men- 19.7 percent higher in Minnesota and 24.1 percent higher nationally-which is consistent with other studies showing elderly women become more severely disabled at higher rates than men. ${ }^{57}$

Elderly Minnesotans report both lower disability rates and less severe disability on the 2000 Census. 19.1 percent of elderly Minnesotans reported having one disability and 17.7 percent reported having two or more disabilities, compared to a national average of 20.1 percent reporting one disability and 21.8 reporting two or more. ${ }^{58}$

## Disability Projections

Many studies predict an optimistic future, projecting declining disability and longer working lives, more active retirements, and less need for LTC services. ${ }^{59}$ Disability is expected to decline mostly because of medical advances,
but also because boomers are better educated, wealthier, worked in less physically demanding careers, and take more preventative measures than previous generations.

One of the most optimistic studies foresees a 1.5 percent annual decline in elderly disability, assuming larger-scale adoption of preventative measures, wide dissemination of technology advances, and additional investments in biomedical research. ${ }^{60}$ Under this scenario, working life could increase by five years or more and, on net, the actual number of disabled elderly could remain constant despite the rapid rise in the elderly population.

Lower overall costs, however, depend on lifestyle changes-more exercise and better nutrition-not technology, since, historically, new medical technologies have been linked to higher demand and use and, therefore, higher health insurance costs.

Some observers are less optimistic that disability rates will drop. They argue that rising obesity will lead to more disability, that the prevalence of debilitating dementia is on the rise, and that smoking, excessive drinking, and the lack of exercise remain all too common. Further, not every study finds declining disability over the past couple decades.

There are solid reasons to be optimistic that disability rates will decline, but there is no guarantee, especially in light of rising obesity rates, and even if disability does decline, the overall cost savings may be minimal if reductions rely too much on expensive technology.

## Obesity Rates Rising

Slimming America's waistline would go a long way to soothing fears that disability rates might rise. Nonetheless, obesity rates continue to grow rapidly. In fact, the Centers for Disease Control and Prevention (CDC) now call it an epidemic. Between 1990 and 2002, BRFSS

surveys (shown in Figure 16) report the median state obesity rate for adults increased from 11.6 percent to 22.1 percent. ${ }^{61}$ For Minnesota the numbers were worse, rising from 10.2 percent to 22.3 percent.

Other measures peg national adult obesity rates at a much higher 30.4 percent. ${ }^{62}$ Men (35.5 percent) and women ( 42.1 percent) aged 55 to 64 weighed in with the highest rates of obesity, but every age group measured extremely high rates (see Figure 17).

Some worry that disability rates will increase once obese boomers start experiencing the disabling effects of obesity: diabetes, heart disease, hypertension, cancer, and arthritis. ${ }^{63}$ If true, it will be costly. ${ }^{64}$ One study, predicts the obese elderly will live just as long, but will spend $\$ 39,000$ more on health care, largely because they will live at least 40 percent more of their life with debilitating and often institutionalizing disabilities. ${ }^{65}$

The health impact of obesity is already evident among boomers. As obesity rates have risen so has the prevalence of hypertension and diagnosed diabetes. The prevalence of hypertension among adults aged 40 to 59
increased from 27.0 percent in 1988 to 30.1 percent in 2000. ${ }^{66}$ Between 1994 and 2004, the prevalence of diagnosed diabetes per 100 people aged 45 to 64 rose from 6.3 to $9.5 .{ }^{67}$

Minnesota boomers experienced a more dramatic doubling of their diabetes rate, rising from 3.6 to 7.3. ${ }^{68}$ But Minnesota's rate-third lowest rate among all adults and sixth lowest among adults aged 45 to 64-still reflects a far healthier population.

Obesity, however, is only one factor among many that will impact future disability rates. And with most other factors trending positive, many continue projecting declines in future disability rates.

Maybe the most important point made by the research is that the disability trend itself depends on choices we make today. If we forgo Kong-sized meal portions, if we get colonoscopies, if we regularly go for brisk walks, and if we keep investing in biomedical technology, disability rates will almost certainly decline. Fortunately, more and more elderly and near-elderly are already choosing to take steps-eating habits aside-that maintain good health and prevent or delay the onset of chronic diseases and disability. As the following pages show, retirees lead
increasingly active lifestyles, exercise more, and take more preventative steps against illness.

## Rising Numbers of Boomers and the Elderly Take Steps to Prevent Illness

Future cost control depends on the large-scale adoption of preventative measures. The costs associated with preventative measures pale in comparison to the lifetime costs of preventable chronic conditions like diabetes and cardiovascular diseases. Preventable illnesses account for about 70 percent of the total cost of illness in this country. ${ }^{69}$ Indeed, the old saw about an ounce of prevention seriously underestimates the value that preventative steps-good nutrition, regular exercise, disease screening, vaccinations, and immunizationscan return to those who take them.

Are today's elderly and baby boomers taking the necessary steps to prevent debilitating and costly disease? Yes and no. When the prevention can be had through a doctor's visit or a drug, like cancer screening and cholesterol lowering drugs, the answer is mostly yes. But when prevention requires more day-to-day selfdiscipline, like diet and exercise, the results are mixed.


| Table 5: Cancer Screening Trends by Age, 1987 and 2000 |  |
| :--- | :---: |

## Cancer Screening

Screening for illness is one of the most important preventative steps available to avoid serious and expensive health complications that can result from cancer and chronic diseases. The American Cancer Society recommends yearly Pap tests for women over 21, yearly mammograms for women over 40, yearly prostate exams for men over 50 , and regular colorectal exams for both men and women over $50 .^{70}$

Prostate screening has yet to prove its value, but screening for cervical cancer, breast cancer, and colorectal cancer have proven incredibly effective at reducing incidence and mortality rates. ${ }^{71}$ Table 5 shows the results of a study that found between 1987 and 2000 Pap tests among women over 25 increased by 12.1 percent, mammograms increased by 140.9 percent, and fecal occult blood/colorectal examinations (FOB/CRE) increased by 45.2 percent. ${ }^{72}$ FOB/CRE screening rates remain far lower than Pap test or mammogram rates. Increased screening was most pronounced for those ages 50 to 64 and for those over 65.

Minnesotans report some of the highest rates of cancer screening. Those over 50 report the highest rate- 66.3 percent-of having a sigmoidoscopy or a colonoscopy at least once. ${ }^{73}$ Minnesota also tops the list for the rate of those over 50 reporting a sigmoidoscopy or a colonoscopy in the past five years or past 10 years. Further, Minnesota ranked high in the
rate of women having a Pap test in the past three years (tenth); the rate of women over 40 having a mammogram in the past two years (sixth); the rate of women over 50 having a mammogram in the past two years (second); and the rate of women over 40 having a clinical breast exam in the past two years (fifth).

## Cholesterol Levels Declining

High cholesterol raises the risk of heart disease, a risk that is increasingly being reduced by more screening and wider use of cholesterollowering drugs. For the 18 -and-over population in the United States, those reporting not having their cholesterol checked in the past five years dropped from a median state rate of 32.7 percent in 1993 to 27.5 percent in $2001 .^{74}$ The rate in Minnesota dropped from 31.1 percent to 23.8 percent.

Cholesterol-lowering drugs contributed to a measurable decline in the rate of high cholesterol among all adults. Between 1988 and 1994, the rate for elderly high cholesterol stood at 32.0 percent; for those 45 to 64 , the rate was 30.4 percent. ${ }^{75}$ By 1999-2003, elderly rates had dropped to 22.1 percent; for men and women 45 to 64 , it had dropped to 22.6 percent.

## Pneumonia and Flu Vaccinations

A simple shot can save a life, especially for the elderly who account for a majority of the vaccine-preventable deaths that occur each

Figure 18: Percent of Elderly Ever Having a Pneumonia Vaccination (3-year averages)


Source: Centers for Disease Control and Prevention. Behaviorial Risk Factor Surveillance System.
year, including 90 percent of flu deaths. ${ }^{76}$ Vaccinations are cheap and simple to administer, and so it is not surprising that the rate of elderly receiving pneumonia and flu vaccinations rose dramatically between 1993 and 2004. Over this time, the median state rate of elderly receiving a pneumonia vaccination almost doubled, rising from 33.7 percent to 64.4 percent, and in Minnesota the rate more than doubled, rising from 33.9 percent to 70.4 percent (see Figure 18). ${ }^{77}$ Over the same period, the rate of elderly receiving flu shots also rose nationally from 56.8 percent to 68.9 percent and in Minnesota from 59.7 percent to 78.4 percent, the highest rate in the country (see Figure 19).

Unlike other preventative measures that can help people avoid many of the chronic diseases and disabilities that lead to expensive LTC, pneumonia and flu vaccinations might increase LTC costs by extending life and thereby extending time spent in a LTC facility. That is not to say vaccinations will not save money in other ways, for example, by cutting down on expensive hospital stays.

Figure 19: Percent of Elderly Who Received a Flu Shot in the Past Year (3-year averages)


Source: Centers for Disease Control and Prevention. Behaviorial Risk Factor Surveillance System.

## Healthy Living

To be most effective, preventative steps focused on healthy living, like exercise and nutrition, should be initiated long before old age sets in, and, for best effect, should be life habits instilled from the cradle on. Nonetheless, research proves the truism "better late than never" and shows that lifestyle changes, even late in life, can significantly improve health outcomes.

Many studies demonstrate the importance of a diet rich with vitamin- and antioxidant-rich fruits and vegetables. But over the past decade, BRFSS surveys show more and more people choosing to eat too-small amounts of produce, defined as less than three servings of fruits and vegetables per day. Between 1994 and 2003, every state posted an increase in the rate of people age 45 to 64 consuming insufficient amounts of these foods. ${ }^{78}$ For the elderly, all but three states-Kentucky, Maryland, and Rhode Island-posted such an increase.

Minnesota boomer eating habits appear slightly less healthy than the rest of the nation, while the eating habits of elderly men and women in the state are slightly healthier. Of 45- to 64-
year-old Minnesotans, 39.2 percent consume fewer than three servings of fruits and vegetables per day, compared with a median rate of 38.8 percent in states across the country. Among the elderly, only 24.2 percent of Minnesotans eat unhealthily in this way, compared to a state median rate of 26.7 percent.

While eating habits deteriorate, it appears the exercise habits of boomers and the elderly are improving, an important fact since even moderate levels of physical activity can protect against chronic illness and extend life. ${ }^{79}$ From 1994-1996 to 2002-2004, the median state rate for 45 - to 65 -year olds reporting any level of physical activity in a month improved from 68.5 to 76.5 percent, with median rates for the elderly improving from 58.2 percent to 66.8 percent. Minnesota remains the state to beat, finishing with the highest physical activity rate for both age groups in the 2002-2004 surveys.

Above all, ditching cigarettes and other tobacco products proves the most effective method for reducing behavior-related health risks. But the allure of nicotine continues to snare around 20 percent of adults-both nationally and in Minnesota-into lighting up, a number that has dropped only slightly in the past decade. Interestingly, a plausible argument can be made that higher tobacco use will result in lower LTC costs, since smokers tend to die before they can develop costlier age-related conditions. ${ }^{80}$ At the very least, it seems safe to say that tobacco use, while impacting overall health immensely, affects LTC needs less than might be expected. Therefore, tobacco use may be a moot point in terms of LTC.

## Overall, Boomers Can Expect Healthier Retirements, But Not Necessarily Less Need for LTC

The above facts and figures highlight many areas for health improvement, but on net, the data show boomers can expect healthier retirements. Life expectancies are up, death rates and disability rates are dropping, and
people are taking more preventative measures to maintain good health.

Improved health might lower future LTC costs. Gains in circulatory health likely will have the most measurable impact on near-term LTC needs. Death rates due to heart disease and strokes continue dropping. The prevalence of heart disease is also dropping for most ages. Since heart disease accounts for about a quarter of LTC costs, these gains might appreciably lower boomer demand for LTC. Lower disability rates provide further hope that boomers might demand less LTC, especially if optimistic projections of 1.5 percent reductions in disability rates hold true.

However, few other disease-specific trends show much improvement. Boomers have experienced slight drops in the prevalence of kidney disease, chronic bronchitis, and emphysema, but these drops are belied by the fact that the prevalence of kidney disease rose for elderly populations and that death rates from chronic lower respiratory disease rose over the past two decades.

Other diseases leading to high LTC demands continue to be major problems. Among the elderly, the incidence of Alzheimer's disease and diabetes continues to rise. And as noted, obesity is another immensely troubling health fact that could lead to higher LTC needs.

Thus, despite overall health gains, LTC costs may increase if the diseases that create the need for LTC become more prevalent. This fact highlights how important treating the specific diseases that lead to LTC will be in any strategy to keep boomer LTC budgets affordable.

We do not know if higher LTC needs resulting from Alzheimer's disease, some cancers, obesity, and other chronic conditions will overwhelm gains made in lowering disability rates and treating and preventing heart disease, but they might, and we need to financially prepare for that possibility.

## Longevity Likely Will Increase LTC Costs

Studies find that increasing longevity will affect acute care and LTC expenditures quite differently. ${ }^{81}$ In general, research finds that better health might possibly lower acute care costs and that it will most likely raise LTC costs.

Intuitively, it seems longer life should impact acute care services more so than LTC services, since any added years will multiply the number of doctor appointments, hospital visits, and drug prescriptions, while added years, by themselves, should only change the timing of LTC. A number of academic studies, however, tell a different story.

Added years will indeed multiply the amount of acute care medical services utilized, but studies measuring impacts on Medicare show the added cost might be much less than expected. Medicare, it turns out, spends much less in the last year of life for those who die later in life. ${ }^{82}$ One study reaches the dramatic conclusion that cumulative per person lifetime spending on Medicare actually levels off by the age of 90 , meaning the lifetime Medicare cost of someone who lives to 98 years is no more than the lifetime cost for someone living to 91 years. ${ }^{83}$ To explain this dramatic result, the authors reason that the older elderly depend more on LTC to meet their health care needs and LTC is much less likely to be paid by Medicare. ${ }^{84}$ Also, the older elderly are less motivated to take aggressive-i.e., expensive-steps in response to life threatening illness.

While spending on acute care at the time before death declines with age, the opposite holds true for LTC spending. According to one study, average nursing home and Medicaid expenditures in the last year of life are three times higher for those over 85 than for those 65 to $74 .{ }^{85}$ Another study, estimating nursing home expenditures in the last two years of life, finds expenditures rise from $\$ 6,000$ for those who die at 75 to $\$ 32,000$ for those who die at $95 .{ }^{86}$

Much of the LTC cost increase can be attributed to needing LTC for a longer time frame. One study modeled the impact of improved health and found that, while improved health increases longevity, improved health also increases the absolute number of days spent in a nursing home. ${ }^{87}$

In light of Minnesota's higher proportion of elderly over 85 and high life expectancy, these data help explain Minnesota's higher nursing home utilization rate and suggest Minnesota will experience increasing LTC cost pressure from longer lives in the future.

## Conclusion

Looking broadly at what the demographics and the health of boomers tell us, three lessons stand out.

- First, a strong economy, by keeping people in the workforce and by keeping their salaries growing, will guarantee more resources to pay for LTC and at the same time limit demand for those resources.
- Second, larger families also will add to the resources for LTC and lower demand for formal LTC by adding more people to the workforce and increasing the number of informal caregivers.
- Third, the health of boomers and the elderly is generally improving, but we cannot depend on such improvements to lessen the need for LTC. On one hand, they may lead to less need for LTC since they are tied to declines in circulatory system diseases and disability rates, which in turn, precipitate much less need for LTC. On the other hand, and as noted, studies likewise suggest that healthier, longerliving boomers will require more LTC.

Minnesota maintains some of the highest labor force participation rates and a better than average worker-to-retiree ratio. And on nearly every health measure documented in this report, Minnesota consistently ranks near the top, often perched above all others. Minnesotans report the lowest adult rate of poor or fair health; the highest rate of colorectal cancer screening; the lowest percentage of elderly not getting flu shots; the highest physical activity rate for boomers and the elderly; the second highest life expectancy; the second lowest death rate; the third lowest diabetes rate, and the list could go on. It is no surprise that America's Health Rankings-an annual report published by the United Health Foundation-ranked Minnesota the healthiest state in eleven of the last seventeen years, including the most recent 2006 edition. ${ }^{88}$

But all of this great health news may come at a price when Minnesota boomers begin needing LTC. One would hope that by having lower disability rates and heart health second to none, Minnesotans would also need less LTC, but Minnesotans utilize nursing homes at higher rates and Minnesota spends more per elderly Medicaid beneficiary than nearly any other state. Studies showing that longevity leads to higher LTC costs suggest Minnesota's better health might contribute to costlier LTC bills. Therefore, Minnesota must be especially vigilant in planning for potentially higher than average LTC costs.

Some may say that it is too late for policy solutions that address demographic and health issues. The boomers are already at retirement's threshold. But, assuming many boomers won't need LTC until they turn 85 , the last of them will begin needing it around 2049, a long way off. Policies and personal practices begun today that make working and building businesses more attractive, that make families more robust, and that reduce health problems would indeed make a difference.

## Endnotes

${ }^{1}$ U.S. Census Bureau, Population Division, Interim State Population Projections, File 3: Annual Projections by Single Year of Age, 2005, http://www.census.gov/ population/www/projections/projectionsagesex.html.
${ }^{2}$ U.S. Census Bureau, Population Division, Interim State Population Projections, Table B1: The Total Population by Selected Age Groups, 2005, http://www.census.gov/ population/www/projections/projectionsagesex.html.
${ }^{3}$ U.S. Census Bureau, Population Division, Interim State Population Projections, Table C1: The Selected Age Groups of Total Population by Region and Division, 2005, http://www.census.gov/population/www/ projections/projectionsagesex.html.
${ }^{4}$ Estimates of the worker-to-retiree ratio compare the total 18 to 64 year old population and the 65 and over population.
${ }^{5}$ Robert F. Szafran, "Age-Adjusted Labor Force Participation Rates, 1960-2045," Monthly Labor Review, U.S. Department of Labor, pp. 25-38 (Sept. 2002).
${ }^{6}$ Martha McMurry, Minnesota Labor Force Trends: 1990-2000, Minnesota State Demographic Center, pg. 2 (Dec. 2002).
${ }^{7}$ Id. at 2-3.
${ }^{8}$ Merrill Lynch \& Co., Inc., 2006 Merrill Lynch New Retirement Study: A Perspective from Individuals and Employers.
${ }^{9}$ Wan He and Jason P. Schachter, Internal Migration of the Older Population: 1995 to 2000, Census 2000 Special Reports 10, U.S. Census Bureau (Aug. 2003). ${ }^{10}$ Centers for Medicare and Medicaid Services, Center for Medicaid and State Operations: Medicaid Statistical Information System (MSIS), Table 106, Medicaid Persons Served (Beneficiaries), by Basis of Eligibility and Area of Residence: Fiscal Year 2002; and U.S. Census Bureau, National Population Datasets, Population change: July 1, 2002 to July 1, 2003, http://www.census.gov/popest/datasets.html.
${ }^{11}$ U.S. Department of Health and Human Services, Health, United States, at Table 116, 2005.
${ }^{12} \mathrm{He}$ and Schachter, supra note 9.
${ }^{13}$ National Center for Health Statistics, Vital Statistics of the United States, 2001, Vol. I., Natality.
${ }^{14}$ U.S. Census Bureau, Table ST-F1-2000: Average Number of Children Per Family With Children, by State: 2000 Census (Sept. 15, 2004).
${ }^{15}$ Minnesota Department of Health, 2004 Minnesota Health Statistics Annual Summary (Nov. 2005).
${ }^{16}$ Vernon L. Greene and Jan I. Ondrich, "Risk Factors for Nursing Home Admissions and Exits: A DiscreteTime Hazard Function Approach," Journal of Gerontology: Social Sciences, Vol. 45, No. 6, p. S255 (1990). But see Monica Tomiak, et al., "Factors Associated With Nursing-Home Entry for Elders in Manitoba, Canada," Journal of Gerontology: Medical Sciences, Vol. 55A, No. 5,pp. M279-M287 (2000) (finding that not having a spouse present did not increase
the risk of nursing home admissions for women in Manitoba nursing homes).
${ }^{17}$ Vicki A. Freedman, "Kin and Nursing Home Lengths of Stay: A Backward Recurrence Time Approach," Journal of Health and Social Behavior, Vol. 34, No. 2 (June 1993). See also Lee Thompson, Long-Term Care: Support for Family Caregivers, Georgetown University Long-Term Care Financing Project Issue Brief (Mar. 2004).
${ }^{18}$ William D. Spector, et al., "The Characteristics of Long-Term Care Users," Agency for Healthcare
Research and Quality Research Report No. 00-0049, United States Department of Health and Human Services.
${ }^{19}$ U.S. Census Bureau, 1990 Census, General Population Characteristics, United States, Table 34, 1990 CP-1-1; U.S. Bureau of the Census, 2000 Census, Summary File 3, Table PCT7: Sex by Marital Status by Age for the Population 15 Years and Over; and U.S. Census Bureau, 2000 Census, Summary File 3, Table P8: Sex by Age.
${ }^{20}$ U.S. Census Bureau, 1990 Census, General Population Characteristics, Minnesota, Table 37, 1990 CP-1-25; U.S. Bureau of the Census, 2000 Census, Summary File 3, Table PCT7: Sex by Marital Status by Age for the Population 15 Years and Over; and U.S. Census Bureau, 2000 Census, Summary File 3, Table P8: Sex by Age.
${ }^{21}$ The estimate assumes: $\$ 46$ million $=62 \%$ [percent of nursing home resident days paid by Medicaid in Minnesota] x \$50,000 [average annual cost of a nursing home] x 1475 [the number of additional elderly women in 2000 who would have utilized LTC services if women were widowed at 1990 rates ( 48.58 percent) versus 2000 rates ( 44.11 percent), assuming a 26.2 percent utilization rate for widows and a 16.7 percent rate for the general elderly population]. Resident day and cost estimates taken from Minnesota Department of Human Services website, at http://www.dhs.state.mn.us/main/ idcplg? IdcService=GET_DYNAMIC_CONVERSION\& RevisionSelectionMethod=LatestReleased\&dDocName= id_005399.
${ }^{22}$ Darius N. Lakdawalla and Robert F. Schoeni, "Is Nursing Home Demand Affected by the Decline in Age Difference Between Spouses?," Demographic Research, Vol. 8, Art. 10 (May 5, 2003).
${ }^{23}$ David Cutler and Louise Sheiner, Demographics and Medical Care Spending: Standard and Non-Standard Effects, Burch Center Working Paper No. B98-3 (Nov. 1998).
${ }^{24}$ William D. Spector et al., The Characteristics of LongTerm Care Users, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services (AHRQ Publication No. 00-0049); but see Donald E. Stull and Annemarie Scarisbrick-Hauser, "NeverMarried Elderly: A Reassessment with Implications for Long-Term Care Policy," Research on Aging, Vol. 11,

