

Missouri Senior Report 2008



Jane Drummond, Director, Missouri Department of Health and Senior Services



Welcome to the Missouri Senior Report 2008

The Missouri Senior Report 2008 is a collaborative effort by the Missouri Department of Health and Senior Services (DHSS) and the University of Missouri Office of Social and Economic Data Analysis (OSED) to inform state and local audiences about the contributions and needs of seniors in Missouri.

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This report can be accessed on line at:

www.MissouriSeniorReport.org

Permission to copy, disseminate, or otherwise use information from this report is granted as long as appropriate acknowledgement is given.

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Dear Fellow Missourians,

As the Official Senior Advocate for Missouri, I am pleased to invite you to take a look at the 2008 Missouri Senior Report. Each year this report provides more data and reveals more trends that can be used to educate and inform communities about the well-being of seniors. This year's report includes new features such as a civic engagement indicator and a senior economic impact indicator.

I encourage you to view the report and the additional data and features available on the website: www.MissouriSeniorReport.org.

The first wave of the baby boom generation is entering their 60s. We need reliable data to understand where older Missourians stand today and what they may face tomorrow. I commend the Department of Health and Senior Services and the University of Missouri Office of Social and Economic Data Analysis for developing and issuing this valuable annual report.

Sincerely,

A handwritten signature in cursive script that reads "Peter Kinder".

PETER D. KINDER
Lieutenant Governor



Dear Fellow Missourians:

The Missouri Department of Health and Senior Services is pleased to present the 2008 Missouri Senior Report. This is the third annual report produced by the department in partnership with the University of Missouri Office of Social and Economic Data Analysis. This report builds on the previous two by offering a view of trends and allowing a comparison of data in an easy-to-read format.

The Department of Health and Senior Services values its role as a leader in protecting and promoting the health and well-being of our senior citizens. Missouri is currently the only state in the country issuing an annual report on the status of seniors.

The Centers for Disease Control and Prevention recently referred to the aging of the U.S. population as one of the major health challenges of the 21st century (*The State of Aging and Health in America 2007*). The Missouri Senior report serves not only as a source for planning and policy development, but also as a tool for health education and research.

I encourage local policy makers and community leaders to consider the “call to action” – our offer to assist you with strategies on how your community can continue to improve the well-being of your seniors.

Sincerely,

A handwritten signature in black ink, appearing to read "Jane Drummmond", is written over a horizontal line.

JANE DRUMMOND
Director

Accessing Community Assistance and Facilitation

- Would you like to improve your county's performance on any of the indicators of senior well-being in the 2008 report?
- Would you like help analyzing the data in the 2008 report as it relates to your county?

If you answered yes to these questions, we can help!

The Department of Health and Senior Services' Office of Community Development Services and University of Missouri Extension are partnering to provide assistance to communities interested in improving the lives of their seniors.

The following assistance is available:

- Interpretation of the data contained in the senior report.
- Assistance with mobilizing your community to improve its profile of senior well-being:
 - Identification of key stakeholders to participate in the process
 - Information on how to convene community meetings to address identified projects
 - Prioritization of the issues – where to start
- Facilitation assistance for development of a community action plan
- Information on evidence-based interventions to address priority issues

Please call the Department of Health and Senior Services' Office of Community Development Services at (573) 751-6750 if you are interested.

Introduction

December, 2008

The proportion of Missouri's senior population is projected to increase from an estimated 13.4 percent today to approximately 15 percent by 2015, and to 19 percent by 2025. The increase in the absolute number of seniors is estimated to be nearly 470,000, bringing the total number of seniors in Missouri to approximately 1.2 million by 2025. (As the baby boom generation ages, 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 provides comparative and trend information on the status of seniors, addressing issues related to their economic well-being, household and community engagement, and healthcare access and status. The report additionally includes annual population estimates, population projections, and quality of life and health and wellness information. Articles on the role of falls in seniors' well-being, understanding the needs of the long-term care workforce, and an update on health disparities among Missouri's seniors, specifically the senior population served by MoHealthNet, the Missouri Medicaid program, are included in this report.

Trend data are available for eight indicators. Statewide, Missouri has improved on three of these indicators between the base and current years. Improvements are noted in workforce participation, transportation, and safety. The economic well-being indicator has remained relatively constant. Trends declined for measures of housing costs, household composition, long-term care, and seniors' health status.

However, trends in these indicators vary within the state, affecting Missouri communities differently. Demographically, Missouri is a diverse state. The county populations range from nearly one million in St. Louis County to fewer than 2,100 in Worth County. Patterns of change in population also vary greatly in Missouri. Between 2000 and 2007, Christian County, sandwiched between Springfield and Branson, has grown by an estimated 33 percent in total population and 37 percent in senior population, while Worth County in northwest Missouri is estimated to have experienced a nearly 12 percent decline in total population and a five percent decline in the number of seniors.

In addition to variation between counties, the demographic, cultural and economic characteristics of Missouri regions vary greatly by their urban, suburban or rural characteristics. Seniors in Missouri's most rural counties, particularly those in northern Missouri, tend to be older and more reliant on retirement income than seniors in more populated areas. Seniors in Missouri's metropolitan counties are more likely to have convenient access to health care, have access to transportation, and participate in the workforce. To address this diversity, while providing com-

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parative 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 describe the demographic composition, quality of life, and health and wellness of seniors.

Understanding Senior Report Outcome and Status Indicators

Senior Report indicators present an annual snapshot of each of Missouri’s counties. The indicators and measures were selected through input from many Missourians with a personal and/or professional passion for the well-being of seniors. Focus group meetings were held in each of the Area Agency on Aging regions during 2008 to determine that the Missouri Senior Report was continuing to meet its mission.

In addition to guidance gathered through the focus groups, the Senior Report advisory committee provides ongoing input into the structure and content of the report. In 2008, based on feedback from the focus groups, the advisory committee added two new outcome indicators to the Missouri Senior Report and strengthened the measure of an outcome indicator included in previous reports.

The new indicators report on the economic contribution of seniors and the level of civic engagement by seniors in their communities. Information has been added from the Missouri Department of Health and Senior Service’s Elderly Abuse Hotline to enhance the outcome indicator that describes seniors’ safety. A subcommittee of the advisory committee selected topics and authors for the articles included in this year’s report.

The web site is located at www.MissouriSeniorReport.org. In addition to the content included in the printed report, the website includes features that allow the user to access all data used to calculate the outcome and status indicators. For example, the population estimates can be viewed by age and gender. These data are provided in both tabular and graphic format, and are ready for viewing online as well as for downloading.

The ‘County Profile Tables’ feature (accessible under ‘Quick Links’) allows the user to select a county of interest and browse tabular data organized by outcome and status indicators. The ‘Dynamic Reports Generator Menu’ (accessible by clicking on the ‘Data’ icon located in the header) allows users to select multiple counties, years, and indicators to produce tables as well as graphs that can be downloaded for use in presentations and reports. Previously published Missouri Senior Reports are fully archived and accessible at the Senior Report website. You may also access a print-ready version of Missouri Senior Report 2008 from the web site.

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Indicators

Missouri Senior Report 2008 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. 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.

The composite index ranking is based on the sum of the standardized values for nine 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 Missouri Board of Healing Arts and the Missouri Department of Social Services) as well as federal reporting agencies (such as the U.S. Census Bureau and the Bureau of Labor Statistics).

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’s Behavioral Risk Factor Surveillance Survey (BRFSS) instrument. The health and wellness indicators are available this year through the county-level surveys conducted by a partnership of the Missouri Department of Health and Senior Services and the Missouri Foundation for Health. The glossaries of outcome and status indicators provide a detailed description of the construction and source of each measure.

Annually available county-level indicators are necessary to produce a resource that provides timely and meaningful information to inform effective public policy. Because the cost of primary data collection is prohibitive, the Senior Report advisory committee selects indicators derived from secondary data sources. However, the use of secondary data sources also introduces certain risks, such as changes in the process of data collection, the structure of the data, or issues in data quality. For example, adjustments in administrative procedures might affect the meaning and quality of the data as it is used in Senior Report. When these situations

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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 2009 the U.S. Census Bureau will release the American Community Survey (ACS) for counties with populations of 20,000 or more; in 2011 ACS data will be available for all levels of census geography. The Office of Social and Economic Data Analysis (OSED) created estimates for ACS variables included in the 2008 Missouri Senior Report for counties with populations smaller than 65,000 persons based on U.S. Census Public Use Microdata Area (PUMA) regions and assumed relative consistency in population characteristics over time. When the ACS estimates for populations of 20,000 or more become available, the Missouri Senior Report website will be updated to reflect those estimates. In the long run, the American Community Survey will provide consistently gathered, comparable county-level information about Missourians that can be studied by age, race, and many other relevant characteristics.

Emerging Issues

As described earlier in the report, a survey was conducted in 2008 to learn how the Senior Report is being used in communities around the state, and to learn what features and information might be added to increase the report's value. During these sessions we were made aware of a variety of issues that are of concern to seniors and to those who care about and care for seniors. Missourians spoke to us about the cost of prescription drugs, the need for better transportation options, the desire for seniors to remain in their home and community as long as possible, the value of social engagement, the fear of under-reporting of elder abuse and financial exploitation, and the need to prepare for the aging of the baby boomer demographic.

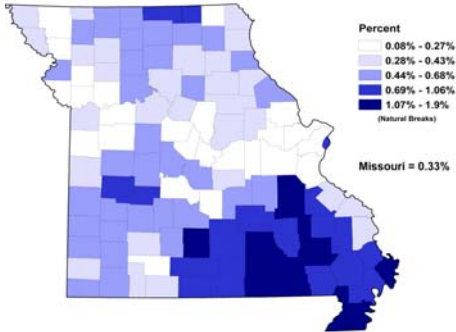
As the 2008 Missouri Senior Report goes to print, the country is facing an economic crisis resulting in mortgage defaults, high unemployment, devastated retirement accounts – all of which have a profound impact on seniors. The 2009 and 2010 reports will begin to reflect the impact of this situation. The value of an annual report is that it can reveal trends and allow for informed policy-making to address the concerns and desires of a community. This report will remain relevant and indeed mature, not only as better data are available, but thanks to feedback from users. We want to hear from you during the coming year. You can contact us at 573.884.5116 or via the web at www.MissouriSeniorReport.org.

Thank you for your support of the Missouri Senior Report.

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Outcome Indicators

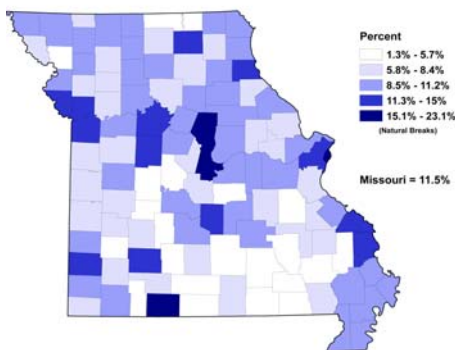
Supplemental Security Income Payments as Percent of Total Personal Income, 2006



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. While ACS poverty estimates for the senior population are now available annually at the state level, they will not be provided by the U.S. Census Bureau at the county level until 2011. However, Bureau of Economic Analysis county-level estimates on the numbers of low-income individuals and seniors who receive Supplemental Security Income (SSI) are available on an annual basis. Therefore, a relative index of economic well-being was created by calculating SSI payments 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.

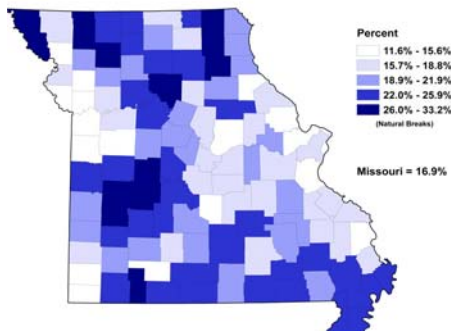
Percent of Seniors Working for Pay, 2006



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 of less physically-demanding service and retail jobs, and if seniors want to remain economically and socially engaged, the outcome can be viewed as positive. On balance, the advisory committee views an increase in senior workforce participation as positive. Senior participation in the Missouri workforce has increased from 9.8 percent in 2001 to 11.5 percent in 2006, after dipping to 8.2 in 2005. By county, senior participation in the workforce ranged from a low of approximately one percent in Douglas County to a high of over 23 percent in Taney County in 2006.

Percent All Consumers Expenditures by Seniors 2007



Economic Contribution

Seniors contribute a great deal to their local economies, frequently at rates higher than those younger than 65. To better understand this contribution in 2007, the Missouri Senior Report has added a measure that calculates the ratio of senior's economic contribution relative to the proportion of a county's population they represent. Overall, Missouri's seniors are responsible for about 17 percent of consumer expenditures, yet comprise only slightly more than 13 percent of the state's population. Seniors' economic impact ranged from 11.6 percent in

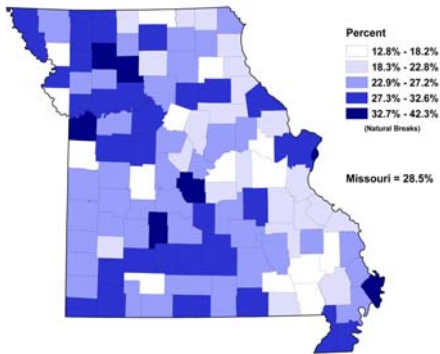
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Jefferson County to more than 30 percent in Cedar County. In all but two Missouri counties, seniors spend more than they represent as a percent of the total population.

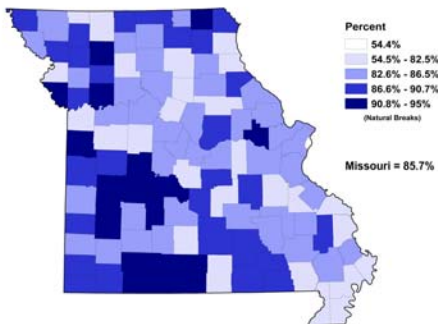
Housing

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 living on fixed incomes are particularly vulnerable to fluctuations in housing costs. The American Community Survey (ACS) housing cost burdened measure is reported in this year’s Missouri Senior Report. ACS estimates are used for counties with populations over 65,000 and estimates for the remaining counties were calculated based on current U.S. Census Bureau Public Use Microdata Area (PUMA) and Census 2000 county-level data. On average, 28.5 percent of Missouri’s seniors are housing cost burdened. When considered by county, the percent of seniors housing cost burdened ranged from approximately 13 percent in Cass County to slightly greater than 42 percent in St. Louis City.

