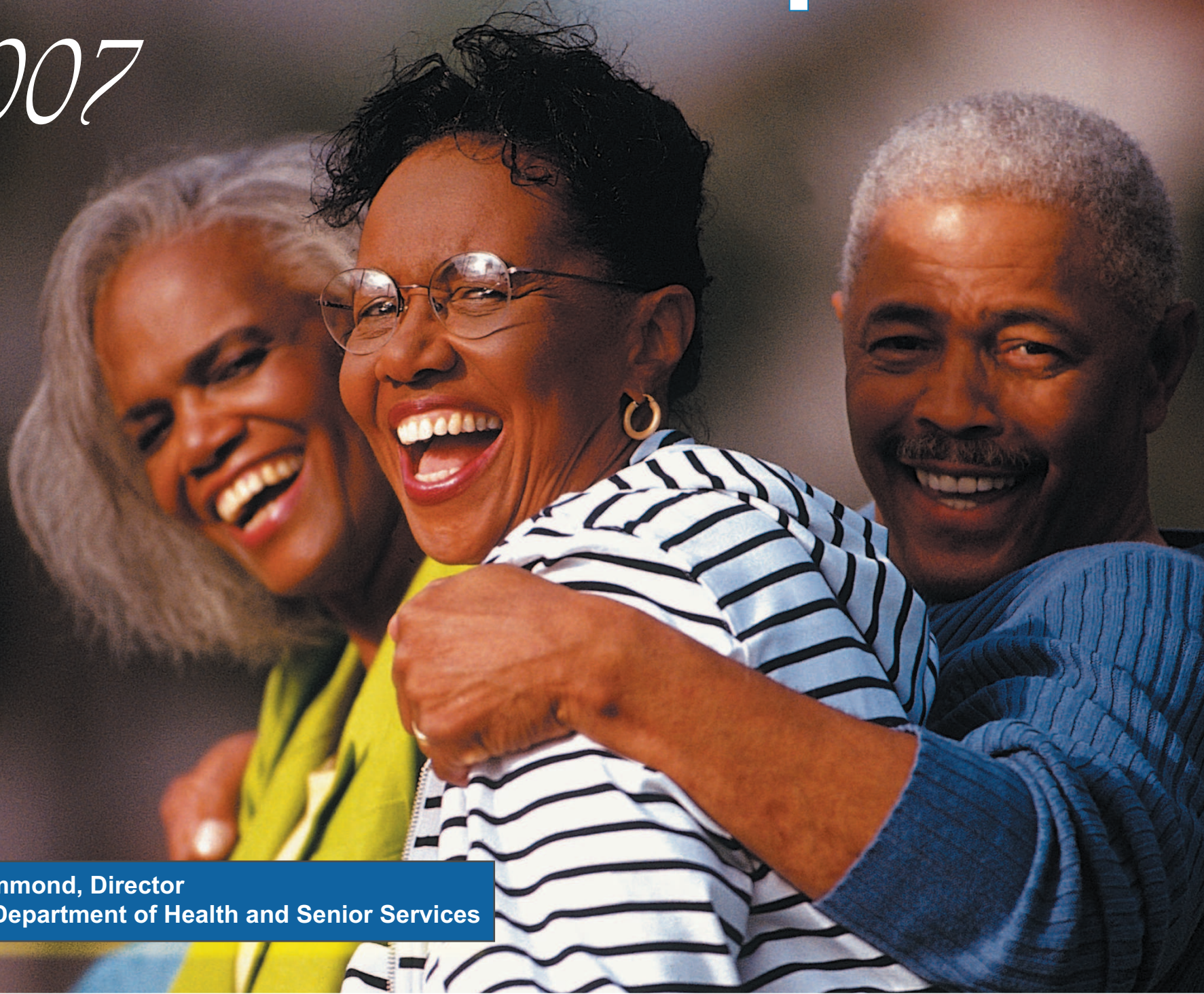


# Missouri Senior Report

*2007*



Jane Drummond, Director  
Missouri Department of Health and Senior Services

# Missouri Senior Report

# 2007



Missouri Department of Health and Senior Services  
PO Box 570  
Jefferson City, Missouri 65102  
[www.dhss.mo.gov](http://www.dhss.mo.gov)

The report can be accessed via the Internet at  
[www.missouriseniorreport.org](http://www.missouriseniorreport.org)  
[www.dhss.mo.gov](http://www.dhss.mo.gov)

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University of Missouri

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER  
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Dear Fellow Missourians,

Missourians over 65 will comprise nearly 20 percent of our state's population by the year 2020. The challenges of providing the necessary services and information to Missouri seniors in the near future will grow substantially. Gathering and compiling the necessary data is critical to assist in targeting these challenges and formulating appropriate solutions. The *Missouri Senior Report 2007* is a great resource that shows us the conditions facing our seniors.

A new and diverse aging population creates the need for novel and fresh approaches to the day-to-day issues facing an aging population. The growth of our senior population in Missouri and the United States is a driving force in affecting major economic and social developments. The *Missouri Senior Report 2007* is a tremendous tool to assist policy makers and personnel involved in senior services.

As the Official Senior Advocate for the State of Missouri, I commend the Department of Health and Senior Services and the University of Missouri Office of Social and Economic Data Analysis for their work and collaboration to gather, distill and produce the *Missouri Senior Report 2007*. We are all committed to a better, healthier and more secure future for all seniors.

Sincerely,

A handwritten signature in black ink that reads "Peter Kinder".

Peter D. Kinder  
Lieutenant Governor



Dear Fellow Missourians:

We are facing a dramatic rise in the number of older Americans and Missourians that will impact every aspect of our communities. Nearly one in five Missourians will be age 65 or older by 2020. This historic population shift has major social and economic implications for Missouri and our nation. A vast majority of older Americans prefer to “age in place,” which presents communities with challenges in the way they plan for this surging population. Missouri’s first-ever senior report last year provided policymakers and community leaders with important information about key aging issues in each of Missouri’s counties. It was chosen as one of the U.S. Administration on Aging’s (AoA) *2007 Choices for Independence Program Champions*.

*Missouri Senior Report 2007*, our second annual report, allows policymakers and communities to continue preparing for the growing senior population. With it, businesses, communities, and policymakers can track the trends of aging Missourians county by county on a variety of indicators, such as health, transportation, and housing.

This report is a collaborative effort between the Missouri Department of Health and Senior Services and the University of Missouri Office of Social and Economic Data Analysis. We look forward to future collaborations and to seeing the information contained in this report used to ensure that resources are available to serve the needs of our ever growing and changing senior population.

Sincerely,

A handwritten signature in black ink, appearing to read "Jane Drummond", is written over a light blue rectangular background.

Jane Drummond  
Director

# Acknowledgements

*The Missouri Senior Report 2007* is a collaborative effort of the Missouri Department of Health and Senior Services (DHSS) and the Office of Social and Economic Data Analysis (OSED) at the University of Missouri. Funding was provided by DHSS and OSED.

DHSS and OSED acknowledge the assistance and support of the ten Missouri Area Agencies on Aging.

The University of Missouri Interdisciplinary Center on Aging contributed resources to communicate the findings of the report through video and other materials.

The Missouri Senior Report Advisory Committee also provided valuable guidance in developing the report. Agencies and organizations represented on the committee include:

Foundation on Aging

Missouri Alliance of Area Agencies on Aging

Missouri Association of Local Public Health Agencies

Missouri Department of Economic Development

Missouri Department of Elementary and Secondary Education

Missouri Department of Health and Senior Services

Missouri Department of Higher Education

Missouri Department of Mental Health

Missouri Department of Social Services

Missouri Department of Transportation

Office of the Lieutenant Governor

Office of Social and Economic Data Analysis

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# Introduction

## December, 2007

As baby boomers age, and life expectancy continues to increase, the proportion of Missouri's senior population will increase from about 13 percent today to approximately 15 percent by 2010, and to 18 percent by 2020. The increase in the absolute number of seniors, as well as the proportion of the population they comprise, will have an impact on Missouri families, communities and local economies. As baby boomers age, their values and life experiences will influence Missourians' perceptions of the resources, needs, capacities and strengths of seniors. The *Missouri Senior Report* is a resource to inform state and local policy makers, service providers and families, in planning for the impact of an increasingly older Missouri.

The report includes comparative information on the status of seniors, including trends for which indicator data are available, as well as annual population estimates, population projections, and health and wellness information. Brief articles on the status of Missouri seniors' mental health trends, health disparities and housing costs also are included. A resource section provides contact information and a brief description of activities or services offered for seniors and those who serve them.

Trend data are available for eight indicators. Statewide, Missouri has improved on four of these indicators between the base and current years considered. Improvements are noted in health status, healthcare access, transportation and crime. Trends declined for measures of household composition, workforce participation and long term care. The economic well-being indicator for seniors changed marginally (0.33% to 0.34%). However, trends in these indicators vary within the state, affecting Missouri communities differently. Demographically, Missouri is a diverse state. The county populations range from over one million in St. Louis County to fewer than 2,300 in Worth County. In addition to variation between counties, the demographic, cultural and economic characteristics of Missouri communities vary greatly by urban, suburban or rural nature.

To address this diversity, while providing comparative data, the report presents information for individual Missouri counties. The report ranks each county on annually-updated outcome indicators. It also includes an overall county composite rank—a summary index of the overall well-being of seniors by county. To place these annual outcome measures in the broader community context, “status” indicators on demographics, quality of life and wellness are included for each county. As communities learn to accommodate to aging trends, they will confront specific challenges and opportunities. The indicators in the report will be used to track the direction of change.

## Understanding Senior Report Outcome and Status Indicators

Senior Report indicators present a brief annual snapshot of each Missouri county. The indicators and measures were selected through input from many Missourians with a personal and/or professional passion for the well-being of seniors. A standing advisory committee provides input into the structure and content of the report. The web site ([www.missouriseniorreport.org](http://www.missouriseniorreport.org)) includes additional measures and graphics viewable on the website and available for downloading. The *Missouri Senior Report 2006* is fully archived and accessible at the Senior Report website. You may also access a print-ready version of *Missouri Senior Report 2007* from the web site.