No. 1, pp. 124-139 (Mar. 1989) (finding the never married elderly are socially active, not socially isolated, and may not be at a higher risk for institutionalization).
${ }^{25}$ Adrienne Jones, "The National Nursing Home Survey: 1999 Summary," National Center for Health Statistics, Vital Health Statistics, Vol. 13, no. 152, p. 28 (June 2002), available at http://www.census.gov/population/ socdemo/hh-fam/tabST-MS1-1990.pdf.
${ }^{26} I d$. at 30 .
${ }^{27}$ Social Security Administration, 2006 OASDI Trustees Report, http://www.ssa.gov/OACT/TR/TR06/ trTOC.html.
${ }^{28}$ Bureau of Labor Statistics News Release, ForeignBorn Workers: Labor Force Characteristics in 2005, April 14, 2006.
${ }^{29}$ Charles Hirschman," Immigration and an Aging America: Downward Spiral or Virtuous Circle" in K. Warner Schaie and Peter Uhlenberg, eds., Social Structures: The Impact of Demographic Changes on the Well-Being of Older Persons (forthcoming).
${ }^{30}$ Martha McMurry, "Fertility of foreign-born women in Minnesota," Population Notes, Minnesota State Demographic Center (Jan. 2003).
${ }^{31}$ Alejandro Portes, Patricia Fernández-Kelly, and
William Haller, "Segmented Assimilation on the
Ground: The New Second Generation in Early Adulthood," Ethnic and Racial Studies, Vol. 28, No. 6, pp. 1000-40 (Nov. 2005).
${ }^{32}$ Id. at 1032.
${ }^{33}$ Roger Waldinger and Cynthia Feliciano, "Will the New Second Generation Experience 'Downward Assimilation'? Segmented Assimilation Re-assessed," Ethnic and Racial Studies, Vol. 27, No. 3, pp. 376-402 (May 2004); Reynolds Farley and Richard Alba, "The Second Generation in the United States," The International Migration Review, Vol. 36, No. 3, pp. 669701 (Fall 2002); and Joel Perlman and Roger Waldinger, "Second Generation Decline? Children of Immigrants, Past and Present-A Reconsideration," The International Migration Review, Vol. 31, No. 4, pp. 893-922 (Winter 1997).
${ }^{34}$ Freedman, supra note 17.
${ }^{35}$ Wei Yu, Todd H. Wagner, and Paul G. Barnett, "Determinants of Cost among People Who Died in VA Nursing Homes," Medical Care Research and Review, Vol. 63, No. 4 (2006).
${ }^{36}$ National Center for Health Statistics, Data Warehouse on Trends in Health and Aging, http://www.cdc.gov/ nchs/agingact.htm.
${ }^{37}$ Id.
${ }^{38}$ U.S. Department of Health and Human Services, supra note 11 at Table 27.
${ }^{39}$ U.S. Census Bureau, Population Division, Interim State Population Projections, State Projection
Methodology, Table 2: Average Life Expectancy at Birth by State for 2000 and Ratio of Estimates and Projections
of Deaths: 2001 to 2003, 2005, http://www.census.gov/ population/www/projections/methodology.html.
${ }^{40}$ Id.; U.S. Department of Health and Human Services, supra note 11 at Table 27; and Martha McMurry, Minnesota Life Expectancy in 2000, Minnesota Planning State Demographic Center (Apr. 2002).
${ }^{41}$ Robert Arking, Vassily Novoseltsev, and Jann Novoseltseva, "The Human Life Span Is Not That Limited: The Effect of Multiple Longevity Phenotypes," Journal of Gerontology: Biological Sciences, Vol. 59A, No. 7, pp. 697-98 (2004).
${ }^{42}$ James F. Fries, "Measuring and Monitoring Success in Compressing Morbidity," Annals of Internal Medicine, Vol. 139 No. 5 (Part 2) (Sept. 2, 2003); Kenneth G. Manton and Kenneth C. Land, "Active Life Expectancy Estimates for the U.S. Elderly Population: A MultiDimensional Continuous-Mixture Model of Functional Change Applied to Completed Cohorts, 1992-1996," Demography, Vol. 37, No. 3 (2000); Youlian Liao, et al., "Quality of the Last Year of Life of Older Adults: 1986 vs. 1993," JAMA, Vol. 283, No. 4 (Jan. 26, 2000); Eileen Crimmins, et al., "Trends in Disability Free Life Expectancy in the United States," Population
Development Review, Vol. 23, No. 3 (1997); and S. Jay Olshansky, et al., "Trading Off Longer Life for Worsening Health," Journal of Aging and Health, Vol. 3, No. 2 (1991).
${ }^{43}$ U.S. Department of Health and Human Services, supra note 11.
${ }^{44}$ Donna L. Hoyert, et al., Deaths: Final Data for 2003, National Vital Statistics Reports, Vol. 54, No. 13, pp. 89, National Center for Health Statistics (Apr. 19, 2006).
${ }^{45}$ Id. at 90 .
${ }^{46}$ Jones, supra note 25.
${ }^{47}$ Wei Yu, et al., "The Relationships Among Age, Chronic Conditions, and Healthcare Costs," The
American Journal of Managed Care, Vol. 10, No. 12 (Dec. 2004).
${ }^{48}$ Michael J. Moore, Carolyn W. Zhu, and Elizabeth C. Clipp, "Informal Costs of Dementia Care: Estimates From the National Longitudinal Caregiver Study," The Journals of Gerontology: Social Sciences, Vol. 56B, No. 4 (July 2001).
${ }^{49}$ Liesi E. Hebert, "Alzheimer Disease in the U.S. Population: Prevalence Estimates Using the 2000 Census," Archives of Neurology, Vol. 60 (Aug. 2003).
${ }^{50}$ R.A. Miech, et al., "Incidence of AD May Decline in the Early 90s for Men, Later for Women: The Cache County Study," Neurology, Vol. 58 (Jan. 2002).
${ }^{51}$ Svetlana Ukraintseva, et al., "Increasing Rates of Dimentia at Time of Declining Mortality From Stroke," Stroke, Vol. 37, pp. 1155-59 (May 2006); and Donald H. Taylor Jr., Frank A. Sloan, and P. Murali Doraiswamy, "Marked Increased in Alzheimer's Disease Identified in Medicare Claims Records Between 1991 and 1999," Journal of Gerontology: Medical Sciences, Vol. 59A, No. 7, pp. 762-66 (July 2004).
${ }^{52}$ National Center for Health Statistics, supra note 36.
${ }^{53}$ U.S. Department of Health and Human Services, Changes in Elderly Disability Rates and the Implications for Health Care Utilization and Cost (Feb. 2003); Vicki A. Freedman, Linda G. Martin, and Robert F. Schoeni, "Recent Trends in Disability and Functioning Among Older Adults in the United States," JAMA, Vol. 288, No. 24, pp. 3137-46 (Dec. 25, 2002); David M. Cutler, "Declining Disability Among the Elderly," Health Affairs (Nov./Dec. 2001).
${ }^{54}$ David M. Cutler, Intensive Medical Technology and the Reduction of Disability, Harvard University (Aug. 2003).
${ }^{55}$ Freedman, Martin, and Schoeni, supra note 53.
${ }^{56}$ Brenda Spillman, Changes in Elderly Disability Rates and the Implications for Health Care Utilization and Cost, U.S. Department of Health hand Human Services (Feb. 3, 2003); Freedman, Martin, \& Schoeni, supra note 53 .
${ }^{57}$ U.S. Census Bureau, Census 2000, Summary File 3 (SF 3) - Sample Data, Table PCT26. Sex by Age by Types of Disability for the Civilian Noninstitutionalized Population 5 Years and Over.
${ }^{58}$ Id.
${ }^{59}$ Timothy A. Waidmann and Korbin Liu, "Disability Trends Among Elderly Persons and Implications for the Future," Journal of Gerontology: Social Sciences, Vol. 55B, No. 5 (2000); and Burton H. Singer and Kenneth G. Manton, "The Effects of Health Changes on Projections of Health Service Needs for the Elderly Population of the United States," Proceedings of the National Academy of Sciences, Vol. 95, pp. 15618-22 (Dec. 1998).
${ }^{60}$ Singer and Manton, supra note 59.
${ }^{61}$ Centers for Disease Control and Prevention,
Behavioral Risk Factor Surveillance System, at http://www.cdc.gov/brfss/index.htm .
${ }^{62}$ U.S. Department of Health and Human Services, supra note 11 at Table 73.
${ }^{63}$ Roland Sturm, Jeanne S. Ringel, and Tatiana Andreyeva, "Increasing Obesity Rates and Disability Trends," Health Affairs, Vol. 23, No. 2, pp. 199-205, (Mar./Apr. 2004).
${ }^{64}$ Jayanta Bhattacharya, et al., "Disability Forecasts and Future Medicare Costs," published in Frontiers in Health Policy Research: Volume 7 (2004).
${ }^{65}$ Darius N. Lakdawalla, Dana P. Goldman, and Baoping Shang, "The Health And Cost Consequences Of Obesity Among The Future Elderly," Health Affairs - Web Exclusive W5-R31 (Sept. 26, 2005).
${ }^{66}$ Ihab Hajjar and Theodore A. Kotchen, "Trends in Prevalence, Awareness, Treatment, and Control of Hypertension in the United States, 1988-2000," JAMA, Vol. 290, No. 2 (July 9, 2003). See also G. E. Miller and M. Zodet, Trends in the Pharmaceutical Treatment of Hypertension, 1997 to 2003, MEPS Researching Findings \#25, U.S. Department of Health and Human

Services, Agency for Healthcare Research and Quality (July 2006).
${ }^{67}$ Centers for Disease Control and Prevention, National Diabetes Surveillance System, at http://www.cdc.gov/ diabetes/Statistics/prev/national/tprevage.htm.
${ }^{68}$ Id. at State-specific Estimates of Diagnosed Diabetes
Among Adults, http://www.cdc.gov/diabetes/Statistics/ $\mathrm{prev} / \mathrm{state} / \mathrm{tPrevalenceTotal.htm}$.
${ }^{69}$ James F. Fries, et al., "Reducing Health Care Costs by Reducing the Need and Demand for Medical Services,"
The New England Journal of Medicine, Vol. 329, No. 5 (July 29, 1993).
${ }^{70}$ American Cancer Society, Cancer Prevention \& Early Detection, Facts \& Figures, 2005.
${ }^{71}$ American Cancer Society, Cancer Prevention \& Early Detection Facts \& Figures, 2006.
${ }^{72}$ Judith Swan, et al., "Progress in Cancer Screening Practices in the United States: Results from the 2000 National Health Interview Survey," Cancer, Vol. 97, No. 6 (Mar. 15, 2003).
${ }^{73}$ National Cancer Institute State Cancer Profiles Website, http://statecancerprofiles.cancer.gov/ (reporting survey data collected from the 2004 Behavioral Risk Factor Surveillance System).
${ }^{74}$ Centers for Disease Control and Prevention, supra note 61 (note that Minnesota surveys in 1997 and 1999 arrived at substantially higher numbers, 38.8 percent and 40.2 percent, respectively, using a significantly higher population sample).
${ }^{75}$ National Center for Health Statistics, supra note 36.
${ }^{76}$ Centers for Disease Control and Prevention, National Immunization Program Annual Report 2006.
${ }^{77}$ National Center for Health Statistics, supra note 36. ${ }^{78}$ Id.
${ }^{79}$ Loretta Dipietro, "Physical Activity in Aging: Changes in Patterns and Their Relationships to Health and Function," Journals of Gerontology: Series A, Vol. 56A (Special Issue 11), pp. 13-22 (2001); and Oscar H. Franco, "Effects of Physical Activity on Life Expectancy with Cardiovascular Disease," Archives of Internal Medicine, Vol. 165, Iss. 20, pp. 2355-60 (2005).
${ }^{80}$ Jan J. Barendregt, Luc Bonneux, and Paul J. van der Maas, "The Health Care Costs of Smoking," The New England Journal of Medicine, Vol. 337, No. 15 (Oct. 9, 1997).
${ }^{81}$ James Lubitz, et al., "Health, Life Expectancy, and Health Care Spending among the Elderly," The New England Journal of Medicine, Vol. 349, No. 11 (Sept. 11, 2003); Zhou Yang, Edward C. Norton, and Sally C. Stearns, "Longevity and Health Care Expenditures: The Real Reasons Older People Spend More," Journal of Gerontology: Social Sciences, Vol. 58B, No. 1 (2003); Tim Miller, "Increasing Longevity and Medicare Expenditures," Demography, Vol. 38, No. 2 (May 2001); and Brenda C. Spillman and James Lubitz, "The Effect of Longevity on Spending for Acute and Long-Term Care," New England Journal of Medicine, Vol. 342, No.

19 (May 11, 2000). But see Jayanta, supra note 64 (projecting per capita Medicare cost declines through 2020, followed by cost increases due to increasing disability).
${ }^{82}$ Yang, Norton, and Stearns, supra note 76, at S7-8;
Spillman and Lubitz, supra note 81, at 1412.
${ }^{83}$ Spillman and Lubitz, supra note 81, at 1410-12.
${ }^{84} \mathrm{Id}$. at 1414.
${ }^{85}$ Yang, Norton, and Stearns, supra note 76, at S8.
${ }^{86}$ Spillman and Lubitz, supra note 81, at 1412.
${ }^{87}$ Sarah B. Laditka, "Modeling Lifetime Nursing Home
Use Under Assumptions of Better Health," Journal of
Gerontology: Social Sciences, Vol. 53B, pgs. S177-S187
(July 1998).
${ }^{88}$ United Health Foundation, America's Health Rankings

- 2006 Edition.


## APPENDIX

Table A1: Population Projections by Region, Division, State, and Age: 2000 and 2030

| Area | 0 to 17 Years |  |  |  | 18 to 64 Years |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 Census | 2030 Projection | \% Change | State Rank | 2000 Census | 2030 Projection | \% Change | State Rank |
| US | 72,293,812 | 85,707,297 | 18.6\% |  | 174,136,341 | 206,423,667 | 18.5\% |  |
| Northeast | 13,047,783 | 12,619,092 | -3.3\% |  | 33,174,313 | 32,880,707 | -0.9\% |  |
| New England | 3,347,897 | 3,371,664 | 0.7\% |  | 8,682,991 | 8,846,586 | 1.9\% |  |
| Connecticut | 841,688 | 823,436 | -2.2\% | 35 | 2,093,694 | 2,070,789 | -1.1\% | 41 |
| Maine | 301,238 | 255,393 | -15.2\% | 48 | 790,283 | 781,687 | -1.1\% | 40 |
| Massachusetts | 1,500,064 | 1,545,614 | 3.0\% | 28 | 3,988,871 | 4,003,285 | 0.4\% | 36 |
| New Hampshire | 309,562 | 355,531 | 14.8\% | 19 | 778,254 | 938,154 | 20.5\% | 16 |
| Rhode Island | 247,822 | 252,731 | 2.0\% | 29 | 648,095 | 653,703 | 0.9\% | 35 |
| Vermont | 147,523 | 138,959 | -5.8\% | 38 | 383,794 | 398,968 | 4.0\% | 26 |
| Middle Atlantic | 9,699,886 | 9,247,428 | -4.7\% |  | 24,491,322 | 24,034,121 | -1.9\% |  |
| New Jersey | 2,087,558 | 2,175,752 | 4.2\% | 26 | 5,213,656 | 5,667,143 | 8.7\% | 22 |
| New York | 4,690,107 | 4,325,477 | -7.8\% | 41 | 11,837,998 | 11,235,061 | -5.1\% | 44 |
| Pennsylvania | 2,922,221 | 2,746,199 | -6.0\% | 39 | 7,439,668 | 7,131,917 | -4.1\% | 43 |
| Midwest | 16,647,666 | 16,555,433 | -0.6\% |  | 39,486,035 | 40,083,495 | 1.5\% |  |
| East North Central | 11,672,709 | 11,400,013 | -2.3\% |  | 27,800,144 | 27,844,429 | 0.2\% |  |
| Illinois | 3,245,451 | 3,259,113 | 0.4\% | 31 | 7,673,817 | 7,761,602 | 1.1\% | 33 |
| Indiana | 1,574,396 | 1,701,424 | 8.1\% | 24 | 3,753,258 | 3,876,811 | 3.3\% | 28 |
| Michigan | 2,595,767 | 2,433,329 | -6.3\% | 40 | 6,123,659 | 6,180,118 | 0.9\% | 34 |
| Ohio | 2,888,339 | 2,640,671 | -8.6\% | 44 | 6,957,044 | 6,552,835 | -5.8\% | 46 |
| Wisconsin | 1,368,756 | 1,365,476 | -0.2\% | 32 | 3,292,366 | 3,473,063 | 5.5\% | 25 |
| West North Central | 4,974,957 | 5,155,420 | 3.6\% |  | 11,685,891 | 12,239,066 | 4.7\% |  |
| lowa | 733,638 | 663,301 | -9.6\% | 45 | 1,756,473 | 1,628,685 | -7.3\% | 47 |
| Kansas | 712,993 | 708,946 | -0.6\% | 33 | 1,619,196 | 1,638,047 | 1.2\% | 32 |
| Minnesota | 1,286,894 | 1,505,527 | 17.0\% | 17 | 3,038,319 | 3,607,479 | 18.7\% | 17 |
| Missouri | 1,427,692 | 1,497,099 | 4.9\% | 25 | 3,412,140 | 3,631,360 | 6.4\% | 24 |
| Nebraska | 450,242 | 456,338 | 1.4\% | 30 | 1,028,826 | 988,098 | -4.0\% | 42 |
| North Dakota | 160,849 | 128,313 | -20.2\% | 50 | 386,873 | 325,895 | -15.8\% | 50 |
| South Dakota | 202,649 | 195,896 | -3.3\% | 36 | 444,064 | 419,502 | -5.5\% | 45 |
| South | 25,566,903 | 34,369,111 | 34.4\% |  | 62,231,650 | 80,574,377 | 29.5\% |  |
| South Atlantic | 12,595,668 | 17,824,382 | 41.5\% |  | 32,286,080 | 43,481,726 | 34.7\% |  |
| Delaware | 194,587 | 218,760 | 12.4\% | 21 | 487,287 | 556,075 | 14.1\% | 19 |
| Dist. of Columbia | 114,992 | 100,589 | -12.5\% | 47 | 387,169 | 274,587 | -29.1\% | 51 |
| Florida | 3,646,340 | 5,770,082 | 58.2\% | 3 | 9,528,441 | 15,146,235 | 59.0\% | 3 |
| Georgia | 2,169,234 | 3,146,624 | 45.1\% | 7 | 5,231,944 | 6,963,377 | 33.1\% | 9 |
| Maryland | 1,356,172 | 1,718,368 | 26.7\% | 15 | 3,341,007 | 4,068,188 | 21.8\% | 14 |
| North Carolina | 1,964,047 | 3,080,611 | 56.9\% | 4 | 5,116,218 | 6,973,955 | 36.3\% | 8 |
| South Carolina | 1,009,641 | 1,143,807 | 13.3\% | 20 | 2,517,038 | 2,870,303 | 14.0\% | 20 |
| Virginia | 1,738,262 | 2,320,190 | 33.5\% | 8 | 4,547,920 | 5,660,841 | 24.5\% | 12 |
| West Virginia | 402,393 | 325,351 | -19.1\% | 49 | 1,129,056 | 968,165 | -14.3\% | 49 |
| East South Central | 4,291,948 | 4,643,543 | 8.2\% |  | 10,599,437 | 11,264,357 | 6.3\% |  |
| Alabama | 1,123,422 | 1,112,264 | -1.0\% | 34 | 2,743,880 | 2,722,819 | -0.8\% | 37 |
| Kentucky | 994,818 | 1,027,976 | 3.3\% | 27 | 2,542,158 | 2,623,572 | 3.2\% | 29 |
| Mississippi | 775,187 | 712,022 | -8.1\% | 42 | 1,725,948 | 1,746,321 | 1.2\% | 31 |
| Tennessee | 1,398,521 | 1,791,281 | 28.1\% | 14 | 3,587,451 | 4,171,645 | 16.3\% | 18 |
| West South Central | 8,679,287 | 11,901,186 | 37.1\% |  | 19,346,133 | 25,828,294 | 33.5\% |  |
| Arkansas | 680,369 | 783,223 | 15.1\% | 18 | 1,619,012 | 1,800,579 | 11.2\% | 21 |
| Louisiana | 1,219,799 | 1,149,939 | -5.7\% | 37 | 2,732,248 | 2,708,482 | -0.9\% | 39 |
| Oklahoma | 892,360 | 977,929 | 9.6\% | 23 | 2,102,344 | 2,177,769 | 3.6\% | 27 |
| Texas | 5,886,759 | 8,990,095 | 52.7\% | 5 | 12,892,529 | 19,141,464 | 48.5\% | 4 |
| West | 17,031,460 | 22,163,661 | 30.1\% |  | 38,488,613 | 51,551,431 | 33.9\% |  |
| Mountain | 4,934,778 | 7,460,022 | 51.2\% |  | 10,451,941 | 15,206,028 | 45.5\% |  |
| Arizona | 1,366,947 | 2,607,152 | 90.7\% | 2 | 3,095,846 | 5,733,891 | 85.2\% | 2 |
| Colorado | 1,100,795 | 1,464,836 | 33.1\% | 9 | 2,784,393 | 3,371,243 | 21.1\% | 15 |
| Idaho | 369,030 | 486,088 | 31.7\% | 11 | 779,007 | 1,122,503 | 44.1\% | 6 |
| Montana | 230,062 | 210,342 | -8.6\% | 43 | 551,184 | 564,998 | 2.5\% | 30 |
| Nevada | 511,799 | 1,075,633 | 110.2\% | 1 | 511,799 | 1,075,633 | 110.2\% | 1 |
| New Mexico | 508,574 | 455,808 | -10.4\% | 46 | 1,098,247 | 1,088,716 | -0.9\% | 38 |
| Utah | 718,698 | 1,060,166 | 47.5\% | 6 | 1,324,249 | 1,964,648 | 48.4\% | 5 |
| Wyoming | 128,873 | 99,997 | -22.4\% | 51 | 307,216 | 284,396 | -7.4\% | 48 |
| Pacific | 12,096,682 | 14,703,639 | 21.6\% |  | 28,036,672 | 36,345,403 | 29.6\% |  |
| Alaska | 190,717 | 249,293 | 30.7\% | 12 | 400,516 | 491,179 | 22.6\% | 13 |
| California | 9,249,829 | 11,046,140 | 19.4\% | 16 | 21,026,161 | 27,110,480 | 28.9\% | 11 |
| Hawaii | 295,767 | 325,503 | 10.1\% | 22 | 755,169 | 813,586 | 7.7\% | 23 |
| Oregon | 846,526 | 1,118,070 | 32.1\% | 10 | 2,136,696 | 2,833,891 | 32.6\% | 10 |
| Washington | 1,513,843 | 1,964,633 | 29.8\% | 13 | 3,718,130 | 5,096,267 | 37.1\% | 7 |
| Source: U.S. Census | eau, Interim State | Population Projecti | ns, 2005. |  |  |  |  |  |