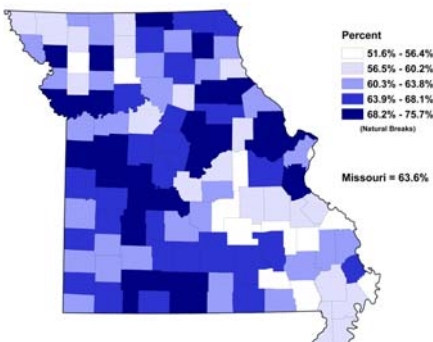
Percent of Seniors Housing Cost Burdened, 2007



Percent of All Seniors with Missouri Driver's License 2007



Seniors Living in Families, 2007



Transportation

Transportation is necessary in order to obtain goods and services and 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 in Missouri 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 83.6 percent in 2007. In suburban and 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 2007 the percent of Missouri seniors with a valid driver’s license ranged from a high of at least 95 percent in Stone, Douglas, Camden, Taney, Ozark, and Daviess Counties, to a low of nearly 55 percent in St. Louis City.

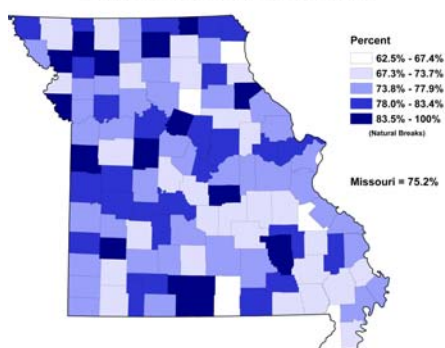
Household Composition

The 2000 U.S. Census indicates Missouri had a relatively large proportion of seniors living in single person households. Seniors who live with someone are less likely to be socially

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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 2001 and 2006, the percent of seniors filing joint income tax returns declined from 42.2 to 40.5 percent. In 2006 the percent of seniors filing joint returns ranged from a high of 56.2 percent in Washington County to a low of 28.4 percent in Knox County.

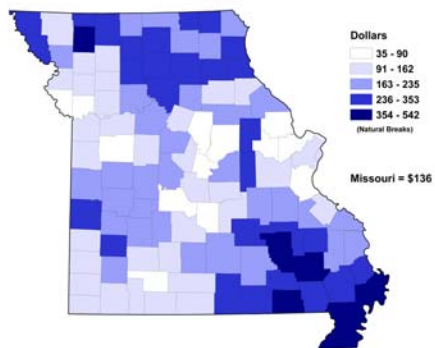
Seniors Registered and Voting, 2007



Civic Engagement

Seniors contribute to their communities through a wide range of civic, humanitarian, and religious volunteer activities. Capturing these activities consistently across counties and over time remains a challenge. However, we can know the degree to which seniors participate in the most fundamental of democratic activities, voting. To measure civic engagement, the Missouri Senior Report has added a measure that calculates an index of seniors as registered voters and as participants in elections on an annual basis. In 2007, Reynolds County seniors were registered to vote and voted at the highest rate, while the lowest rate of voter participation was found in St. Louis City.

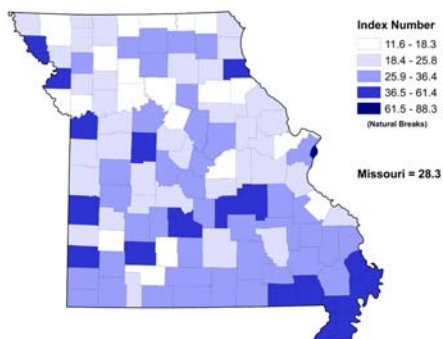
Medicaid Costs for Long Term Care per 1,000 Persons 2007



Long-Term Care

Long-term care represents a significant healthcare cost for seniors, who tend to have limited incomes, and for the state, due to MoHealthNet (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 \$136 per capita in 2007—an approximately 25% increase in three years in unadjusted dollars. However, because the measure is confounded between counties due to 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.

Senior Safety Index, 2007



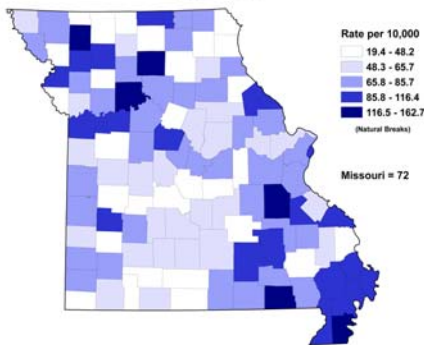
Safety

Understanding the relationship between seniors and safety is complicated. As with all populations, seniors are at risk of becoming victims of property and violent crimes. However, seniors who are physically or psychologically vulnerable are at

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increased risk of suffering accidents and abuse within their own homes. While crime data by age of the victim is unavailable, we can measure the overall crime rate in a county. In this year's safety indicator we are additionally including alleged cases of abuse and neglect as reported through the Missouri Department of Health and Senior Services Elder Abuse and Neglect Hotline. These combined data sources are reported as an indexed rate per 1,000 persons. Osage County experienced the lowest crime and senior abuse incidents in 2007, occurring at a rate of 11.6 per 1,000 persons, while St. Louis County experienced the highest rate of 88.3 per 1,000 persons.

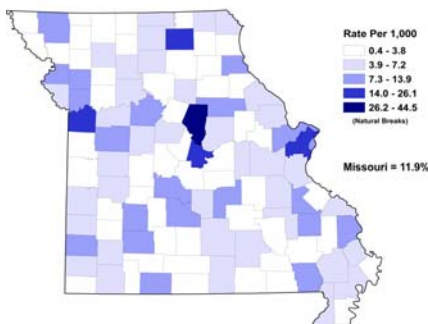
Hospitalization and ER Visits for Diabetes per 10,000 Seniors
2004 - 2006



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 status needs. The Senior Report advisory committee 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 increased slightly from 71.6 in 2002 to 72.0 in 2006. In 2006 the rate ranged from a high of 162.7 per 10,000 seniors in Ripley County to 19.4 in Clark County.

Primary Care Physicians per 1,000 Seniors
Current Year: 2007



Health Care Access

Health care access is essential for the overall well-being of seniors. Reliable, convenient access to primary care increases the capacity of seniors to live independently. The Missouri Senior Report measures health care access for seniors based on the number of primary care physicians per 1,000 seniors. Primary care physicians frequently serve a demographically diverse patient base. Primary care practice specialties are typically defined as: family practice, family medicine, general practice, internal medicine, general surgery, gynecology/obstetrics, and pediatrics. To enhance the quality of the measure for this year's report, the physician's professional registration database, which captures practice specialties, was matched to Missouri's Bureau of Narcotics and Dangerous Drugs (BNDD) database which requires physicians to report the counties in which they practice. Based on these data, the rate of primary care physi-

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cians per 1,000 seniors was 11.9 for the state. In 2007 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 Hickory County to over 44 per 1,000 seniors in Boone County.

Status Indicators

Demographics

The proportion of seniors (65 and older) in Missouri's population was 13.5 percent in 2000 and 13.4 percent in 2007, reflecting a dip in the birth rate during the early years of the Second World War. By 2015 the proportion of Missouri's population aged 65 or over is projected to be slightly more than 15 percent, and by 2025 the proportion is projected to be more than 19 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 2007. The state's senior population also grew relatively slowly during this period, from 755,838 in 2000 to 788,371 in 2007—an approximately four percent increase. 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. In 2007, nearly 70 percent of Missourians age 85 or older were women. This gender difference is projected to moderate somewhat—women are projected to be about 68 percent of the 85 and older population in 2015 and approximately 65 in 2025—but remains a persistent feature of the older population.

Quality of Life

The Missouri Senior report includes six measures from the U.S. Census Bureau that speak to the overall quality of life of seniors. By 2011, the U.S. Census Bureau's American Community Survey (ACS) will release annual estimates for these measures for all Missouri counties. For this year's Senior Report, ACS estimates are included for counties with populations of 65,000 or greater. For counties with populations of less than 65,000, the Office of Social and Economic Data Analysis (OSED) has calculated 2007 estimates based on current population estimates and ACS Public Use Microdata Area (PUMA) regional estimates.

Owner-Occupied Housing

Seniors' housing needs are more likely to be met if they live in owner-occupied housing. According to the ACS 2007 estimate, Missouri reported that 80.1 percent, of seniors lived in owner-occupied housing, a one percent increase from 2000. The rate ranged from 93 percent in Ralls County to about 63 percent in St. Louis City.

Seniors Living in Families

Family life enhances the senior population's well-being. Seniors who live alone are more likely to be socially isolated and at greater risk of accidental injury as well as physical and mental illness. The Census defines families as

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two or more related persons living in the same household. Persons residing in single person households are not reported as “families.” In 2007, 63.6 percent of Missouri seniors lived in family households. By county, the percent of seniors living in family households ranged from a high of 76 percent in Ray County to approximately 52 percent in Gasconade County.

Median Value of Owner-Occupied Housing

The ownership of a house represents a significant asset for most seniors, and the relative value of housing is a useful indicator of both seniors’ and community assets. In 2007, the median value of owner-occupied housing in Missouri was \$138,600, an increase over the 2000 census estimate of \$86,900. By county, the median value of housing ranged from a high of \$196,700 in St. Charles County to a low of \$50,057 in Worth County.

Seniors in Poverty

The proportion of seniors living in poverty is a direct measure of economic need. According to 2007 ACS-based estimates, 9.3 percent of Missouri seniors lived in poverty, slightly lower than the 2000 estimate of 9.9 percent. In 2007 by county, the poverty rate among seniors ranged from a low of 3.5 percent in Ray and Platte counties to a high of nearly 23 percent in Shannon and Oregon counties.

Average Income of Senior Households

In 2007 the average income estimate for Missouri’s senior households was \$43,662, an increase of approximately 13 percent since 2000. In 2007 by county, senior’s average household income ranged from \$76,000 in Boone County to \$21,232 in Shannon County.

Seniors with a College Education

Higher levels of educational attainment are positively correlated with household and community wealth and well-being. In 2007, an estimated 14.9 percent of Missouri seniors had completed a college education, an increase of nearly three percent from 2000, reflecting the aging of the baby boomers. The state’s senior population with a college education in 2007 ranged from 36.3 percent in Boone County to 3.3 percent in Schuyler County.

Health and Wellness

The health and wellness of Missouri seniors can be gauged in several ways. The Missouri Senior Report focuses on seven indicators of long term health and wellness that can be impacted by preventative practices and public health interventions. In past editions of the report, these measures were taken from health survey data for which the best estimates available were at the geographic level of multi-county regions. In 2007, the Missouri Foundation for Health funded a county-level study that includes the items used in previous Missouri Senior Reports. For two indicators, ‘No Sigmoidoscopy or Colonoscopy’ and ‘No Mammography within Past Year’, comparable U.S. data are not available for 2007. Due to variations in sample size and response rates at the county-

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level, age-cohort specific reporting may vary from state-level estimates. Additional information about both regional and county-level estimates, as well as references about health indicators and health practices, can be found at the Missouri Department of Health and Senior Services' Web sites www.dhss.mo.gov/CommunityDataProfiles/ and www.dhss.mo.gov/Health/index.html.

No Exercise, 2007

In 2007 the percent of Missouri seniors reporting they participated in no exercise was higher, 38.5 percent, than the national rate of 32.5 percent among seniors. The range of seniors not engaging in exercise was quite broad, as many as 50 percent of Dunklin County seniors reported engaging in no exercise while as few as 24 percent of Webster County seniors reported limited physical activities.

No Sigmoidoscopy or Colonoscopy, 2007

Approximately 37 percent of Missouri seniors report not having a screening test for colon cancer (sigmoidoscopy or colonoscopy) within the past 10 years. Though not annually comparable, the U.S. rate in 2006 was 33 percent. Fifty-three percent of Worth County seniors had not undergone this screening within a ten-year period compared to slightly less than 14 percent in St. Louis City.

High Blood Pressure, 2007

About forty percent of Missouri seniors reported a diagnosis of high blood pressure compared to the national level of nearly 58 percent. The range within Missouri counties was also varied. Consistent with national trends, 57 percent of New Madrid seniors reported receiving a diagnosis of high blood pressure, while only 27 percent of Cass County seniors reported receiving this diagnosis.

Obesity, 2007

Slightly more than a quarter of Missouri seniors responding to the county-level study reported a body mass index (BMI) that indicated obesity, compared to 22 percent of seniors nationally. Thirty-seven percent of Clark County seniors reported their BMI in the obese range, compared to slightly less than 16 percent in Mississippi County.

Smoking, 2007

Approximately 11 percent of Missouri seniors reported they smoked, compared to 8.6 percent seniors nationally. More than 21 percent of Madison County seniors reported smoking, the highest rate in Missouri, while four percent or less of seniors smoke in Dade, Lafayette, and Perry Counties.

No Mammography, 2007

Of women age 65 and over surveyed through the 2007 county-level study, half reported not having a mammogram in the past year. Female seniors in Jackson County were the least likely to undergo this routine screening procedure, while female seniors in St. Charles County were the most likely to undergo this procedure.

Introduction

High Cholesterol, 2007

About a quarter of Missouri seniors reported having been told by a health-care professional that they have high cholesterol levels. More than 42 percent of Mississippi County seniors reported receiving this diagnosis, the highest percentage in Missouri in 2007. Fewer than 15 percent of seniors in Cooper and Cape Girardeau Counties reported a diagnosis of unhealthy cholesterol levels, the lowest figures in the state.

Falls Among Older Adults: A National Public Health Crisis

By Paula Nickelson, Prevention Services Coordinator, Department of Health and Senior Services and the Executive Leadership Team of the Show Me Falls Free Missouri State Coalition.