## Indicators

*Missouri Senior Report 2007* is organized around two types of information: “outcome” and “status” indicators. Outcome indicators measure progress over time. Tracking trends in these indicators supports efforts to improve the health, social, and economic well-being of Missouri seniors. Counties are ranked by each outcome indicator. The indicator rankings are combined to compute the composite outcome ranking. Status indicators present demographic, quality of life, and health status measures for a single point in time. They provide contextual information to support the interpretation of outcome measures.

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Measures were considered for “face validity,” or the meaningfulness of the indicator to describe counties comparatively and across time. Each outcome measure was reviewed for (a) assurance of sufficient numbers of cases to yield a reasonable estimate, and (b) relatively normal distribution of estimates among counties. Measures of statistical significance are available on the web site.

A composite county ranking also has been calculated, based on the sum of the standardized values for seven of the outcome measures. It represents an overall measure of the well-being of seniors. The purpose of the ranking is to help focus improvement on local factors that contribute to the quality of life of Missouri seniors.

Outcome and status measures are derived from reliable sources and tested for statistical reliability and validity. Because outcome indicators are measured annually, they are collected from various sources, including state administrative records (such as the Board of Healing Arts and the Department of Social Services) as well as federal reporting agencies (such as the Bureau of Labor Statistics and the F.B.I. Uniform Crime Reporting System).

Status indicators describing population characteristics are derived from the U.S. Census Bureau. Health and wellness indicators are drawn from the Center for Disease Control Behavioral Risk Factor Surveillance Survey (BRFSS). The glossaries of outcome and status indicators provide a detailed description of the construction and source of each measure.

The cultural and economic diversity of the state presents challenges to substantive comparisons, even when standards of methodological comparability have been met. For example, seniors in Missouri’s cities without a valid Missouri driver’s license are more likely to have access to affordable, reliable public and private transportation, than are seniors in rural communities. To enhance the quality of the Senior Report transportation

indicator, Missouri’s Area Agencies on Aging are working collaboratively to implement a standardized transportation services tracking system. The system was piloted this year, and we anticipate incorporating this information in 2008, allowing the report of an index of transportation modes available to seniors by county.

Identifying annually available county-level indicators is necessary to produce a resource that provides timely and meaningful information to inform effective public policy. However, the use of secondary data sources also introduces the risk that changes in the structure of the data—or issues in data quality—may occur. For instance, such changes might be adjusted by alternate administrative procedures, and the corrections might not be reflected in the data set. When these situations occur, it may be necessary to change the measure used to describe the indicator or, alternatively, to note the impact of a data inconsistency in reporting. For example, as of 2005, physicians were no longer required to report the percentage of the time they practice by county. The Senior Report advisory group determined it was more accurate to continue reporting 2004 information, than to use less specific 2005 information, when describing seniors’ access to primary care.

In 2009 the U.S. Census Bureau will release the American Community Survey (ACS) for counties with populations of 20,000 or more; in 2010 ACS data will be available for all levels of census geography. The American Community Survey will provide consistently gathered, comparable county-level information about Missourians that can be disaggregated by age, race, and many other relevant characteristics. The ACS will likely be used as a resource in future Senior Reports.

## **Outcome Indicators**

### *Household Composition*

The 2000 U.S. Census indicates Missouri had a relatively large propor-



# Introduction

tion of seniors living in single person households. Seniors who live with someone are less likely to be socially isolated, and may have help with many issues. Consequently, household composition is an important indicator for seniors' well-being. Because census measures of single person households are not available annually, the percent of seniors filing joint Missouri income tax returns was used to gauge household composition. Between 2000 and 2005, the percent of seniors filing joint income tax returns declined marginally from 44.8 to 43.8 percent. In 2005 the percent of seniors filing joint returns ranged from a high of 57.5 percent in Washington County to a low of 27.6 percent in Knox County.

## *Economic Well-being*

Economic well-being for seniors can be measured by the percentage of seniors living in poverty. In 2000 the poverty rate for Missouri seniors was 9.9 percent, as compared to 10.9 percent nationally. Census poverty estimates for the senior population are not available annually; however, there are estimates on the numbers of low-income individuals and seniors who receive Supplemental Security Income (SSI). The Bureau of Economic Analysis provides these annual estimates. Therefore, a relative index of economic well-being was created by calculating the SSI payment as a percentage of total personal income. In Missouri, overall SSI payments represent one-third of one percent of total personal income, consistent with last year's estimate. By county, this index of economic well-being ranges from a high of nearly two percent in Pemiscot County to a low of under one-tenth of a percent in Platte and St. Charles Counties.

## *Workforce Participation*

Senior participation in the workforce may be viewed as either an adverse or positive outcome. An adverse view may result if seniors work because they are strapped for cash, and would prefer to be fully retired. If, however, workforce participation is the result of an increased availability in

less physically-demanding service and retail jobs, and if seniors want to remain economically and socially engaged, the outcome can be positive. On balance, the advisory committee views an increase in senior workforce participation as positive. Yet, senior participation in the Missouri workforce decreased from 9.8 percent in 2001 to 8.2 percent in 2005. By county, senior participation in the workforce ranged from a low of under one percent in Douglas County to a high of nearly 17 percent in Taney County in 2005.

## *Transportation*

Transportation is necessary, in order to obtain goods and services, or to participate in work and social activities. Whether seniors have the capacity to meet their transportation needs is often measured by how many hold a valid driver's license. Transportation needs are also likely to vary, depending on the availability of mass transit. Whatever transportation arrangements seniors make, the lack of a driver's license indicates that transportation is an issue. The percent of Missouri seniors with a valid driver's license increased from 76.7 percent in 2001 to 81.5 percent in 2006. In suburban (and especially rural) counties with lower percentages of licensed senior drivers, transportation is likely to be a more pressing issue than in similar counties with higher percentages of senior drivers, or in more urbanized areas that have public and private transportation resources. In 2005 the percent of Missouri seniors with a valid driver's license ranged from a high of 97.0 percent in Daviess County, to a low of approximately 53 percent in St. Louis City.

## *Health Status*

Selecting one health status measure for the senior population is particularly difficult because of the wide range of health issues confronting seniors. The Missouri Department of Health and Senior Services tracks numerous health and mental health indicators to inform communities of health

# Introduction

status needs. The Senior Report advisory group selected the measure of “number of hospitalizations and ER visits for diabetes, averaged over three years per 10,000 seniors.” Tracking diabetes-related care is a valuable proxy for health status because (a) the number of cases by county is sufficient to produce a reliable rate; (b) diabetes is related to many other health problems; and (c) effective preventive measures can reduce the incidence of diabetes and related health problems. The rate of diabetes hospitalizations and ER visits per 10,000 seniors in Missouri decreased from 71.4 in 2001, to 70.6 in 2005. In 2005 the rate ranged from a high of 158.1 per 10,000 seniors in Ripley County to 8.3 in Clark County.

## *Health Care Access*

One measure of health care access for seniors is the number of primary care physicians per 1,000 seniors. Overall access improved in Missouri between 2000 and 2004, largely because the number of primary care physicians per 1,000 Missourians increased from the equivalent of 5.1 to 5.5 full-time physicians. In 2004 access to primary care physicians ranged from a low of under one-half of one full-time primary care physician per 1,000 seniors in Bollinger County to over 15 per 1,000 seniors in Boone County.

## *Long Term Care*

Long term care represents a significant health care cost for both seniors, who tend to have limited incomes, and for the state, due to Medicaid expenditures. The number and value of long-term care insurance policies would be a useful measure for this indicator. However, these data are not reported by county. Consequently, this report presents the portion of long-term care costs paid by Medicaid for in-home and institutionalized long-term care services per capita. This annual measure shows the trend, if not the full expense, of long term care. Long-term care costs have

increased from \$122 per capita in 2002 to \$138 per capita in 2006—a 25% increase in three years in unadjusted dollars. However, because the measure is confounded between counties by differential rates of Medicaid eligibility and differential health care costs, this measure is not used in the construction of the overall county index of senior well-being.

## *Crime*

At regional planning meetings for the report, participants consistently expressed a concern about crime and its relation to seniors. Accordingly, the number of property and violent crimes per 1,000 persons is reported as an outcome measure. Overall, the Missouri crude crime rate declined from 48.8 in 2001 to 45.4 in 2006. In 2006 the crude crime rate ranged from a low of 3.7 crimes per 1,000 persons in Schuyler County to a high of 146.9 in St. Louis City.

## *Housing*

The U.S. Department of Housing and Urban Development (HUD) considers families who pay more than 30 percent of their income for housing as cost burdened; these families may have difficulty affording necessities such as food, clothing, transportation and medical care. Housing costs include mortgage or rent, taxes, insurance and utilities. Seniors, particularly those over 75 or those living on fixed incomes, are vulnerable. According to the 2006 American Community Survey (ACS), households with seniors comprise approximately one-half million of Missouri’s 2.3 million households. Of these senior households, 28.9 percent reported spending more than 30 percent of their income on housing costs. County-level 2006 ACS data are available for counties with populations of 65,000 or more. While this measure is reported for counties for which it is available, it will not be considered in the composite ranking until comparable data are available for all counties.

# Introduction

## Status Indicators

### *Demographics*

The proportion of seniors in Missouri's population was 13.5 percent in 2000 and 13.3 percent in 2006. By 2010 the proportion of Missouri's population aged 65 or over is projected to be nearly 15 percent, and by 2020 the proportion is projected to be more than 18 percent – proportions higher than the nation overall. Missouri's total population is approaching six million and in recent years has sustained slow but steady overall growth—a slightly more than four percent increase between 2000 and 2006. The state's senior population (65 and older) also grew slowly from 755,838 in 2000 to 778,891 in 2006—a three percent increase. The recent consistent growth of the senior population (compared to the state's total population) reflects the smaller cohorts of people born during the Great Depression and World War II. However, the first baby boomers will turn 65 in 2011, beginning a trend of relative growth in the senior population that will continue until approximately 2030. An important characteristic of the senior population is the greater proportion of women than men. This gender difference is projected to moderate somewhat, but remain a persistent feature of the older population, and carries implications for the types of services seniors need.

### *Quality of Life*

Six measures of the overall quality of life among seniors are included as status indicators. The most recent source for these measures is the 2000 U.S. Census, although the introduction of the American Community Survey will provide annual estimates for most Missouri counties in 2009 and all counties by 2010.