Table A1: Population Projections by Region, Division, State, and Age: 2000 and 2030 (cont.)

|  | 65-74 |  |  |  | 75-84 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | 2000 Census | 2030 Projection | \% Change | State Rank | 2000 Census | 2030 Projection | \% Change | State Rank |
| US | 18,390,986 | 37,947,933 | 106.3\% |  | 12,361,180 | 23,902,504 | 93.4\% |  |
| Northeast | 3,768,272 | 6,268,511 | 66.3\% |  | 2,665,551 | 4,071,309 | 52.7\% |  |
| New England | 948,285 | 1,752,919 | 84.9\% |  | 689,939 | 1,148,515 | 66.5\% |  |
| Connecticut | 231,565 | 395,444 | 70.8\% | 39 | 174,345 | 266,521 | 52.9\% | 44 |
| Maine | 96,196 | 190,490 | 98.0\% | 25 | 63,890 | 131,254 | 105.4\% | 22 |
| Massachusetts | 427,830 | 763,820 | 78.5\% | 32 | 315,640 | 487,351 | 54.4\% | 43 |
| New Hampshire | 78,327 | 189,201 | 141.6\% | 8 | 51,412 | 118,711 | 130.9\% | 12 |
| Rhode Island | 73,684 | 126,749 | 72.0\% | 37 | 57,821 | 82,846 | 43.3\% | 49 |
| Vermont | 40,683 | 87,215 | 114.4\% | 19 | 26,831 | 61,832 | 130.4\% | 14 |
| Middle Atlantic | 2,819,987 | 4,515,592 | 60.1\% |  | 1,975,612 | 2,922,794 | 47.9\% |  |
| New Jersey | 574,669 | 1,027,274 | 78.8\% | 31 | 402,468 | 641,360 | 59.4\% | 37 |
| New York | 1,276,046 | 2,003,135 | 57.0\% | 46 | 860,818 | 1,291,985 | 50.1\% | 45 |
| Pennsylvania | 969,272 | 1,485,183 | 53.2\% | 49 | 712,326 | 989,449 | 38.9\% | 50 |
| Midwest | 4,247,710 | 7,216,959 | 69.9\% |  | 2,947,070 | 4,685,033 | 59.0\% |  |
| East North Central | 2,956,079 | 4,907,755 | 66.0\% |  | 2,027,635 | 3,172,952 | 56.5\% |  |
| Illinois | 772,247 | 1,258,942 | 63.0\% | 45 | 535,747 | 801,294 | 49.6\% | 47 |
| Indiana | 395,393 | 647,725 | 63.8\% | 43 | 265,880 | 415,014 | 56.1\% | 42 |
| Michigan | 642,880 | 1,090,442 | 69.6\% | 40 | 433,678 | 703,194 | 62.1\% | 36 |
| Ohio | 790,252 | 1,225,233 | 55.0\% | 48 | 540,709 | 809,292 | 49.7\% | 46 |
| Wisconsin | 355,307 | 685,413 | 92.9\% | 26 | 251,621 | 444,158 | 76.5\% | 30 |
| West North Central | 1,291,631 | 2,309,204 | 78.8\% |  | 919,435 | 1,512,081 | 64.5\% |  |
| lowa | 211,935 | 330,090 | 55.8\% | 47 | 159,160 | 228,119 | 43.3\% | 48 |
| Kansas | 175,916 | 300,649 | 70.9\% | 38 | 128,543 | 204,473 | 59.1\% | 38 |
| Minnesota | 295,825 | 626,678 | 111.8\% | 21 | 212,840 | 397,987 | 87.0\% | 26 |
| Missouri | 393,226 | 694,282 | 76.6\% | 34 | 263,582 | 433,236 | 64.4\% | 34 |
| Nebraska | 115,699 | 189,001 | 63.4\% | 44 | 82,543 | 130,624 | 58.2\% | 39 |
| North Dakota | 45,901 | 75,535 | 64.6\% | 42 | 33,851 | 53,521 | 58.1\% | 40 |
| South Dakota | 53,129 | 92,969 | 75.0\% | 36 | 38,916 | 64,121 | 64.8\% | 33 |
| South | 6,711,853 | 15,460,469 | 130.3\% |  | 4,295,868 | 9,331,409 | 117.2\% |  |
| South Atlantic | 3,686,234 | 9,188,225 | 149.3\% |  | 2,420,833 | 5,503,828 | 127.4\% |  |
| Delaware | 56,415 | 131,016 | 132.2\% | 12 | 34,762 | 77,812 | 123.8\% | 18 |
| Dist. of Columbia | 35,919 | 29,441 | -18.0\% | 51 | 25,004 | 19,959 | -20.2\% | 51 |
| Florida | 1,452,176 | 4,306,324 | 196.5\% | 3 | 1,024,134 | 2,519,453 | 146.0\% | 7 |
| Georgia | 435,695 | 1,067,953 | 145.1\% | 7 | 261,723 | 614,958 | 135.0\% | 11 |
| Maryland | 321,285 | 647,072 | 101.4\% | 23 | 211,120 | 411,910 | 95.1\% | 25 |
| North Carolina | 533,777 | 1,198,818 | 124.6\% | 16 | 329,810 | 707,474 | 114.5\% | 20 |
| South Carolina | 270,048 | 612,834 | 126.9\% | 14 | 165,016 | 380,339 | 130.5\% | 13 |
| Virginia | 432,456 | 974,059 | 125.2\% | 15 | 272,611 | 619,563 | 127.3\% | 16 |
| West Virginia | 148,463 | 220,708 | 48.7\% | 50 | 96,653 | 152,360 | 57.6\% | 41 |
| East South Central | 1,159,253 | 2,171,673 | 87.3\% |  | 722,254 | 1,330,752 | 84.2\% |  |
| Alabama | 316,748 | 558,598 | 76.4\% | 35 | 195,749 | 348,492 | 78.0\% | 29 |
| Kentucky | 273,943 | 496,848 | 81.4\% | 30 | 172,589 | 300,550 | 74.1\% | 31 |
| Mississippi | 185,710 | 355,395 | 91.4\% | 27 | 114,922 | 205,026 | 78.4\% | 28 |
| Tennessee | 382,852 | 760,832 | 98.7\% | 24 | 238,994 | 476,684 | 99.5\% | 23 |
| West South Central | 1,866,366 | 4,100,571 | 119.7\% |  | 1,152,781 | 2,496,829 | 116.6\% |  |
| Arkansas | 198,334 | 360,153 | 81.6\% | 29 | 129,193 | 213,926 | 65.6\% | 32 |
| Louisiana | 282,925 | 499,768 | 76.6\% | 33 | 175,328 | 318,229 | 81.5\% | 27 |
| Oklahoma | 242,499 | 403,068 | 66.2\% | 41 | 156,276 | 254,926 | 63.1\% | 35 |
| Texas | 1,142,608 | 2,837,582 | 148.3\% | 5 | 691,984 | 1,709,748 | 147.1\% | 6 |
| West | 3,663,151 | 9,001,994 | 145.7\% |  | 2,452,691 | 5,814,753 | 137.1\% |  |
| Mountain | 1,111,051 | 3,196,364 | 187.7\% |  | 699,879 | 1,994,613 | 185.0\% |  |
| Arizona | 363,841 | 1,317,759 | 262.2\% | 1 | 235,473 | 788,321 | 234.8\% | 3 |
| Colorado | 226,310 | 491,097 | 117.0\% | 18 | 141,547 | 333,146 | 135.4\% | 10 |
| Idaho | 75,970 | 188,338 | 147.9\% | 6 | 51,889 | 125,674 | 142.2\% | 8 |
| Montana | 62,519 | 133,804 | 114.0\% | 20 | 43,093 | 98,360 | 128.3\% | 15 |
| Nevada | 131,775 | 470,955 | 257.4\% | 2 | 70,165 | 243,651 | 247.3\% | 2 |
| New Mexico | 117,745 | 283,974 | 141.2\% | 9 | 71,174 | 195,581 | 174.8\% | 4 |
| Utah | 101,548 | 242,184 | 138.5\% | 11 | 66,923 | 158,899 | 137.4\% | 9 |
| Wyoming | 31,343 | 68,253 | 117.8\% | 17 | 19,615 | 50,981 | 159.9\% | 5 |
| Pacific | 2,552,100 | 5,805,630 | 127.5\% |  | 1,752,812 | 3,820,140 | 117.9\% |  |
| Alaska | 22,507 | 64,238 | 185.4\% | 4 | 10,558 | 44,907 | 325.3\% | 1 |
| California | 1,887,823 | 4,332,266 | 129.5\% | 13 | 1,282,178 | 2,797,438 | 118.2\% | 19 |
| Hawaii | 85,262 | 159,457 | 87.0\% | 28 | 57,775 | 119,246 | 106.4\% | 21 |
| Oregon | 219,342 | 444,155 | 102.5\% | 22 | 161,404 | 316,061 | 95.8\% | 24 |
| Washington | 337,166 | 805,514 | 138.9\% | 10 | 240,897 | 542,488 | 125.2\% | 17 |
| Source: U.S. Census Bureau, Interim State Population Projections, 2005. |  |  |  |  |  |  |  |  |

Table A1: Population Projections by Region, Division, State, and Age: 2000 and 2030 (cont.)

| Area | 85+ |  |  |  | 65+ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 Census | 2030 Projection | \% Change | State Rank | 2000 Census | 2030 Projection | \% Change | State Rank |
| United States | 4,239,587 | 9,603,034 | 126.5\% |  | 34,991,753 | 71,453,471 | 104.2\% |  |
| Northeast | 938,459 | 1,831,449 | 95.2\% |  | 7,372,282 | 12,171,269 | 65.1\% |  |
| New England | 253,405 | 503,331 | 98.6\% |  | 1,891,629 | 3,404,765 | 80.0\% |  |
| Connecticut | 64,273 | 132,440 | 106.1\% | 28 | 470,183 | 794,405 | 69.0\% | 38 |
| Maine | 23,316 | 52,273 | 124.2\% | 23 | 183,402 | 374,017 | 103.9\% | 22 |
| Massachusetts | 116,692 | 211,939 | 81.6\% | 38 | 860,162 | 1,463,110 | 70.1\% | 37 |
| New Hampshire | 18,231 | 44,874 | 146.1\% | 21 | 147,970 | 352,786 | 138.4\% | 11 |
| Rhode Island | 20,897 | 36,912 | 76.6\% | 41 | 152,402 | 246,507 | 61.7\% | 43 |
| Vermont | 9,996 | 24,893 | 149.0\% | 20 | 77,510 | 173,940 | 124.4\% | 18 |
| Middle Atlantic | 685,054 | 1,328,118 | 93.9\% |  | 5,480,653 | 8,766,504 | 60.0\% |  |
| New Jersey | 135,999 | 290,911 | 113.9\% | 26 | 1,113,136 | 1,959,545 | 76.0\% | 32 |
| New York | 311,488 | 621,771 | 99.6\% | 30 | 2,448,352 | 3,916,891 | 60.0\% | 46 |
| Pennsylvania | 237,567 | 415,436 | 74.9\% | 42 | 1,919,165 | 2,890,068 | 50.6\% | 50 |
| Midwest | 1,064,295 | 1,956,378 | 83.8\% |  | 8,259,075 | 13,858,370 | 67.8\% |  |
| East North Central | 698,470 | 1,313,315 | 88.0\% |  | 5,682,184 | 9,394,022 | 65.3\% |  |
| Illinois | 192,031 | 351,941 | 83.3\% | 35 | 1,500,025 | 2,412,177 | 60.8\% | 45 |
| Indiana | 91,558 | 169,134 | 84.7\% | 34 | 752,831 | 1,231,873 | 63.6\% | 41 |
| Michigan | 142,460 | 287,089 | 101.5\% | 29 | 1,219,018 | 2,080,725 | 70.7\% | 36 |
| Ohio | 176,796 | 322,497 | 82.4\% | 36 | 1,507,757 | 2,357,022 | 56.3\% | 47 |
| Wisconsin | 95,625 | 182,654 | 91.0\% | 33 | 702,553 | 1,312,225 | 86.8\% | 27 |
| West North Central | 365,825 | 643,063 | 75.8\% |  | 2,576,891 | 4,464,348 | 73.2\% |  |
| lowa | 65,118 | 104,977 | 61.2\% | 49 | 436,213 | 663,186 | 52.0\% | 49 |
| Kansas | 51,770 | 87,969 | 69.9\% | 46 | 356,229 | 593,091 | 66.5\% | 39 |
| Minnesota | 85,601 | 168,459 | 96.8\% | 31 | 594,266 | 1,193,124 | 100.8\% | 26 |
| Missouri | 98,571 | 174,196 | 76.7\% | 40 | 755,379 | 1,301,714 | 72.3\% | 34 |
| Nebraska | 33,953 | 56,186 | 65.5\% | 48 | 232,195 | 375,811 | 61.9\% | 42 |
| North Dakota | 14,726 | 23,302 | 58.2\% | 50 | 94,478 | 152,358 | 61.3\% | 44 |
| South Dakota | 16,086 | 27,974 | 73.9\% | 44 | 108,131 | 185,064 | 71.1\% | 35 |
| South | 1,430,546 | 3,533,971 | 147.0\% |  | 12,438,267 | 28,325,849 | 127.7\% |  |
| South Atlantic | 780,345 | 2,095,055 | 168.5\% |  | 6,887,412 | 16,787,108 | 143.7\% |  |
| Delaware | 10,549 | 28,995 | 174.9\% | 9 | 101,726 | 237,823 | 133.8\% | 13 |
| Dist. of Columbia | 8,975 | 8,838 | -1.5\% | 51 | 69,898 | 58,238 | -16.7\% | 51 |
| Florida | 331,287 | 943,675 | 184.9\% | 7 | 2,807,597 | 7,769,452 | 176.7\% | 4 |
| Georgia | 87,857 | 224,926 | 156.0\% | 18 | 785,275 | 1,907,837 | 143.0\% | 8 |
| Maryland | 66,902 | 176,713 | 164.1\% | 15 | 599,307 | 1,235,695 | 106.2\% | 21 |
| North Carolina | 105,461 | 266,881 | 153.1\% | 19 | 969,048 | 2,173,173 | 124.3\% | 19 |
| South Carolina | 50,269 | 141,286 | 181.1\% | 8 | 485,333 | 1,134,459 | 133.7\% | 14 |
| Virginia | 87,266 | 250,366 | 186.9\% | , | 792,333 | 1,843,988 | 132.7\% | 15 |
| West Virginia | 31,779 | 53,375 | 68.0\% | 47 | 276,895 | 426,443 | 54.0\% | 48 |
| East South Central | 249,918 | 491,960 | 96.8\% |  | 2,131,425 | 3,994,385 | 87.4\% |  |
| Alabama | 67,301 | 132,070 | 96.2\% | 32 | 579,798 | 1,039,160 | 79.2\% | 30 |
| Kentucky | 58,261 | 106,052 | 82.0\% | 37 | 504,793 | 903,450 | 79.0\% | 31 |
| Mississippi | 42,891 | 73,646 | 71.7\% | 45 | 343,523 | 634,067 | 84.6\% | 28 |
| Tennessee | 81,465 | 180,192 | 121.2\% | 24 | 703,311 | 1,417,708 | 101.6\% | 24 |
| West South Central | 400,283 | 946,956 | 136.6\% |  | 3,419,430 | 7,544,356 | 120.6\% |  |
| Arkansas | 46,492 | 82,327 | 77.1\% | 39 | 374,019 | 656,406 | 75.5\% | 33 |
| Louisiana | 58,676 | 126,215 | 115.1\% | 25 | 516,929 | 944,212 | 82.7\% | 29 |
| Oklahoma | 57,175 | 99,559 | 74.1\% | 43 | 455,950 | 757,553 | 66.1\% | 40 |
| Texas | 237,940 | 638,855 | 168.5\% | 14 | 2,072,532 | 5,186,185 | 150.2\% | 6 |
| West | 806,287 | 2,281,236 | 182.9\% |  | 6,922,129 | 17,097,983 | 147.0\% |  |
| Mountain | 218,916 | 718,748 | 228.3\% |  | 2,029,846 | 5,909,725 | 191.1\% |  |
| Arizona | 68,525 | 265,274 | 287.1\% | 3 | 667,839 | 2,371,354 | 255.1\% | 3 |
| Colorado | 48,216 | 132,035 | 173.8\% | 11 | 416,073 | 956,278 | 129.8\% | 17 |
| Idaho | 18,057 | 47,021 | 160.4\% | 16 | 145,916 | 361,033 | 147.4\% | 7 |
| Montana | 15,337 | 37,394 | 143.8\% | 22 | 120,949 | 269,558 | 122.9\% | 20 |
| Nevada | 16,989 | 82,573 | 386.0\% | 2 | 218,929 | 797,179 | 264.1\% | 1 |
| New Mexico | 23,306 | 75,629 | 224.5\% | 4 | 212,225 | 555,184 | 161.6\% | 5 |
| Utah | 21,751 | 59,470 | 173.4\% | 12 | 190,222 | 460,553 | 142.1\% | 9 |
| Wyoming | 6,735 | 19,352 | 187.3\% | 5 | 57,693 | 138,586 | 140.2\% | 10 |
| Pacific | 587,371 | 1,562,488 | 166.0\% |  | 4,892,283 | 11,188,258 | 128.7\% |  |
| Alaska | 2,634 | 18,057 | 585.5\% | 1 | 35,699 | 127,202 | 256.3\% | 2 |
| California | 425,657 | 1,158,537 | 172.2\% | 13 | 3,595,658 | 8,288,241 | 130.5\% | 16 |
| Hawaii | 17,564 | 48,254 | 174.7\% | 10 | 160,601 | 326,957 | 103.6\% | 23 |
| Oregon | 57,431 | 121,741 | 112.0\% | 27 | 438,177 | 881,957 | 101.3\% | 25 |
| Washington | 84,085 | 215,899 | 156.8\% | 17 | 662,148 | 1,563,901 | 136.2\% | 12 |
| Source: U.S. Census | au, Interim State | opulation Projectio | s, 2005. |  |  |  |  |  |

Table A2: Percent of Population Over 65 and Median Age by Region, Division, and State: $\mathbf{2 0 0 0}$ and 2030