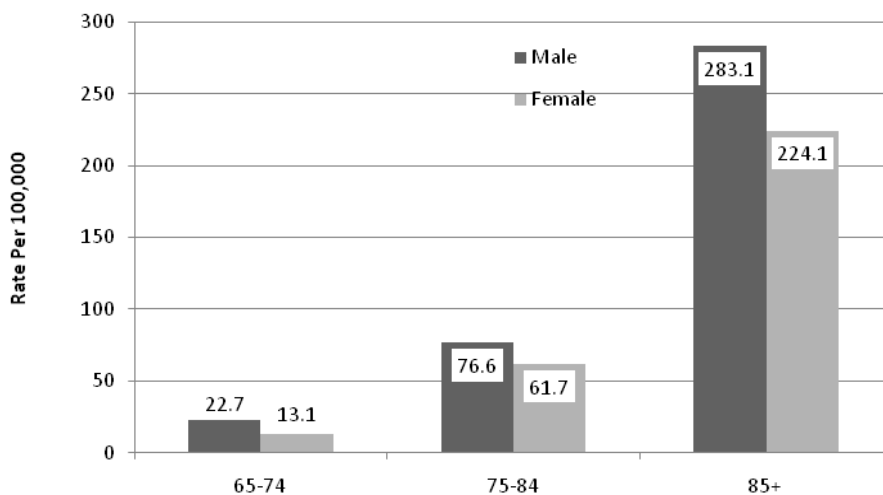
How big is the problem?

Falls and fall-related injuries among older adults are common and present a serious public health crisis in the United States. Falls among older adults result in longstanding pain, functional impairment, disability, hospital admissions, premature nursing home admissions and death.^{1,3} Further, they represent a significant burden on individuals, families, society and the health care system, as evidenced through associated costs and decreased quality of life for our older adults and their families.

More than one-third of adults 65 and older living in the community fall each year in the United States,⁴ the rate increases to 40 percent among those over the age of 80 years.² Among older adults, falls are the leading cause of injury deaths.⁵ In Missouri, the fall death rate for older adults was more than thirty percent higher than the national death rate in 2005.

More than one-third of adults 65 and older fall each year.

Figure 1. Fall death rate by age and sex, among seniors 65+ years of age, Missouri, 2003-2005



Source: DHSS, Death MICA (<http://www.dhss.mo.gov/DeathMICA/index.html>)

20% to 30% of older adults who fall suffer moderate to severe injuries.

The death rate of falls increases with age, and jumps sharply for older adults. Fall death rates among Missouri older adults are generally slightly higher in males than in females (Figure 1). However, females account for a larger number of falls deaths, because they are more likely to survive into the older age groups.⁶

Twenty to 30 percent of people who fall suffer moderate to severe injuries such as bruises, hip fractures, or head trauma.^{7,8} Most fractures among older adults are caused by falls.⁹ Falls are the most common cause of traumatic brain injuries.¹⁰

Falls Among Older Adults: A National Public Health Crisis

Many who fall also have a chronic or acute disease.

The older adult's fall-related injury also impacts the caregiver(s).

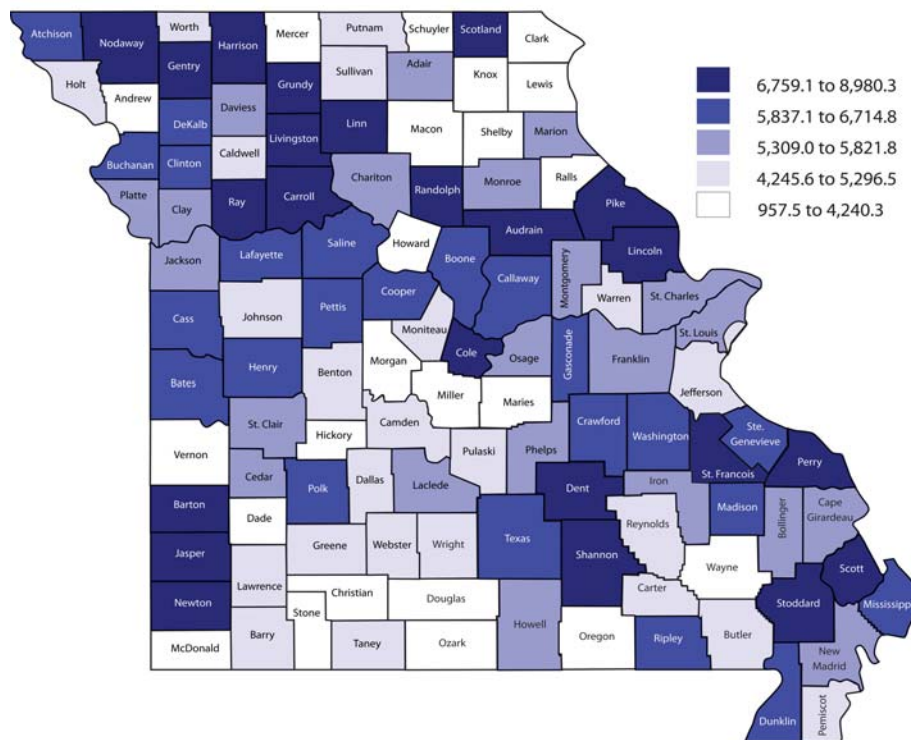
Many older adults never fully recover from falls, living with chronic pain, reduced functional abilities, and often leading to reduced independence.¹¹ One study found that falls were the major reason for 40 percent of nursing home admissions.¹²

Many people who fall also have a chronic or acute disease. The functional impairment as a result of that disease either precipitates the fall or is further complicated by the fall.¹³ For example, individuals with arthritis may experience decreased mobility or decreased grip which may exacerbate a fall. Or individuals prone to depression may engage in physical activity less and, once sustaining a fall, experience an exacerbation of their depressive illness due to pain or limited mobility.

Many people who fall, even those who are not injured, develop a fear of falling. This fear may cause them to limit their activities, leading to reduced mobility and physical fitness, and increasing their actual risk of falling.¹⁴

The older adult's fall-related injury also impacts their caregiver(s). Once a fall injury occurs, the caregiver(s) may be impacted by increased

Figure 2. Rate (per 100,000) of ER visits and hospitalizations due to unintentional fall injuries* among Missouri seniors 65+ years, by county, 2004-2005



Source: DHSS, Injury MICA (<http://www.dhss.mo.gov/>)

* Principal diagnosis

Falls Among Older Adults: A National Public Health Crisis

time away from work, concerns over healthcare costs and coverage, and decreased time for their own family, leisure or community commitments.

The rate of emergency room visits and hospitalizations due to unintentional fall injuries increase considerably with age among older adults. In 2006, the rate in Missouri for seniors 85 years and over was more than four times higher than those at 65-74 years (13,393 vs. 3,047 per 100,000). Older adult females are almost twice as likely to be hospitalized or admitted to the emergency room due to unintentional fall injuries than older adult males (6,637 vs. 3,702 per 100,000). Further, the rate of emergency room visits and hospitalizations due to unintentional fall injuries in Missouri varies by county, from 958 per 100,000 in Clark County to 8,980 per 100,000 in Livingston County in 2005-2006.¹⁵

Costs of fall injuries tend to increase with age and tend to be higher for women.

The total direct cost of all fall injuries for people 65 and older in 2000 was slightly more than \$19 billion.¹⁶ By 2020, the annual direct and indirect cost of fall injuries for people 65 and older is expected to reach \$43.8 billion (in current dollars). The costs of fall injuries tend to increase with age and tend to be higher for women.¹⁷

What can older adults do to decrease the risk of falling?

Falls are not an inevitable part of the aging process, and are often highly preventable.

Most experts agree that an approach that addresses multiple modifiable risk factors is the most effective. Older adults should consider increasing their ability to remain independent by decreasing their risk of falling in the following ways:

- Participating in a fall risk assessment. Consult your physician or a physical therapist for advice on such an assessment.
- Managing your health, including chronic and acute conditions and medications. Ask your physician or pharmacist to review your medications with you on a regular basis for adverse interactions or any medications that can be reduced or eliminated.
- Assuring your home and community environments are free of environmental hazards. You may find a home safety checklist is useful, a resource for a home safety checklist is noted later in this article.
- Participating in an appropriate physical activity routine to increase strength, balance and gait. Request a referral for physical therapy, or with your physician's approval, participate in a home exercise program or a physical activity program at your local senior or community center.
- Assuring optimal vision, including adequate and uniform lighting in the home and regular eye exams with recommended corrections. Con-

Falls are not an inevitable part of the aging process.

Falls Among Older Adults: A National Public Health Crisis

sider light bulbs throughout your house with sufficient wattage to allow you to see clearly in each room including stairwells, hallways and bathrooms. Schedule eye examinations regularly.

In customizing your personal plan to decrease your or your loved one's risk of falling, you may find these resources of use:

1. "Stay Active & Independent for Life: An Information Guide for Adults 65+"
<http://www.doh.wa.gov/hsqa/emstrauma/injury/pubs/SAILguide.pdf>
2. "What You Can Do to Prevent Falls" – available in English, Spanish and Chinese
<http://www.cdc.gov/ncipc/duip/preventadultfalls.htm>
3. "Check for Safety: A Home Fall Prevention Checklist for Older Adults" – available in English, Spanish and Chinese
<http://www.cdc.gov/ncipc/duip/preventadultfalls.htm>
4. "Taking Steps to Prevent Falling Head Over Heels" and "The AARP Home Fit Guide"
<http://www.aarp.org/family/housing/>
5. "My Drug and Supplement Diary"
<http://www.healthyagingprograms.org>
6. A list of medications which may be useful to review with your physician or your pharmacist is available at:
<http://www.txhca.org/BestPractices/MedMgmt/medBeer1.pdf>

The Show Me Falls Free Missouri State Coalition is led by a multi-agency team.

What can communities do to decrease risk of falling among older adults?

Community leaders, as well as senior-serving organizations and associations, may wish to join the Show Me Falls Free Missouri State Coalition. The State Coalition is led by a multi-agency leadership team including: AARP-Missouri Chapter; Missouri Association of Area Agencies on Aging; Missouri Pharmacy Association; Missouri Physical Therapy Association; Missouri Department of Health and Senior Services; and OASIS.

The Show Me Falls Free Missouri State Coalition is a voluntary coalition of diverse entities interested in decreasing falls and fall-related injuries among Missouri's older adults while maximizing their independence and quality of life and decreasing healthcare costs and deaths.

The Show Me Falls Free Missouri State Coalition has developed a state plan to guide this work which is available at <http://www.dhss.mo.gov/showmefallsfreemissouri>, including information about resources which may be useful to older adults and communities. This site also provides information about how to contact the state coalition and join this important work.

Falls Among Older Adults: A National Public Health Crisis

Missouri joins several other states, as well as national senior-serving organizations and associations in a National Falls Free Coalition. Missouri's state plan is aligned with the national falls free plan available at <http://www.healthyagingprograms.org/content.asp?sectionid=98>

Communities are increasingly planning to optimize their older adults' opportunity to remain independent, which includes decreasing their fall risks. Additional resources which your community may find useful to support these efforts include:

Additional resources which your community may find useful.

1. <http://www.dhss.mo.gov/InterventionMICA>
2. <http://www.oasisnet.org/stlouis>
Free from Falls curriculum, provided by OASIS
3. http://www.mainehealth.org/mh_body.cfm?id=449
A Matter of Balance: Managing Concerns about Falls. This is an evidence-based program proven to help reduce fear of falling and safely increase activity levels of older adults. For more information, or to find a list of Master Trainers in Missouri.
4. <http://www.aarp.org/family/housing/>
"Beyond 50: Livable Communities Quiz"

(Footnotes appear on the last page of this report.)

The Long-Term Care Workforce

*By Robyn I. Stone, DrPh, Executive Director,
Institute for the Future of Aging Services (IFAS),
and*

*Denise Clemonds, CEO,
Missouri Association of Homes for the Aging*

Meeting the long-term care needs of America's chronically disabled older population will become ever more challenging as the Baby Boom generation ages. Both the financing of such care and service design have received much attention, but until recently less thought was given to another key component: recruiting, training and retaining the long-term care workforce. (Stone, 2006).

Fortunately, about five years ago workforce concerns began receiving more scrutiny. More than 35 state commissions and task forces have examined workforce issues and possible solutions.[1] The National Commission for Quality Long-Term Care's 2006 report, *Out of Isolation: A Vision for Long-Term Care in America*, made the case for long-term care reform, including confronting workforce problems.

In addition, the Institute of Medicine (IOM) and the U.S. Departments of Health and Human Services (HHS) and Labor (DOL), the National Commission on the Nursing Workforce for Long-Term Care, the Citizens for Long-Term Care, and the National Alliance for Caregiving (the Alliance) have become involved.

These organizations concur that:

1. The professionals and paraprofessionals who manage, supervise and provide long-term care services already are in short supply.
2. The problem goes beyond mere numbers. There is now a dearth of qualified, competent, appropriately trained and educated caregivers even among the available workforce.
3. Lack of competencies and workforce instability result in:
 - Problems accessing needed services. This has, in some cases, compromised safety, quality of care and quality of life;
 - Higher costs due to the need to continuously recruit and train new personnel and/or employ higher-cost contract staff;
 - Extreme workloads for nurses and paraprofessional staff, inadequate supervision, less time for new staff training, as well as employee accident and injury rates exceeding those in construction and mining.
4. Growing demand from aging baby boomers, coupled with shrinkage of the traditional caregiver labor pool, could make a bad situation significantly worse unless decisive action is taken.
5. Workforce shortages do not exist in isolation but are related to all other aspects of long-term care reform, from financing to technological innovations.

*Those who
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The Long-Term Care Workforce

There is no “silver bullet” that can solve today’s problems, much less tomorrow’s. Rather, it will require a multifaceted approach.

There is no “silver bullet” that can solve today’s problems, much less tomorrow’s. Rather, it will require a multifaceted approach. How the United States chooses to meet the growing demand for long-term care will significantly impact those in need of care and their loved ones.