### **Owner-Occupied Housing**

Seniors' housing needs are more likely to be met if they live in owner-occupied housing. In 2000, Missouri reported a higher percentage of

owner-occupied housing among seniors (79.1%) than the nation overall (77.6%). The rate ranged from 91 percent in Hickory County to 61 percent in St. Louis City.

### **Seniors Living in Families**

Family life enhances the senior population's well-being. The Census defines families as two or more related persons living in the same household. Persons residing in single person households are not reported as "families." In 2000, 17.6 percent of Missouri seniors lived in family households, compared with 16.6 percent nationally. By county, the percent of seniors living in family households ranged from a high of 33 percent in Hickory County to fewer than 11 percent in Platte County.

### **Median Value of Owner-Occupied Housing**

Home ownership is a significant asset for most seniors, and the relative value of housing is a useful indicator of county assets. In 2000, the median value of owner-occupied housing in Missouri was \$86,900 compared with \$111,800 nationally. By county, the median value of housing ranged from a high of \$127,800 in Platte County to a low of \$34,300 in Worth County.

### **Seniors in Poverty**

The proportion of seniors living in poverty is a direct measure of economic need. However, the Census infrequently measures senior poverty rates at the county level. In 2000 the overall poverty rate among seniors in Missouri was 9.9 percent compared with 10.9 percent nationally. In 2000 by county, the poverty rate among seniors ranged from a low of 5.1 percent in St. Charles County to a high of 23.2 percent in Pemiscot County.

### **Average Income of Senior Households**

In 2000 the average income of households headed by seniors in Missouri

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was \$37,822, compared with \$41,712 nationally. In 2000 by county, average household income ranged from more than \$51,000 in St. Louis County to just under \$21,600 in Putnam County.

## **Seniors with a College Education**

A high proportion of seniors with a college education increase the capacity of communities to contribute to the quality of life of seniors. In 2000, 11.8 percent of Missouri seniors had a college education compared with 15.4 percent for the United States. The state's senior population with a college education in 2000 ranged from 27.9 percent in Boone County to 3.0 percent in Schuyler County.

## ***Health and Wellness***

The health and wellness of Missouri seniors can be gauged in several ways. The report presents seven indicators related to long-term health and wellness. These indicators have been selected, since preventative practices can be adopted to foster improved health. These wellness measures are taken from health survey data for which the best estimate available is a multi-county regional measure. Find additional information, and references about health indicators and health practices, at the Missouri Department of Health and Senior Services' Web sites [www.dhss.mo.gov/CommunityDataProfiles/](http://www.dhss.mo.gov/CommunityDataProfiles/) and [www.dhss.mo.gov/Health/index.html](http://www.dhss.mo.gov/Health/index.html).

## **No Exercise, 2006**

In 2006 the percent of Missouri seniors reporting they participated in no exercise was higher (35.9%) than the national rate among seniors (32.7%).

## **No Sigmoidoscopy or Colonoscopy, 2006**

Approximately 47 percent of Missouri seniors report not having a screening test for colon cancer (sigmoidoscopy or colonoscopy) within the past 10 years.

## **High Blood Pressure, 2005**

The state and federal rates are the same (54.8%) for seniors who have been told by a health care professional that they have high blood pressure.

## **Obesity, 2005**

Slightly more Missouri seniors (24.3%) have a body mass index indicating obesity than seniors nationally (22.0%).

## **Smoking, 2006**

Marginal more Missouri seniors report currently smoking (8.7%) than seniors nationally (8.6%).

## **No Mammography, 2006**

A greater percent of Missouri senior women (39.8%) have not had a mammogram in the past year than senior women nationally (21.6%).

## **High Cholesterol, 2005**

More Missouri seniors (55.3%) have been told by a health care professional that they have high cholesterol levels than seniors nationally (50.6%).

## **Conclusion**

The report offers valuable information on the current status of Missouri's senior population, and highlights areas of strength and opportunity. It is intended to increase awareness of the demographic issues that will affect Missouri in the next decade and beyond. Communities, policy leaders and individuals are encouraged to use this report as a tool to assess, plan and respond to the impact of the increasing population.

# Health Disparities among Seniors

By Tracy Greever-Rice, Associate Director, OSEDA; Stan Hudson, Senior Policy Analyst, Center for Health Policy, University of Missouri

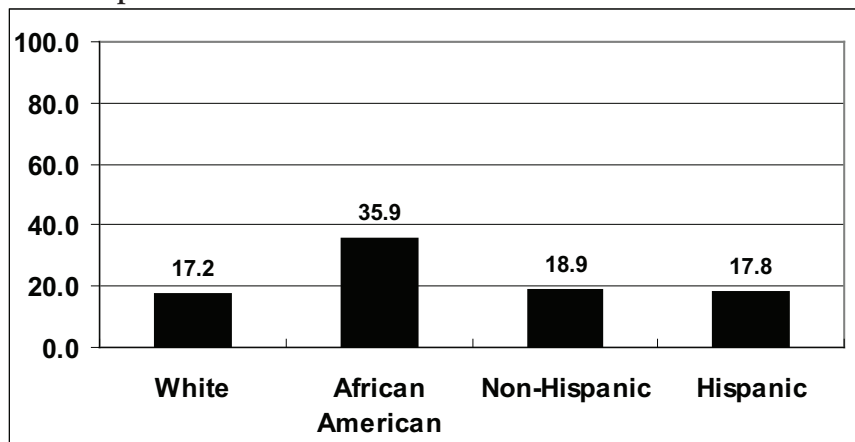
## Population

Seniors accounted for 13.0 percent of Missouri's population in 2006, according to U.S. Census Bureau Population Estimates. Seniors as a proportion of the population are anticipated to increase to nearly 15 percent by 2010, and more than 18 percent by 2020. The race and ethnic composition of the senior population has remained relatively stable since 1990. African American seniors made up 7.2% of the population; the percentage of White seniors was approximately 92.5%. The Hispanic senior population has increased only slightly from 0.4% in 1990 to 0.9%<sup>1</sup> in 2006. Growth in the Hispanic population is expected to increase dramatically in the coming decades.

## Socioeconomic Disparities

Significant socioeconomic disparities exist among Missouri seniors, based on race and ethnicity. As seen in Figure 1, nearly 36 percent of African Americans age 65 years and older were living in households with incomes

Figure 1. Percent Seniors by Race and Ethnicity Reporting Less than \$20,000 per Year Total Household Income



Source: Behavioral Risk Factor Surveillance System Survey Data, 2004.

less than \$20,000 per year—approximately twice the rate of White seniors and Hispanic seniors.<sup>2</sup>

Seniors in low income households are less likely to receive needed healthcare (including preventative care), and more likely to forgo physician visits and medications because they cannot afford them. Without adequate health care, seniors often experience serious complications due to undiagnosed and untreated conditions, which as they worsen, further increase existing health disparities. Poor seniors experience greater disability,<sup>3</sup> faster decline in mental capabilities,<sup>4</sup> and more limitations on daily life activities.<sup>5</sup>

## Health Disparities by Race and Ethnicity

Racial and ethnic health disparities among Missouri seniors are most apparent when comparing the death rates from many common diseases. Figure 2 presents seven common causes of death by race and ethnicity.<sup>6</sup>

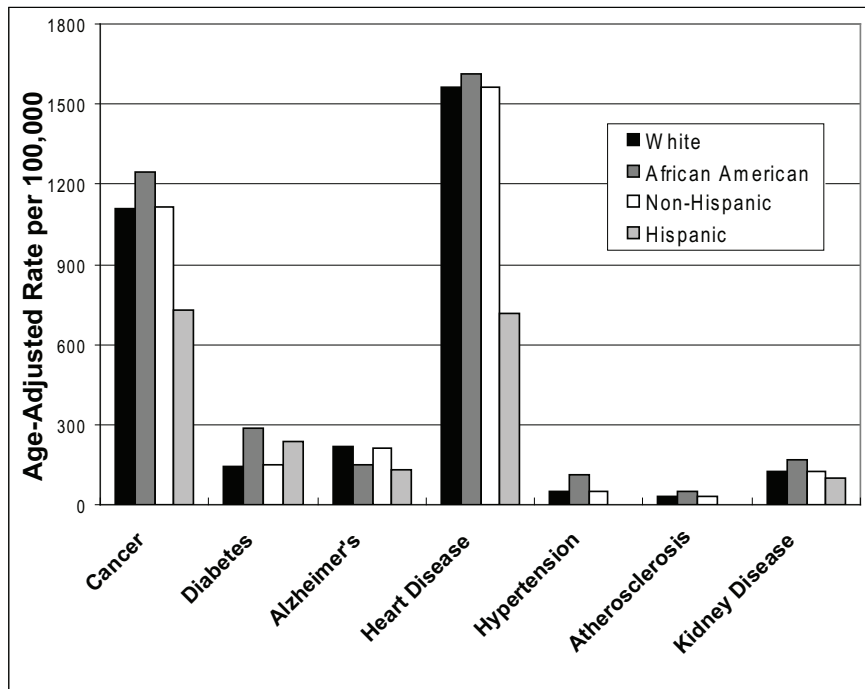
The highest rates of disparities were found for hypertension, diabetes, and atherosclerosis. African American seniors were approximately twice as likely to die from these diseases as Whites. During the same period, Whites were approximately one-third more likely to die from Alzheimer's disease than non-Whites.

In 2005, Hispanics were approximately one-third more likely to die from diabetes than their non-Hispanic counterparts. Current data show fewer disparities between Hispanic and non-Hispanic Missouri seniors, however, Missouri-specific data for persons of specific ethnicities are limited. At this time, data are available for Hispanic compared to non-Hispanic populations, although Hispanic seniors' health outcomes vary greatly, depending upon factors such as cultural heritage and economic status.

# Health Disparities among Seniors

Death rates provide valuable indicators to inform public policy and health care interventions intended to decrease disparities and improve outcomes for Missouri's senior minority populations.