|  | Percent Over 65 |  |  |  | Median Age |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | 2000 | Rank | 2030 | Rank | 2000 | Rank | 2030 | Rank |
| United States | 12.4\% |  | 19.7\% |  | 35.31 |  | 39.01 |  |
| Northeast | 13.8\% |  | 21.1\% |  |  |  |  |  |
| New England | 13.6\% |  | 21.8\% |  |  |  |  |  |
| Connecticut | 13.8\% | 10 | 21.5\% | 16 | 37.39 | 7 | 41.11 | 17 |
| Maine | 14.4\% | 7 | 26.5\% | 2 | 38.64 | 3 | 46.95 | 1 |
| Massachusetts | 13.5\% | 12 | 20.9\% | 21 | 36.55 | 12 | 40.24 | 21 |
| New Hampshire | 12.0\% | 37 | 21.4\% | 17 | 37.11 | 8 | 42.07 | 11 |
| Rhode Island | 14.5\% | 6 | 21.4\% | 18 | 36.73 | 10 | 40.73 | 20 |
| Vermont | 12.7\% | 26 | 24.4\% | 8 | 37.69 | 5 | 43.93 | 7 |
| Middle Atlantic | 13.8\% |  | 20.8\% |  |  |  |  |  |
| New Jersey | 13.2\% | 18 | 20.0\% | 29 | 36.74 | 9 | 40.8 | 19 |
| New York | 12.9\% | 24 | 20.1\% | 28 | 35.86 | 25 | 39.88 | 25 |
| Pennsylvania | 15.6\% | 2 | 22.6\% | 11 | 38.01 | 4 | 42.12 | 10 |
| Midwest | 12.8\% |  | 19.7\% |  |  |  |  |  |
| East North Central | 12.6\% |  | 19.3\% |  |  |  |  |  |
| Illinois | 12.1\% | 34 | 18.0\% | 42 | 34.69 | 39 | 37.77 | 41 |
| Indiana | 12.4\% | 28 | 18.1\% | 41 | 35.21 | 36 | 37.67 | 42 |
| Michigan | 12.3\% | 30 | 19.5\% | 32 | 35.51 | 29 | 40.16 | 23 |
| Ohio | 13.3\% | 15 | 20.4\% | 24 | 36.22 | 15 | 40.2 | 22 |
| Wisconsin | 13.1\% | 20 | 21.3\% | 19 | 36.03 | 20 | 41.58 | 13 |
| West North Central | 13.4\% |  | 20.4\% |  |  |  |  |  |
| lowa | 14.9\% | 4 | 22.4\% | 12 | 36.64 | 11 | 41.98 | 12 |
| Kansas | 13.3\% | 17 | 20.2\% | 27 | 35.17 | 37 | 39.06 | 32 |
| Minnesota | 12.1\% | 33 | 18.9\% | 35 | 35.37 | 32 | 39.01 | 33 |
| Missouri | 13.5\% | 13 | 20.2\% | 26 | 36.11 | 18 | 39.56 | 27 |
| Nebraska | 13.6\% | 11 | 20.6\% | 22 | 35.31 | 34 | 38.44 | 37 |
| North Dakota | 14.7\% | 5 | 25.1\% | 6 | 36.16 | 17 | 43.17 | 9 |
| South Dakota | 14.3\% | 8 | 23.1\% | 10 | 35.58 | 28 | 41.49 | 14 |
| South | 12.4\% |  | 19.8\% |  |  |  |  |  |
| South Atlantic | 13.3\% |  | 21.5\% |  |  |  |  |  |
| Delaware | 13.0\% | 23 | 23.5\% | 9 | 36.02 | 21 | 43.6 | 8 |
| Dist. of Columbia | 12.2\% | 31 | 13.4\% | 50 | 34.64 | 40 | 33.74 | 49 |
| Florida | 17.6\% | 1 | 27.1\% | 1 | 38.7 | 2 | 45.43 | 5 |
| Georgia | 9.6\% | 49 | 15.9\% | 47 | 33.38 | 46 | 35.63 | 47 |
| Maryland | 11.3\% | 41 | 17.6\% | 45 | 36 | 22 | 37.51 | 43 |
| North Carolina | 12.0\% | 36 | 17.8\% | 44 | 35.31 | 34 | 36.77 | 45 |
| South Carolina | 12.1\% | 32 | 22.0\% | 15 | 35.44 | 31 | 41.3 | 15 |
| Virginia | 11.2\% | 44 | 18.8\% | 36 | 35.7 | 27 | 37.81 | 40 |
| West Virginia | 15.3\% | 3 | 24.8\% | 7 | 38.9 | 1 | 46.69 | 2 |
| East South Central | 12.5\% |  | 20.1\% |  |  |  |  |  |
| Alabama | 13.0\% | 21 | 21.3\% | 20 | 35.85 | 26 | 41.01 | 18 |
| Kentucky | 12.5\% | 27 | 19.8\% | 30 | 35.87 | 24 | 39.97 | 24 |
| Mississippi | 12.1\% | 35 | 20.5\% | 23 | 33.81 | 45 | 41.12 | 16 |
| Tennessee | 12.4\% | 29 | 19.2\% | 34 | 35.89 | 23 | 38.33 | 38 |
| West South Central | 10.9\% |  | 16.7\% |  |  |  |  |  |
| Arkansas | 14.0\% | 9 | 20.3\% | 25 | 36.05 | 19 | 39.79 | 26 |
| Louisiana | 11.6\% | 40 | 19.7\% | 31 | 34.04 | 44 | 38.81 | 34 |
| Oklahoma | 13.2\% | 19 | 19.4\% | 33 | 35.49 | 30 | 37.89 | 39 |
| Texas | 9.9\% | 47 | 15.6\% | 48 | 32.33 | 50 | 34.61 | 48 |
| West | 11.0\% |  | 18.6\% |  |  |  |  |  |
| Mountain | 11.2\% |  | 19.8\% |  |  |  |  |  |
| Arizona | 13.0\% | 22 | 22.1\% | 14 | 34.2 | 43 | 39.32 | 29 |
| Colorado | 9.7\% | 48 | 16.5\% | 46 | 34.32 | 42 | 35.65 | 46 |
| Idaho | 11.3\% | 42 | 18.3\% | 38 | 33.19 | 48 | 39.22 | 30 |
| Montana | 13.4\% | 14 | 25.8\% | 5 | 37.54 | 6 | 46.04 | 4 |
| Nevada | 11.0\% | 45 | 18.6\% | 37 | 35.03 | 38 | 39.36 | 28 |
| New Mexico | 11.7\% | 39 | 26.4\% | 4 | 34.56 | 41 | 44.78 | 6 |
| Utah | 8.5\% | 50 | 13.2\% | 51 | 27.14 | 51 | 30.42 | 51 |
| Wyoming | 11.7\% | 38 | 26.5\% | 3 | 36.22 | 15 | 46.41 | 3 |
| Pacific | 10.9\% |  | 18.0\% |  |  |  |  |  |
| Alaska | 5.7\% | 51 | 14.7\% | 49 | 32.43 | 49 | 32.87 | 50 |
| California | 10.6\% | 46 | 17.8\% | 43 | 33.28 | 47 | 37.37 | 44 |
| Hawaii | 13.3\% | 16 | 22.3\% | 13 | 36.25 | 14 | 38.68 | 35 |
| Oregon | 12.8\% | 25 | 18.2\% | 39 | 36.33 | 13 | 39.11 | 31 |
| Washington | 11.2\% | 43 | 18.1\% | 40 | 35.35 | 33 | 38.5 | 36 |
| Source: U.S. Census B | rim State P | lation Pro | ions, 2005. |  |  |  |  |  |

Table A3: Internal Migration from 1995 to 2000 Within the United States by Region, Division, and State

|  | Total, 65 and over |  |  | 65 to 74 |  |  | 75 to 84 |  |  | 85 and over |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Net Migration | Net Migration Rate | State <br> Rank | Net Migration | Net Migration rate | State Rank | $\begin{aligned} & \hline \text { Net } \\ & \text { Migration } \end{aligned}$ | Net migration rate | State Rank | Net Migration | Net Migration rate | State Rank |
| Northeast | -175,814 | -23.5 |  | -122,249 | -31.5 |  | -40,986 | -15.2 |  | -12,579 | -13.6 |  |
| New England | -22,286 | -11.7 |  | -21,195 | -21.9 |  | -2,665 | -3.9 |  | 1,574 | 6.4 |  |
| Maine | 1,650 | 9.1 | 12 | 195 | - 2 | 20 | 749 | 11.9 | 10 | 706 | 31.9 | 4 |
| Vermont | 19 | 0.2 | 25 | -230 | -5.6 | 29 | 30 | 1.1 | 22 | 219 | 22.6 | 13 |
| New Hampshire | 720 | 4.9 | 19 | 61 | 0.8 | 24 | 168 | 3.3 | 19 | 491 | 27.1 | 9 |
| Massachusetts | -14,434 | -16.6 | 44 | -11,014 | -25.2 | 44 | -2,619 | -8.3 | 42 | -801 | -7 | 41 |
| Rhode Island | -748 | -4.9 | 32 | -1,029 | -13.8 | 37 | -10 | -0.2 | 25 | 291 | 14.4 | 19 |
| Connecticut | -9,493 | -20 | 46 | -9,178 | -38.4 | 48 | -983 | -5.6 | 40 | 668 | 10.7 | 24 |
| Middle Atlantic | -153,528 | -27.5 |  | -101,054 | -34.7 |  | -38,321 | -19.2 |  | -14,153 | -20.8 |  |
| New York | -114,171 | -45 | 50 | -71,721 | -53.6 | 49 | -29,666 | -33.6 | 50 | -12,784 | -40.5 | 50 |
| New Jersey | -23,151 | -20.6 | 47 | -18,239 | -31 | 46 | -4,496 | -11.1 | 46 | -738 | -5.5 | 38 |
| Pennsylvania | -15,884 | -8.2 | 37 | -11,094 | -11.3 | 34 | -4,159 | -5.8 | 41 | -631 | -2.7 | 32 |
| Midwest | -108,601 | -13 |  | -85,036 | -31.5 |  | -19,290 | -6.5 |  | -4,275 | -4.1 |  |
| East North Central | -93,934 | -16.3 |  | -72,125 | -23.8 |  | -17,351 | -8.5 |  | -4,458 | -6.5 |  |
| Ohio | -18,589 | -12.2 | 42 | -15,328 | -18.9 | 41 | -2,717 | -5 | 38 | -544 | -3.2 | 33 |
| Indiana | -6,315 | -8.3 | 38 | -6,556 | -16.3 | 40 | 214 | 0.8 | 23 | 27 | 0.3 | 29 |
| Illinois | -43,119 | -28.1 | 48 | -29,500 | -36.9 | 47 | -10,047 | -18.5 | 48 | -3,572 | -18.8 | 47 |
| Michigan | -21,949 | -17.7 | 45 | -16,697 | -25.3 | 45 | -4,385 | -10.1 | 45 | -867 | -6.1 | 39 |
| Wisconsin | -3,962 | -5.6 | 33 | -4,044 | -11.2 | 33 | -416 | -1.7 | 29 | 498 | 5.4 | 27 |
| West North Central | -14,667 | -5.7 |  | -12,911 | -9.9 |  | -1,939 | -2.1 |  | 183 | 0.5 |  |
| Minnesota | -6,137 | -10.3 | 40 | -6,107 | -20.2 | 42 | -826 | -3.9 | 34 | 796 | 9.4 | 25 |
| Iowa | -4,927 | -11.2 | 41 | -3,460 | -16 | 39 | -1,508 | -9.4 | 44 | 41 | 0.6 | 28 |
| Missouri | 513 | 0.7 | 24 | 586 | 1.5 | 22 | 539 | 2.1 | 20 | -612 | -6.3 | 40 |
| North Dakota | -1,546 | -16.1 | 43 | -624 | -13.4 | 36 | -586 | -17 | 47 | -336 | -22.5 | 49 |
| South Dakota | -246 | -2.3 | 28 | -230 | -4.3 | 25 | -16 | -0.4 | 26 | 0 | 0 | 30 |
| Nebraska | -1,889 | -8.1 | 36 | -1,477 | -12.6 | 35 | -272 | -3.3 | 33 | -140 | -4.2 | 36 |
| Kansas | -435 | -1.2 | 27 | -1,599 | -9 | 32 | 730 | 5.7 | 17 | 434 | 8.7 | 26 |
| South | 232,779 | 19.2 |  | 180,075 | 27.6 |  | 44,479 | 10.6 |  | 8,225 | 5.9 |  |
| South Atlantic | 199,158 | 30 |  | 154,017 | 43.7 |  | 37,738 | 16 |  | 7,403 | 9.8 |  |
| Delaware | 2,679 | 27.2 | 5 | 2,141 | 39.4 | 5 | 316 | 9.3 | 13 | 222 | 21.9 | 15 |
| Maryland | -4,388 | -7.3 | 35 | -7,878 | -24 | 43 | 1,576 | 7.6 | 16 | 1,914 | 30.5 | 5 |
| District of Columbia | -5,187 | -69.5 | 51 | -2,235 | -58.5 | 50 | -1,699 | -63.7 | 51 | -1,253 | -128.9 | 51 |
| Virginia | 6,937 | 8.9 | 13 | 1,795 | 4.2 | 18 | 2,673 | 10 | 12 | 2,469 | 29.8 | 6 |
| West Virginia | -931 | -3.4 | 30 | 244 | 1.6 | 21 | -489 | -5.1 | 39 | -686 | -21.2 | 48 |
| North Carolina | 20,922 | 22.1 | 6 | 13,467 | 25.7 | 6 | 4,873 | 15.1 | 7 | 2,582 | 26 | 11 |
| South Carolina | 15,760 | 33.6 | 4 | 11,882 | 45.6 | 4 | 2,758 | 17.3 | 5 | 1,120 | 23.2 | 12 |
| Georgia | 13,926 | 18.1 | 8 | 6,590 | 15.2 | 12 | 5,132 | 20.3 | 4 | 2,204 | 26.3 | 10 |
| Florida | 149,440 | 56.9 | 3 | 128,011 | 97.8 | 3 | 22,598 | 22.8 | 3 | -1,169 | -3.6 | 34 |
| East South Central | 14,566 | 6.9 |  | 13,507 | 11.7 |  | 1,980 | 2.8 |  | -921 | -3.8 |  |
| Kentucky | -1,397 | -2.8 | 29 | 253 | 0.9 | 23 | -754 | -4.4 | 37 | -896 | -15.6 | 45 |
| Tennessee | 10,499 | 15.2 | 9 | 6,205 | 16.4 | 11 | 3,091 | 13.2 | 8 | 1,203 | 15.4 | 17 |
| Alabama | 3,031 | 5.3 | 18 | 3,662 | 11.6 | 13 | -73 | -0.4 | 26 | -558 | -8.4 | 42 |
| Mississippi | 2,433 | 7.1 | 16 | 3,387 | 18.3 | 10 | -284 | -2.5 | 32 | -670 | -15.4 | 44 |
| West South Central | 19,055 | 5.7 |  | 12,551 | 6.8 |  | 4,761 | 4.2 |  | 1,743 | 4.5 |  |
| Arkansas | 2,496 | 6.7 | 17 | 4,382 | 22.5 | 8 | -1,136 | -8.8 | 43 | -750 | -16.3 | 46 |
| Louisiana | -2,472 | -4.8 | 31 | -1,465 | -5.1 | 27 | -693 | -4 | 35 | -314 | -5.4 | 37 |
| Oklahoma | 1,074 | 2.4 | 22 | 1,529 | 6.3 | 16 | -249 | -1.6 | 28 | -206 | -3.7 | 35 |
| Texas | 17,957 | 8.8 | 14 | 8,105 | 7.2 | 15 | 6,839 | 10.1 | 11 | 3,013 | 13.3 | 21 |
| West | 51,636 | 7.6 |  | 27,210 | 7.6 |  | 15,797 | 6.6 |  | 8,629 | 11.1 |  |
| Mountain | 85,677 | 44.4 |  | 59,575 | 56.8 |  | 20,254 | 30.1 |  | 5,848 | 28 |  |
| Montana | 891 | 7.4 | 15 | 311 | - 5 | 17 | 383 | 9 | 15 | 197 | 13.1 | 22 |
| Idaho | 2,795 | 19.6 | 7 | 1,715 | 23.1 | 7 | 819 | 16.1 | 6 | 261 | 14.8 | 18 |
| Wyoming | -29 | -0.5 | 26 | -172 | -5.5 | 28 | -36 | -1.8 | 30 | 179 | 27.4 | 8 |
| Colorado | 1,994 | 4.8 | 20 | -1,095 | -4.8 | 26 | 1,282 | 9.2 | 14 | 1,807 | 40 | 3 |
| New Mexico | 2,500 | 12 | 10 | 2,157 | 18.6 | 9 | 93 | 1.3 | 21 | 250 | 11.1 | 23 |
| Arizona | 53,241 | 87.4 | 2 | 40,371 | 125.5 | 2 | 11,401 | 51.5 | 2 | 1,469 | 22.2 | 14 |
| Utah | 2,096 | 11.2 | 11 | 928 | 9.2 | 14 | 804 | 12.3 | 9 | 364 | 17.3 | 16 |
| Nevada | 22,189 | 114.2 | 1 | 15,360 | 132.7 | 1 | 5,508 | 86.6 | 1 | 1,321 | 88 | 1 |
| Pacific | -34,041 | -7 |  | -32,365 | -12.7 |  | -4,457 | -2.6 |  | 2,781 | 4.9 |  |
| Washington | 1,170 | 1.8 | 23 | -2,278 | -6.8 | 30 | 1,244 | 5.2 | 18 | 2,204 | 27.7 | 7 |
| Oregon | 1,340 | 3.1 | 21 | 586 | 2.7 | 19 | 2 | 0 | 24 | 752 | 13.6 | 20 |
| California | -34,171 | -9.6 | 39 | -28,690 | -15.2 | 38 | -5,383 | -4.3 | 36 | -98 | -0.2 | 31 |
| Alaska | -1,428 | -39.4 | 49 | -1,375 | -59.3 | 51 | -211 | -20 | 49 | 158 | 62.5 | 2 |
| Hawaii | -952 | -6 | 34 | -608 | -7.1 | 31 | -109 | -1.9 | 31 | -235 | -13.3 | 43 |
| Source: Wan He and Jason | P. Schachter, In | Iteral Migration of t | the Older | pulation: 199 | 95 to 2000, Census 20 | Ooo Spec | sial Reports 10, | , U.S. Census Bureau | 4, August | 2003. |  |  |

Table A4: Fertility Rates, Live Births per 1,000 Women Ages 15-44, United States and Minnesota

| Year | United States | Minnesota | Year | United States | Minnesota |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1910 | 126.8 |  | 1958 | 120.0 |  |
| 1911 | 126.3 |  | 1959 | 118.8 |  |
| 1912 | 125.8 |  | 1960 | 118.0 | 136.0 |
| 1913 | 124.7 |  | 1961 | 117.1 |  |
| 1914 | 126.6 |  | 1962 | 112.0 |  |
| 1915 | 125.0 |  | 1963 | 108.3 |  |
| 1916 | 123.4 |  | 1964 | 104.7 |  |
| 1917 | 121.0 |  | 1965 | 96.3 | 105.9 |
| 1918 | 119.8 |  | 1966 | 90.8 |  |
| 1919 | 111.2 |  | 1967 | 87.2 |  |
| 1920 | 117.9 |  | 1968 | 85.2 |  |
| 1921 | 119.8 |  | 1969 | 86.1 |  |
| 1922 | 111.2 |  | 1970 | 87.9 | 88.4 |
| 1923 | 110.5 |  | 1971 | 81.6 |  |
| 1924 | 110.9 |  | 1972 | 73.1 |  |
| 1925 | 106.6 |  | 1973 | 68.8 |  |
| 1926 | 102.6 |  | 1974 | 67.8 |  |
| 1927 | 99.8 |  | 1975 | 66.0 | 65.4 |
| 1928 | 93.8 |  | 1976 | 65.0 |  |
| 1929 | 89.3 |  | 1977 | 66.8 |  |
| 1930 | 89.2 |  | 1978 | 65.5 |  |
| 1931 | 84.6 |  | 1979 | 67.2 |  |
| 1932 | 81.7 |  | 1980 | 68.4 | 70.8 |
| 1933 | 76.3 |  | 1981 | 67.3 |  |
| 1934 | 78.5 |  | 1982 | 67.3 |  |
| 1935 | 77.2 |  | 1983 | 65.7 |  |
| 1936 | 75.8 |  | 1984 | 65.5 |  |
| 1937 | 77.1 |  | 1985 | 66.3 | 68.0 |
| 1938 | 79.1 |  | 1986 | 65.4 | 65.9 |
| 1939 | 77.6 |  | 1987 | 65.8 | 64.9 |
| 1940 | 79.9 | 81.0 | 1988 | 67.3 | 65.4 |
| 1941 | 83.4 |  | 1989 | 69.2 | 65.9 |
| 1942 | 91.5 |  | 1990 | 70.9 | 66.3 |
| 1943 | 94.3 |  | 1991 | 69.3 | 64.7 |
| 1944 | 88.8 |  | 1992 | 68.4 | 62.5 |
| 1945 | 85.9 | 85.1 | 1993 | 67.0 | 61.0 |
| 1946 | 101.9 |  | 1994 | 65.9 | 59.9 |
| 1947 | 113.3 |  | 1995 | 64.6 | 60.1 |
| 1948 | 107.3 |  | 1996 | 64.1 | 59.7 |
| 1949 | 107.1 |  | 1997 | 63.6 | 61.4 |
| 1950 | 106.2 | 119.1 | 1998 | 64.3 | 61.8 |
| 1951 | 111.4 |  | 1999 | 64.4 | 62.5 |
| 1952 | 113.8 |  | 2000 | 65.9 | 62.3 |
| 1953 | 115.0 |  | 2001 | 65.3 | 60.9 |
| 1954 | 117.9 |  | 2002 | 64.8 | 62.0 |
| 1955 | 118.3 | 130.1 | 2003 | 66.1 | 64.1 |
| 1956 | 121.0 |  | 2004 | 66.3 | 64.5 |
| 1957 | 122.7 |  |  |  |  |
| Sources: National Center for Health Statistics, Vital Statistics of the United States, 2001, Vol I, Natality; and Minnesota Department of Health, 2004 Minnesota Health Statistics Annual Summary, November 2005. |  |  |  |  |  |