The Make-up of the Long-Term Care Workforce

According to the Bureau of Labor Statistics (BLS) as of December, 2007, about 3.9 million people worked in facility-based and home care settings[2], not including informal caregivers and caregivers employed directly by consumers and their families. This report focuses on licensed professionals and direct caregivers. In Missouri in 2007, approximately 67,000 people worked in facility-based care while approximately 11,000 worked as home health aides.

Licensed Professionals

Physicians. Physicians are involved in long-term care as nursing home and home health agency medical directors and as the individuals who must sign off on nursing home and home health care plans. Some also treat their elderly patients after placement in a nursing home or assisted living facility.

Nurse practitioners (NPs). NPs are registered nurses with additional education in health assessment, diagnosis and management of illness and disease. Studies of NPs suggest they enhance the medical services available to residents and prevent unnecessary hospital admissions (McAiney, 2005). A survey of nursing home medical directors found that they perceive NPs as particularly effective in maintaining physician, resident and family satisfaction (Rosenfeld, Kobayashi, Barber, and Mezey, 2004).

Nursing home/other long-term care administrators. The federal government requires states to license nursing home administrators, although there are no national standards. States determine whether and how administrators in assisted living facilities, home health agencies and other home and community-based services agencies are credentialed. In Missouri, nursing home administrators must pass state and national licensure exams as well as demonstrating three years experience in health care administration or two years of postsecondary education in the field (Missouri Board of Nursing Home Administrators).

Of late there has been a sharp decline in the number of individuals entering nursing home administration and a high turnover rate among current job holders (National Association of Boards of Examiners of Long Term Care Administrators, 2001).

Nurses. An estimated 500,000 registered nurses (RNs) and licensed practical/vocational nurses (LPNs/LVNs) make up the vast majority of long-term care professionals (American Health Care Association, 2004). As of 2007, approximately 56,000 registered nurses were practicing in

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Missouri, as were 17,750 licensed practical/vocational nurses (Missouri Economic Research and Information Center).

RNs are the dominating force in long-term care, playing a major role in care assessment, planning and delivery, as well as quality assurance. RNs are relatively evenly distributed between home health agencies and nursing homes.

Most RNs in nursing homes hold administrative and supervisory positions. Their primary role is to assess resident health, develop treatment plans and supervise LPNs and paraprofessional direct care staff. Home health RNs assess patients' living environment, care for and instruct patients and their families, and supervise home health aides. LPNs account for 46 percent of licensed long-term care nurses and are employed primarily by nursing homes. The LPN workforce is somewhat younger than the RN workforce, and shows greater racial diversity. (Seago, Spetz, Chapman, Dyer and Grumback, 2001).

Although LPN scopes of practice are more limited than that of RNs, they play an extremely important role in nursing homes, providing direct patient care including taking vital signs and administering medications. Surveys indicate that more than 60 percent of LPNs act as charge nurses or team leaders, supervising and directing the care provided by paraprofessional staffers.

Reports of high turnover and difficulty recruiting and retaining RNs and LPNs are widespread. Analysis of a 2001 survey of nursing homes conducted by the American Health Care Association (AHCA) found annual turnover among RNs averaged almost 49 percent, and LPN turnover averaged more than 50 percent.

Direct Care Workers

Direct care workers are the “hands, voice and face” of long-term care. The majority work in nursing homes and assisted living facilities, but increasing numbers provide services in-home. Women make up about 90 percent of the paraprofessional workforce. Almost half of these workers are racial or ethnic minorities.

Importantly, 50 percent of nursing home workers are employed full-time, while only about a third of home care workers are full-time. These differences have implications for developing recruitment and retention strategies.

Certification requirements for direct care workers are usually low or non-existent. Federal law requires less than two weeks of training for nursing assistants and home health aides, although most states have additional requirements. Missouri has a certified nurse assistant program (CNA) that prepares individuals for employment in various long term care settings. The state-approved course requires the individual to complete

Reports of high turnover and difficulty recruiting and retaining RNs and LPNs are widespread.

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75 hours of classroom training, 100 hours of on-the-job training and successfully complete a two-part final examination. Some of the topics include basic nursing skills, fire safety, disaster training, resident safety and rights, and social and psychological training to care for those with dementia and mental disease. [3]

Federal law does not require training for home care workers and state requirements for these workers vary widely. Missouri does not specify training requirements or licensure for home care workers.

Nationally, the median annual wage in 2005 for personal and home care aides was \$17,710; for home health aides, \$18,850; and for nurse's aides and orderlies, \$21,480 (Bureau of Labor Statistics, 2006). In Missouri, the median annual wage in 2006 for personal and home care aides was \$17,700, for home health aides, \$18,220, and for nurse's aides and orderlies, \$20,320 (Missouri Economic Research & Information Center, 2007). Home health aides was projected to be the fourth fastest growing occupation in Missouri. Growth in this field is projected to increase by more than eight percent between 2007 and 2009 with approximately 500 new openings per year. [4]

One in four direct care workers employed in nursing homes and two in five employed by home care agencies lack health insurance. Despite high injury rates, nursing home workers are twice as likely to be uninsured as hospital personnel. (Paraprofessional Health Care Institute, 2006).

Turnover and job dissatisfaction are clearly linked to poor pay and benefits (PHI, 2004), but direct care staff who feel valued and appreciated by their supervisors have better job satisfaction and are more likely to stay (Bowers, Esmond and Jacobson, 2003; Harris-Kojetin, Lipson, Fielding, Kiefer and Stone, 2004). Also, those who stay in their jobs cite their relationships with older adults in their care as the reason.

Trends

The "Emerging Care Gap". Demographers say that between now and 2015 the population aged 85 and older, those most likely to require long-term care, will increase by 40 percent. At the same time, the native-born population aged 25 to 54, the pool from which both paid and informal caregivers largely come, will not increase. After 2015, growth of the older adult population will begin to accelerate and will continue to do so until 2050.

Shift from Institutional Care to In-Home and Community-Based Care Settings. The number of older adults in nursing homes declined from 4.2 percent to 3.6 percent between 1985 and 2004. During this period, alternatives to nursing homes have rapidly emerged, particularly assisted living and home and community-based services. This shift will influence the number and types of caregivers needed, as well as regulatory requirements. According to a recently-released study from the AARP

Between now and 2015 the population aged 85 and older, those most likely to require long-term care, will increase by 40 percent.

The Long-Term Care Workforce

Public Policy Institute, compared to the U.S. average, Missouri allocates a greater percentage of its Medicaid long-term care spending to home and community-based services for seniors and those with disabilities.[5] The study also notes that the number of Missourians receiving home and community-based services increased by approximately 15 percent (+15,753) between 2000 and 2006 while those receiving services in nursing homes has minimally declined (-156).

Movement to New Models of Care. The organization of tomorrow's long-term care system will be different. Traditional nursing homes may not exist, but become primarily sub-acute facilities, with the more traditional long-term care services being provided in other types of residential settings.

Home and community-based services will dominate long-term care delivery. Consumer-directed care enables older adults, rather than professionals, to make decisions about the services they want, who they want to deliver them, and how and when they are delivered.

Introduction of New Technology. The impact of new technology on the supply and demand for personnel is promising but uncertain. Technology may reduce paperwork burdens and injury rates while improving worker efficiency. Telehealth, including electronic records that allow monitoring health and functional status and managing patient transitions from setting to setting, may help as well.

The impact of new technology on the supply and demand for personnel is promising but uncertain.

Strategies for Solving the Long-Term Care Workforce Crisis

Goal 1: *Expand the Supply of Personnel Coming into the Long-Term Care Field.*

Clearly, new sources of caregivers must be found. To accomplish this:

- Federal and state government must do a better job of tracking supply and demand and labor shortage areas.
- Employers should cooperate in marketing and recruiting campaigns aimed at improving the image of long-term care. Such firms also should encourage post-secondary schools to expose students to long-term care careers.
- Improved financial assistance, including scholarships and loan forgiveness, should be offered to anyone interested in such careers.

Goal 2: *Create More Competitive Long-Term Care Jobs Through Wage and Benefit Increases*

Low wages for paraprofessional staff and direct care workers, and limited employer-based health insurance coverage for the latter, makes recruiting and retaining personnel difficult. In the long term, wage and

The Long-Term Care Workforce

benefit improvements are tied to fundamental reforms in how long-term care is financed and reimbursed.

In the shorter term, possibilities include:

- A federal/state working group could examine wage and benefit parity between acute and long-term care settings and recommend financing and reimbursement options for achieving parity.
- A working group of the American Association of Homes and Services for the Aging (AAHSA), AHCA, the Alliance, the National Governors Association (NGA) and the National Conference of state Legislators could be established to identify and disseminate strategies for raising wages and providing health insurance to direct care personnel.
- The national provider associations could investigate how temporary and contract personnel are being used and the added costs of these temporary staff.

Higher wages and better benefits alone will not suffice to attract and retain a high-quality workforce.

Goal 3: *Improve Working Conditions and the Quality of Long-Term Care Jobs*

Higher wages and better benefits alone will not suffice to attract and retain a high-quality workforce. Most experts agree that working conditions and the quality of the job must be improved. Potential initiatives include:

- Develop effective long-term care leaders and managers.
- Increase participation of minorities in long-term care management.
- Give long-term care employers and states that improve working conditions financial incentives and regulatory relief.
- Invest in information technology to reduce paperwork.
- Promote employers' self-assessment of working conditions.
- Create career advancement paths in all long-term care settings.

Goal 4: *Make Larger and Smarter Investments in the Development and Continuing Education of the Long-Term Care Workforce.*

The preparation, credentialing and ongoing training of long-term care workers should be redesigned in light of workforce composition and work setting changes, job dissatisfaction, high turnover and vacancy rates, and future needs. Potential initiatives include:

- Encourage government to match long-term care provider investments in workforce development.
- Request the Institute of Medicine (IOM) to review federal regulations governing the preparation and credentialing of the long-term care workforce.

The Long-Term Care Workforce

- Encourage state reform of education and training requirements.
- Make education and training more accessible, particularly in rural areas.
- Improve medical directors' performance by better preparing physicians to assume the position of medical director.
- Strengthen long-term care nurse competencies in geriatrics, administration, management and supervision.
- Reassess the scopes of practice of RNs and LPNs in long-term care.

It is unlikely that the need for new long-term care personnel can be completely reconciled with the growth in demand.

Goal 5: *Moderate the Demand for Long-Term Care Personnel.*

It is unlikely that the need for new long-term care personnel can be completely reconciled with the growth in demand, especially given the shrinking numbers of potential family and formal caregivers. However, other strategies that might improve the efficiency of the workforce or lessen the need for hands-on care should be pursued. Potential initiatives include:

- Identify and disseminate labor-saving service delivery strategies.
- Support government investment in technologies to reduce the demand for direct care personnel.
- Facilitate lateral transfers across health and long-term care settings.
- Create and implement education programs and preventative healthcare.

Goal 6: *Encourage and Support Applied, Evidence-Based Research to Inform Long-Term Care Workforce Policy and Practice.*

- Develop measures of supply, demand and workforce shortages.
- Studies of physicians, nurses and administrators should be conducted to learn why they choose or avoid long-term care careers.
- Determine how the demand for formal and informal long-term care is likely to be affected by the growing population of aging baby boomers, their economic status, their better health, and new ways to diagnose and treat chronic illnesses.
- Quantify the impact of different wage and benefit structures, and other factors, on recruitment and retention, and if such factors are different from other comparable labor markets.

(Footnotes appear on the last page of this report.)

Health Disparities: MoHealthNet Seniors

This paper is the third in a series published in the Missouri Senior Report that explores the nature and impact of health disparities by seniors' demographic and socio-economic status. The 2008 paper provides an update on previous years' analysis and provides a description of Missouri's non-institutionalized seniors (persons 65+) enrolled in Missouri HealthNet, the state's Medicaid program.

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

As baby boomers age, seniors will account for an increasing portion of Missouri's population. According to U.S. Census Bureau Population Estimates, seniors comprised 13.4 percent of Missourians in 2007, an uptick from 13.3 percent in 2006. As a proportion of the population, seniors are anticipated to increase to nearly 15.1 percent by 2015 and more than 19.1 percent by 2025¹.

The race and ethnic composition of the senior population has remained relatively stable since 1990. In 2007, approximately 92 percent of Missouri seniors were White. Blacks made up the largest portion, 7.2 percent, of the non-White senior population in 1990, while accounting for 7.4 percent in 2007. Regardless of the constancy of the race ratio, poor health outcomes disproportionately affect minority seniors.

Significant socio-economic disparities exist between Missouri seniors based on race and ethnicity.

Health Disparities & Poverty

Significant socio-economic disparities exist between Missouri seniors based on race and ethnicity. According to the 2007 American Community Survey, 18.5 percent of Blacks age 65 years and older in Missouri were living in households in poverty compared to 8.5 percent of White seniors.²

Poor seniors are less likely than the affluent to receive adequate healthcare, particularly preventative care, and more likely to forgo doctor's visits and prescription drugs³. Without adequate health care for acute and chronic conditions, poor seniors are more likely to experience serious complications, further exacerbating health disparities. Poor seniors experience greater disability,⁴ faster decline in mental capabilities,⁵ and more limitations on daily activities.⁶

By definition, seniors enrolled in the Missouri HealthNet program are living in poverty. To qualify for the Missouri HealthNet program, adult participants must live in households with incomes less than \$737 a month for an individual and \$992 for a married couple (i.e., incomes less than 85 percent of the federal poverty guideline) and may not possess assets of more than \$1,000 as individuals or \$2,000 as a married couple.⁷

Last year 69,554 non-institutionalized seniors received services through the program. Nearly three quarters of those seniors were female. Forty-four percent (30,619) of all enrolled seniors were between the ages of 65 and 74; approximately 36 percent (24,731) were between 75 and 84; while the remaining 20 percent (14,204) were 85 and older (Missouri HealthNet Data Analysis Project, University of Missouri, 2008).