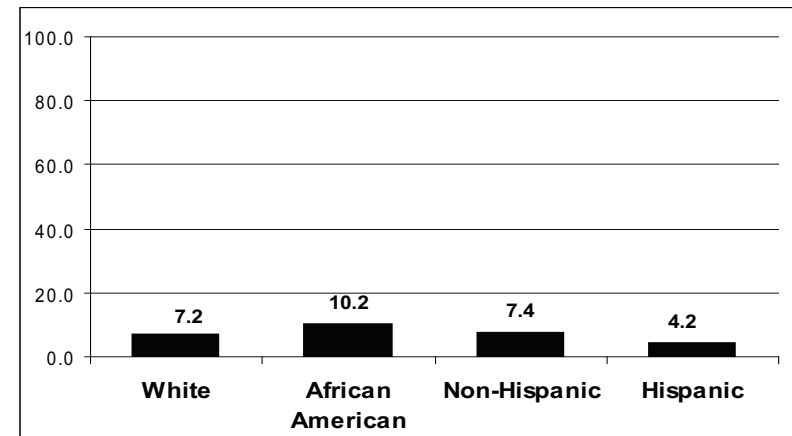
**Figure 2.**  
2005 Death Rates by Race & Ethnicity



Source: Behavioral Risk Factor Surveillance System Survey Data, 2004.

Selected responses from the Behavior Risk Factor Surveillance Survey<sup>7</sup> (BRFSS) indicate health and wellness factors that can be addressed to more effectively prevent and successfully manage diseases among seniors. (See Figure 3.)

**Figure 3.**  
Percent Seniors by Race & Ethnicity Reporting Diabetes Diagnosis



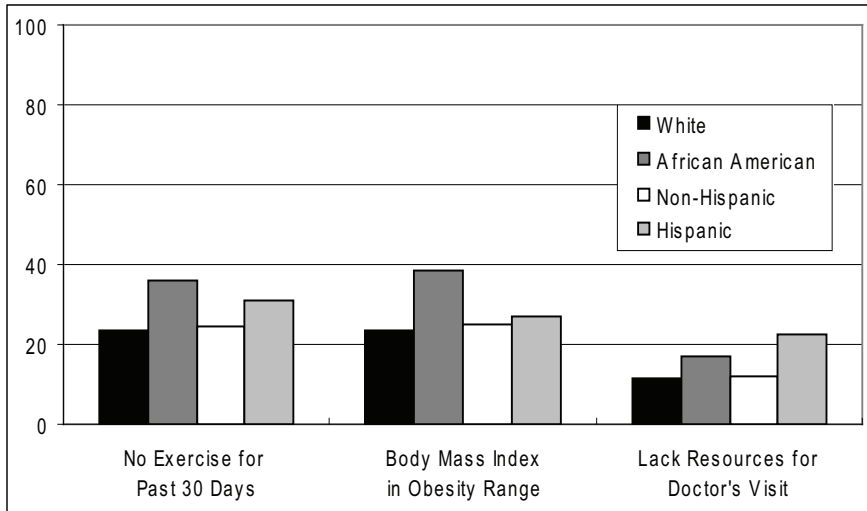
Source: Behavioral Risk Factor Surveillance System Survey Data, 2004.

For example, African American seniors are diagnosed with diabetes at a higher rate than White or Hispanic seniors in Missouri. Diabetes is a highly treatable disease, particularly when diagnosed early, and consistently managed.<sup>8</sup> Yet a greater percent of African American seniors report barriers to many of the activities and resources known to effectively prevent and manage this chronic illness. (See Figure 4.)

When surveyed for the 2004 BRFSS, nearly 36% of African American seniors and 31% of Hispanic seniors reported not participating in exercise during the previous month, compared to less than 25% of White and Non-Hispanic respondents. Similarly, a greater percentage of African American and Hispanic seniors reported not visiting their physicians, because they lacked resources to pay for the visit. Approximately 15% more African American seniors reported Body Mass Index<sup>9</sup> scores in the 'Obese' range than did White seniors. Table 1 presents findings related to these BRFSS items. (See Table 1, page 11.)

# Health Disparities among Seniors

Figure 4. Percent Seniors by Race & Ethnicity Reporting Risk Factors for Diabetes



Source: Behavioral Risk Factor Surveillance System Survey Data, 2004.

## Implications

Racial and socioeconomic health disparities have substantial implications for Missouri communities and their senior population. Economically, communities with systemically unhealthier senior populations experience reduced productivity from both seniors and their caregivers. Moreover, preventative treatment is less expensive than treating complications of chronic illnesses. The implications are significant. Senior with chronic untreated diseases experience reduced quality of life, and further social and economic limitations. Increased difficulty in performance of daily activities reduces independence and causes distress, which further contributes to physical and mental deterioration.

## Best Practices

Efforts to educate providers in delivering culturally-competent health services for minority seniors has been shown to reduce racial and ethnic disparities.<sup>10</sup> Intensifying recruiting efforts to create a diverse health-care workforce, more reflective of the racial and ethnic makeup of Missouri, may reduce health care disparities.<sup>11</sup> Greater emphasis on understanding and improving the health literacy of seniors (specifically, culturally-sensitive outreach), also has potential to reduce health disparities.<sup>12</sup> Finally, health outreach programs for minority populations have a proven track record in other states.<sup>13</sup>

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# Health Disparities among Seniors

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**Table 1.**  
Selected Responses Missouri BRFSS 2004 — Percent Seniors by Race & Ethnicity

	Did you do exercise in the past 30 days?	Was there a time during the last 12 months when you needed to see a doctor, but could not because of the cost?	BMI, Body mass index indicator obese
White	23.3	11.3	23.6
African American	35.8	16.8	38.4
Non-Hispanic	24.5	12.2	24.9
Hispanic	31.2	22.4	26.9

Source: Behavioral Risk Factor Surveillance System Survey Data, 2004.



# Housing and Seniors

By William L. Elder, Ph.D., Director, OSEDA

Housing is a critical need for all families, and affordable housing is especially important for senior households that often have more limited incomes than many younger families. According to the U.S. Department of Housing and Urban Development, “The generally accepted definition of affordability is for a household to pay no more than 30 percent of its annual income on housing. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.”<sup>1</sup> Housing costs include mortgage or rent, taxes, insurance and utilities.

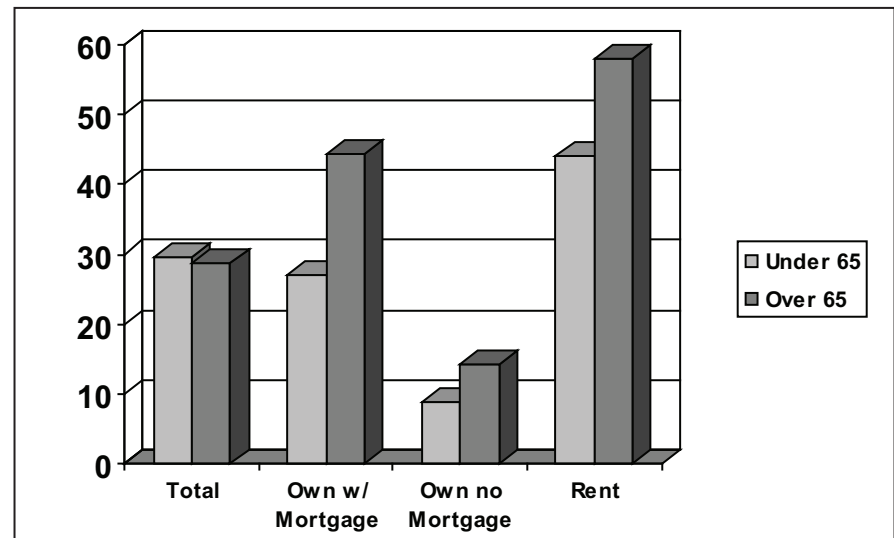
Nearly 29 percent of Missouri households with a householder over age 65 pay more than 30 percent of their income for housing—over 138,000 households. The Missouri percentage compares favorably to the U.S. estimate of 35 percent. Information from the American Community Survey<sup>2</sup> permits a description of the extent of housing expenses by type of household. In 2006, there were 2,305,021 households in Missouri. Nearly one-half million of these (494,796) were “older households” with a householder over the age of 65.

The extent to which households are housing cost burdened depends on many factors including age, income and tenure (whether housing is rented or owned, and if owned, whether there is a mortgage).

Renters are more cost burdened than owners. Nationally, among senior households that rented, 61.2 percent were housing cost burdened in 2006, compared to 28.8 percent among homeowners. In Missouri, 58 percent of older renters were cost burdened, while 22.5 percent of older homeowners were housing cost burdened. Figure 1 shows the percent of households that were housing cost burdened in 2006 by age and type of tenure. Older

households are proportionally more burdened than younger households by tenure. For example, 44.5 percent of senior householders, who own their home with a mortgage, are housing cost burdened compared with 26.9 percent among similar younger households. However, the number of cost burdened households is greater among younger households (see Figure 2), because seniors are only about 21 percent of all households. Also, seniors are more likely to be owners (80%) than younger householders (68%), and senior households are much more likely to own their homes without a mortgage remaining (58%) than younger households (14%).

Figure 1.  
Percent Housing Cost Burdened by Age and Tenure, 2006

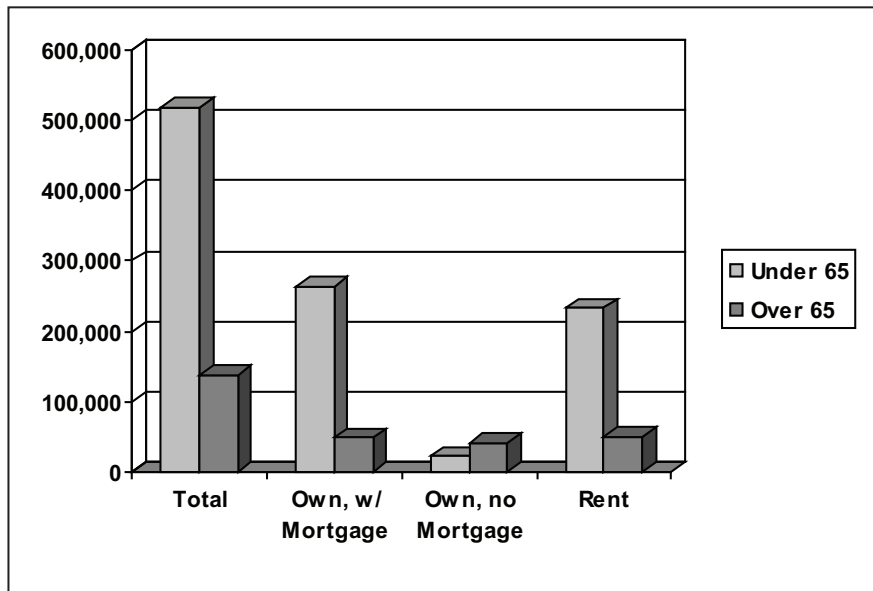


Source: Bureau of the Census, American Community Survey, 2006

# Housing and Seniors

Naturally, the level of household income is a factor in the extent to which households are housing cost burdened. According to the 2006 American Community Survey in Missouri, there were 686,311 households with incomes below 60 percent of the state median income (\$42,200). This income threshold was set by the Missouri Housing Development Commission Task Force on Senior Housing in its recent report.<sup>3</sup> Of the 138,191 senior households that were housing cost burdened, 108,865 (or 79 percent) were low income households. This compares with 60 percent of the younger households.