| State | Never married |  |  |  | Widowed |  |  |  | Divorced |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 45 \text { to } 64 \\ \text { years } \\ \hline \end{gathered}$ | State <br> Rank | 65+ | State <br> Rank | $\begin{gathered} 45 \text { to } 64 \\ \text { years } \\ \hline \end{gathered}$ | State <br> Rank | 65+ | State <br> Rank | $\begin{gathered} 45 \text { to } 64 \\ \text { years } \\ \hline \end{gathered}$ | State <br> Rank | 65+ | State <br> Rank |
| Alabama | 6.38\% | 12 | 3.19\% | 9 | 2.01\% | 47 | 14.28\% | 35 | 14.32\% | 26 | 6.68\% | 25 |
| Alaska | 9.89\% | 46 | 5.49\% | 41 | 1.37\% | 11 | 12.49\% | 6 | 17.13\% | 50 | 10.43\% | 49 |
| Arizona | 7.40\% | 24 | 2.54\% | 3 | 1.77\% | 33 | 12.61\% | 9 | 16.60\% | 44 | 7.50\% | 41 |
| Arkansas | 5.20\% | 3 | 2.96\% | 5 | 1.88\% | 42 | 12.52\% | 7 | 14.52\% | 29 | 6.92\% | 31 |
| California | 10.10\% | 47 | 4.78\% | 35 | 1.65\% | 23 | 13.13\% | 18 | 14.25\% | 24 | 8.23\% | 46 |
| Colorado | 7.73\% | 28 | 3.19\% | 10 | 1.38\% | 12 | 12.42\% | 5 | 15.87\% | 42 | 7.96\% | 44 |
| Connecticut | 8.95\% | 42 | 5.88\% | 45 | 1.56\% | 19 | 14.46\% | 37 | 12.97\% | 14 | 6.15\% | 18 |
| Delaware | 8.17\% | 34 | 4.14\% | 26 | 2.00\% | 46 | 14.27\% | 32 | 13.66\% | 20 | 6.01\% | 15 |
| D.C. | 27.24\% | 51 | 13.51\% | 51 | 2.98\% | 51 | 18.23\% | 51 | 16.89\% | 48 | 12.59\% | 51 |
| Florida | 7.93\% | 30 | 3.10\% | 7 | 1.87\% | 40 | 12.86\% | 14 | 16.70\% | 46 | 7.24\% | 37 |
| Georgia | 6.72\% | 17 | 3.53\% | 17 | 1.87\% | 41 | 13.55\% | 24 | 14.03\% | 23 | 6.89\% | 30 |
| Hawaii | 12.73\% | 50 | 6.49\% | 47 | 1.35\% | 9 | 11.83\% | 2 | 13.93\% | 21 | 6.88\% | 29 |
| Idaho | 4.88\% | 2 | 2.25\% | 2 | 1.23\% | 2 | 11.92\% | 3 | 15.01\% | 38 | 7.27\% | 38 |
| Illinois | 8.91\% | 40 | 5.40\% | 40 | 1.74\% | 32 | 14.73\% | 39 | 12.88\% | 12 | 6.38\% | 20 |
| Indiana | 6.04\% | 10 | 3.20\% | 11 | 1.48\% | 18 | 14.27\% | 33 | 14.77\% | 33 | 6.54\% | 21 |
| Iowa | 6.54\% | 13 | 4.14\% | 25 | 1.39\% | 13 | 12.85\% | 13 | 12.94\% | 13 | 4.87\% | 2 |
| Kansas | 5.92\% | 7 | 3.65\% | 19 | 1.25\% | 3 | 13.02\% | 15 | 13.94\% | 22 | 5.78\% | 10 |
| Kentucky | 5.84\% | 6 | 3.52\% | 16 | 1.85\% | 37 | 14.28\% | 34 | 14.47\% | 28 | 6.93\% | 32 |
| Louisiana | 8.40\% | 36 | 4.42\% | 29 | 2.33\% | 49 | 15.64\% | 46 | 14.39\% | 27 | 6.96\% | 34 |
| Maine | 6.83\% | 20 | 4.73\% | 34 | 1.41\% | 14 | 14.83\% | 42 | 15.72\% | 41 | 7.33\% | 39 |
| Maryland | 8.93\% | 41 | 5.06\% | 36 | 1.78\% | 34 | 14.77\% | 40 | 11.98\% | 5 | 6.23\% | 19 |
| Massachusetts | 10.86\% | 48 | 6.87\% | 48 | 1.63\% | 22 | 15.14\% | 44 | 12.31\% | 7 | 5.81\% | 13 |
| Michigan | 7.88\% | 29 | 4.21\% | 27 | 1.67\% | 26 | 14.56\% | 38 | 14.83\% | 35 | 6.80\% | 27 |
| Minnesota | 8.29\% | 35 | 5.32\% | 39 | 1.30\% | 4 | 12.66\% | 10 | 13.06\% | 15 | 5.78\% | 9 |
| Mississippi | 7.72\% | 27 | 3.97\% | 22 | 2.33\% | 50 | 15.68\% | 47 | 14.29\% | 25 | 7.02\% | 35 |
| Missouri | 6.57\% | 15 | 3.79\% | 20 | 1.71\% | 29 | 13.70\% | 28 | 14.88\% | 36 | 6.66\% | 23 |
| Montana | 6.72\% | 18 | 4.60\% | 32 | 1.57\% | 20 | 13.21\% | 20 | 15.59\% | 40 | 7.78\% | 43 |
| Nebraska | 6.82\% | 19 | 4.72\% | 33 | 1.41\% | 15 | 12.82\% | 12 | 12.79\% | 10 | 5.18\% | 4 |
| Nevada | 8.73\% | 38 | 4.44\% | 31 | 1.80\% | 36 | 13.68\% | 27 | 20.45\% | 51 | 12.26\% | 50 |
| New Hampshire | 6.57\% | 16 | 4.43\% | 30 | 1.58\% | 21 | 13.80\% | 30 | 14.79\% | 34 | 6.94\% | 33 |
| New Jersey | 8.98\% | 43 | 5.69\% | 42 | 1.71\% | 30 | 15.69\% | 48 | 10.59\% | 1 | 5.34\% | 7 |
| New Mexico | 8.47\% | 37 | 4.00\% | 24 | 1.86\% | 39 | 13.74\% | 29 | 16.91\% | 49 | 8.40\% | 47 |
| New York | 11.52\% | 49 | 7.06\% | 49 | 1.90\% | 45 | 15.12\% | 43 | 11.31\% | 2 | 5.85\% | 14 |
| North Carolina | 6.55\% | 14 | 3.26\% | 12 | 1.90\% | 44 | 13.18\% | 19 | 12.65\% | 9 | 5.79\% | 12 |
| North Dakota | 8.86\% | 39 | 7.32\% | 50 | 1.43\% | 16 | 12.61\% | 8 | 11.84\% | 4 | 4.44\% | 1 |
| Ohio | 7.34\% | 23 | 3.93\% | 21 | 1.69\% | 27 | 14.79\% | 41 | 14.67\% | 31 | 6.67\% | 24 |
| Oklahoma | 5.36\% | 4 | 2.56\% | 4 | 1.72\% | 31 | 13.03\% | 16 | 15.48\% | 39 | 7.46\% | 40 |
| Oregon | 6.92\% | 21 | 3.04\% | 6 | 1.33\% | 7 | 13.26\% | 21 | 16.78\% | 47 | 8.40\% | 48 |
| Pennsylvania | 9.01\% | 44 | 5.71\% | 43 | 1.86\% | 38 | 15.42\% | 45 | 11.77\% | 3 | 5.08\% | 3 |
| Rhode Island | 9.37\% | 45 | 6.25\% | 46 | 1.67\% | 25 | 16.01\% | 50 | 13.32\% | 17 | 6.11\% | 17 |
| South Carolina | 7.01\% | 22 | 3.63\% | 18 | 2.09\% | 48 | 14.38\% | 36 | 12.82\% | 11 | 5.78\% | 11 |
| South Dakota | 8.06\% | 32 | 5.78\% | 44 | 1.45\% | 17 | 12.18\% | 4 | 13.36\% | 18 | 5.30\% | 5 |
| Tennessee | 6.03\% | 9 | 3.28\% | 13 | 1.80\% | 35 | 13.66\% | 26 | 14.92\% | 37 | 6.79\% | 26 |
| Texas | 6.01\% | 8 | 3.12\% | 8 | 1.70\% | 28 | 13.09\% | 17 | 13.59\% | 19 | 6.85\% | 28 |
| Utah | 4.64\% | 1 | 2.03\% | 1 | 1.17\% | 1 | 11.49\% | 1 | 12.37\% | 8 | 5.30\% | 6 |
| Vermont | 7.98\% | 31 | 5.28\% | 38 | 1.31\% | 6 | 13.83\% | 31 | 14.58\% | 30 | 7.24\% | 36 |
| Virginia | 7.49\% | 25 | 3.99\% | 23 | 1.67\% | 24 | 13.60\% | 25 | 12.13\% | 6 | 6.07\% | 16 |
| Washington | 7.49\% | 26 | 3.38\% | 14 | 1.31\% | 5 | 12.73\% | 11 | 16.15\% | 43 | 8.06\% | 45 |
| West Virginia | 6.33\% | 11 | 4.33\% | 28 | 1.89\% | 43 | 15.81\% | 49 | 14.69\% | 32 | 6.65\% | 22 |
| Wisconsin | 8.14\% | 33 | 5.23\% | 37 | 1.36\% | 10 | 13.38\% | 22 | 13.23\% | 16 | 5.68\% | 8 |
| Wyoming | 5.40\% | 5 | 3.46\% | 15 | 1.34\% | 8 | 13.51\% | 23 | 16.70\% | 45 | 7.75\% | 42 |
| United States | 8.11\% |  | 4.40\% |  | 1.71\% |  | 13.90\% |  | 13.89\% |  | 6.71\% |  |
| Source: U.S. Census Bureau, Census 2000, Summary File 3, Table PCT7: Sex by Marital Status by Age for the Population 15 Years and Over. |  |  |  |  |  |  |  |  |  |  |  |  |


| Never Married |  |  |  |  | Widowed |  |  |  | Divorced |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | $45 \text { to } 64$ years | State <br> Rank | 65+ | State <br> Rank | $\begin{gathered} 45 \text { to } 64 \\ \text { years } \end{gathered}$ | State Rank | 65+ | State Rank | $\begin{gathered} 45 \text { to } 64 \\ \text { years } \end{gathered}$ | State <br> Rank | 65+ | State <br> Rank |
| Alabama | 5.60\% | 26 | 3.31\% | 17 | 8.81\% | 47 | 50.12\% | 49 | 16.49\% | 17 | 6.70\% | 14 |
| Alaska | 5.13\% | 15 | 2.78\% | 11 | 5.78\% | 15 | 41.60\% | 8 | 19.35\% | 43 | 12.49\% | 51 |
| Arizona | 5.49\% | 21 | 2.58\% | 10 | 6.26\% | 19 | 39.29\% | 1 | 20.29\% | 48 | 8.52\% | 43 |
| Arkansas | 3.89\% | 4 | 2.25\% | 6 | 7.84\% | 44 | 47.32\% | 42 | 16.47\% | 16 | 6.18\% | 11 |
| California | 7.92\% | 41 | 4.00\% | 29 | 6.69\% | 25 | 42.70\% | 12 | 19.12\% | 42 | 10.42\% | 47 |
| Colorado | 5.69\% | 27 | 2.89\% | 13 | 4.92\% | 1 | 41.48\% | 5 | 20.31\% | 49 | 10.44\% | 48 |
| Connecticut | 8.19\% | 44 | 6.53\% | 47 | 5.96\% | 17 | 44.34\% | 18 | 17.41\% | 30 | 7.18\% | 25 |
| Delaware | 7.04\% | 39 | 4.13\% | 34 | 7.20\% | 34 | 45.41\% | 26 | 17.90\% | 35 | 6.86\% | 18 |
| D.C. | 24.91\% | 51 | 12.58\% | 51 | 10.17\% | 51 | 47.77\% | 43 | 21.82\% | 50 | 11.99\% | 49 |
| Florida | 5.58\% | 25 | 2.95\% | 14 | 7.30\% | 37 | 41.58\% | 6 | 19.86\% | 44 | 7.94\% | 41 |
| Georgia | 6.06\% | 30 | 3.49\% | 21 | 7.83\% | 43 | 49.55\% | 48 | 18.36\% | 41 | 7.41\% | 28 |
| Hawaii | 8.95\% | 48 | 5.00\% | 43 | 6.88\% | 28 | 40.24\% | 3 | 16.69\% | 19 | 7.44\% | 29 |
| Idaho | 2.97\% | 1 | 1.56\% | 2 | 5.20\% | 4 | 41.60\% | 7 | 17.11\% | 25 | 7.77\% | 36 |
| Illinois | 7.94\% | 43 | 4.99\% | 42 | 7.18\% | 33 | 46.73\% | 38 | 16.53\% | 18 | 7.14\% | 23 |
| Indiana | 5.18\% | 17 | 3.20\% | 16 | 6.36\% | 22 | 46.65\% | 35 | 17.36\% | 28 | 7.52\% | 30 |
| Iowa | 4.88\% | 10 | 4.01\% | 30 | 5.60\% | 11 | 45.56\% | 29 | 14.98\% | 5 | 5.27\% | 3 |
| Kansas | 4.26\% | 7 | 3.11\% | 15 | 5.76\% | 14 | 44.84\% | 21 | 16.77\% | 21 | 6.95\% | 20 |
| Kentucky | 4.83\% | 9 | 3.94\% | 27 | 8.11\% | 45 | 48.70\% | 46 | 16.82\% | 22 | 6.88\% | 19 |
| Louisiana | 7.39\% | 40 | 4.10\% | 32 | 9.28\% | 49 | 49.37\% | 47 | 17.56\% | 32 | 7.10\% | 22 |
| Maine | 5.78\% | 28 | 4.74\% | 39 | 5.87\% | 16 | 44.81\% | 20 | 18.31\% | 40 | 7.77\% | 38 |
| Maryland | 8.73\% | 47 | 4.77\% | 40 | 7.28\% | 36 | 46.72\% | 37 | 16.88\% | 23 | 7.66\% | 32 |
| Massachusetts | 9.84\% | 49 | 8.13\% | 50 | 6.34\% | 21 | 44.96\% | 22 | 16.90\% | 24 | 6.74\% | 15 |
| Michigan | 6.65\% | 37 | 4.01\% | 31 | 6.65\% | 24 | 45.75\% | 30 | 17.99\% | 37 | 7.83\% | 39 |
| Minnesota | 6.51\% | 35 | 4.67\% | 38 | 4.92\% | 2 | 44.14\% | 16 | 15.61\% | 11 | 5.99\% | 9 |
| Mississippi | 6.61\% | 36 | 3.48\% | 20 | 9.54\% | 50 | 52.49\% | 51 | 16.17\% | 15 | 6.29\% | 13 |
| Missouri | 5.54\% | 23 | 3.61\% | 25 | 6.89\% | 29 | 46.17\% | 32 | 17.33\% | 27 | 7.35\% | 27 |
| Montana | 3.96\% | 5 | 2.19\% | 5 | 5.74\% | 13 | 44.21\% | 17 | 17.25\% | 26 | 7.73\% | 34 |
| Nebraska | 5.25\% | 19 | 3.59\% | 23 | 5.69\% | 12 | 45.22\% | 24 | 15.33\% | 9 | 5.73\% | 6 |
| Nevada | 4.96\% | 12 | 2.17\% | 4 | 6.93\% | 31 | 40.65\% | 4 | 22.17\% | 51 | 12.07\% | 50 |
| New Hampshire | 5.53\% | 22 | 4.90\% | 41 | 5.47\% | 8 | 42.94\% | 13 | 17.39\% | 29 | 7.77\% | 37 |
| New Jersey | 8.43\% | 46 | 6.01\% | 46 | 7.33\% | 38 | 47.27\% | 41 | 15.12\% | 6 | 6.28\% | 12 |
| New Mexico | 6.74\% | 38 | 3.47\% | 19 | 6.78\% | 26 | 42.04\% | 10 | 19.87\% | 45 | 9.89\% | 46 |
| New York | 10.98\% | 50 | 7.91\% | 49 | 7.64\% | 40 | 46.41\% | 34 | 15.53\% | 10 | 6.84\% | 17 |
| North Carolina | 5.54\% | 24 | 3.61\% | 26 | 7.80\% | 42 | 47.03\% | 40 | 15.76\% | 13 | 6.10\% | 10 |
| North Dakota | 4.60\% | 8 | 4.00\% | 28 | 6.17\% | 18 | 46.71\% | 36 | 12.98\% | 1 | 3.78\% | 1 |
| Ohio | 6.43\% | 33 | 4.23\% | 36 | 6.82\% | 27 | 46.12\% | 31 | 17.70\% | 34 | 7.74\% | 35 |
| Oklahoma | 3.58\% | 3 | 2.29\% | 7 | 7.40\% | 39 | 45.09\% | 23 | 18.27\% | 39 | 7.93\% | 40 |
| Oregon | 5.24\% | 18 | 2.48\% | 8 | 5.26\% | 6 | 42.63\% | 11 | 20.00\% | 46 | 9.46\% | 44 |
| Pennsylvania | 7.93\% | 42 | 5.99\% | 45 | 7.21\% | 35 | 46.27\% | 33 | 14.69\% | 3 | 5.47\% | 4 |
| Rhode Island | 8.29\% | 45 | 7.28\% | 48 | 6.52\% | 23 | 45.42\% | 27 | 18.08\% | 38 | 6.80\% | 16 |
| South Carolina | 5.84\% | 29 | 3.56\% | 22 | 8.89\% | 48 | 48.60\% | 45 | 15.15\% | 7 | 5.50\% | 5 |
| South Dakota | 4.92\% | 11 | 3.59\% | 24 | 6.27\% | 20 | 45.40\% | 25 | 14.13\% | 2 | 4.74\% | 2 |
| Tennessee | 5.17\% | 16 | 3.32\% | 18 | 7.71\% | 41 | 47.90\% | 44 | 17.63\% | 33 | 7.23\% | 26 |
| Texas | 4.99\% | 14 | 2.88\% | 12 | 7.17\% | 32 | 45.43\% | 28 | 17.52\% | 31 | 7.96\% | 42 |
| Utah | 4.19\% | 6 | 2.02\% | 3 | 4.93\% | 3 | 39.89\% | 2 | 15.18\% | 8 | 7.06\% | 21 |
| Vermont | 6.39\% | 31 | 5.08\% | 44 | 5.37\% | 7 | 44.80\% | 19 | 17.94\% | 36 | 7.68\% | 33 |
| Virginia | 6.46\% | 34 | 4.10\% | 33 | 6.89\% | 30 | 46.86\% | 39 | 15.96\% | 14 | 7.16\% | 24 |
| Washington | 5.34\% | 20 | 2.49\% | 9 | 5.21\% | 5 | 41.94\% | 9 | 20.11\% | 47 | 9.73\% | 45 |
| West Virginia | 4.96\% | 13 | 4.15\% | 35 | 8.74\% | 46 | 50.75\% | 50 | 14.84\% | 4 | 5.98\% | 8 |
| Wisconsin | 6.40\% | 32 | 4.32\% | 37 | 5.57\% | 10 | 44.09\% | 15 | 15.62\% | 12 | 5.98\% | 7 |
| Wyoming | 3.56\% | 2 | 1.46\% | 1 | 5.47\% | 9 | 43.84\% | 14 | 16.74\% | 20 | 7.63\% | 31 |
| United States | 6.79\% |  | 4.32\% |  | 6.98\% |  | 45.31\% |  | 17.37\% |  | 7.54\% |  |
| Source: U.S. Census Bureau, Census 2000, Summary File 3, Table PCT7: Sex by Marital Status by Age for the Population 15 Years and Over. |  |  |  |  |  |  |  |  |  |  |  |  |

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| Men |  |  |  |  |  |  | Women |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ages 45 to 64, United States |  |  |  |  |  |  | Ages 45 to 64, United States |  |  |  |  |  |  |
|  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
| Never Married | 8.46\% | 7.68\% | 6.43\% | 5.72\% | 6.25\% | 8.11\% | Never Married | 7.77\% | 7.43\% | 6.10\% | 4.78\% | 5.10\% | 6.79\% |
| Widowed | 4.93\% | 3.19\% | 2.75\% | 2.46\% | 2.16\% | 1.71\% | Widowed | 17.02\% | 14.66\% | 13.43\% | 12.50\% | 10.15\% | 6.98\% |
| Divorced | 2.80\% | 3.06\% | 3.80\% | 6.30\% | 10.58\% | 13.89\% | Divorced | 3.03\% | 4.00\% | 5.29\% | 8.35\% | 13.53\% | 17.37\% |
| Ages 45 to 64, Minnesota |  |  |  |  |  |  | Ages 45 to 64, Minnesota |  |  |  |  |  |  |
|  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
| Never Married | - | - | - | 6.61\% | 6.17\% | 8.29\% | Never Married | - | - | - | 4.61\% | 4.59\% | 6.51\% |
| Widowed | - | - | - | 1.82\% | 1.58\% | 1.30\% | Widowed | - | - | - | 10.34\% | 7.80\% | 4.92\% |
| Divorced | - | - | - | 5.13\% | 9.40\% | 13.06\% | Divorced | - | - | - | 6.51\% | 11.44\% | 15.61\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ages 65 and Over, United States |  |  |  |  |  |  | Ages 65 and Over, United States |  |  |  |  |  |  |
|  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
| Never Married | 8.31\% | 7.75\% | 7.49\% | 5.50\% | 4.93\% | 4.40\% | Never Married | 8.89\% | 8.52\% | 8.13\% | 6.65\% | 5.49\% | 4.32\% |
| Widowed | 24.32\% | 19.21\% | 17.10\% | 14.57\% | 14.18\% | 13.90\% | Widowed | 54.37\% | 52.11\% | 52.22\% | 51.71\% | 49.40\% | 45.31\% |
| Divorced | 1.86\% | 2.35\% | 3.04\% | 3.65\% | 4.82\% | 6.71\% | Divorced | 1.11\% | 2.04\% | 3.19\% | 4.18\% | 5.50\% | 7.54\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ages 65 and Over, Minnesota |  |  |  |  |  |  | Ages 65 and Over, Minnesota |  |  |  |  |  |  |
|  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
| Never Married | - | - | - | 9.30\% | 7.23\% | 5.32\% | Never Married | - | - | - | 9.02\% | 6.71\% | 4.67\% |
| Widowed | - | - | - | 14.14\% | 13.03\% | 12.66\% | Widowed | - | - | - | 49.63\% | 48.58\% | 44.14\% |
| Divorced | - | - | - | 2.96\% | 3.83\% | 5.78\% | Divorced | - | - | - | 3.33\% | 4.25\% | 5.99\% |
| Source: Author calculations derived from U.S. Census Bureau, Subject Reports, Marital Status, 1950 (Report P-E No. 2D), 1960 (Report PC(2)-4E), and 1970 (Report PC(2)-4C ; U.S. Census Bu Census Subject Reports, Marital Characteristics, Report PC80-2-4C; U.S. Census Bureau, 1980 Census, Detailed Population Characteristics, Minnesota, Report C80-1-D25; U.S. Census Burea Census, General Population Characteristics, United States, Report 1990 CP-1-1; U.S. Census Bureau, 1990 Census, General Population Characteristics, Minnesota, Report 1990 CP-1-25; and Bureau, 2000 Census, Summary File 3, Table PCT7: Sex by Marital Status by Age for the Population 15 Years and Over; and U.S. Census Bureau, 2000 Census, Summary File 3, Table P8: Sex by |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table A8: Distribution of Long-Term Care Costs Among Veterans, 2000

| 65 to 79 Years |  |  |  | 80 Years and Over |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chronic Condition | Mean Cost | Total Cost | Percent of Total LTC Costs | Chronic Condition | $\begin{aligned} & \text { Mean LTC } \\ & \text { Cost } \end{aligned}$ | Total Cost | Percent of Total LTC Costs |
| Dementia | 5,785 | 98,865,650 | 11.23\% | Dementia | 6,934 | 79,304,158 | 15.66\% |
| Congestive heart failure | 1,055 | 77,311,455 | 8.78\% | Alzheimer's disease | 10,522 | 58,239,270 | 11.50\% |
| Psychoses | 1,921 | 72,448,594 | 8.23\% | Congestive heart failure | 2,123 | 53,686,424 | 10.60\% |
| Renal failure | 2,042 | 71,612,940 | 8.13\% | Renal failure | 3,147 | 36,826,194 | 7.27\% |
| Alzheimer's disease | 9,006 | 64,464,948 | 7.32\% | Psychoses | 3,949 | 30,683,730 | 6.06\% |
| Cerebrovascular disease/stroke | 1,642 | 52,701,632 | 5.98\% | Cerebrovascular disease/stroke | 2,620 | 23,454,240 | 4.63\% |
| Cancer, not otherwise listed | 1,203 | 40,850,271 | 4.64\% | Parkinson's disease | 3,879 | 21,691,368 | 4.28\% |
| Peripheral vascular disease | 705 | 38,041,095 | 4.32\% | Chronic obstructive pulmonary disease | 1,135 | 21,128,025 | 4.17\% |
| Chronic obstructive pulmonary disease | 410 | 37,186,590 | 4.22\% | Peripheral vascular disease | 1,505 | 20,425,860 | 4.03\% |
| Alcoholism | 1,722 | 37,002,336 | 4.20\% | Cancer, not otherwise listed | 2,009 | 16,397,458 | 3.24\% |
| Parkinson's disease | 2,320 | 34,468,240 | 3.91\% | Ischemic heart disease | 435 | 14,877,870 | 2.94\% |
| Spinal cord injury | 6,113 | 33,016,313 | 3.75\% | Diabetes mellitus | 687 | 11,537,478 | 2.28\% |
| Lung cancer | 1,938 | 31,918,860 | 3.62\% | Prostate cancer | 665 | 10,861,445 | 2.14\% |
| Diabetes mellitus | 229 | 24,453,307 | 2.78\% | Lung cancer | 2,850 | 9,667,200 | 1.91\% |
| Ischemic heart disease | 134 | 20,828,156 | 2.37\% | Hypertension | 462 | 9,531,060 | 1.88\% |
| Prostate cancer | 268 | 14,681,308 | 1.67\% | Spinal cord injury | 9,424 | 9,358,032 | 1.85\% |
| Hypertension | 126 | 12,831,840 | 1.46\% | Alcoholism | 4,283 | 7,906,418 | 1.56\% |
| Multiple sclerosis | 5,064 | 8,912,640 | 1.01\% | Arthritis | 412 | 6,198,128 | 1.22\% |
| Colorectal cancer | 626 | 8,338,946 | 0.95\% | Colorectal cancer | 1,380 | 5,289,540 | 1.04\% |
| Arthritis | 103 | 6,216,771 | 0.71\% | Benign prostatic hyperplasia | 484 | 4,582,996 | 0.90\% |
| Depression | 202 | 4,901,328 | 0.56\% | Acid-related disorders | 523 | 3,543,848 | 0.70\% |
| Acid-related disorders | 140 | 4,497,640 | 0.51\% | Multiple sclerosis | 7,596 | 1,785,060 | 0.35\% |
| Benign prostatic hyperplasia | 101 | 4,171,401 | 0.47\% | Lower back pain | 320 | 1,671,680 | 0.33\% |
| Lower back pain | 65 | 1,732,445 | 0.20\% | Depression | 286 | 1,220,648 | 0.24\% |
| Asthma | 86 | 1,594,526 | 0.18\% | Asthma | 179 | 590,879 | 0.12\% |
| Headache | 120 | 1,115,520 | 0.13\% | Hepatitis C | 1,196 | 307,372 | 0.06\% |
| AIDS/HIV | 1,014 | 1,055,574 | 0.12\% | Substance abuse | 359 | 238,735 | 0.05\% |
| Hepatitis C | 414 | 984,492 | 0.11\% | Headache | 141 | 206,424 | 0.04\% |
| Substance abuse | 108 | 911,952 | 0.10\% | AIDS/HIV | 1,465 | 111,340 | 0.02\% |
| 0 of 29 chronic conditions | 395 | 73,462,890 | 8.34\% | 0 of 29 chronic conditions | 872 | 45,187,040 | 8.92\% |
| $\geq 1$ of 29 chronic conditions | 736 | 807,804,160 |  | $\geq 1$ of 29 chronic conditions | 1,765 | 461,418,655 |  |
|  | tal LTC Costs | \$880,579,660 |  |  | tal LTC Costs | \$506,509,920 |  |
| Source: Author calculations derived from Wei Yu, et al., "The Relationships Among Age, Chronic Conditions, and Healthcare Costs," The American Journal of Managed Care, Vol. 10, No. 12, December 2004. |  |  |  |  |  |  |  |