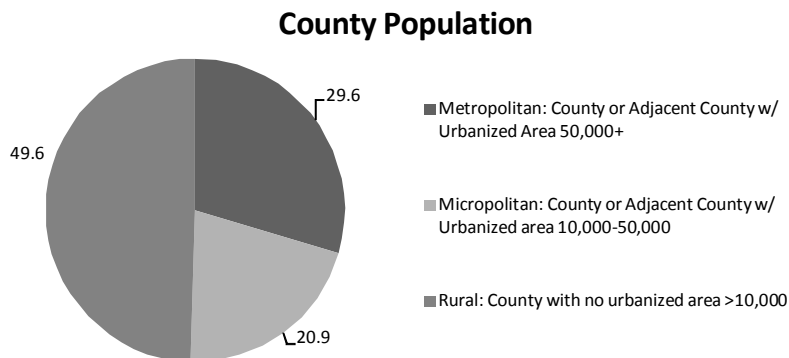
Health Disparities: MoHealthNet Seniors

Seniors enrolled in the Missouri HealthNet program were equally as likely to live in metropolitan as more rural counties.

Seniors enrolled in the Missouri HealthNet program were equally as likely to live in metropolitan as more rural counties⁸. Approximately 35,000, or 50.6 percent, lived in one of Missouri's 34 metropolitan counties, while the remaining 34,400 lived in counties identified by the U.S. Census Bureau as 'micropolitan' (24 counties) or neither metro- or micropolitan (57 counties).

Nearly one-quarter of Missouri HealthNet participants living in metropolitan counties were members of racial minorities compared to less than ten percent of participants in more rural counties. Regardless of counties' population density, the distribution of participants by age cohort remained consistent with the state-wide age distribution.

Figure 1. Percent Non-Institutionalized Seniors by Size of County



Source: Missouri HealthNet Data Analysis Project, University of Missouri, 2008

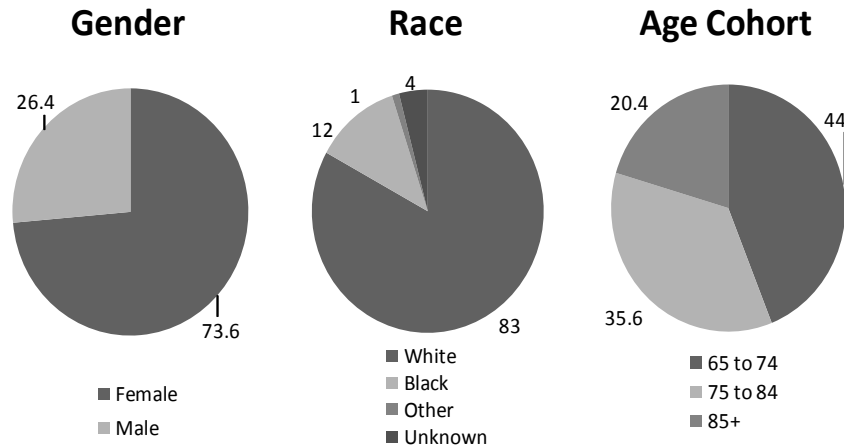
Eighty-three percent of Missouri HealthNet-enrolled seniors identified their race as White and 12 percent as Black. The latter figure is disproportionate to Blacks as a percent of all seniors. Nearly half (47.5 percent) of the Black women receiving healthcare through the Missouri HealthNet program were between the ages of 65 and 74, compared to less than forty percent of White females in this age category. Over sixty percent of Black men served were between 65 and 74, compared to slightly less than 54 percent of White men.

Health Disparities & Race

Race is frequently used as a proxy to describe health disparities rooted in educational and socio-economic disparities. These become most stark when comparing death rates for Missouri seniors from many common diseases. Figure 3 presents the seven most common causes of death by race⁹.

Health Disparities: MoHealthNet Seniors

Figure 2. Percent Non-Institutionalized Seniors by Demographic Categories Enrolled in Missouri HealthNet

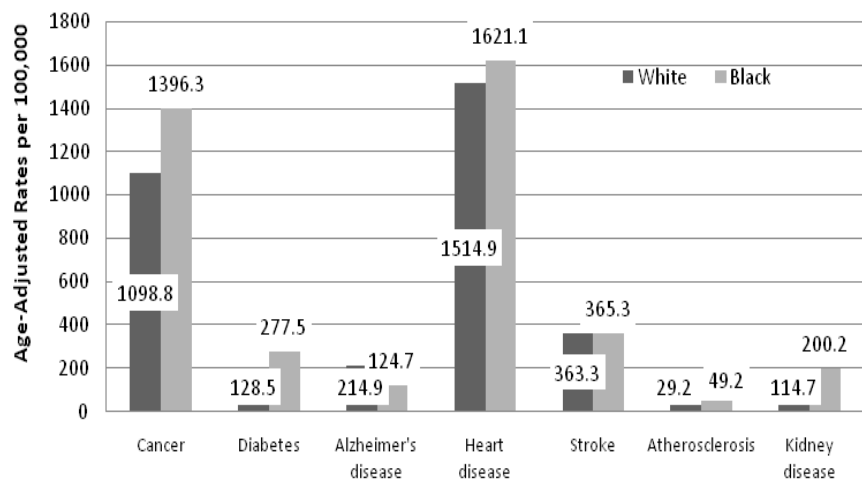


Source: Missouri HealthNet Data Analysis Project, University of Missouri, 2008

The highest levels of disparities among death rates were found for diabetes, kidney disease, Alzheimer’s disease, and atherosclerosis. Black seniors were more than twice as likely to die from diabetes, while White seniors were approximately forty percent more likely to die from Alzheimer’s disease than Blacks.

White Missouri seniors died from kidney disease at a rate only three quarters that of Blacks. Similarly, White Missouri seniors died from atherosclerosis at a rate less than 70 percent of that for Blacks. Of these four diseases, only Alzheimer’s disease is not preventable (Death MICA, Missouri Department of Health and Senior Services, 2006).

Figure 3. 2006 Death Rates by Race and Age, 65+



Source: Death MICA, Missouri Department of Health & Senior Services, 2006

Health Disparities: MoHealthNet Seniors

Diabetes is a highly treatable disease, particularly when diagnosed early and when consistently and aggressively managed¹⁰. However, a greater percent of Black seniors report barriers to many of the activities and resources known to effectively prevent and manage this chronic illness.

According to both the county-level study and analysis of Missouri HealthNet, Black seniors in Missouri were diagnosed with diabetes at a higher rate than White seniors or Latino seniors. The Missouri county-level study was conducted in 2007 using survey items from the Behavioral Risk Factor Surveillance Survey (BRFSS) to indicate health and wellness issues that can be addressed to better prevent or more successfully manage preventable diseases among seniors.¹¹ Nearly 30 percent of Black seniors responding to the county-level study reported receiving a diagnosis of diabetes, compared to less than 20 percent of White seniors and approximately 16 percent of Latino seniors.

When surveyed for the 2007 county-level study, Black seniors were more likely than Whites or Latino respondents to report increased risk around items related to cause and management of the disease. For example, nearly 50 percent of Black seniors reported not participating in exercise during the previous month, compared to approximately 40 percent of White and 45 percent of Latino seniors.

Similarly, 53.3 percent of Black seniors reported not visiting their physicians when they felt they needed to because they lacked the resources to pay for the visit, while approximately 30 percent of Whites (31.2) and only one quarter of Latinos reported forgoing medical attention due to costs. Thirty-five percent of Black seniors reported Body Mass Index scores in the ‘Obese’ range, nine percent more than did White seniors (26.1) and ten percent more than Latino seniors (25.4). Table 1 presents findings to these county-level study items.

While both death rates and selected responses from the Missouri’s county-level study provide valuable indicators of the overall status of Missouri’s senior minority population, analysis of Missouri HealthNet usage by race and gender paints a picture of the health issues faced by the poorest of Missouri’s seniors. Diagnoses for seniors enrolled in the Missouri HealthNet program reveal trends consistent with the county-level study, but with racial disparities more extreme for the most treatable of diseases.

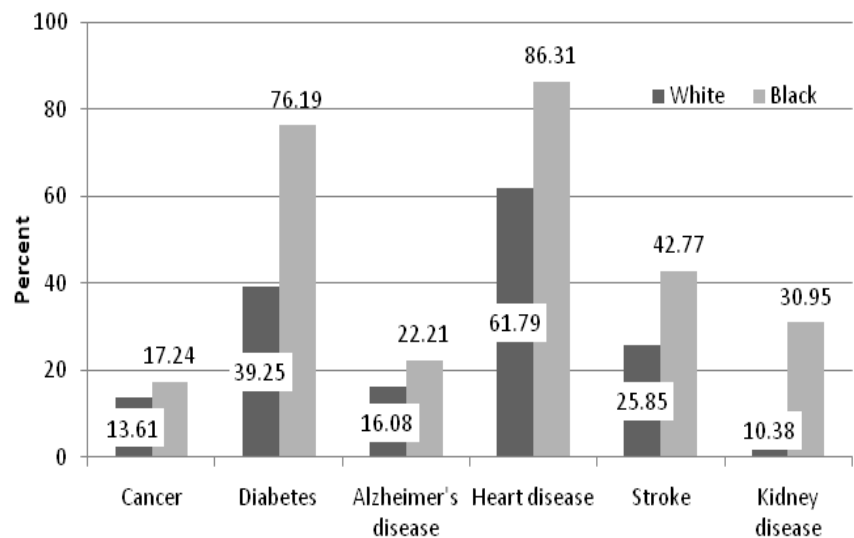
Black seniors enrolled in the Missouri HealthNet program were nearly 40 percent more likely to be diagnosed with diabetes than their White counterparts, 25 percent more likely to be diagnosed with heart disease, and approximately 20 percent more likely to receive services for the treatment of both stroke and kidney disease. Figure 4 describes these disparities.

The highest levels of disparities among death rates were found for diabetes, kidney disease, Alzheimer’s disease, and atherosclerosis.

Health Disparities: MoHealthNet Seniors

Economically, communities with poor, unhealthy senior populations experience reduced productivity from both seniors and those who support them.

Figure 4. Missouri HealthNet Diagnosis by Race



Source: Missouri HealthNet Data Analysis Project, University of Missouri, 2008

Implications

Racial and socio-economic health disparities have substantial implications for Missouri communities and their senior populations. Economically, communities with poor, unhealthy senior populations experience reduced productivity from both seniors and those who support them.

Premature death results in years of productive lives lost for the family and community. Preventative treatment is less expensive than treating complications. The implications for individual seniors and their families are also significant. Quality of life is greatly reduced for these seniors, further limiting social and economic opportunities. Increased limitations in performance of daily activities reduce independence and elicit psychological distress, further contributing to physical and mental deterioration.

(Footnotes appear on the last page of this report.)

How to Use the Senior Report

What is an outcome indicator?

An outcome indicator represents an issue important to the overall well-being of seniors in your community, such as seniors' economic well-being and access to health care.

What is an outcome measure?

An outcome measure is the specific item that indicates how well seniors are doing in regard to an issue. For example, 'Primary Care Physicians per 1,000 Seniors' is the outcome measure for the outcome indicator, 'Health Care Access'. In order to be included in the Senior Report all measures must be available on an annual basis and collected in a consistent manner across counties, allowing for both comparison over time and between counties.

What is a status indicator?

A status indicator describes the characteristics of the senior population in a county at a single point in time. A status indicator provides 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 measurement. 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.

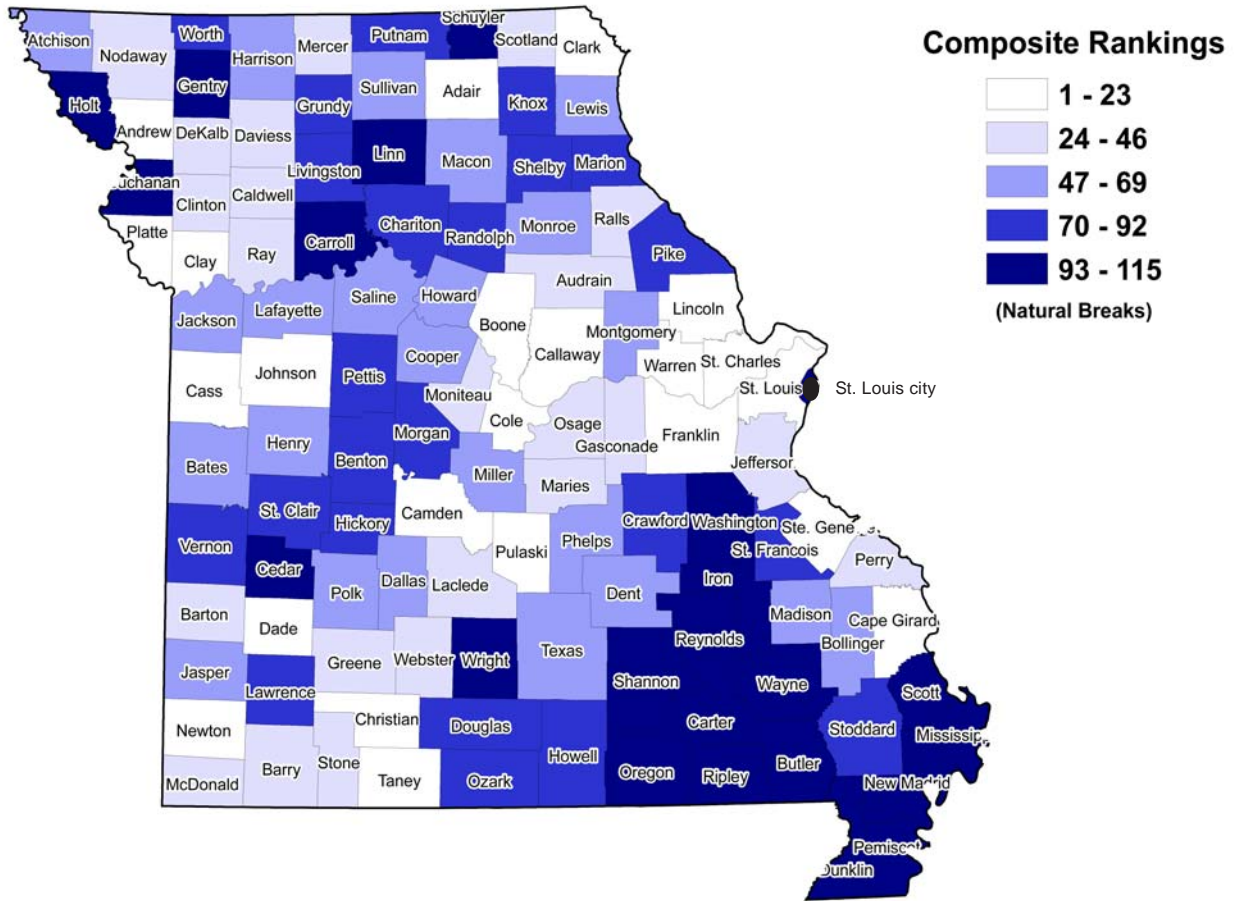
Tables are also included that organize counties and rankings by three general categories of population density as defined by the U.S. Census Bureau: metropolitan (county or adjacent county with urbanized area 50,000+), micropolitan (county or adjacent county with urbanized area 10,000 – 50,000), and rural (county with no urbanized area >10,000).