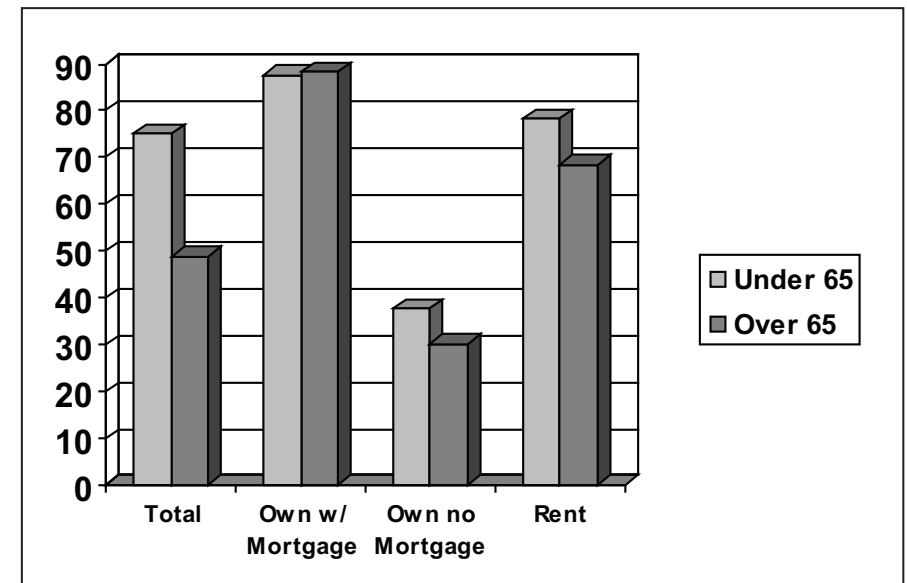
**Figure 2.**  
Number of Cost Burdened Households in Missouri by Age and Tenure, 2006



Source: Bureau of the Census, American Community Survey, 2006

This income difference reflects the general reduced level of earnings among seniors, highlighting why affordable housing is a concern for many of them. Figure 3 shows the percent housing cost burden by tenure and age for low income households. Senior householders who own their home, but continue to have a mortgage, have the single highest level of housing cost burden (88.2%).

**Figure 3.**  
Percent Housing Cost Burdened by Age and Tenure among Low Income Households, 2006

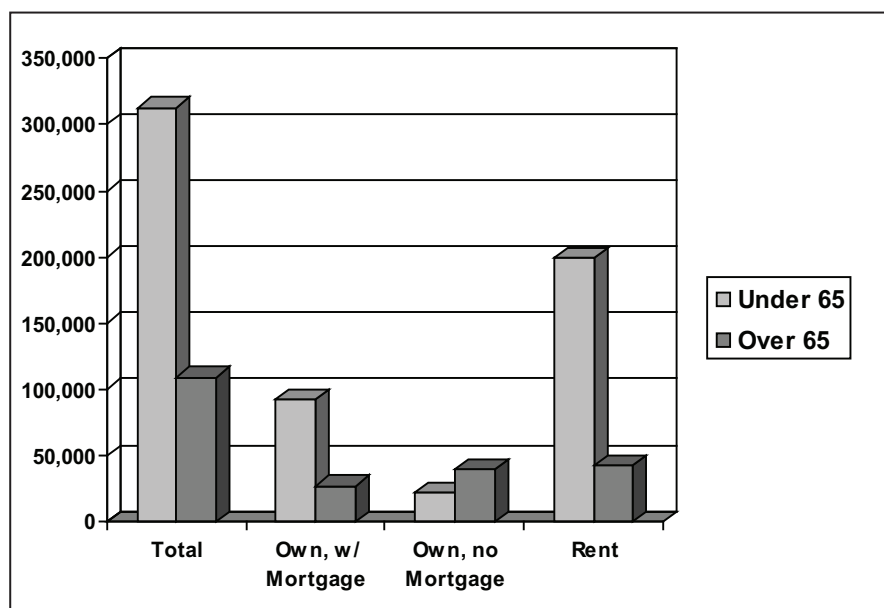


Source: Bureau of the Census, American Community Survey, 2006

# Housing and Seniors

Figure 4 shows the number of housing cost burdened households among the low income households. Among those spending more than 30 percent of household income on housing are 27,016 senior home owners with a mortgage, 39,388 senior home owners without a mortgage, and 42,461 seniors householders who are renters.

**Figure 4.**  
**Number of Cost Burdened Households in Missouri by Age and Tenure among Low Income Households, 2006**



Source: Bureau of the Census, American Community Survey, 2006

Older homes require higher maintenance and repair costs than newer homes, and often present challenges for older householders, especially those with disabilities. In Missouri in 2006, 36 percent of householders over age 65 live in houses constructed prior to 1960, compared with 31 percent of younger householders.

Information about housing costs and the characteristics of householders will become increasingly accessible, with the release by the U.S. Census Bureau of more detailed American Community Survey data (beginning in 2008). Currently, ACS data is available for only a limited number of geographic units and regions within the state. Next year, a more complete description of the geographic diversity in housing patterns among Missouri seniors will be possible.

## Endnote

Table 1. Number and Percent of Missouri Households by Age, Tenure, Income and Cost Burdened Status, ACS 2006 (see page 21).

## References

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- 2 U.S. Census, American Community Survey, 2006 <http://www.census.gov>
- 3 [http://www.mhdc.com/notices/Senior\\_Housing\\_Task\\_Force\\_Report\\_7-2007.pdf](http://www.mhdc.com/notices/Senior_Housing_Task_Force_Report_7-2007.pdf)

# Housing and Seniors

Table 1: Number and Percent of Missouri Households by Age, Tenure, Income and Cost Burdened Status, ACS 2006							
	All Ages	Age Under 65	65 or Older		All Ages	Age Under 65	65 or Older
<b>Number of Households by Age and Tenure--All Income Levels</b>				<b>Number of Households by Age and Tenure--Low Income</b>			
All Households	2,305,021	1,810,225	494,796	686,311	452,125	234,186	
Costs Unknown	68,924	54,644	14,280	46,807	35,413	11,394	
Not Cost Burdened	1,580,291	1,237,966	342,325	217,843	103,916	113,927	
Cost Burdened	655,806	517,615	138,191	421,661	312,796	108,865	
Own, with Mortgage	1,089,816	981,006	108,810	139,506	108,468	31,038	
Costs Unknown	3,601	3,202	399	3,601	3,202	399	
Not Cost Burdened	775,124	714,998	60,126	16,615	12,992	3,623	
Cost Burdened	311,091	262,806	48,285	119,290	92,274	27,016	
Own, no Mortgage	543,100	254,268	288,832	191,806	60,009	131,797	
Costs Unknown	4,491	2,843	1,648	4,491	2,843	1,648	
Not Cost Burdened	475,924	229,429	246,495	126,355	35,594	90,761	
Cost Burdened	62,685	21,996	40,689	60,960	21,572	39,388	
Renters	672,105	574,951	97,154	354,999	283,648	71,351	
Costs Unknown	60,832	48,599	12,233	38,715	29,368	9,347	
Not Cost Burdened	329,243	293,539	35,704	74,873	55,330	19,543	
Cost Burdened	282,030	232,813	49,217	241,411	198,950	42,461	
<b>Percent Housing Cost Burdened--All Income Levels</b>				<b>Percent Housing Cost Burdened--Low Income</b>			
	All Ages	Under 65	65 or Older	All Ages	Under 65	65 or Older	
All	29.3%	29.5%	28.8%	65.9%	75.1%	48.9%	
Own, with Mortgage	28.6%	26.9%	44.5%	87.8%	87.7%	88.2%	
Own, no Mortgage	11.6%	8.7%	14.2%	32.5%	37.7%	30.3%	
Renters	46.1%	44.2%	58.0%	76.3%	78.2%	68.5%	
<b>Percent of Households by Tenure--All Income Levels</b>				<b>Percent of Households by Tenure--Low Income</b>			
Own, with Mortgage	47.3%	54.2%	22.0%	20.3%	24.0%	13.3%	
Own, no Mortgage	23.6%	14.0%	58.4%	27.9%	13.3%	56.3%	
Renters	29.2%	31.8%	19.6%	51.7%	62.7%	30.5%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: Bureau of the Census, American Community Survey, 2006

# Trends in Senior Mental Health

By Kristen Heitkamp, OSEDA, and Mary Louise Bussabarger\*

## Background

Missouri's senior population is increasing at an unprecedented rate. This trend is projected to continue until growth in the senior population, as well as seniors as a proportion of Missouri's population, peaks around 2020—when the largest annual baby boom cohorts reach age 65. These demographic changes will affect some state regions more than others: for some time, trends have indicated that the “most significant increases in the 55-64 age cohort during the 1990s occurred in suburban, small city and retirement recreation counties,” and these increases “tend to confirm the pattern of retiree in-migration.”<sup>1</sup>

Along with a growing population of retired baby boomers, Missouri's seniors are living longer lives. Both factors will contribute to increased demands on health care delivery, especially in rural areas. Coupled with health problems, mental health needs present a growing concern for the state's health delivery system. Missouri seniors, their families, policy makers and service providers will face particular challenges related to senior mental health.