| State | 45 to 64 |  |  |  | 65 to 74 |  |  |  | 75 and Over |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1993-1995 | 2002-2004 | State <br> Rank | Percent Change | 1993-1995 | 2002-2004 | State <br> Rank | Percent Change | 1993-1995 | 2002-2004 | State <br> Rank | Percent Change |
| Alabama | 22.2 | 24.8 | 47 | 11.7\% | 34.5 | 38.4 | 49 | 11.3\% | 46.1 | 44.5 | 49 | -3.5\% |
| Alaska | 11.2 | 14.9 | 19 | 33.0\% | 28.9 | 24.4 | 29 | -15.6\% | 32.8 | 32.1 | 27 | -2.1\% |
| Arizona | 14.1 | 17.4 | 29 | 23.4\% | 22.3 | 21.2 | 10 | -4.9\% | 27.7 | 27.9 | 6 | 0.7\% |
| Arkansas | 24.4 | 24.6 | 45 | 0.8\% | 37.7 | 31.4 | 42 | -16.7\% | 44.4 | 39.9 | 43 | -10.1\% |
| California | 15.2 | 19.1 | 34 | 25.7\% | 23.8 | 24.6 | 31 | 3.4\% | 25.6 | 28.9 | 11 | 12.9\% |
| Colorado | 13.5 | 13.2 | 9 | -2.2\% | 21.3 | 20.1 | 5 | -5.6\% | 31.1 | 28.9 | 11 | -7.1\% |
| Connecticut | 10.2 | 11.7 | 1 | 14.7\% | 22.1 | 21.7 | 11 | -1.8\% | 35.5 | 27.8 | 4 | -21.7\% |
| Delaware | 17.1 | 16.0 | 24 | -6.4\% | 23.9 | 23.4 | 20 | -2.1\% | 32.9 | 32.8 | 32 | -0.3\% |
| D.C. | 12.1 | 14.1 | 16 | 16.5\% | 22.1 | 23.7 | 23 | 7.2\% | 28.5 | 26.3 | 1 | -7.7\% |
| Florida | 16.5 | 19.9 | 39 | 20.6\% | 25.6 | 24.1 | 25 | -5.9\% | 29.2 | 28.5 | 8 | -2.4\% |
| Georgia | 16.7 | 20.6 | 40 | 23.4\% | 35.7 | 33.4 | 46 | -6.4\% | 49.5 | 41.4 | 47 | -16.4\% |
| Hawaii | 13.2 | 12.5* | 6 | -5.3\% | 21.3 | 19.3* | 3 | -9.4\% | 37.3 | 30.0* | 17 | -19.6\% |
| Idaho | 13.7 | 15.5 | 21 | 13.1\% | 22.6 | 24.2 | 27 | 7.1\% | 30.3 | 30.9 | 23 | 2.0\% |
| Illinois | 16.0 | 17.5 | 30 | 9.4\% | 27.3 | 26.1 | 35 | -4.4\% | 32.9 | 32.9 | 33 | 0.0\% |
| Indiana | 16.5 | 19.2 | 36 | 16.4\% | 29.2 | 29.1 | 38 | -0.3\% | 39.5 | 35.7 | 36 | -9.6\% |
| lowa | 11.4 | 12.4 | 4 | 8.8\% | 20.7 | 19.7 | 4 | -4.8\% | 29.7 | 28.7 | 10 | -3.4\% |
| Kansas | 12.8 | 14.1 | 16 | 10.2\% | 22.7 | 23.5 | 21 | 3.5\% | 39.7 | 30.8 | 22 | -22.4\% |
| Kentucky | 28.1 | 29.2 | 49 | 3.9\% | 39.3 | 38.9 | 50 | -1.0\% | 42.4 | 46.2 | 50 | 9.0\% |
| Louisiana | 21.3 | 23.7 | 43 | 11.3\% | 35.1 | 32.9 | 45 | -6.3\% | 42.8 | 40.3 | 46 | -5.8\% |
| Maine | 14.4 | 15.8 | 22 | 9.7\% | 24.4 | 24.3 | 28 | -0.4\% | 28.4 | 32.2 | 28 | 13.4\% |
| Maryland | 14.3 | 14.6 | 18 | 2.1\% | 23.0 | 23.5 | 21 | 2.2\% | 28.9 | 30.2 | 19 | 4.5\% |
| Massachusetts | 13.1 | 13.4 | 11 | 2.3\% | 21.2 | 21.1 | 8 | -0.5\% | 28.7 | 30.7 | 21 | 7.0\% |
| Michigan | 16.0 | 17.2 | 28 | 7.5\% | 28.3 | 22.5 | 15 | -20.5\% | 38.2 | 32.4 | 29 | -15.2\% |
| Minnesota | 10.5 | 11.8 | 2 | 12.4\% | 22.2 | 18.5 | 2 | -16.7\% | 31.7 | 29.6 | 13 | -6.6\% |
| Mississippi | 28.2 | 30.6 | 51 | 8.5\% | 41.5 | 40.6 | 51 | -2.2\% | 50.8 | 48.3 | 51 | -4.9\% |
| Missouri | 16.4 | 19.6 | 37 | 19.5\% | 26.5 | 31.7 | 43 | 19.6\% | 38.9 | 37.7 | 40 | -3.1\% |
| Montana | 14.8 | 13.8 | 14 | -6.8\% | 20.1 | 23.3 | 18 | 15.9\% | 28.3 | 28.0 | 7 | -1.1\% |
| Nebraska | 12.4 | 13.7 | 13 | 10.5\% | 21.9 | 23.7 | 23 | 8.2\% | 39.8 | 31.6 | 25 | -20.6\% |
| Nevada | 16.0 | 18.8 | 33 | 17.5\% | 26.3 | 20.9 | 7 | -20.5\% | 28.9 | 29.8 | 14 | 3.1\% |
| New Hampshire | 11.3 | 12.1 | 3 | 7.1\% | 18.8 | 22.6 | 16 | 20.2\% | 27.4 | 27.6 | 3 | 0.7\% |
| New Jersey | 14.4 | 16.3 | 26 | 13.2\% | 21.9 | 24.5 | 30 | 11.9\% | 29.3 | 31.4 | 24 | 7.2\% |
| New Mexico | 16.5 | 19.6 | 37 | 18.8\% | 27.8 | 27.7 | 37 | -0.4\% | 31.8 | 37.1 | 39 | 16.7\% |
| New York | 14.2 | 19.1 | 34 | 34.5\% | 22.7 | 27.1 | 36 | 19.4\% | 38.3 | 36.4 | 38 | -5.0\% |
| North Carolina | 22.0 | 23.9 | 44 | 8.6\% | 37.2 | 33.6 | 47 | -9.7\% | 46.8 | 40.2 | 45 | -14.1\% |
| North Dakota | 15.7 | 13.5 | 12 | -14.0\% | 26.1 | 22.1 | 13 | -15.3\% | 39.7 | 34.2 | 34 | -13.9\% |
| Ohio | 18.7 | 16.6 | 27 | -11.2\% | 28.2 | 25.2 | 33 | -10.6\% | 32.9 | 32.6 | 31 | -0.9\% |
| Oklahoma | 18.0 | 21.5 | 41 | 19.4\% | 28.3 | 32.2 | 44 | 13.8\% | 39.8 | 40.0 | 44 | 0.5\% |
| Oregon | 14.0 | 18.1 | 32 | 29.3\% | 22.8 | 22.6 | 16 | -0.9\% | 27.7 | 27.1 | 2 | -2.2\% |
| Pennsylvania | 14.8 | 17.5 | 30 | 18.2\% | 25.5 | 25.4 | 34 | -0.4\% | 35.3 | 34.6 | 35 | -2.0\% |
| Rhode Island | 18.0 | 15.8 | 22 | -12.2\% | 29.2 | 24.9 | 32 | -14.7\% | 31.7 | 29.9 | 16 | -5.7\% |
| South Carolina | 22.9 | 22.8 | 42 | -0.4\% | 34.2 | 29.8 | 39 | -12.9\% | 46.0 | 35.7 | 36 | -22.4\% |
| South Dakota | 15.5 | 13.2 | 9 | -14.8\% | 22.3 | 23.3 | 18 | 4.5\% | 32.6 | 32.5 | 30 | -0.3\% |
| Tennessee | 23.1 | 27.3 | 48 | 18.2\% | 40.0 | 31.2 | 41 | -22.0\% | 40.8 | 39.2 | 42 | -3.9\% |
| Texas | 19.6 | 24.7 | 46 | 26.0\% | 31.1 | 30.7 | 40 | -1.3\% | 36.9 | 38.0 | 41 | 3.0\% |
| Utah | 15.5 | 13.8 | 14 | -11.0\% | 26.3 | 21.7 | 11 | -17.5\% | 34.4 | 31.6 | 25 | -8.1\% |
| Vermont | 13.7 | 12.4 | 4 | -9.5\% | 22.2 | 18.4 | 1 | -17.1\% | 31.1 | 27.8 | 4 | -10.6\% |
| Virginia | 14.2 | 16.0 | 24 | 12.7\% | 27.8 | 24.1 | 25 | -13.3\% | 34.4 | 29.8 | 14 | -13.4\% |
| Washington | 12.2 | 15.1 | 20 | 23.8\% | 20.8 | 21.1 | 8 | 1.4\% | 27.2 | 30.1 | 18 | 10.7\% |
| West Virginia | 29.5 | 29.3 | 50 | -0.7\% | 38.8 | 37.7 | 48 | -2.8\% | 44.7 | 44.3 | 48 | -0.9\% |
| Wisconsin | 11.8 | 12.6 | 7 | 6.8\% | 21.4 | 20.5 | 6 | -4.2\% | 30.8 | 28.6 | 9 | -7.1\% |
| Wyoming | 13.4 | 13.1 | 8 | -2.2\% | 22.5 | 22.1 | 13 | -1.8\% | 30.6 | 30.4 | 20 | -0.7\% |
| Median Rate | 15.2 | 16.5 |  | 8.2\% | 25.5 | 24.2 |  | -5.3\% | 32.9 | 31.9 |  | -3.2\% |
| * The data shown represents 2001-2003 survey responses as 2002-2004 data was unavailable. |  |  |  |  |  |  |  |  |  |  |  |  |

Table A10: Death Rates Due to All Causes, Diseases of the Heart, Cancer, Cerebrovascular Diseases, Chronic Lower Respiratory Disease, Diabetes, Influenza and Pneumonia, and Alzheimer's by State, 2003