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. The Economic Contribution and Long Term Care Costs indicators are not calculated in the composite rank due to variation in local economies.

State Data Report

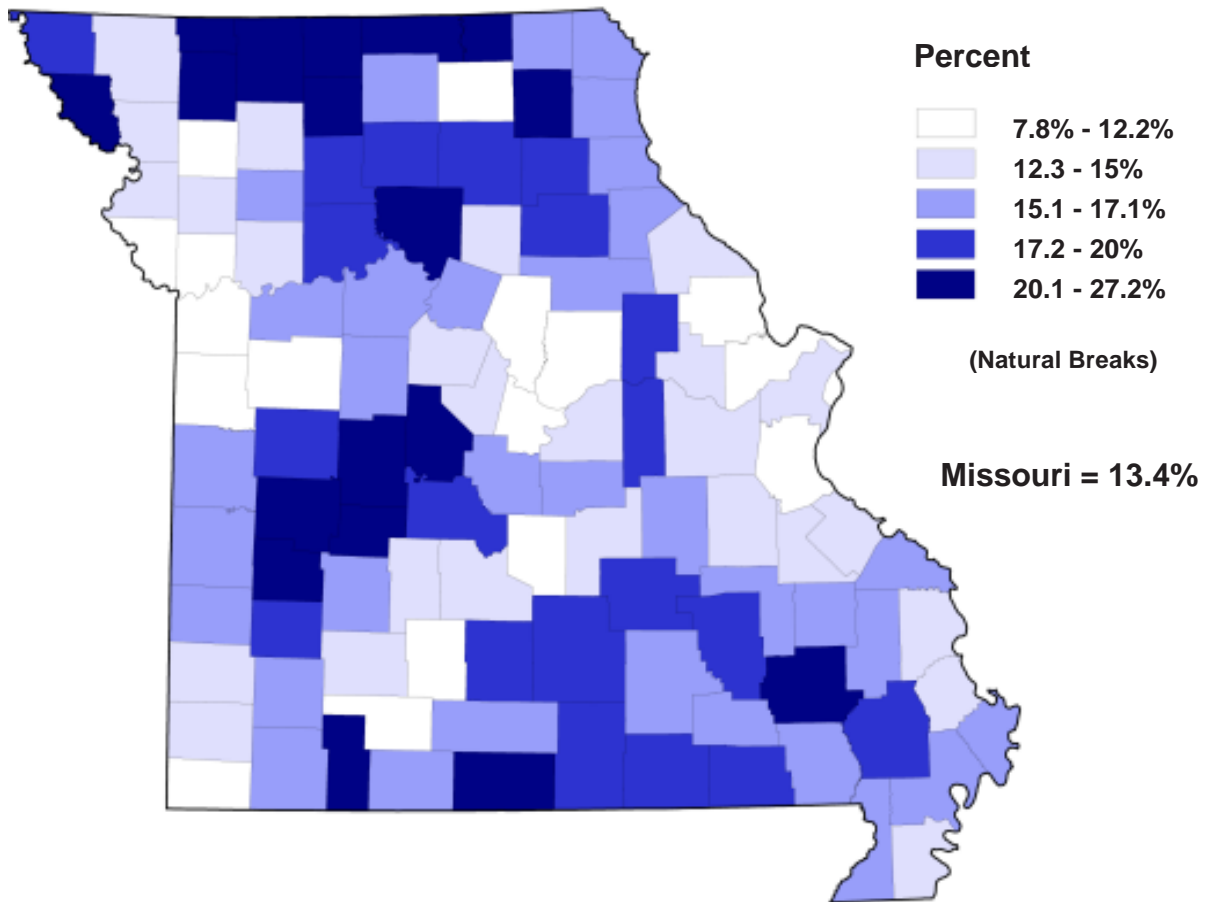
Missouri Senior Report, 2008 Composite County Rankings



Missouri Senior Report 2008
 Produced by: University of Missouri Extension, Office of Social and Economic Data Analysis (OSED)A
 Map Generated on 12.4.2008

Comparative County Ranks

Percent of Population 65 and Over, 2007



Missouri Senior Report 2008
Source: US Census Bureau, Census of Population and Housing, 2007
Produced by: University of Missouri Extension, Office of Social and Economic Data Analysis (OSED)
Map Generated on 11.19.2008

Comparative County Ranks

Composite Index in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Boone	1	1	1	Dallas	59	50	58
Platte	2	2	4	Monroe	60	80	34
Taney	3	3	3	Macon	61	66	87
Cole	4	5	2	Texas	62	75	65
Clay	5	6	9	Miller	63	61	25
St. Louis	6	15	22	Bollinger	64	55	66
Christian	7	7	17	Cooper	65	59	68
Pulaski	8	10	13	Dent	66	68	41
Adair	9	9	7	Polk	67	65	84
St. Charles	10	8	18	Harrison	68	69	81
Camden	11	12	26	Madison	69	87	62
Cass	12	16	23	Pike	70	74	73
Cape Girardeau	13	13	24	Livingston	71	103	105
Newton	14	4	5	Marion	72	77	71
Johnson	15	26	51	Benton	73	63	103
Ste. Genevieve	16	14	14	Randolph	74	52	54
Warren	17	18	20	Grundy	75	49	94
Clark	18	11	8	Shelby	76	82	11
Franklin	19	17	43	Pettis	77	83	52
Lincoln	20	32	33	Douglas	78	54	70
Dade	21	24	45	Lawrence	79	64	35
Andrew	22	31	53	Crawford	80	99	96
Callaway	23	30	76	Chariton	81	96	79
Stone	24	37	30	Knox	82	79	75
McDonald	25	36	56	Worth	83	89	12
Osage	26	38	55	Stoddard	84	60	59
Webster	27	25	27	St. Clair	85	67	86
Ray	28	27	28	Hickory	86	92	106
Maries	29	21	15	Vernon	87	105	101
Ralls	30	19	6	St. Francois	88	85	108
Barry	31	20	21	Ozark	89	44	107
Caldwell	32	23	37	Howell	90	94	100
Clinton	33	56	89	Morgan	91	91	82
Gasconade	34	51	46	Putnam	92	76	29
Jefferson	35	39	50	Buchanan	93	97	92
Daviess	36	33	40	Wright	94	73	61
Barton	37	22	38	Cedar	95	93	98
Greene	38	35	49	Scott	96	81	67
Mercer	39	43	57	Gentry	97	95	83
DeKalb	40	29	80	Reynolds	98	101	95
Laclede	41	34	44	Schuylar	99	100	31
Moniteau	42	45	10	Carroll	100	88	63
Scotland	43	58	19	Carter	101	107	104
Nodaway	44	62	42	Iron	102	106	91
Audrain	45	41	36	Shannon	103	104	90
Perry	46	46	48	Wayne	104	108	110
Bates	47	47	16	Oregon	105	109	111
Henry	48	53	72	Holt	106	102	47
Atchison	49	28	32	Mississippi	107	86	109
Howard	50	40	69	Linn	108	111	99
Phelps	51	48	77	Butler	109	84	97
Lewis	52	78	64	Washington	110	98	88
Sullivan	53	42	78	New Madrid	111	110	102
Lafayette	54	72	74	Dunklin	112	112	113
Saline	55	57	39	Ripley	113	113	112
Montgomery	56	70	85	Pemiscot	114	114	114
Jackson	57	90	93	St. Louis city	115	115	115
Jasper	58	71	60				

Comparative County Ranks

Composite Index by Population Type

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

Comparative County Ranks

Economic Well-Being in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Platte	1	1	1	Knox	59	72	77
St. Charles	2	2	2	Sullivan	60	63	74
Clay	3	4	4	Lawrence	61	61	55
Cass	4	3	3	Livingston	62	56	75
Osage	5	5	6	Pike	63	68	60
Clinton	6	13	14	Phelps	64	74	72
St. Louis	7	7	5	Pettis	65	62	62
Andrew	8	6	9	Barry	66	66	63
Warren	9	8	7	Henry	67	81	81
Jefferson	10	11	11	Barton	68	59	53
Camden	11	10	10	Linn	69	64	65
Franklin	12	22	24	Mercer	70	35	58
Ray	13	12	8	Jasper	71	80	78
Lafayette	14	17	19	Crawford	72	70	66
Scotland	15	31	38	Morgan	73	53	56
Nodaway	16	20	34	Adair	74	73	67
Boone	17	18	26	Laclede	75	86	85
Cole	18	14	16	Harrison	76	52	70
Christian	19	19	22	Randolph	77	83	82
Gasconade	20	28	18	Dallas	78	78	80
Moniteau	21	24	13	Carroll	79	69	59
Johnson	22	15	28	Vernon	80	85	90
Cooper	23	26	20	Polk	81	79	79
Pulaski	24	30	37	Cedar	82	84	84
Lincoln	25	25	15	Marion	83	89	88
Ste. Genevieve	26	23	25	Grundy	84	58	68
Holt	27	33	30	McDonald	85	76	73
Atchison	28	27	31	Benton	86	77	76
Taney	29	36	32	Stoddard	87	93	91
Daviess	30	29	29	Hickory	88	82	83
Ralls	31	21	17	St. Francois	89	94	94
Stone	32	32	23	St. Clair	90	87	87
Monroe	33	37	21	Dent	91	90	96
Jackson	34	39	40	Texas	92	98	99
Cape Girardeau	35	43	47	Scott	93	96	95
Maries	36	34	36	Bollinger	94	92	89
Newton	37	16	27	Putnam	95	91	92
DeKalb	38	9	12	Schuyler	96	88	86
Callaway	39	38	35	Madison	97	97	93
Greene	40	44	50	Douglas	98	95	97
Bates	41	47	48	Howell	99	99	98
Montgomery	42	46	46	St. Louis city	100	103	100
Caldwell	43	40	42	Reynolds	101	102	101
Audrain	44	49	45	Ozark	102	100	106
Perry	45	48	33	Butler	103	101	105
Howard	46	45	51	New Madrid	104	106	104
Clark	47	55	39	Mississippi	105	104	103
Lewis	48	41	44	Shannon	106	105	102
Chariton	49	50	49	Washington	107	107	107
Shelby	50	54	41	Wright	108	109	109
Saline	51	67	57	Iron	109	108	108
Worth	52	75	54	Wayne	110	112	113
Macon	53	42	43	Carter	111	110	110
Gentry	54	51	52	Dunklin	112	114	114
Buchanan	55	60	64	Oregon	113	111	111
Dade	56	57	69	Ripley	114	113	112
Webster	57	65	71	Pemiscot	115	115	115
Miller	58	71	61				

Comparative County Ranks

Economic Well-Being by Population Type

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

Comparative County Ranks

Workforce Participation in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Taney	1	1	1	Clark	59	52	32
St. Louis city	2	3	3	Cass	60	55	59
Cole	3	2	2	McDonald	61	56	80
Boone	4	4	4	Miller	62	73	56
Jackson	5	5	5	Butler	63	26	24
Platte	6	6	7	Bates	64	61	47
Cape Girardeau	7	7	8	St. Francois	65	69	74
St. Louis	8	8	6	Howell	66	63	68
Pulaski	9	47	42	Vernon	67	64	70
Adair	10	10	11	Moniteau	68	72	71
Greene	11	13	13	Knox	69	62	51
Marion	12	9	9	Lincoln	70	74	75
Perry	13	16	17	Madison	71	68	38
Jasper	14	14	16	Ray	72	65	64
Clay	15	12	10	Montgomery	73	67	66
Saline	16	11	14	Holt	74	71	69
Pettis	17	15	15	Daviess	75	81	85
Cooper	18	20	41	Johnson	76	66	65
Randolph	19	17	21	Clinton	77	82	83
Newton	20	19	19	Macon	78	92	89
Buchanan	21	21	23	Ralls	79	76	63
Mississippi	22	25	28	Warren	80	79	73
Pike	23	24	18	Christian	81	78	84
Gasconade	24	23	22	St. Clair	82	85	91
Shelby	25	27	25	Worth	83	87	79
Phelps	26	22	20	Iron	84	91	95
DeKalb	27	54	76	Crawford	85	80	81
Nodaway	28	18	12	Cedar	86	88	92
Lewis	29	59	40	Caldwell	87	83	87
Lafayette	30	39	39	Chariton	88	77	78
Gentry	31	31	26	Wright	89	86	82
Livingston	32	36	29	Jefferson	90	84	86
Dunklin	33	38	30	Polk	91	93	97
Atchison	34	51	33	Lawrence	92	90	88
Scott	35	44	46	Sullivan	93	89	77
Grundy	36	33	54	Texas	94	101	102
Camden	37	37	58	Dade	95	70	72
Callaway	38	29	43	Webster	96	102	103
Pemiscot	39	43	45	Oregon	97	108	107
Franklin	40	28	31	Washington	98	103	99
Scotland	41	41	37	Andrew	99	99	98
Audrain	42	40	49	Schuyler	100	107	109
Linn	43	49	50	Putnam	101	94	94
Dent	44	97	90	Stone	102	106	104
Harrison	45	34	35	Maries	103	100	96
Ste. Genevieve	46	58	67	Reynolds	104	98	101
Barton	47	30	34	Carter	105	96	100
St. Charles	48	32	27	Benton	106	105	105
Henry	49	50	53	Dallas	107	104	106
Laclede	50	60	55	Morgan	108	95	93
New Madrid	51	48	44	Ripley	109	110	110
Osage	52	57	61	Bollinger	110	109	108
Stoddard	53	46	60	Shannon	111	111	111
Mercer	54	75	62	Wayne	112	112	112
Barry	55	45	36	Hickory	113	113	113
Howard	56	35	52	Ozark	114	114	114
Carroll	57	53	57	Douglas	115	115	115
Monroe	58	42	48				

Comparative County Ranks

Workforce Participation by Population Type

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

Comparative County Ranks

Economic Contribution in Rank Order

This is the first year Economic Contribution has been included, thus no trend data are available.