## Challenges

### *Depression*

Depression continues to be the leading mental health concern for older adults, as noted by Senior Report 2006. Depression and associated disorders, particularly dysthymia (mild depression), are generally underreported by older adults, and consequently untreated. Many older adults develop depression in response to grief, social and familial losses, and chronic physical diseases. “Clinically significant depression in older adults results in greater risk of suicide, poorer outcomes on medical conditions, such as diabetes and heart disease, as well as an overall shortened lifespan and increased mortality rates.”<sup>2</sup>

### *Alzheimer's disease and dementia*

Alzheimer's disease (AD) and associated dementias are irreversible, debilitating conditions, which increase the burden on health care services as individuals with these diseases age. The 2005 estimates of the prevalence of AD vary from 110,000<sup>3</sup> to 125,000<sup>4</sup>, or approximately 14%, of Missourians over the age of 65. The costs associated with dementia health care are significantly higher than caring for those without dementia. Reporting in 2000, annual Medicare spending in nursing homes for a person over 65 with dementia, was \$13,207, while the cost for a person without dementia was \$4,454.<sup>3</sup>

Of the 75,103 Missourians in long term care in 2005, an estimated 42% had severe cognitive impairments, and 29% had “very mild” to “mild” impairment.<sup>3</sup>

According to the Alzheimer's Association, “Medicare beneficiaries with Alzheimer's and other dementias had 3.4 times more hospital stays than the average for other beneficiaries, and the costs for hospital care were 3.2 times higher than the average (\$7,704 versus \$2,204). Ninety-five percent of Medicare beneficiaries age 65 and over with Alzheimer's and other dementias have at least one other chronic condition, including congestive heart failure, coronary heart disease, diabetes and/or chronic obstructive pulmonary disease. Among beneficiaries of these relatively costly conditions ... Medicare costs are more than double when dementia is present.”<sup>3</sup>

Persons with Alzheimer's and other dementias make slightly more visits to a doctor (1.3 times), but the availability of appropriate care is an issue. “The greatest barriers to screening and treatment exist in rural areas. Approximately one third of Missourians with dementia live in rural

# Trends in Senior Mental Health

counties. Changing demographics suggest that a substantial portion of these live alone and thus may face even greater healthcare challenges.”<sup>5</sup> Further, rural caretakers have fewer respite and support services than those in urban areas.<sup>6</sup>

## *Long-term medical complications of psychiatric drugs*

As the baby boom cohort ages, an increasing number of persons taking “new generation” psychiatric drugs will require health care services for related chronic diseases. Recent research compares patients with bipolar disorder receiving conventional treatment, such as lithium, with patients receiving newer antipsychotic drugs, such as clozapine, risperidone, olanzapine and quetiapine.<sup>7</sup> Findings show that the development or exacerbation of diabetes mellitus is associated with antipsychotic use in bipolar patients, particularly the use of novel antipsychotics.<sup>8</sup> The treatment of bipolar disorders places these seniors at “risk for developing diabetes ... associated with weight gain, hypertension and substance abuse.”<sup>7,8</sup>

## *Substance Abuse*

Federal studies estimate that abuse of alcohol and legal drugs affects as many as 17% of adults aged 60 and older. “Prescription drug misuse and abuse are prevalent among older adults, not solely because more drugs are prescribed, but because aging affects vulnerability to drugs.” Moreover, the aging baby boomer cohort will increase not only the number of substance abusers, but also demands on the substance abuse treatment system.<sup>9</sup>

## *Suicide*

The suicide rate of those 65 years and older is the highest rate of any age group, while the rate for Missourians 85 years and older is twice the national average (CDC 1999). Missouri’s age-adjusted rate of suicide is 22% higher than the national average. “The suicide rates among adolescents and elderly males are of particular concern.”<sup>10</sup> Compared with non-veterans

in the general population, male veterans are more likely to die of suicide. Research indicates that veterans over the age of 65 “commit suicide slightly more often (40.39%) than veterans aged 45-64 (37.23%).” Disability and access to firearms increase the likelihood of mortality from suicide.<sup>11</sup>

## **Building a Safer System of Care for Seniors**

In its *Bulding a Safer System* report (2006), the Missouri Mental Health Commission urged the Department of Mental Health (DMH) to “develop a comprehensive plan, including adequate staffing, for addressing the unique mental health needs of aging DMH clients.”<sup>12</sup>

The 2006 Governor’s Task Force on Mental Health noted the strong need for elder mental health services, recommending that the Department of Mental Health “work with the Department of Health and Senior Services to establish formal ties to its adult abuse hotline, and with the Department of Social Services for formal ties to its child abuse hotline, so that reporters of abuse and neglect of DMH consumers fully utilize those hotlines as another means of reporting abuse and neglect. The Department shall then rigorously promote the use of these hotlines.”<sup>13</sup>

Recognizing the potential public health risk, the Missouri Department of Mental Health cites “research in eight states, including Missouri” that found “persons with serious mental illnesses (SMI), on average, will die 25 years earlier than the average American. DMH can no longer be content to focus solely on a psychiatric illness without attending to the individual’s broader physical health needs.”<sup>14</sup> Not only are the elderly living longer (generally requiring expensive medical care and medications), but the “boomers” are in the wings. This next generation will demand appropriate mental and physical health care.

# Trends in Senior Mental Health

## Conclusion

*While effective treatments exist for many late-life mental health problems, there is a gap between current mental health services and the infrastructure necessary to meet the coming demand. This substantial under-investment in research, knowledge dissemination, and service development could lead to a public health crisis.*<sup>15</sup>

The challenges presented here comprise trends following the baby boom cohort as it ages. In response to these trends, Missouri's public and private health care providers must face the challenge of skyrocketing medical costs, within the context of decreasing budgets. As the recent task force reports suggest, a coordinated interagency plan, adequate funding, strategic service delivery, and educational efforts to dispel the stigma associated with mental illness, will all be essential elements to protecting Missouri's seniors.

\*Mary Louise Bussabarger, former Missouri Mental Health Commissioner.

## References

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- 12 Missouri Mental Health Commission (August, 2006) Report to the Governor: Building a Safer Mental Health System, Recommendation 22.
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- 15 Bartles, Stephen J. & Michael A. Smyer, guest editors. (2002) "Mental disorders of aging: An emerging public health crisis?" *Generations: Journal of the American Society of Aging*, 26(1), 14-20.

# How to Use Your Missouri Senior Report

**What is an outcome indicator?**

An outcome indicator represents an issue important to the overall well-being of Seniors in your community.

**What is an outcome measure?**

An outcome measure is the specific item that indicates how well Seniors are doing in regard to an issue. Measures were selected based upon the availability over time and the reliability of the data.

**What is a status indicator?**

The status indicators describe the characteristics of the Senior population in a county at a single point in time. The status indicators provide context for understanding and prioritizing the outcome indicators.

**What is an Index?**

An index is a tool that combines more than one measure into a single value by converting different units of measurement into a standard unit of measure. An index is used to describe an indicator when single measures are unavailable.

**How do I interpret the county rank?**

The county rank for an outcome indicator represents the relative position of a county in the context of all 114 Missouri counties and St. Louis City with “1” indicating the most positive finding.

**How do I interpret the composite rank?**

The composite county rank is a ranked index of the sum of the standardized outcome measures and represents the relative position of a county in the context of all 114 Missouri counties and St. Louis City with “1” indicating the highest overall score.

**How do I interpret the trend arrow?**

The trend arrow indicates the direction of the indicator in a county over time. An arrow pointing upward signals an improvement for Seniors for that indicator. Conversely, an arrow pointing downward signifies a decline, while a horizontal arrow indicates that no change has occurred between the base and current years. A dash in the trend column indicates that the time element associated with that outcome measure is not sufficiently reliable to report change.



# Glossary of Outcome Indicators

## HOUSEHOLD COMPOSITION

Seniors Filing Missouri Joint  
Income Tax Returns

By measuring the percent of persons age 65 or older that filed Missouri joint income tax returns in a county, we can infer the percent of Seniors living alone.

*Source: Division of Taxation & Collection, Missouri Department of Revenue*

## ECONOMIC WELL-BEING

Supplemental Security Payments as  
Percent of Total Personal Income

Supplemental security income (SSI) payments are income-based benefits available to Seniors. In 2005, the SSI benefit for an individual who lives alone and has no other income is \$579 a month, or 73 percent of the poverty line. People with countable assets of more than \$2,000 for an individual and \$3,000 for a couple are ineligible for SSI. *Source: Research & Evaluation, Missouri Department of Social Services*

## WORKFORCE PARTICIPATION

Percent of Seniors Working for Pay

The percent of persons aged 65 or over in a county working for wages as calculated by averaging the number of persons 65+ working for wages during each quarter of 2005.

*Source: The Longitudinal Employer–Households Dynamic Program, Missouri Economic Research & Information Center, Missouri Department of Economic Development*

## TRANSPORTATION

Proportion of All Seniors with  
Missouri Driver's License

The percent of seniors with a valid Missouri driver's license.

*Source: Division of Motor Vehicle & Drivers Licensing, Missouri Department of Revenue*

## HEALTH STATUS

Hospitalization & ER Visits for  
Diabetes per 10,000 Seniors

The number of hospital and emergency room visits made per 10,000 seniors regarding diabetes and issues associated with diabetes. *Source: Data, Surveillance Systems, & Statistical Reports, Missouri Department of Health and Senior Services*

## HEALTH CARE ACCESS

The number of full time equivalent (FTE) primary care physician positions per 1,000 seniors.