| State | All causes |  | Diseases of the Heart |  | Cancer |  | CerebrovascularDiseases(Strokes) |  | Chronic Lower Respiratory Disease |  | Diabetes |  | Influenza and Pneumonia |  | Alzheimer's |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank |
| Alabama | 1,001.7 | 49 | 281.7 | 47 | 207.1 | 45 | 65.1 | 45 | 51.8 | 41 | 30.0 | 41 | 25.0 | 36 | 27.6 | 43 |
| Alaska | 829.8 | 27 | 181.8 | 5 | 186.4 | 19 | 60.7 | 41 | 46.1 | 27 | 27.3 | 32 | 20.5 | 17 | 22.2 | 27 |
| Arizona | 787.1 | 17 | 198.3 | 12 | 172.5 | 6 | 44.4 | 8 | 46.0 | 25 | 20.7 | 8 | 23.6 | 32 | 31.6 | 49 |
| Arkansas | 937.5 | 42 | 258.4 | 41 | 204.9 | 44 | 69.6 | 51 | 49.9 | 38 | 29.8 | 40 | 30.3 | 50 | 18.0 | 9 |
| California | 754.3 | 5 | 219.8 | 26 | 172.1 | 5 | 56.8 | 30 | 43.5 | 21 | 22.5 | 12 | 26.3 | 45 | 21.3 | 20 |
| Colorado | 784.3 | 15 | 178.0 | 3 | 169.2 | 3 | 50.7 | 15 | 53.7 | 45 | 19.0 | 4 | 22.5 | 27 | 25.9 | 37 |
| Connecticut | 734.6 | 3 | 201.8 | 18 | 183.0 | 15 | 43.5 | 6 | 36.0 | 7 | 16.7 | 3 | 20.1 | 16 | 13.9 | 3 |
| Delaware | 844.4 | 29 | 243.1 | 36 | 201.4 | 38 | 49.0 | 13 | 40.2 | 16 | 28.2 | 38 | 15.4 | 3 | 18.0 | 9 |
| D.C. | 982.3 | 47 | 287.3 | 49 | 199.7 | 37 | 45.0 | 10 | 24.2 | 2 | 32.2 | 48 | 15.2 | 2 | 16.5 | 4 |
| Florida | 776.0 | 12 | 212.7 | 24 | 181.4 | 14 | 43.4 | 5 | 39.9 | 15 | 21.8 | 11 | 13.2 | 1 | 18.2 | 11 |
| Georgia | 946.4 | 43 | 251.8 | 39 | 196.5 | 32 | 64.5 | 44 | 48.4 | 36 | 24.3 | 19 | 25.6 | 40 | 26.0 | 38 |
| Hawaii | 649.3 | 1 | 176.9 | 2 | 154.8 | 2 | 53.9 | 23 | 20.6 | 1 | 14.5 | 1 | 16.9 | 7 | 11.4 | 2 |
| Idaho | 797.1 | 21 | 197.0 | 11 | 180.3 | 10 | 58.8 | 35 | 47.2 | 31 | 27.8 | 35 | 25.5 | 39 | 27.1 | 41 |
| Illinois | 834.5 | 28 | 235.1 | 31 | 197.1 | 34 | 54.2 | 26 | 39.1 | 14 | 24.4 | 20 | 22.3 | 26 | 20.2 | 13 |
| Indiana | 894.5 | 37 | 246.3 | 37 | 207.6 | 46 | 57.7 | 34 | 52.5 | 42 | 27.7 | 33 | 21.6 | 23 | 23.9 | 33 |
| Iowa | 768.4 | 9 | 208.1 | 21 | 187.3 | 20 | 53.7 | 22 | 46.4 | 28 | 20.0 | 5 | 25.7 | 43 | 21.6 | 23 |
| Kansas | 824.0 | 25 | 212.5 | 23 | 186.2 | 18 | 56.8 | 30 | 49.5 | 37 | 23.1 | 16 | 21.9 | 24 | 24.3 | 35 |
| Kentucky | 977.7 | 45 | 275.9 | 46 | 223.6 | 51 | 60.4 | 39 | 58.2 | 48 | 31.4 | 45 | 25.6 | 40 | 27.0 | 40 |
| Louisiana | 1,004.6 | 50 | 274.2 | 45 | 221.9 | 50 | 60.4 | 39 | 41.1 | 17 | 40.8 | 51 | 22.1 | 25 | 29.1 | 46 |
| Maine | 822.3 | 23 | 200.6 | 17 | 204.4 | 42 | 51.5 | 16 | 51.0 | 40 | 26.0 | 25 | 21.1 | 20 | 29.7 | 47 |
| Maryland | 852.9 | 34 | 235.6 | 32 | 195.0 | 29 | 53.6 | 21 | 39.0 | 13 | 27.9 | 36 | 23.1 | 31 | 17.3 | 7 |
| Massachusetts | 778.7 | 13 | 198.4 | 13 | 193.5 | 28 | 45.6 | 11 | 38.5 | 8 | 20.0 | 5 | 26.4 | 46 | 20.7 | 15 |
| Michigan | 850.5 | 32 | 254.0 | 40 | 193.4 | 27 | 53.5 | 20 | 44.3 | 22 | 26.0 | 25 | 19.0 | 13 | 20.8 | 17 |
| Minnesota | 713.0 | 2 | 152.0 | 1 | 181.0 | 12 | 47.1 | 12 | 35.6 | 6 | 24.7 | 22 | 15.4 | 3 | 22.2 | 27 |
| Mississippi | 1,014.0 | 51 | 310.3 | 51 | 211.1 | 47 | 62.1 | 43 | 50.1 | 39 | 24.1 | 18 | 27.2 | 47 | 21.1 | 19 |
| Missouri | 902.6 | 38 | 262.9 | 42 | 202.5 | 39 | 57.2 | 33 | 47.9 | 32 | 27.1 | 29 | 25.4 | 38 | 20.3 | 14 |
| Montana | 828.1 | 26 | 190.7 | 8 | 180.9 | 11 | 55.1 | 27 | 58.0 | 47 | 25.5 | 23 | 24.1 | 34 | 22.2 | 27 |
| Nebraska | 790.5 | 18 | 196.9 | 10 | 178.5 | 7 | 53.9 | 23 | 46.7 | 29 | 20.9 | 10 | 20.6 | 18 | 21.7 | 25 |
| Nevada | 924.5 | 40 | 242.6 | 35 | 202.6 | 40 | 57.0 | 32 | 62.6 | 51 | 15.0 | 2 | 23.0 | 29 | 19.0 | 12 |
| New Hampshire | 749.8 | 4 | 210.8 | 22 | 190.5 | 25 | 41.8 | 2 | 41.9 | 18 | 23.2 | 17 | 15.9 | 5 | 22.2 | 27 |
| New Jersey | 794.8 | 20 | 234.8 | 30 | 195.6 | 31 | 42.2 | 4 | 31.5 | 3 | 26.9 | 28 | 19.3 | 14 | 17.1 | 5 |
| New Mexico | 823.8 | 24 | 191.5 | 9 | 169.6 | 4 | 43.7 | 7 | 52.9 | 44 | 33.0 | 49 | 21.1 | 20 | 20.9 | 18 |
| New York | 760.1 | 6 | 266.0 | 43 | 178.7 | 9 | 35.1 | 1 | 32.9 | 4 | 20.7 | 8 | 25.6 | 40 | 8.8 | 1 |
| North Carolina | 905.8 | 39 | 231.9 | 28 | 195.4 | 30 | 65.6 | 47 | 48.2 | 33 | 29.2 | 39 | 25.2 | 37 | 27.6 | 43 |
| North Dakota | 766.6 | 8 | 198.5 | 14 | 178.6 | 8 | 55.4 | 28 | 38.8 | 10 | 26.8 | 27 | 21.2 | 22 | 36.2 | 50 |
| Ohio | 889.8 | 36 | 247.9 | 38 | 204.8 | 43 | 55.7 | 29 | 48.2 | 33 | 30.4 | 43 | 18.8 | 11 | 23.2 | 32 |
| Oklahoma | 974.3 | 44 | 300.1 | 50 | 199.1 | 36 | 67.6 | 48 | 58.6 | 49 | 30.2 | 42 | 25.8 | 44 | 21.5 | 22 |
| Oregon | 808.5 | 22 | 181.6 | 4 | 192.4 | 26 | 65.4 | 46 | 48.3 | 35 | 27.1 | 29 | 15.9 | 5 | 28.9 | 45 |
| Pennsylvania | 849.2 | 30 | 241.8 | 34 | 198.8 | 35 | 51.7 | 17 | 38.8 | 10 | 24.5 | 21 | 18.8 | 11 | 17.7 | 8 |
| Rhode Island | 786.9 | 16 | 227.7 | 27 | 190.2 | 24 | 42.1 | 3 | 38.5 | 8 | 20.2 | 7 | 19.5 | 15 | 21.4 | 21 |
| South Carolina | 934.8 | 41 | 234.5 | 29 | 203.3 | 41 | 69.0 | 50 | 46.8 | 30 | 28.0 | 37 | 23.0 | 29 | 27.3 | 42 |
| South Dakota | 790.5 | 18 | 208.0 | 20 | 189.6 | 23 | 49.8 | 14 | 42.7 | 19 | 22.9 | 15 | 22.8 | 28 | 17.1 | 5 |
| Tennessee | 982.2 | 46 | 273.4 | 44 | 212.2 | 49 | 67.8 | 49 | 52.5 | 42 | 31.5 | 47 | 31.7 | 51 | 26.1 | 39 |
| Texas | 855.7 | 35 | 237.8 | 33 | 185.6 | 17 | 59.7 | 37 | 43.4 | 20 | 31.4 | 45 | 20.9 | 19 | 24.2 | 34 |
| Utah | 782.3 | 14 | 183.5 | 6 | 144.1 | 1 | 53.9 | 23 | 34.7 | 5 | 31.2 | 44 | 27.4 | 48 | 20.7 | 15 |
| Vermont | 765.3 | 7 | 199.3 | 15 | 181.3 | 13 | 44.9 | 9 | 45.5 | 24 | 27.2 | 31 | 17.2 | 8 | 25.1 | 36 |
| Virginia | 850.9 | 33 | 218.1 | 25 | 196.9 | 33 | 59.2 | 36 | 44.5 | 23 | 22.8 | 14 | 23.6 | 32 | 22.7 | 31 |
| Washington | 775.9 | 11 | 188.6 | 7 | 188.8 | 22 | 60.8 | 42 | 46.0 | 25 | 25.8 | 24 | 18.3 | 9 | 39.9 | 51 |
| West Virginia | 994.9 | 48 | 284.6 | 48 | 211.8 | 48 | 60.2 | 38 | 59.0 | 50 | 36.9 | 50 | 24.8 | 35 | 21.6 | 23 |
| Wisconsin | 772.5 | 10 | 205.1 | 19 | 183.0 | 15 | 52.3 | 18 | 38.9 | 12 | 22.6 | 13 | 18.5 | 10 | 22.0 | 26 |
| Wyoming | 849.9 | 31 | 199.5 | 16 | 188.4 | 21 | 53.0 | 19 | 57.2 | 46 | 27.7 | 33 | 30.2 | 49 | 30.1 | 48 |
| United States | 832.7 |  | 232.3 |  | 190.1 |  | 53.5 |  | 43.3 |  | 25.3 |  | 22.0 |  | 21.4 |  |
| Source: Donna L. Hoyert, et al., Deaths: Final Data for 2003, National Vital Statistics Report, Vol. 54, No. 13, Table 29, National Center for Health Statistics, April 19, 2006. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| State | Male |  |  |  |  |  | Female |  |  |  |  |  | Total |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | One Disability |  | Two or More Disabilities |  | No Disability |  | One Disability |  | Two or More Disabilities |  | No Disability |  | One Disability |  | Two or More Disabilities |  | No Disability |  |
|  | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank | Rate | Rank |
| AL | 22.6\% | 43 | 25.1\% | 49 | 52.2\% | 47 | 20.5\% | 49 | 30.2\% | 50 | 49.3\% | 50 | 21.4\% | 46 | 28.2\% | 50 | 50.5\% | 50 |
| AK | 22.6\% | 41 | 22.3\% | 42 | 55.1\% | 42 | 19.7\% | 32 | 27.6\% | 43 | 52.7\% | 41 | 21.1\% | 41 | 25.1\% | 41 | 53.8\% | 42 |
| AZ | 21.6\% | 25 | 17.6\% | 18 | 60.8\% | 20 | 19.2\% | 22 | 20.9\% | 14 | 59.9\% | 16 | 20.3\% | 25 | 19.4\% | 17 | 60.3\% | 17 |
| AR | 23.0\% | 49 | 25.1\% | 48 | 51.9\% | 48 | 20.3\% | 45 | 29.2\% | 47 | 50.5\% | 48 | 21.5\% | 49 | 27.4\% | 48 | 51.1\% | 48 |
| CA | 21.0\% | 13 | 19.2\% | 31 | 59.8\% | 26 | 19.1\% | 18 | 24.7\% | 36 | 56.2\% | 36 | 19.9\% | 16 | 22.4\% | 36 | 57.8\% | 31 |
| CO | 21.3\% | 19 | 18.2\% | 25 | 60.5\% | 22 | 18.5\% | 7 | 21.8\% | 22 | 59.7\% | 18 | 19.7\% | 11 | 20.3\% | 22 | 60.0\% | 20 |
| CT | 19.7\% | 1 | 15.6\% | 2 | 64.7\% | 1 | 17.9\% | 3 | 20.4\% | 10 | 61.7\% | 7 | 18.6\% | 2 | 18.4\% | 7 | 63.0\% | 3 |
| DE | 21.5\% | 23 | 15.5\% | 1 | 63.0\% | 7 | 17.5\% | 1 | 20.8\% | 13 | 61.8\% | 6 | 19.2\% | 8 | 18.5\% | 9 | 62.3\% | 5 |
| DC | 19.9\% | 4 | 18.8\% | 29 | 61.3\% | 17 | 20.1\% | 39 | 24.8\% | 37 | 55.1\% | 37 | 20.0\% | 18 | 22.5\% | 37 | 57.5\% | 35 |
| FL | 21.6\% | 24 | 17.2\% | 12 | 61.2\% | 18 | 19.3\% | 26 | 20.8\% | 12 | 59.9\% | 17 | 20.3\% | 26 | 19.2\% | 11 | 60.5\% | 15 |
| GA | 21.7\% | 27 | 23.3\% | 44 | 55.0\% | 43 | 20.2\% | 41 | 29.0\% | 45 | 50.8\% | 46 | 20.8\% | 37 | 26.7\% | 44 | 52.5\% | 44 |
| HI | 21.4\% | 22 | 20.2\% | 36 | 58.5\% | 32 | 18.7\% | 12 | 21.1\% | 17 | 60.2\% | 14 | 19.9\% | 17 | 20.7\% | 25 | 59.4\% | 25 |
| ID | 22.7\% | 46 | 20.3\% | 37 | 57.0\% | 37 | 19.5\% | 29 | 22.5\% | 26 | 58.0\% | 27 | 20.9\% | 39 | 21.5\% | 30 | 57.5\% | 34 |
| IL | 20.7\% | 11 | 17.7\% | 19 | 61.6\% | 14 | 19.1\% | 20 | 22.8\% | 29 | 58.0\% | 26 | 19.8\% | 14 | 20.7\% | 26 | 59.5\% | 23 |
| IN | 22.2\% | 37 | 19.5\% | 33 | 58.4\% | 34 | 20.1\% | 40 | 23.3\% | 30 | 56.7\% | 34 | 21.0\% | 40 | 21.7\% | 31 | 57.4\% | 37 |
| IA | 21.3\% | 21 | 16.5\% | 7 | 62.1\% | 12 | 19.2\% | 24 | 18.5\% | 3 | 62.3\% | 4 | 20.1\% | 21 | 17.7\% | 3 | 62.2\% | 6 |
| KS | 22.6\% | 42 | 18.1\% | 22 | 59.3\% | 30 | 20.5\% | 50 | 21.5\% | 20 | 58.0\% | 28 | 21.4\% | 47 | 20.1\% | 20 | 58.5\% | 28 |
| KY | 23.0\% | 48 | 25.4\% | 50 | 51.6\% | 50 | 20.5\% | 48 | 29.5\% | 49 | 50.0\% | 49 | 21.5\% | 51 | 27.8\% | 49 | 50.7\% | 49 |
| LA | 22.7\% | 45 | 23.6\% | 45 | 53.8\% | 46 | 20.4\% | 47 | 29.0\% | 44 | 50.6\% | 47 | 21.3\% | 45 | 26.8\% | 45 | 51.9\% | 46 |
| ME | 22.4\% | 40 | 18.6\% | 27 | 58.9\% | 31 | 19.2\% | 23 | 21.9\% | 23 | 58.9\% | 22 | 20.5\% | 30 | 20.5\% | 24 | 58.9\% | 27 |
| MD | 20.0\% | 5 | 17.3\% | 13 | 62.7\% | 8 | 18.7\% | 11 | 22.8\% | 28 | 58.5\% | 24 | 19.3\% | 9 | 20.5\% | 23 | 60.2\% | 18 |
| MA | 19.7\% | 2 | 16.7\% | 10 | 63.6\% | 4 | 17.7\% | 2 | 21.1\% | 16 | 61.2\% | 9 | 18.5\% | 1 | 19.3\% | 13 | 62.2\% | 7 |
| MI | 21.8\% | 31 | 18.7\% | 28 | 59.5\% | 29 | 19.8\% | 34 | 23.8\% | 34 | 56.3\% | 35 | 20.6\% | 32 | 21.7\% | 32 | 57.7\% | 33 |
| MN | 20.4\% | 8 | 15.9\% | 4 | 63.6\% | 3 | 18.1\% | 6 | 19.1\% | 5 | 62.8\% | 3 | 19.1\% | 5 | 17.7\% | 4 | 63.1\% | 2 |
| MS | 23.1\% | 50 | 26.8\% | 51 | 50.0\% | 51 | 20.2\% | 44 | 32.6\% | 51 | 47.1\% | 51 | 21.4\% | 48 | 30.3\% | 51 | 48.3\% | 51 |
| MO | 22.1\% | 36 | 19.6\% | 34 | 58.3\% | 35 | 19.8\% | 35 | 23.5\% | 31 | 56.7\% | 33 | 20.8\% | 36 | 21.9\% | 33 | 57.4\% | 36 |
| MT | 21.3\% | 17 | 18.5\% | 26 | 60.3\% | 23 | 19.3\% | 25 | 20.2\% | 9 | 60.5\% | 13 | 20.2\% | 22 | 19.4\% | 16 | 60.4\% | 16 |
| NE | 20.9\% | 12 | 16.1\% | 5 | 63.0\% | 6 | 18.8\% | 15 | 18.3\% | 2 | 62.9\% | 1 | 19.7\% | 12 | 17.4\% | 1 | 62.9\% | 4 |
| NV | 22.9\% | 47 | 17.4\% | 16 | 59.7\% | 27 | 19.8\% | 36 | 21.0\% | 15 | 59.2\% | 20 | 21.3\% | 44 | 19.3\% | 12 | 59.4\% | 24 |
| NH | 21.3\% | 20 | 16.4\% | 6 | 62.3\% | 10 | 19.1\% | 19 | 20.1\% | 8 | 60.8\% | 11 | 20.0\% | 19 | 18.5\% | 8 | 61.5\% | 9 |
| NJ | 19.8\% | 3 | 16.7\% | 9 | 63.4\% | 5 | 18.6\% | 9 | 21.5\% | 19 | 59.9\% | 15 | 19.1\% | 4 | 19.5\% | 18 | 61.4\% | 11 |
| NM | 21.8\% | 33 | 21.9\% | 39 | 56.3\% | 40 | 19.5\% | 27 | 26.1\% | 38 | 54.4\% | 38 | 20.5\% | 28 | 24.3\% | 38 | 55.2\% | 39 |
| NY | 20.0\% | 6 | 17.4\% | 14 | 62.6\% | 9 | 18.5\% | 8 | 23.7\% | 33 | 57.7\% | 30 | 19.1\% | 6 | 21.2\% | 29 | 59.7\% | 22 |
| NC | 21.3\% | 18 | 22.0\% | 40 | 56.8\% | 39 | 20.2\% | 42 | 27.3\% | 41 | 52.5\% | 43 | 20.6\% | 33 | 25.1\% | 40 | 54.3\% | 40 |
| ND | 21.6\% | 26 | 17.4\% | 15 | 61.0\% | 19 | 20.0\% | 38 | 18.1\% | 1 | 62.0\% | 5 | 20.7\% | 34 | 17.8\% | 5 | 61.5\% | 8 |
| OH | 21.2\% | 16 | 18.2\% | 23 | 60.6\% | 21 | 19.5\% | 30 | 22.6\% | 27 | 57.9\% | 29 | 20.2\% | 24 | 20.8\% | 27 | 59.0\% | 26 |
| OK | 22.6\% | 44 | 23.1\% | 43 | 54.3\% | 44 | 20.6\% | 51 | 26.8\% | 40 | 52.6\% | 42 | 21.5\% | 50 | 25.2\% | 43 | 53.3\% | 43 |
| OR | 22.4\% | 39 | 19.2\% | 30 | 58.4\% | 33 | 19.1\% | 21 | 22.4\% | 25 | 58.5\% | 25 | 20.5\% | 29 | 21.0\% | 28 | 58.5\% | 29 |
| PA | 20.7\% | 10 | 17.1\% | 11 | 62.2\% | 11 | 18.8\% | 14 | 21.7\% | 21 | 59.5\% | 19 | 19.6\% | 10 | 19.8\% | 19 | 60.6\% | 13 |
| RI | 21.7\% | 29 | 16.7\% | 8 | 61.6\% | 15 | 20.2\% | 43 | 21.3\% | 18 | 58.5\% | 23 | 20.8\% | 38 | 19.4\% | 14 | 59.7\% | 21 |
| SC | 21.8\% | 32 | 22.1\% | 41 | 56.1\% | 41 | 19.8\% | 33 | 27.4\% | 42 | 52.8\% | 40 | 20.6\% | 31 | 25.2\% | 42 | 54.2\% | 41 |
| SD | 22.2\% | 38 | 17.7\% | 20 | 60.1\% | 24 | 20.3\% | 46 | 18.9\% | 4 | 60.8\% | 12 | 21.1\% | 42 | 18.4\% | 6 | 60.5\% | 14 |
| TN | 22.1\% | 35 | 24.0\% | 46 | 54.0\% | 45 | 19.8\% | 37 | 29.2\% | 48 | 50.9\% | 45 | 20.8\% | 35 | 27.1\% | 46 | 52.2\% | 45 |
| TX | 21.7\% | 28 | 21.5\% | 38 | 56.8\% | 38 | 19.5\% | 28 | 26.4\% | 39 | 54.1\% | 39 | 20.4\% | 27 | 24.3\% | 39 | 55.2\% | 38 |
| UT | 21.1\% | 15 | 17.5\% | 17 | 61.4\% | 16 | 18.7\% | 10 | 22.3\% | 24 | 59.0\% | 21 | 19.7\% | 13 | 20.2\% | 21 | 60.1\% | 19 |
| VT | 20.7\% | 9 | 17.7\% | 21 | 61.6\% | 13 | 18.0\% | 4 | 20.7\% | 11 | 61.3\% | 8 | 19.1\% | 7 | 19.4\% | 15 | 61.4\% | 10 |
| VA | 21.0\% | 14 | 19.4\% | 32 | 59.6\% | 28 | 19.0\% | 17 | 24.2\% | 35 | 56.8\% | 32 | 19.9\% | 15 | 22.2\% | 35 | 57.9\% | 30 |
| WA | 21.8\% | 34 | 20.1\% | 35 | 58.0\% | 36 | 18.8\% | 13 | 23.7\% | 32 | 57.5\% | 31 | 20.1\% | 20 | 22.2\% | 34 | 57.7\% | 32 |
| WV | 23.3\% | 51 | 25.0\% | 47 | 51.7\% | 49 | 19.7\% | 31 | 29.1\% | 46 | 51.2\% | 44 | 21.2\% | 43 | 27.4\% | 47 | 51.4\% | 47 |
| WI | 20.1\% | 7 | 15.7\% | 3 | 64.3\% | 2 | 18.0\% | 5 | 19.1\% | 6 | 62.9\% | 2 | 18.9\% | 3 | 17.7\% | 2 | 63.5\% | 1 |
| WY | 21.7\% | 30 | 18.2\% | 24 | 60.0\% | 25 | 18.9\% | 16 | 19.8\% | 7 | 61.2\% | 10 | 20.2\% | 23 | 19.1\% | 10 | 60.7\% | 12 |
| US | 21.3\% |  | 19.1\% |  | 59.6\% |  | 19.3\% |  | 23.7\% |  | 57.0\% |  | 20.1\% |  | 21.8\% |  | 58.1\% |  |
| Source: U.S. Census Bureau, Census 2000 Summary File 3, Table PCT26. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Table A12: Cancer Screening Rates by State, 2004

| State | Ever had a Sigmoidoscopy or Colonoscopy, Ages 50+ |  | Had a <br> Sigmoidoscopy or Colonoscopy in Past 5 Years, Ages 50+ |  | Had a Pap Smear in Past 3 Years and No Hysterectomy, Women Ages 18+ |  | Had a Clinical Breast Exam in Past 2 Years, Women Ages 40+ |  | Had a Mammogram in Past 2 Years, Women Ages 40+ |  | Had a Mammogram in Past 2 Years, Women Ages 50+ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent | Rank | Percent | Rank | Percent | Rank | Percent | Rank | Percent | Rank | Percent | Rank |
| Alabama | 50.9 | 31 | 42.3 | 31 | 87.4 | 16 | 76.0 | 37 | 75.5 | 20 | 78.7 | 23 |
| Alaska | 50.6 | 33 | 40.9 | 37 | 88.8 | 5 | 80.6 | 17 | 67.0 | 46 | 74.5 | 39 |
| Arizona | 52.1 | 29 | 42.2 | 32 | 85.2 | 31 | 77.9 | 32 | 75.5 | 20 | 81.2 | 12 |
| Arkansas | 47.4 | 42 | 37.4 | 44 | 81.8 | 48 | 73.3 | 47 | 66.9 | 47 | 70.0 | 48 |
| California | 53.9 | 22 | 43.0 | 29 | 84.8 | 34 | 74.5 | 41 | 76.5 | 13 | 81.2 | 12 |
| Colorado | 50.0 | 37 | 41.3 | 35 | 88.3 | 9 | 81.8 | 15 | 71.3 | 38 | 77.4 | 31 |
| Connecticut | 63.7 | 2 | 55.7 | 3 | 87.8 | 12 | 83.9 | 9 | 81.1 | 5 | 82.9 | 8 |
| Delaware | 62.0 | 6 | 53.7 | 7 | 87.7 | 13 | 84.4 | 8 | 82.4 | 2 | 84.2 | 5 |
| D.C. | 63.2 | 3 | 54.9 | 4 | 88.5 | 7 | 85.2 | 6 | 80.9 | 6 | 83.7 | 7 |
| Florida | 56.2 | 17 | 49.3 | 14 | 84.1 | 41 | 78.7 | 28 | 76.5 | 13 | 82.1 | 10 |
| Georgia | 53.7 | 25 | 43.9 | 26 | 87.9 | 10 | 80.0 | 22 | 74.5 | 27 | 77.2 | 33 |
| Idaho | 47.3 | 43 | 37.8 | 43 | 78.8 | 49 | 72.5 | 49 | 63.9 | 50 | 67.6 | 50 |
| Illinois | 49.0 | 39 | 39.2 | 40 | 87.5 | 15 | 79.4 | 23 | 76.1 | 15 | 78.9 | 19 |
| Indiana | 50.5 | 35 | 39.9 | 39 | 82.5 | 46 | 74.0 | 45 | 69.2 | 40 | 73.7 | 40 |
| lowa | 51.6 | 30 | 44.1 | 25 | 86.0 | 25 | 80.1 | 21 | 75.2 | 24 | 78.1 | 25 |
| Kansas | 49.9 | 38 | 41.6 | 34 | 86.2 | 23 | 80.2 | 19 | 76.1 | 15 | 79.5 | 17 |
| Kentucky | 47.2 | 44 | 40.3 | 38 | 85.0 | 33 | 75.8 | 38 | 75.6 | 19 | 77.5 | 30 |
| Louisiana | 44.9 | 50 | 38.4 | 42 | 85.2 | 31 | 74.2 | 42 | 74.3 | 28 | 77.4 | 31 |
| Maine | 59.2 | 12 | 50.6 | 10 | 88.8 | 5 | 85.9 | 4 | 81.9 | 4 | 84.7 | 4 |
| Maryland | 62.2 | 4 | 54.5 | 5 | 89.0 | 3 | 86.4 | 2 | 79.0 | 9 | 82.9 | 8 |
| Massachusetts | 61.2 | 8 | 54.1 | 6 | 89.3 | 2 | 87.6 | 1 | 82.5 | 1 | 85.2 | 2 |
| Michigan | 60.4 | 9 | 50.5 | 11 | 86.5 | 21 | 82.6 | 10 | 78.9 | 10 | 81.6 | 11 |
| Minnesota | 66.3 | 1 | 56.9 | 1 | 87.9 | 10 | 85.5 | 5 | 80.5 | 7 | 85.2 | 2 |
| Mississippi | 46.8 | 45 | 37.2 | 46 | 84.5 | 38 | 72.3 | 50 | 66.4 | 49 | 69.8 | 49 |
| Missouri | 52.8 | 27 | 43.1 | 28 | 84.8 | 34 | 74.2 | 42 | 68.9 | 42 | 73.2 | 44 |
| Montana | 52.6 | 28 | 41.8 | 33 | 86.1 | 24 | 78.5 | 29 | 71.9 | 36 | 77.7 | 28 |
| Nebraska | 46.2 | 49 | 37.1 | 47 | 85.8 | 27 | 79.3 | 24 | 76.0 | 17 | 78.8 | 21 |
| Nevada | 46.7 | 46 | 36.7 | 49 | 84.8 | 34 | 74.2 | 42 | 69.3 | 39 | 73.6 | 42 |
| New Hampshire | 62.2 | 4 | 53.3 | 8 | 89.8 | 1 | 84.8 | 7 | 80.2 | 8 | 84.0 | 6 |
| New Jersey | 56.6 | 16 | 49.1 | 15 | 84.3 | 39 | 78.8 | 27 | 74.9 | 25 | 77.8 | 27 |
| New Mexico | 50.7 | 32 | 41.3 | 35 | 84.7 | 37 | 76.1 | 36 | 69.1 | 41 | 73.5 | 43 |
| New York | 56.7 | 15 | 47.6 | 17 | 85.4 | 29 | 80.3 | 18 | 75.5 | 20 | 78.8 | 21 |
| North Carolina | 54.6 | 21 | 48.7 | 16 | 88.4 | 8 | 82.0 | 13 | 77.4 | 12 | 80.5 | 14 |
| North Dakota | 53.9 | 22 | 43.2 | 27 | 83.3 | 43 | 78.4 | 30 | 72.2 | 34 | 76.4 | 35 |
| Ohio | 53.2 | 26 | 45.1 | 20 | 86.5 | 21 | 79.1 | 25 | 73.5 | 30 | 80.0 | 15 |
| Oklahoma | 46.7 | 46 | 35.7 | 50 | 82.9 | 44 | 73.9 | 46 | 67.6 | 45 | 72.7 | 46 |
| Oregon | 54.8 | 20 | 44.4 | 23 | 83.5 | 42 | 75.1 | 40 | 71.9 | 36 | 76.0 | 37 |
| Pennsylvania | 53.9 | 22 | 44.4 | 23 | 84.3 | 39 | 76.7 | 34 | 73.4 | 31 | 76.2 | 36 |
| Rhode Island | 61.7 | 7 | 56.0 | 2 | 89.0 | 3 | 86.1 | 3 | 82.4 | 2 | 86.0 | 1 |
| South Carolina | 55.9 | 19 | 46.9 | 19 | 87.1 | 20 | 78.4 | 30 | 72.1 | 35 | 76.7 | 34 |
| South Dakota | 50.3 | 36 | 42.8 | 30 | 87.3 | 18 | 80.8 | 16 | 76.0 | 17 | 79.1 | 18 |
| Tennessee | 50.6 | 33 | 44.9 | 21 | 87.3 | 18 | 81.9 | 14 | 78.0 | 11 | 78.9 | 19 |
| Texas | 48.4 | 41 | 38.9 | 41 | 82.2 | 47 | 73.1 | 48 | 67.8 | 44 | 72.9 | 45 |
| Utah | 56.0 | 18 | 44.6 | 22 | 78.2 | 50 | 76.5 | 35 | 66.6 | 48 | 72.0 | 47 |
| Vermont | 58.8 | 13 | 49.6 | 13 | 87.7 | 13 | 82.5 | 11 | 74.8 | 26 | 77.6 | 29 |
| Virginia | 59.9 | 10 | 51.5 | 9 | 87.4 | 16 | 79.1 | 25 | 73.7 | 29 | 78.1 | 25 |
| Washington | 57.4 | 14 | 47.1 | 18 | 85.4 | 29 | 80.2 | 19 | 72.8 | 32 | 78.6 | 24 |
| West Virginia | 46.3 | 48 | 37.3 | 45 | 82.6 | 45 | 75.3 | 39 | 72.5 | 33 | 75.7 | 38 |
| Wisconsin | 59.5 | 11 | 50.3 | 12 | 85.7 | 28 | 82.2 | 12 | 75.5 | 20 | 79.7 | 16 |
| Wyoming | 48.5 | 40 | 37.1 | 47 | 86.0 | 25 | 76.9 | 33 | 68.2 | 43 | 73.7 | 40 |