County	2008	County	2008
Cedar	1	Gasconade	59
Hickory	2	Sullivan	60
Daviess	3	Vernon	61
Chariton	4	Caldwell	62
Knox	5	Howell	63
Worth	6	Barton	64
Benton	7	Livingston	65
St. Clair	8	Greene	66
Stone	9	Moniteau	67
Atchison	10	Wright	68
Shelby	11	Cooper	69
Scotland	12	Washington	70
Holt	13	Miller	71
Gentry	14	Nodaway	72
Ripley	15	Scott	73
Linn	16	Boone	74
Pemiscot	17	Lafayette	75
Dunklin	18	Perry	76
Dade	19	Crawford	77
Morgan	20	Madison	78
Schuyler	21	St. Louis	79
Ozark	22	Putnam	80
Wayne	23	Montgomery	81
Carroll	24	Shannon	82
Mercer	25	Adair	83
Saline	26	Osage	84
Douglas	27	Phelps	85
Taney	28	Maries	86
New Madrid	29	Ste. Genevieve	87
Texas	30	Ray	88
Henry	31	Pike	89
Harrison	32	Cole	90
Carter	33	Franklin	91
Stoddard	34	Webster	92
Grundy	35	Randolph	93
Dallas	36	Jasper	94
Audrain	37	St. Francois	95
Macon	38	Bollinger	96
Mississippi	39	Buchanan	97
Bates	40	Jackson	98
Camden	41	McDonald	99
Barry	42	Newton	100
Oregon	43	Cass	101
Polk	44	Ralls	102
Dent	45	St. Louis city	103
Lawrence	46	Clinton	104
Butler	47	Lincoln	105
Lewis	48	Johnson	106
Iron	49	Cape Girardeau	107
Reynolds	50	Pulaski	108
Marion	51	Callaway	109
DeKalb	52	Andrew	110
Howard	53	Platte	111
Pettis	54	Christian	112
Monroe	55	St. Charles	113
Laclede	56	Clay	114
Warren	57	Jefferson	115
Clark	58		

Comparative County Ranks

Economic Contribution by Population Type

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

Comparative County Ranks

Housing in Rank Order

This is the first year Housing has been included, thus no trend data are available.

County	2008	County	2008
Cass	1	Lafayette	59
Platte	2	Adair	60
Wayne	3	Cedar	61
Benton	4	Douglas	62
Butler	5	Nodaway	63
Osage	6	Bates	64
Warren	7	Clinton	65
Shelby	8	Howell	66
Carter	9	New Madrid	67
Bollinger	10	Cooper	68
Howard	11	Callaway	69
Andrew	12	Phelps	70
Christian	13	Camden	71
Putnam	14	Montgomery	72
Franklin	15	Polk	73
Washington	16	Scott	74
Dade	17	Taney	75
Mercer	18	Macon	76
Scotland	19	Buchanan	77
Stoddard	20	Ray	78
St. Francois	21	Monroe	79
Ste. Genevieve	22	Greene	80
Jefferson	23	Lawrence	81
Gasconade	24	Barry	82
Moniteau	25	Holt	83
Lincoln	26	Crawford	84
Maries	27	Gentry	85
Boone	28	Saline	86
Linn	29	Pulaski	87
Lewis	30	Worth	88
Audrain	31	Ozark	89
Perry	32	Johnson	90
Schuyler	33	Pettis	91
Ripley	34	Clay	92
Iron	35	Pike	93
Ralls	36	St. Charles	94
Marion	37	Harrison	95
Knox	38	McDonald	96
Shannon	39	Texas	97
Newton	40	Atchison	98
Henry	41	Oregon	99
Barton	42	Pemiscot	100
Cole	43	Carroll	101
Clark	44	Wright	102
Hickory	45	St. Louis	103
St. Clair	46	Sullivan	104
Jasper	47	Randolph	105
Vernon	48	Dunklin	106
Cape Girardeau	49	DeKalb	107
Stone	50	Webster	108
Chariton	51	Mississippi	109
Grundy	52	Miller	110
Laclede	53	Jackson	111
Madison	54	Daviess	112
Dent	55	Dallas	113
Morgan	56	Livingston	114
Caldwell	57	St. Louis city	115
Reynolds	58		

Comparative County Ranks

Housing by Population Type

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

Comparative County Ranks

Transportation in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Camden	1	5	14	Scott	59	54	40
Daviess	1	1	9	St. Louis	60	68	66
Douglas	1	7	29	Montgomery	61	83	102
Ozark	1	2	45	Holt	62	64	5
Stone	1	4	3	Schuyler	63	52	32
Taney	1	3	1	Boone	64	61	65
Benton	7	10	37	Greene	65	60	60
Cass	8	20	62	Iron	66	88	84
Ray	9	9	31	Webster	67	58	89
Warren	10	12	30	Clinton	68	85	109
Hickory	11	13	21	Jefferson	69	75	96
Dade	12	8	25	Monroe	70	84	85
St. Clair	13	11	16	Shelby	71	77	44
Cedar	14	14	19	Pike	72	82	68
Scotland	15	28	2	Wayne	73	56	69
Platte	16	25	56	Stoddard	74	65	43
Christian	17	18	48	Cole	75	69	64
Dallas	18	15	7	Dent	76	66	17
Marion	19	6	10	Reynolds	77	72	46
DeKalb	20	36	106	Madison	78	97	88
Putnam	21	30	6	Cooper	79	74	83
Knox	22	19	41	Chariton	80	90	22
Carter	23	29	74	Nodaway	81	67	49
Oregon	24	24	51	Polk	82	76	82
Mercer	25	16	4	Carroll	83	79	86
Andrew	26	32	42	Lafayette	84	80	97
Bollinger	27	31	28	Lawrence	85	62	38
Newton	28	22	24	Jasper	86	81	33
Clark	29	27	15	Osage	87	86	104
McDonald	30	40	52	St. Francois	88	92	91
Barry	31	21	26	Perry	89	89	80
Caldwell	32	17	12	Macon	90	73	108
Ripley	33	34	27	Gasconade	91	87	77
Callaway	34	42	87	Cape Girardeau	92	98	94
Shannon	35	45	18	Phelps	93	99	101
Clay	36	41	53	Audrain	94	78	35
Barton	37	39	47	Wright	95	93	55
Adair	38	35	23	Howell	96	100	95
Bates	39	33	8	Pettis	97	91	59
Texas	40	38	20	Harrison	98	94	73
Atchison	41	37	61	Jackson	99	103	98
Henry	42	26	36	Johnson	100	101	105
Crawford	43	48	70	Washington	101	95	99
Ralls	44	23	13	Marion	102	104	93
Gentry	45	46	39	Worth	103	96	11
Pulaski	46	57	78	Livingston	104	107	92
Sullivan	47	43	72	Buchanan	105	105	76
Grundy	48	49	71	Dunklin	106	110	113
St. Charles	49	47	75	Mississippi	107	106	107
Moniteau	50	44	50	Randolph	108	102	79
Ste. Genevieve	51	63	67	Butler	109	108	103
Laclede	52	51	54	Miller	110	111	111
Franklin	53	50	57	Howard	111	109	114
Lincoln	54	55	100	Lewis	112	113	90
Morgan	55	53	81	Pemiscot	113	112	110
Saline	56	71	63	New Madrid	114	114	112
Vernon	57	70	58	St. Louis city	115	115	115
Linn	58	59	34				

Comparative County Ranks

Transportation by Population Type

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

Comparative County Ranks

Household Composition in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Washington	1	1	1	Phelps	59	60	59
Pulaski	2	3	9	Dent	60	61	56
Webster	3	2	2	Perry	61	58	54
Christian	4	4	3	Boone	62	65	65
McDonald	5	6	11	Cape Girardeau	63	66	57
New Madrid	6	9	10	Bates	64	59	60
Lincoln	7	8	4	Montgomery	65	67	71
Jefferson	8	7	5	Pettis	66	71	67
Pemiscot	9	14	13	Lafayette	67	72	64
Bollinger	10	10	8	Adair	68	68	82
Reynolds	11	5	7	Daviess	69	84	73
Mississippi	12	12	21	Vernon	70	73	70
St. Charles	13	13	12	Pike	71	70	68
Scott	14	18	18	Marion	72	69	66
Platte	15	23	29	Clark	73	75	69
Carter	16	15	6	Cooper	74	76	75
Dunklin	17	20	19	Jackson	75	80	79
Laclede	18	22	26	Buchanan	76	83	63
Cass	19	19	23	Sullivan	77	79	74
Shannon	20	17	17	Lewis	78	85	81
Newton	21	24	14	Howard	79	81	95
Madison	22	21	20	Camden	80	74	80
Johnson	23	28	34	Monroe	81	94	88
Callaway	24	26	32	Taney	82	77	78
Andrew	25	30	92	Gasconade	83	89	87
Franklin	26	29	27	Greene	84	82	85
Wright	27	11	16	Schuyler	85	91	90
Warren	28	32	28	Audrain	86	93	96
Stoddard	29	27	35	Stone	87	88	76
Wayne	30	33	31	St. Louis	88	92	86
St. Francois	31	35	33	Douglas	89	39	48
Ripley	32	16	15	Macon	90	95	97
Oregon	33	36	24	Nodaway	91	98	98
Ste. Genevieve	34	34	22	Morgan	92	87	83
Ray	35	40	25	Cedar	93	90	89
Lawrence	36	49	43	Henry	94	86	84
Ralls	37	38	42	Harrison	95	101	104
Clay	38	44	44	Benton	96	78	93
Butler	39	37	39	Saline	97	97	94
Dallas	40	41	49	Grundy	98	96	99
Polk	41	31	38	Carroll	99	100	105
Jasper	42	48	51	Mercer	100	109	111
Barry	43	45	55	Putnam	101	102	91
Osage	44	47	46	Livingston	102	99	102
Miller	45	46	36	Linn	103	107	101
Crawford	46	51	40	Ozark	104	57	53
Dade	47	54	77	Atchison	105	110	109
Texas	48	43	47	Worth	106	114	113
Iron	49	42	37	St. Louis city	107	106	106
Randolph	50	53	45	Chariton	108	111	114
Howell	51	25	30	Gentry	109	103	103
DeKalb	52	52	41	Holt	110	108	100
Clinton	53	56	58	Hickory	111	105	112
Cole	54	62	61	Scotland	112	113	110
Moniteau	55	50	52	Shelby	113	112	107
Caldwell	56	55	62	St. Clair	114	104	108
Maries	57	64	72	Knox	115	115	115
Barton	58	63	50				

Comparative County Ranks

Household Composition by Population Type

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

Comparative County Ranks

Civic Engagement in Rank Order

This is the first year Civic Engagement has been included, thus no trend data are available.

County	2008	County	2008
Reynolds	1	Vernon	59
Schuyler	2	Franklin	60
Pettis	3	Shannon	61
Sullivan	4	Webster	62
Douglas	5	Chariton	63
Daviess	6	Knox	64
Cass	7	Pike	65
Ralls	8	Greene	66
Platte	9	Benton	67
Ozark	10	Cape Girardeau	68
Dade	11	Jasper	69
Gentry	12	Jefferson	70
Andrew	13	Texas	71
Howard	14	St. Louis	72
Maries	15	New Madrid	73
Warren	16	Jackson	74
St. Clair	17	Mississippi	75
Christian	18	Mercer	76
Atchison	19	Linn	77
Dallas	20	Gasconade	78
Saline	21	Grundy	79
Worth	22	Perry	80
DeKalb	23	McDonald	81
Hickory	24	Audrain	82
Cole	25	Montgomery	83
Bates	26	Scott	84
Putnam	27	Butler	85
Oregon	28	Johnson	86
Iron	29	Pulaski	87
Camden	30	Wright	88
Stone	31	Livingston	89
Ray	32	Pemiscot	89
Henry	33	Polk	91
Carter	34	Wayne	92
Shelby	35	Miller	93
Bollinger	36	Nodaway	94
Clark	37	Marion	95
Boone	38	Lawrence	96
Scotland	39	Barry	97
Callaway	40	Morgan	98
St. Charles	41	Macon	99
Barton	42	Harrison	100
Caldwell	43	Ripley	101
Ste. Genevieve	44	Buchanan	102
Lincoln	45	Madison	103
Monroe	46	Adair	104
Clinton	47	Phelps	105
Newton	48	Stoddard	106
Cooper	49	Crawford	107
Lafayette	50	Dent	108
Taney	51	Washington	109
Clay	52	St. Francois	110
Cedar	53	Randolph	111
Holt	54	Dunklin	112
Laclede	55	Lewis	113
Moniteau	56	Howell	114
Carroll	57	St. Louis city	115
Osage	58		

Comparative County Ranks

Civic Engagement by Population Type

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

Comparative County Ranks

Safety in Rank Order

This is the first year Safety has been included, thus no trend data are available.