*Source: Department of Health Management & Informatics, University of Missouri*

# Glossary of Outcome Indicators

## LONG TERM CARE

Medicaid Costs for Long Term Care  
per 1,000 Persons

Total Medicaid dollars spent on in-home and residential long term care services per 1,000 persons.  
*Source: Section for Long-term Care, Division of Senior Services, Missouri Department of Health & Senior Services*

## CRIME

Property & Violent Crime  
per 1,000 Persons

The number of property and violent crimes per 1,000 persons.  
*Source: The Missouri Statistical Analysis Center, Missouri Department of Highway Patrol, Missouri Department of Public Safety*

## HOUSING

Percent of Seniors  
Housing Cost Burdened

Percent of persons 65 and older who spend 30 percent or more of their monthly income on mortgage payments or rent and utilities combined.  
*Sources: Census 2000 Summary File 3 (SF3) – Sample Data. U.S. Bureau of the Census, American Community Survey 2006. U.S. Bureau of the Census*

# Glossary of Status Indicators

## DEMOGRAPHICS

Total Population	Measures the total population for the years of 2000, 2006, 2010 and 2020. <i>Source: Table 2a. Projected Population of the United States, by Age and Sex: 2000 to 2050, "U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin," U.S. Census Bureau, 2006</i>
Change in Total Population	A measure of the change in population between 2000 and 2006. <i>Source: Table 2a. Projected Population of the United States, by Age and Sex: 2000 to 2050, "U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin," U.S. Census Bureau, 2006</i>
Population 65+	A measure of the total population that is 65 years old or older. <i>Source: Table 1, Annual Estimates of the Population by Sex and Five-Year Age Groups for the United States: April 1, 2000 to July 1, 2006. Population Division, U.S. Census Bureau</i>
Percent of Population 65+	A measure of the percent of the total population that is 65 years old or older. <i>Source: Table 1, Annual Estimates of the Population by Sex and Five-Year Age Groups for the United States: April 1, 2000 to July 1, 2006. Population Division, U.S. Census Bureau</i>
Population Projections 65+	A measure of both the total, male and female population that is 65 years old or older for the years of 2010 and 2020. <i>Sources: Population projections are produced by OSEDA by using 2006 NCHS estimates for demographic cohorts. Cohort-survival ratios by race and sex were calculated as five-year intervals using 1990 and 2000 census data as well as 2001-2006 estimates, including an adjustment for St. Louis City's accepted challenge of the 2006 estimates.</i>
<b>QUALITY OF LIFE</b>	
Seniors in Owner-Occupied Housing	The percent of persons 65 years old and older living in owner-occupied housing. <i>Source: Census 2000 Summary File 3 (SF 3) - Sample Data. U.S. Census Bureau</i>
Seniors Living in Families	The percent of persons 65 years old and older living in families. <i>Source: Census 2000 Summary File 3 (SF 3) - Sample Data. U.S. Census Bureau</i>
Median Value of Own House	A measure of the median value, in dollars, of owner-occupied housing for persons 65 years old and older. <i>Source: Census 2000 Summary File 3 (SF 3) - Sample Data. U.S. Bureau of the Census</i>
Seniors in Poverty	A measure of the percent of persons 65 years old and older who are living in poverty. <i>Source: Census 2000 Summary File 3 (SF 3) - Sample Data. U.S. Bureau of the Census</i>

# Glossary of Status Indicators

## QUALITY OF LIFE (Continued)

Average Household Income of Seniors     A measure of the annual average household income, in dollars, for persons 65 years old and older.  
*Source: Census 2000 Summary File 3 (SF 3) - Sample Data. U.S. Bureau of the Census*

Seniors with a College Education     A measure of the percent of persons 65 years old and older with a college degree or higher.  
*Source: Census 2000 Summary File 3 (SF 3) - Sample Data. U.S. Bureau of the Census*

## HEALTH AND WELLNESS

No Exercise     A measure of the percent of seniors who responded that they had not performed some sort of non-work related exercise during the past month.

No Sigmoidoscopy or Colonoscopy     A measure of the percent of seniors who responded that they have not had a sigmoidoscopy or colonoscopy exam in the past 10 years.

High Blood Pressure     A measure of the percent of seniors who have been told they have high blood pressure by a doctor, nurse, or other health professional.

Obesity     A measure of the percent of seniors who have a body mass index greater than 25.00 (Overweight or Obese).

Smoking     A measure of the percent of seniors who are current smokers.

No Mammography     A measure of the percent of senior females who have not had a mammogram in the past year.

High Cholesterol     A measure of the percent of seniors who have had their cholesterol checked and have been told by a doctor, nurse, or other health professional that it was high.

*Source for Health and Wellness Status Indicators: Behavioral Risk Factor Surveillance System (BRFSS), Data, Surveillance Systems & Statistical Reports. Missouri Department of Health and Senior Services*

# Missouri

Population 65+, 2006

MO: 778,891

US: 37,260,352

Percent Change 65+ Population, 2000-2006

MO: 3.0%

US: 6.5%

## Outcome Indicators

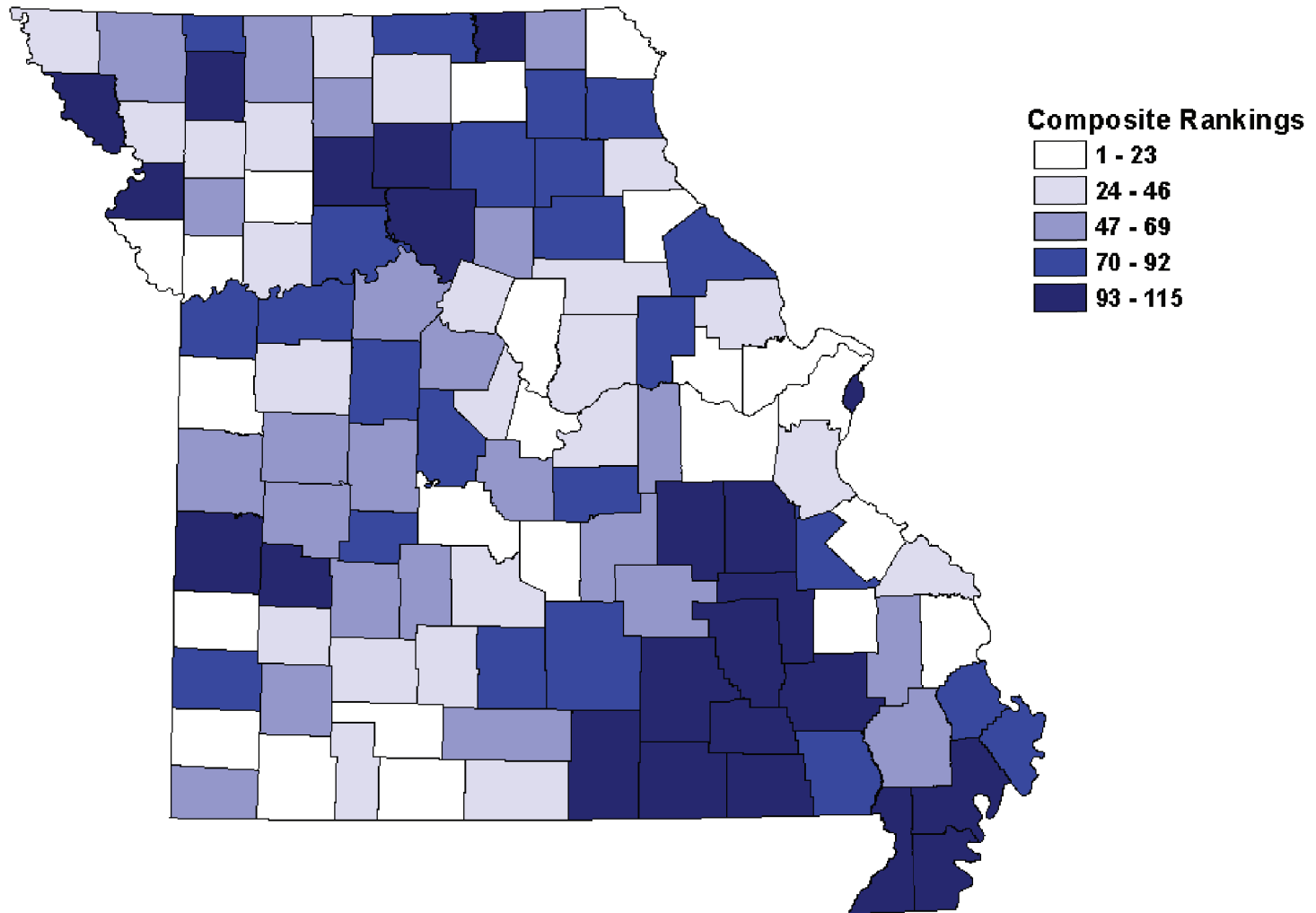
	Year	Measure	Trend
<b>Household Composition</b>			
Seniors Filing Missouri Joint Income Tax Returns	2000	44.8%	▼
	2005	43.8%	
<b>Economic Well-being</b>			
SSI Payments as Percent of Total Personal Income	2001	0.33%	▼
	2005	0.34%	
<b>Workforce Participation</b>			
Percent of Seniors Working for Pay	2001	9.8%	▼
	2005	8.2%	
<b>Transportation</b>			
Percent of All Seniors with Missouri Driver's License	2001	76.7%	▲
	2006	81.5%	
<b>Health Status *</b>			
Hospitalizations & ER Visits for Diabetes per 10,000 Seniors	2001	71.4	▲
	2005	70.6	
<b>Health Care Access</b>			
Primary Care Physicians per 1,000 Seniors	2000	5.1	▲
	2004	5.5	
<b>Long Term Care **</b>			
Medicaid Costs for Long Term Care per Capita	2002	\$122	▼
	2006	\$138	
<b>Crime</b>			
Property & Violent Crime per 1,000 Persons	2001	48.8	▲
	2006	45.4	
<b>Housing</b>			
Percent Seniors Housing Cost Burdened	(Trend data not available)		-
	2006	28.9	

## Status Indicators

	MO Measure	US Measure	
<b>Demographics</b>	Total Population, 2000	5,606,532	281,421,906
	Total Population, 2006	5,842,713	299,398,484
	Percent Change Total Population, 2000-2006	4.2%	6.4%
	Population 65+, 2000	755,838	34,978,972
	Percent of Population 65+, 2000	13.5%	12.4%
	Percent Female	59.3%	58.9%
	Percent Male	40.7%	41.1%
	Percent of Population 65+, 2006	13.3%	12.4%
	Percent Female	58.4%	58.0%
	Percent Male	41.6%	42.0%
	Population Projections 65+, 2010	14.9%	13.0%
	Percent Female	56.8%	57.7%
	Percent Male	43.2%	42.3%
	Population Projections 65+, 2020	18.2%	16.3%
Percent Female	55.1%	56.5%	
Percent Male	44.9%	43.5%	
<b>Quality of Life</b>	Seniors in Owner-Occupied Housing, 2000	79.1%	77.6%
	Seniors Living in Families, 2000	61.3%	64.0%
	Median Value of Own House, 2000	\$86,900	\$111,800
	Seniors in Poverty, 2000	9.9%	10.9%
	Average Household Income of Seniors, 2000	\$37,822	\$41,712
	Seniors with a College Education, 2000	11.8%	15.4%
<b>Health and Wellness</b>	No Exercise, 2006	35.9%	32.7%
	No Sigmoidoscopy or Colonoscopy, 2006	46.3%	33.0%
	High Blood Pressure, 2005	54.8%	54.8%
	Obesity, 2006	24.3%	22.0%
	Smoking, 2006	8.7%	8.6%
	No Mammography, 2006	39.8%	21.6%
High Cholesterol, 2005	55.3%	50.6%	