[^2]| State | Physical Activity ${ }^{\text {a }}$ |  |  |  | Unhealthy Eating ${ }^{\text {b }}$ |  |  |  | Obesity ${ }^{\text {c }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1994-1996 | 2002-2004 | Rank | Percent Change | 1994-1996 | 2001-2003 | Rank | Percent Change | 1993-1995 | 2002-2004 | Rank | Percent Change |
| Alabama | 61.1 | 68.1 | 47 | 11.5\% | 31.8 | 41.5 | 41 | 30.5\% | 19.2 | 31.5 | 48 | 64.1\% |
| Alaska | 75.4 | 77.7 | 16 | 3.1\% | 32.8 | 38.4 | 24 | 17.1\% | 22.4 | 28.5 | 32 | 27.2\% |
| Arizona | 68.5 | 76.9 | 23 | 12.3\% | 33.8 | 40.0 | 32 | 18.3\% | 18.2 | 24.4 | 12 | 34.1\% |
| Arkansas | 58.6 | 68.9 | 45 | 17.6\% | 29.3 | 42.5 | 43 | 45.1\% | 21.7 | 30.2 | 44 | 39.2\% |
| California | 75.5 | 77.2 | 19 | 2.3\% | 30.2 | 37.3 | 17 | 23.5\% | 17.9 | 24.6 | 14 | 37.4\% |
| Colorado | 78.1 | 82.5 | 3 | 5.6\% | 32.6 | 37.4 | 18 | 14.7\% | 16.0 | 19.5 | 1 | 21.9\% |
| Connecticut | 73.5 | 81.3 | 4 | 10.6\% | 24.0 | 30.6 | 4 | 27.5\% | 16.3 | 22.8 | 7 | 39.9\% |
| Delaware | 58.3 | 74.1 | 31 | 27.1\% | 33.5 | 35.9 | 15 | 7.2\% | 21.8 | 28.2 | 30 | 29.4\% |
| D.C. | 55.0 | 77.1 | 21 | 40.2\% | 28.8 | 32.5 | 7 | 12.8\% | 17.1 | 26.1 | 17 | 52.6\% |
| Florida | 70.7 | 72.4 | 40 | 2.4\% | 33.4 | 37.5 | 19 | 12.3\% | 19.4 | 26.5 | 21 | 36.6\% |
| Georgia | 50.2 | 70.7 | 43 | 40.8\% | 30.9 | 38.5 | 25 | 24.6\% | 18.3 | 29.3 | 39 | 60.1\% |
| Hawaii | 73.6 | 80.6 | 9 | 9.5\% | 31.1 | 35.0 | 9 | 12.5\% | 13.2 | 19.8* | 2 | 50.0\% |
| Idaho | 74.7 | 79.1 | 13 | 5.9\% | 33.6 | 39.5 | 29 | 17.6\% | 17.6 | 26.2 | 19 | 48.9\% |
| Illinois | 65.4 | 73.6 | 34 | 12.5\% | 33.9 | 53.4 | 51 | 57.5\% | 22.6 | 28.1 | 29 | 24.3\% |
| Indiana | 66.3 | 72.7 | 39 | 9.7\% | 35.3 | 40.8 | 36 | 15.6\% | 24.5 | 31.3 | 46 | 27.8\% |
| Iowa | 67.1 | 77.3 | 17 | 15.2\% | 35.4 | 42.0 | 42 | 18.6\% | 21.8 | 28.0 | 27 | 28.4\% |
| Kansas | 64.7 | 74.1 | 31 | 14.5\% | 30.2 | 42.5 | 43 | 40.7\% | 17.1 | 28.0 | 27 | 63.7\% |
| Kentucky | 47.7 | 68.4 | 46 | 43.4\% | 36.3 | 35.5 | 12 | -2.2\% | 20.3 | 29.0 | 35 | 42.9\% |
| Louisiana | 62.6 | 66.2 | 50 | 5.8\% | 37.0 | 43.5 | 46 | 17.6\% | 22.3 | 31.5 | 48 | 41.3\% |
| Maine | 58.5 | 76.8 | 25 | 31.3\% | 27.3 | 33.7 | 8 | 23.4\% | 17.9 | 24.6 | 14 | 37.4\% |
| Maryland | 64.6 | 77.2 | 19 | 19.5\% | 30.7 | 31.4 | 5 | 2.3\% | 20.8 | 26.1 | 17 | 25.5\% |
| Massachusetts | 72.6 | 81 | 8 | 11.6\% | 29.0 | 30.0 | 2 | 3.4\% | 15.7 | 22.1 | 3 | 40.8\% |
| Michigan | 74.2 | 76.6 | 26 | 3.2\% | 34.5 | 42.6 | 45 | 23.5\% | 25.5 | 30.8 | 45 | 20.8\% |
| Minnesota | 76.3 | 83.8 | 1 | 9.8\% | 30.3 | 39.2 | 28 | 29.4\% | 18.3 | 29.0 | 35 | 58.5\% |
| Mississippi | 55.7 | 65.6 | 51 | 17.8\% | 43.3 | 45.1 | 50 | 4.2\% | 23.8 | 32.8 | 50 | 37.8\% |
| Missouri | 66.0 | 73.2 | 37 | 10.9\% | 32.1 | 41.2 | 38 | 28.3\% | 23.8 | 27.5 | 25 | 15.5\% |
| Montana | 76.6 | 80.2 | 11 | 4.7\% | 28.7 | 35.6 | 14 | 24.0\% | 17.2 | 23.0 | 9 | 33.7\% |
| Nebraska | 72.8 | 77.3 | 17 | 6.2\% | 33.4 | 41.0 | 37 | 22.8\% | 21.6 | 28.6 | 34 | 32.4\% |
| Nevada | 74.6 | 74.9 | 30 | 0.4\% | 37.4 | 41.4 | 40 | 10.7\% | 15.7 | 22.9 | 8 | 45.9\% |
| New Hampshire | 72.1 | 80.0 | 12 | 11.0\% | 27.3 | 32.3 | 6 | 18.3\% | 16.9 | 23.8 | 11 | 40.8\% |
| New Jersey | 68.8 | 73.8 | 33 | 7.3\% | 25.4 | 37.9 | 21 | 49.2\% | 17.1 | 24.4 | 12 | 42.7\% |
| New Mexico | 74.4 | 79.0 | 14 | 6.2\% | 30.2 | 41.2 | 38 | 36.4\% | 15.2 | 23.3 | 10 | 53.3\% |
| New York | 64.2 | 73.6 | 34 | 14.6\% | 26.3 | 35.5 | 12 | 35.0\% | 20.4 | 26.0 | 16 | 27.5\% |
| North Carolina | 53.7 | 71.8 | 41 | 33.7\% | 33.6 | 36.7 | 16 | 9.2\% | 20.0 | 29.4 | 40 | 47.0\% |
| North Dakota | 61.3 | 76.9 | 23 | 25.4\% | 35.2 | 44.4 | 49 | 26.1\% | 21.4 | 30.1 | 42 | 40.7\% |
| Ohio | 55.4 | 73.3 | 36 | 32.3\% | 33.6 | 38.1 | 22 | 13.4\% | 21.7 | 29.4 | 40 | 35.5\% |
| Oklahoma | 59.7 | 67.5 | 48 | 13.1\% | 31.8 | 44.1 | 48 | 38.7\% | 15.8 | 29.2 | 38 | 84.8\% |
| Oregon | 77.1 | 81.1 | 6 | 5.2\% | 32.3 | 38.2 | 23 | 18.3\% | 19.0 | 26.2 | 19 | 37.9\% |
| Pennsylvania | 71.8 | 75.7 | 29 | 5.4\% | 33.4 | 40.1 | 33 | 20.1\% | 21.9 | 29.0 | 35 | 32.4\% |
| Rhode Island | 72.4 | 76.4 | 27 | 5.5\% | 30.6 | 35.3 | 10 | 15.4\% | 18.7 | 22.5 | 4 | 20.3\% |
| South Carolina | 62.9 | 73.2 | 37 | 16.4\% | 31.6 | 39.8 | 31 | 25.9\% | 21.9 | 28.5 | 32 | 30.1\% |
| South Dakota | 63.2 | 77.1 | 21 | 22.0\% | 31.3 | 39.0 | 27 | 24.6\% | 18.2 | 28.4 | 31 | 56.0\% |
| Tennessee | 57.2 | 66.5 | 49 | 16.3\% | 26.9 | 28.2 | 1 | 4.8\% | 19.8 | 30.1 | 42 | 52.0\% |
| Texas | 68.1 | 71.4 | 42 | 4.8\% | 30.1 | 40.7 | 35 | 35.2\% | 22.4 | 31.4 | 47 | 40.2\% |
| Utah | 77.6 | 80.4 | 10 | 3.6\% | 31.3 | 43.5 | 46 | 39.0\% | 18.5 | 27.1 | 23 | 46.5\% |
| Vermont | 74.9 | 81.1 | 6 | 8.3\% | 26.1 | 30.3 | 3 | 16.1\% | 18.6 | 22.7 | 6 | 22.0\% |
| Virginia | 70.4 | 75.8 | 28 | 7.7\% | 29.2 | 35.4 | 11 | 21.2\% | 18.4 | 27.4 | 24 | 48.9\% |
| Washington | 78.6 | 83.6 | 2 | 6.4\% | 32.6 | 37.5 | 19 | 15.0\% | 18.6 | 27.0 | 22 | 45.2\% |
| West Virginia | 52.8 | 70.3 | 44 | 33.1\% | 34.1 | 40.6 | 34 | 19.1\% | 20.7 | 33.6 | 51 | 62.3\% |
| Wisconsin | 75.0 | 81.2 | 5 | 8.3\% | 37.6 | 38.8 | 26 | 3.2\% | 22.8 | 27.7 | 26 | 21.5\% |
| Wyoming | 75.2 | 79.0 | 14 | 5.1\% | 30.6 | 39.6 | 30 | 29.4\% | 17.7 | 22.5 | 4 | 27.1\% |
| Median Rate | 68.5 | 76.6 |  | 11.8\% | 31.8 | 38.8 |  | 22.0\% | 19.0 | 27.7 |  | 45.8\% |

[^3]| State | Physical Activity ${ }^{\text {a }}$ |  |  |  | Unhealthy Eating ${ }^{\text {b }}$ |  |  |  | Obesity ${ }^{\text {c }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1994-1996 | 2002-2004 | Rank | Percent Change | 1994-1996 | 2001-2003 | Rank | Percent Change | 1993-1995 | 2002-2004 | Rank | Percent Change |
| Alabama | 46.9 | 62.7 | 44 | 33.7\% | 27.9 | 32.4 | 46 | 16.1\% | 16.3 | 21.0 | 37 | 28.8\% |
| Alaska | 47.3 | 65.3 | 37 | 38.1\% | 21.0 | 30.6 | 44 | 45.7\% | 21.7 | 22.6 | 44 | 4.1\% |
| Arizona | 63.6 | 71.1 | 8 | 11.8\% | 20.2 | 24.4 | 17 | 20.8\% | 10.4 | 16.9 | 5 | 62.5\% |
| Arkansas | 52.8 | 63.4 | 42 | 20.1\% | 23.3 | 30.4 | 42 | 30.5\% | 14.1 | 18.0 | 8 | 27.7\% |
| California | 75.0 | 74.6 | 5 | -0.5\% | 16.2 | 24.1 | 14 | 48.8\% | 11.9 | 19.7 | 24 | 65.5\% |
| Colorado | 71.7 | 72.6 | 6 | 1.3\% | 21.0 | 26.6 | 24 | 26.7\% | 8.5 | 13.4 | 2 | 57.6\% |
| Connecticut | 62.7 | 69.9 | 13 | 11.5\% | 15.3 | 20.1 | 2 | 31.4\% | 10.0 | 18.3 | 11 | 83.0\% |
| Delaware | 49.2 | 65.7 | 32 | 33.5\% | 17.8 | 27.2 | 30 | 52.8\% | 15.4 | 21.5 | 41 | 39.6\% |
| D.C. | 46.5 | 67.7 | 25 | 45.6\% | 23.7 | 22.8 | 10 | -3.8\% | 15.5 | 22.7 | 45 | 46.5\% |
| Florida | 68.5 | 67.8 | 24 | -1.0\% | 19.0 | 26.7 | 26 | 40.5\% | 12.0 | 18.5 | 14 | 54.2\% |
| Georgia | 39.7 | 62.3 | 46 | 56.9\% | 25.9 | 34.7 | 48 | 34.0\% | 12.3 | 20.9 | 35 | 69.9\% |
| Hawaii | 73.9 | 77.1* | 2 | 4.3\% | 21.4 | 24.4 | 17 | 14.0\% | 7.5 | 10.7 | 1 | 42.7\% |
| Idaho | 67.3 | 70.4 | 10 | 4.6\% | 20.8 | 28.5 | 34 | 37.0\% | 12.7 | 19.6 | 23 | 54.3\% |
| Illinois | 61.8 | 63.2 | 43 | 2.3\% | 19.8 | 43.7 | 51 | 120.7\% | 13.1 | 21.0 | 37 | 60.3\% |
| Indiana | 57.0 | 62.1 | 47 | 8.9\% | 27.8 | 30.5 | 43 | 9.7\% | 16.0 | 20.8 | 34 | 30.0\% |
| lowa | 60.7 | 66.6 | 27 | 9.7\% | 19.0 | 25.3 | 20 | 33.2\% | 16.0 | 24.2 | 50 | 51.3\% |
| Kansas | 54.6 | 65.4 | 34 | 19.8\% | 19.1 | 26.6 | 24 | 39.3\% | 12.5 | 18.9 | 20 | 51.2\% |
| Kentucky | 39.3 | 60.4 | 48 | 53.7\% | 28.7 | 28.3 | 32 | -1.4\% | 12.6 | 20.0 | 26 | 58.7\% |
| Louisiana | 51.9 | 57.5 | 50 | 10.8\% | 29.0 | 35.3 | 49 | 21.7\% | 17.9 | 22.8 | 47 | 27.4\% |
| Maine | 53.1 | 66.1 | 30 | 24.5\% | 16.5 | 21.3 | 5 | 29.1\% | 13.2 | 19.7 | 24 | 49.2\% |
| Maryland | 51.0 | 68.0 | 23 | 33.3\% | 22.2 | 21.2 | 3 | -4.5\% | 14.5 | 19.1 | 21 | 31.7\% |
| Massachusetts | 64.6 | 69.0 | 16 | 6.8\% | 19.4 | 22.2 | 7 | 14.4\% | 11.8 | 18.3 | 11 | 55.1\% |
| Michigan | 63.3 | 68.5 | 17 | 8.2\% | 18.7 | 28.3 | 32 | 51.3\% | 13.0 | 24.2 | 50 | 86.2\% |
| Minnesota | 62.7 | 77.3 | 1 | 23.3\% | 19.2 | 24.2 | 16 | 26.0\% | 15.3 | 20.4 | 31 | 33.3\% |
| Mississippi | 48.7 | 58.5 | 49 | 20.1\% | 35.5 | 39.6 | 50 | 11.5\% | 15.5 | 21.8 | 42 | 40.6\% |
| Missouri | 58.1 | 65.3 | 37 | 12.4\% | 21.2 | 28.8 | 36 | 35.8\% | 12.2 | 20.0 | 26 | 63.9\% |
| Montana | 63.5 | 69.8 | 14 | 9.9\% | 20.5 | 24.4 | 17 | 19.0\% | 12.0 | 16.2 | 4 | 35.0\% |
| Nebraska | 63.5 | 71.3 | 7 | 12.3\% | 20.0 | 27.0 | 29 | 35.0\% | 14.9 | 21.3 | 40 | 43.0\% |
| Nevada | 68.4 | 68.4 | 18 | 0.0\% | 23.7 | 28.6 | 35 | 20.7\% | 11.3 | 18.6 | 16 | 64.6\% |
| New Hampshire | 58.2 | 68.1 | 21 | 17.0\% | 20.1 | 21.8 | 6 | 8.5\% | 13.3 | 18.2 | 10 | 36.8\% |
| New Jersey | 56.0 | 670 | 26 | 19.6\% | 20.5 | 23.0 | 11 | 12.2\% | 12.2 | 19.2 | 22 | 57.4\% |
| New Mexico | 69.3 | 70.9 | 9 | 2.3\% | 23.9 | 30.1 | 40 | 25.9\% | 10.4** | 15.3 | 3 | 47.1\% |
| New York | 54.1 | 64.4 | 40 | 19.0\% | 18.2 | 25.3 | 20 | 39.0\% | 12.8 | 20.7 | 33 | 61.7\% |
| North Carolina | 44.0 | 65.4 | 34 | 48.6\% | 29.7 | 30.0 | 39 | 1.0\% | 14.6 | 20.9 | 35 | 43.2\% |
| North Dakota | 52.2 | 65.4 | 34 | 25.3\% | 20.7 | 24.1 | 14 | 16.4\% | 15.4 | 24.0 | 49 | 55.8\% |
| Ohio | 51.9 | 63.7 | 41 | 22.7\% | 22.2 | 26.0 | 23 | 17.1\% | 15.4 | 22.7 | 45 | 47.4\% |
| Oklahoma | 45.1 | 62.7 | 44 | 39.0\% | 19.6 | 30.2 | 41 | 54.1\% | 10.6 | 18.0 | 8 | 69.8\% |
| Oregon | 71.4 | 75.4 | 3 | 5.6\% | 20.7 | 25.7 | 22 | 24.2\% | 12.0 | 17.7 | 6 | 47.5\% |
| Pennsylvania | 60.4 | 64.7 | 39 | 7.1\% | 20.9 | 26.7 | 26 | 27.8\% | 14.9 | 23.0 | 48 | 54.4\% |
| Rhode Island | 63.2 | 65.8 | 31 | 4.1\% | 24.0 | 23.1 | 12 | -3.7\% | 11.1 | 18.3 | 11 | 64.9\% |
| South Carolina | 56.7 | 69.1 | 15 | 21.9\% | 22.4 | 29.5 | 38 | 31.7\% | 14.7 | 20.6 | 32 | 40.1\% |
| South Dakota | 51.1 | 68.4 | 18 | 33.9\% | 20.8 | 21.2 | 3 | 1.9\% | 14.4 | 20.1 | 28 | 39.6\% |
| Tennessee | 47.5 | 56.0 | 51 | 17.9\% | 22.0 | 22.3 | 8 | 1.4\% | 14.5 | 18.5 | 14 | 27.6\% |
| Texas | 60.4 | 66.4 | 28 | 9.9\% | 23.2 | 29.4 | 37 | 26.7\% | 12.2 | 20.1 | 28 | 64.8\% |
| Utah | 69.0 | 70.0 | 12 | 1.4\% | 20.8 | 31.1 | 45 | 49.5\% | 10.1 | 20.2 | 30 | 100.0\% |
| Vermont | 65.9 | 68.1 | 21 | 3.3\% | 16.0 | 19.5 | 1 | 21.9\% | 11.7 | 17.9 | 7 | 53.0\% |
| Virginia | 58.2 | 66.4 | 28 | 14.1\% | 19.7 | 23.7 | 13 | 20.3\% | 14.6 | 18.6 | 16 | 27.4\% |
| Washington | 74.7 | 74.7 | 4 | 0.0\% | 20.2 | 26.8 | 28 | 32.7\% | 12.4 | 18.7 | 18 | 50.8\% |
| West Virginia | 43.6 | 65.7 | 32 | 50.7\% | 27.1 | 34.0 | 47 | 25.5\% | 13.7 | 21.0 | 37 | 53.3\% |
| Wisconsin | 62.9 | 70.3 | 11 | 11.8\% | 15.5 | 22.5 | 9 | 45.2\% | 15.2 | 21.9 | 43 | 44.1\% |
| Wyoming | 68.5 | 68.2 | 20 | -0.4\% | 19.1 | 28.1 | 31 | 47.1\% | 12.6 | 18.7 | 18 | 48.4\% |
| Median Rate | 58.2 | 67.0 |  | 15.1\% | 20.8 | 26.7 |  | 28.4\% | 13.1 | 20.0 |  | 52.7\% |
| a Persons who report participating in any physical activity or exercise during the month before in <br> b Persons who report consuming less than 3 servings of fruit or vegetables per day. <br> c Persons reporting body mass index greater than 30.0. <br> * The data shown represents 2001-2003 survey responses as 2002-2004 data was unavailable. <br> ** The data shown represents 1994-1996 survey responses as 1993-1995 data was unavailable. <br> Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. |  |  |  |  |  |  |  |  |  |  |  |  |

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[^0]:    Source: Donna Hoyert, et al., Deaths: Final Data for 2003, National Vital Statistics Reports, Vol. 54, No. 13, April 19, 2006).

[^1]:    * The data shown represents 1999-2000 data as 1997-1998 data was unavailable.

    Source: Centers for Disease Control and Prevention, National Health Interview Survey.

[^2]:    Data for Hawaii is not available.
    Source: National Cancer Institute State Cancer Profiles Website, http://statecancerprofiles.cancer.gov/, reporting survey data collected from the 2004 Behavioral Risk Factor Surveillance System.

[^3]:    a Persons who report participating in any physical activity or exercise during the mont
    b Persons who report consuming less than 3 servings of fruit or vegetables per day.
    b Persons who report consuming less than 3 servings of
    c Persons reporting body mass index greater than 30.0.

    * The data shown represents 2001-2003 survey responses as 2002-2004 data was unavailable.

    Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.