\* Three year average 2000-2002 and 2003-2005 \*\*Not included in composite county rank

# 2007 County Rankings



Prepared by Office of Social and Economic Data Analysis (OSED)A)  
Map Created on 12.14.2007

# Resources

## **AARP**

<http://www.aarp.org/>  
Missouri state office:  
700 West 47th St., Suite 110  
Kansas City, MO 64112-1805  
Phone: (Toll-Free) 866-389-5627  
Fax: 816-561-3107

## **Adult Protective Services**

<http://www.dhss.mo.gov/ProtectiveServices/>  
Provides protective oversight to people who are unable to manage their own affairs, carry out activities of daily living, or protect themselves from abuse, neglect, or exploitation.  
Missouri Department of Health and Senior Services  
Division of Senior and Disability Services  
PO Box 570  
Jefferson City, MO 65102  
Phone: (Toll-Free) 800-235-5503

## **Community Development**

The Department of Health and Senior Services Community Development Unit and the University of Missouri Extension partner to provide assistance to communities interested in developing a community plan that will address issues identified in the Missouri Senior Report.  
Community Development Unit  
Missouri Department of Health and Senior Services  
PO Box 570  
Jefferson City, MO 65102-0570  
573-751-6168

## **Elder Abuse and Neglect Hotline, 800-392-0210 (Toll-Free)**

TDD 800-669-8819 or Relay Missouri 800-676-3777  
<http://www.dhss.mo.gov/ElderAbuse/>  
The hotline responds to reports of alleged abuse, neglect or financial exploitation of Missourians at least 60 years old and other eligible adults between 18 and 59.  
Missouri Department of Health and Senior Services  
Division of Senior and Disability Services  
Elder Abuse and Neglect Hotline  
PO Box 570  
Jefferson City, MO 65102-0570  
Phone: 573-751-4842

## **Employee Disqualification List**

<http://www.dhss.mo.gov/EDL/>  
Lists individuals who have abused, neglected or misappropriated funds of a resident, patient, or client while employed in a Missouri nursing home, hospital, home health agency, or ambulatory surgical center.  
Missouri Department of Health and Senior Services  
Employee Disqualification List  
PO Box 570, Jefferson City, MO 65102-0570  
Phone: 573-526-8544 or 573-522-2449

## **Governor's Advisory Council on Aging**

<http://www.dhss.mo.gov/GovAdvisoryCouncil/>  
Provides advice to Missouri's governor to enhance the quality of life, independence and dignity of older Missourians.  
Governor's Advisory Council on Aging  
Division of Senior and Disability Services  
Missouri Department of Health and Senior Services  
PO Box 570, Jefferson City, MO 65102-0570  
Phone: 573-526-8534

# Resources

## **Home and Community Services, Missouri Department of Health and Senior Services**

<http://www.dhss.mo.gov/HomeComServices/>

Provides support services to help ill or disabled older Missourians remain in their own homes and avoid or delay institutionalization.

Division of Senior and Disability Services

Home and Community Services Field Operations

Missouri Department of Health and Senior Services

PO Box 570

Jefferson City, MO 65102-0570

Phone: 573-526-8537

## **Medicare**

<http://www.medicare.gov/>

Medicare beneficiaries can view their claim status (excluding Medicare Part D claims); order a duplicate Medicare Summary Notice or replacement Medicare card; view eligibility and entitlement information; view enrollment information for Medicare Part D prescription drug plans and Part B deductible status.

Centers for Medicare and Medicaid Services (CMS)

7500 Security Blvd.

Baltimore, MD 21244-1850

Phone: (Toll-Free) 800-MEDICARE for general information

TTY for Hearing Impaired: (Toll-Free) 877-486-2048

To report Medicare fraud & abuse: (Toll-Free) 800-447-8477

## **Missouri Alliance of Area Agencies on Aging**

<http://www.MoAging.com>

Ten Area Agencies on Aging develop and implement programs and services for older Missourians at the local level.

Missouri Alliance of Area Agencies on Aging (MA4)

1121 Business Loop 70 East

Columbia, MO 65201

## **Missouri Attorney General's Consumer Protection Division**

<http://www.ago.mo.gov/divisions/consumerprotection.htm>

Protects Missourians from telephone fraud; car repair, sales disputes and rip offs; telemarketing, Internet and e-mail scams; home repair rip offs; travel scams; and banking and credit card fraud.

## **Missouri Attorney General's Office**

Supreme Court Building

207 W. High St.

PO Box 899

Jefferson City, MO 65102

Consumer Protection Hotline: (Toll-Free) 800-392-8222

## **Missouri Long-Term Care Ombudsman Program**

<http://www.dhss.mo.gov/Ombudsman/>

Ombudsmen investigate and resolve complaints for residents in nursing homes and other long-term care settings.

State Office of Long-Term Care Ombudsman Program

Missouri Department of Health and Senior Services

PO Box 570

Jefferson City, MO 65102-0570

Phone: (Toll-Free) 800-309-3282



# Resources

## **MOSAFE – Missourians Stopping Adult Financial Exploitation**

<http://www.dhss.mo.gov/MOSAFE/index.html>

Financial exploitation of the elderly and disabled is a crime and destroys thousands of Missouri lives. MOSAFE was launched to help stop it.

Missouri Department of Health and Senior Services

MOSAFE

PO Box 570

Jefferson City, MO 65102

Phone: (Toll-Free) 800-235-5503

## **Missouri Department of Mental Health**

PO Box 687

Jefferson City, MO 65102

Phone: (Toll-Free) 800-364-9687

## **National Family Caregiver Support Program (NFCSP)**

[http://www.aoa.gov/prof/aoaprogram/caregiver/overview/overview\\_caregiver.asp](http://www.aoa.gov/prof/aoaprogram/caregiver/overview/overview_caregiver.asp)

Department of Health and Human Services

Administration on Aging (AoA)

Washington, DC 20201

Phone: 202-619-0724

## **Show Me Long-Term Care**

<http://www.dhss.mo.gov/showmelongtermcare/>

You can find out how any licensed Missouri long-term care facility did on its last inspection.

Section for Long Term Care

Missouri Department of Health and Senior Services

PO Box 570

Jefferson City, MO 65102-0570

Phone: 573-526-8524

## **Social Security Administration**

<http://www.ssa.gov/>

Pays retirement, disability and survivor benefits to workers and their families and issues Social Security cards. For information about the Social Security office that serves your area, go to:

<https://s044a90.ssa.gov/apps6z/FOLO/fo001.jsp> or

<https://s044a90.ssa.gov/apps6z/FOLO/fo001.jsp>

Phone: (Toll-Free) 800-772-1213

(Toll-Free) TTY for Hearing Impaired: 800-325-0778

A more extensive list of resources may be found at [www.missourisenior-report.edu](http://www.missourisenior-report.edu) or on the Missouri Department of Health and Senior Services Web site at [www.dhss.mo.gov](http://www.dhss.mo.gov).

## Appendix 1: Composite County Ranks 2006 – 2007

COUNTY	2006	2007	COUNTY	2006	2007	COUNTY	2006	2007
Adair	7	9	Grundy	94	49	Perry	48	46
Andrew	53	31	Harrison	81	69	Pettis	52	83
Atchison	32	28	Henry	72	53	Phelps	77	48
Audrain	36	41	Hickory	106	92	Pike	73	74
Barry	21	20	Holt	47	102	Platte	4	2
Barton	38	22	Howard	69	40	Polk	84	65
Bates	16	47	Howell	100	94	Pulaski	13	10
Benton	103	63	Iron	91	106	Putnam	29	76
Bollinger	66	55	Jackson	93	90	Ralls	6	19
Boone	1	1	Jasper	60	71	Randolph	54	52
Buchanan	92	97	Jefferson	50	39	Ray	28	27
Butler	97	84	Johnson	51	26	Reynolds	95	101
Caldwell	37	23	Knox	75	79	Ripley	112	113
Callaway	76	30	Laclede	44	34	Saline	39	57
Camden	26	12	Lafayette	74	72	Schuyler	31	100
Cape Girardeau	24	13	Lawrence	35	64	Scotland	19	58
Carroll	63	88	Lewis	64	78	Scott	67	81
Carter	104	107	Lincoln	33	32	Shannon	90	104
Cass	23	16	Linn	99	111	Shelby	11	82
Cedar	98	93	Livingston	105	103	St. Charles	18	8
Chariton	79	96	Macon	87	66	St. Clair	86	67
Christian	17	7	Madison	62	87	St. Francois	108	85
Clark	8	11	Maries	15	21	St. Louis	22	15
Clay	9	6	Marion	71	77	St. Louis City	115	115
Clinton	89	56	McDonald	56	36	Ste. Genevieve	14	14
Cole	2	5	Mercer	57	43	Stoddard	59	60
Cooper	68	59	Miller	25	61	Stone	30	37
Crawford	96	99	Mississippi	109	86	Sullivan	78	42
Dade	45	24	Moniteau	10	45	Taney	3	3
Dallas	58	50	Monroe	34	80	Texas	65	75
Daviess	40	33	Montgomery	85	70	Vernon	101	105
DeKalb	80	29	Morgan	82	91	Warren	20	18
Dent	41	68	New Madrid	102	110	Washington	88	98
Douglas	70	54	Newton	5	4	Wayne	110	108
Dunklin	113	112	Nodaway	42	62			
Franklin	43	17	Oregon	111	109			
Gasconade	46	51	Osage	55	38			
Gentry	83	95	Ozark	107	44			
Greene	49	35	Pemiscot	114	114			