County	2008	County	2008
Osage	1	St. Louis	59
Chariton	2	Polk	60
Platte	3	Morgan	61
Dade	4	Bollinger	62
Carroll	5	DeKalb	63
Livingston	6	Wright	64
Putnam	7	Douglas	65
Clay	8	Grundy	66
Schuyler	9	Ozark	67
Mercer	10	St. Clair	68
Howard	11	Oregon	69
Ste. Genevieve	12	Iron	70
Christian	13	Sullivan	71
Monroe	14	Carter	72
Nodaway	15	Newton	73
Daviess	16	Miller	74
Scotland	17	Barry	75
St. Charles	18	Linn	76
Ralls	19	Pulaski	77
Webster	20	Saline	78
Perry	21	Callaway	79
Lewis	22	St. Francois	80
Moniteau	23	Boone	81
Worth	24	Dallas	82
Johnson	25	Henry	83
Clinton	26	Madison	84
Benton	27	McDonald	85
Shelby	28	Knox	86
Hickory	29	Dent	87
Andrew	30	Wayne	88
Gentry	31	Randolph	89
Stone	32	Taney	90
Lincoln	33	Stoddard	91
Maries	34	Lawrence	92
Cass	35	Adair	93
La Fayette	36	Washington	94
Montgomery	37	Howell	95
Harrison	38	Cape Girardeau	96
Bates	39	Laclede	97
Pike	40	Vernon	98
Macon	41	Crawford	99
Gasconade	42	Pettis	100
Audrain	43	Buchanan	101
Jefferson	44	Holt	102
Franklin	45	Phelps	103
Ray	46	Marion	104
Warren	47	Ripley	105
Cooper	48	Greene	106
Cedar	49	Mississippi	107
Atchison	50	Scott	108
Caldwell	51	New Madrid	109
Reynolds	52	Jasper	110
Barton	53	Dunklin	111
Texas	54	Butler	112
Clark	55	Pemiscot	113
Camden	56	Jackson	114
Shannon	57	St. Louis city	115
Cole	58		

Comparative County Ranks

Safety by Population Type

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

Comparative County Ranks

Long-Term Care Costs in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Boone	1	1	1	Carroll	59	62.5	62.5
Adair	2	3	3	Jefferson	60	52.5	52.5
St. Louis	3	9	9	Clark	61	42	42
Jackson	4	10	10	Putnam	62	107	107
Cole	5	4	4	St. Clair	63	32.5	32.5
St. Louis city	6	2	2	Crawford	64	88	88
Cape Girardeau	7	6	6	Harrison	65	100.5	100.5
Greene	8	8	8	Gentry	66	65	65
Butler	9	7	7	Schuyler	67	74.5	74.5
Clay	10	11.5	11.5	Christian	68	82	82
Marion	11	13	13	Cedar	69	88	88
Taney	12	15	15	Osage	69	95.5	95.5
Jasper	13	39.5	39.5	McDonald	71	104.5	104.5
Phelps	14	11.5	11.5	Macon	72	71.5	71.5
Madison	15	37.5	37.5	Ripley	73	52.5	52.5
Johnson	16	22.5	22.5	Montgomery	74	68	68
Clinton	17	44.5	44.5	DeKalb	75	88	88
Audrain	18	14	14	Pemiscot	76	29.5	29.5
Buchanan	19	17	17	Mississippi	77	65	65
Camden	20	47	47	Dent	78	56.5	56.5
Nodaway	21	29.5	29.5	Ray	79	82	82
St. Charles	22	16	16	Douglas	80	74.5	74.5
Saline	23	32.5	32.5	Bates	81	82	82
Laclede	24	29.5	29.5	Wright	82	82	82
St. Francois	25	18	18	Cass	83	77.5	77.5
Polk	26	34	34	Ste. Genevieve	84	42	42
Scott	27	19.5	19.5	Holt	85	88	88
Howell	28	29.5	29.5	Chariton	86	113	113
Henry	29	44.5	44.5	Grundy	87	52.5	52.5
Randolph	30	22.5	22.5	Miller	88	49.5	49.5
Newton	31	5	5	Morgan	89	82	82
Pettis	32	42	42	Caldwell	90	76	76
Pulaski	33	19.5	19.5	Moniteau	91	77.5	77.5
Scotland	34	26	26	Warren	92	97	97
Franklin	35	24	24	Dallas	93	82	82
Barry	36	26	26	Reynolds	94	68	68
Callaway	37	56.5	56.5	Knox	95	65	65
Pike	38	68	68	Webster	96	92.5	92.5
New Madrid	39	92.5	92.5	Carter	97	109	109
Daviess	40	112	112	Worth	98	49.5	49.5
Washington	41	71.5	71.5	Howard	99	62.5	62.5
Vernon	42	47	47	Monroe	100	92.5	92.5
Livingston	43	39.5	39.5	Wayne	101	100.5	100.5
Barton	44	37.5	37.5	Lewis	102	88	88
Gasconade	45	95.5	95.5	Atchison	103	56.5	56.5
Dunklin	46	35.5	35.5	Shelby	104	92.5	92.5
Linn	47	35.5	35.5	Benton	105	71.5	71.5
Lawrence	48	26	26	Mercer	106	100.5	100.5
Iron	49	56.5	56.5	Dade	107	110.5	110.5
Perry	50	60	60	Maries	108	104.5	104.5
Lincoln	51	82	82	Ralls	109	100.5	100.5
Texas	52	60	60	Stone	110	100.5	100.5
Shannon	53	114	114	Bollinger	111	115	115
Sullivan	54	52.5	52.5	Andrew	112	110.5	110.5
Platte	55	21	21	Oregon	113	100.5	100.5
Stoddard	56	60	60	Ozark	114	107	107
Cooper	57	71.5	71.5	Hickory	115	107	107
Lafayette	58	47	47				

Comparative County Ranks

Long-Term Care Costs by Population Type

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

Comparative County Ranks

Health Status in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Clark	1	1	1	Marion	59	73	69
Ozark	2	3	5	Newton	60	39	39
Douglas	3	2	2	Osage	61	70	72
Stone	4	4	7	Vernon	62	74	74
Hickory	5	8	23	Howell	63	58	24
Maries	6	6	3	Cole	64	61	75
Mercer	7	13	8	Lincoln	65	62	66
Sullivan	8	16	42	Franklin	66	69	85
Lewis	9	30	16	Lawrence	67	57	50
Caldwell	10	23	67	Montgomery	67	79	91
Howard	11	5	11	Jasper	69	71	84
Macon	12	21	14	Adair	70	75	58
Worth	13	25	53	Jefferson	71	59	48
Johnson	14	28	21	Moniteau	71	83	52
Gasconade	15	22	40	Livingston	73	101	104
Wayne	16	43	34	Oregon	74	103	110
Platte	17	10	20	Polk	75	68	70
Knox	18	32	32	Pettis	76	86	88
Camden	19	11	6	Clinton	77	67	82
Christian	20	7	9	Iron	78	87	78
Dent	21	34	63	Saline	79	80	94
Cape Girardeau	22	35	36	Holt	80	95	87
Dade	23	42	57	Scotland	81	97	95
Ralls	24	14	64	Madison	82	102	97
McDonald	25	48	55	Butler	83	93	96
Miller	26	18	12	Monroe	84	76	49
St. Clair	27	54	41	Randolph	85	60	47
Harrison	28	37	13	Nodaway	86	98	61
Andrew	29	47	26	Ray	87	88	77
Henry	30	24	45	Bates	88	64	68
Barry	31	19	35	Carter	89	105	105
Greene	32	26	22	Schuylar	90	85	59
Webster	33	15	4	Mississippi	91	81	100
Wright	34	29	10	Jackson	92	99	99
Grundy	35	9	18	Dunklin	93	91	92
Audrain	36	55	73	Buchanan	94	92	86
Atchison	37	17	19	DeKalb	95	84	81
Laclede	38	33	29	Stoddard	96	89	83
Clay	39	40	37	Reynolds	97	112	115
Morgan	40	44	27	Putnam	98	27	28
Shelby	41	51	30	Perry	99	96	89
Ste. Genevieve	42	12	31	Lafayette	100	108	103
Phelps	43	49	56	Daviess	101	66	65
St. Charles	44	50	43	New Madrid	102	100	106
Bollinger	45	41	46	St. Francois	103	107	108
Taney	46	53	44	Shannon	104	78	71
Cass	47	45	33	Cooper	105	77	90
Dallas	48	20	15	Scott	106	110	107
Pulaski	48	52	51	Pike	107	106	109
Texas	50	63	79	Cedar	108	90	101
Callaway	51	72	80	St. Louis city	109	111	112
Benton	52	46	25	Carroll	110	82	76
Barton	53	31	60	Gentry	111	109	102
Boone	54	65	62	Washington	112	104	98
Warren	55	36	17	Linn	113	114	113
St. Louis	56	56	54	Pemiscot	114	113	114
Chariton	57	38	38	Ripley	115	115	111
Crawford	58	94	93				

Comparative County Ranks

Health Status by Population Type

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

Comparative County Ranks

Health Care Access in Rank Order

County	2008	2007	2006	County	2008	2007	2006
Boone	1	1	1	Carroll	59	62.5	62.5
Adair	2	3	3	Jefferson	60	52.5	52.5
St. Louis	3	9	9	Clark	61	42	42
Jackson	4	10	10	Putnam	62	107	107
Cole	5	4	4	St. Clair	63	32.5	32.5
St. Louis city	6	2	2	Crawford	64	88	88
Cape Girardeau	7	6	6	Harrison	65	100.5	100.5
Greene	8	8	8	Gentry	66	65	65
Butler	9	7	7	Schuyler	67	74.5	74.5
Clay	10	11.5	11.5	Christian	68	82	82
Marion	11	13	13	Cedar	69	88	88
Taney	12	15	15	Osage	69	95.5	95.5
Jasper	13	39.5	39.5	McDonald	71	104.5	104.5
Phelps	14	11.5	11.5	Macon	72	71.5	71.5
Madison	15	37.5	37.5	Ripley	73	52.5	52.5
Johnson	16	22.5	22.5	Montgomery	74	68	68
Clinton	17	44.5	44.5	DeKalb	75	88	88
Audrain	18	14	14	Pemiscot	76	29.5	29.5
Buchanan	19	17	17	Mississippi	77	65	65
Camden	20	47	47	Dent	78	56.5	56.5
Nodaway	21	29.5	29.5	Ray	79	82	82
St. Charles	22	16	16	Douglas	80	74.5	74.5
Saline	23	32.5	32.5	Bates	81	82	82
Laclede	24	29.5	29.5	Wright	82	82	82
St. Francois	25	18	18	Cass	83	77.5	77.5
Polk	26	34	34	Ste. Genevieve	84	42	42
Scott	27	19.5	19.5	Holt	85	88	88
Howell	28	29.5	29.5	Chariton	86	113	113
Henry	29	44.5	44.5	Grundy	87	52.5	52.5
Randolph	30	22.5	22.5	Miller	88	49.5	49.5
Newton	31	5	5	Morgan	89	82	82
Pettis	32	42	42	Caldwell	90	76	76
Pulaski	33	19.5	19.5	Moniteau	91	77.5	77.5
Scotland	34	26	26	Warren	92	97	97
Franklin	35	24	24	Dallas	93	82	82
Barry	36	26	26	Reynolds	94	68	68
Callaway	37	56.5	56.5	Knox	95	65	65
Pike	38	68	68	Webster	96	92.5	92.5
New Madrid	39	92.5	92.5	Carter	97	109	109
Daviess	40	112	112	Worth	98	49.5	49.5
Washington	41	71.5	71.5	Howard	99	62.5	62.5
Vernon	42	47	47	Monroe	100	92.5	92.5
Livingston	43	39.5	39.5	Wayne	101	100.5	100.5
Barton	44	37.5	37.5	Lewis	102	88	88
Gasconade	45	95.5	95.5	Atchison	103	56.5	56.5
Dunklin	46	35.5	35.5	Shelby	104	92.5	92.5
Linn	47	35.5	35.5	Benton	105	71.5	71.5
Lawrence	48	26	26	Mercer	106	100.5	100.5
Iron	49	56.5	56.5	Dade	107	110.5	110.5
Perry	50	60	60	Maries	108	104.5	104.5
Lincaln	51	82	82	Ralls	109	100.5	100.5
Texas	52	60	60	Stone	110	100.5	100.5
Shannon	53	114	114	Bollinger	111	115	115
Sullivan	54	52.5	52.5	Andrew	112	110.5	110.5
Platte	55	21	21	Oregon	113	100.5	100.5
Stoddard	56	60	60	Ozark	114	107	107
Cooper	57	71.5	71.5	Hickory	115	107	107
Lafayette	58	47	47				

Comparative County Ranks

Health Care Access by Population Type

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

Glossary of Indicators

Economic Well-being

Supplemental Security
Payments as Percent of Total
Personal Income

Glossary of Outcome Indicators

Supplemental Security Income (SSI) payments are income-based benefits available to seniors and persons with disabilities. In 2005, the SSI benefit for an individual who lives alone and has no other income is 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: Source: Research & Evaluation, Missouri Department of Social Services, 2006

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 2006.

Source: The Longitudinal Employer – Households Dynamic Program, Missouri Economic Research & Information Center, Missouri Department of Economic Development, 2006

Economic Contribution

Economic Impact Index

Calculation is based on the ratio between average household income and average household expenditures by age cohorts 65+ and <65. The expenditures for the two groups are then attributed to the ratio of the two age groups in a county.

Source: U.S. Bureau of the Census, American Community Survey 2007, Consumer Expenditure Survey, Bureau of Labor Statistics, 2006

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: American Community Survey, U.S. Bureau of the Census 2007; Office of Social & Economic Data Analysis ACS Estimates, 2007

Transportation

Portion of All Seniors with
Missouri Driver's License

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

Source: Division of Motor Vehicle and Drivers Licensing, Missouri Department of Revenue, 2007

Household Composition

Seniors Filing Missouri Joint
Income Tax Returns

Percent of seniors living in households where head of household did not file as 'single'.

Source: Division of Taxation & Collection, Missouri Department of Revenue, 2006

Civic Engagement

Senior Voters Index

The percent of seniors who were registered to vote and/or voted in an election.

Source: Missouri Secretary of State, 2007

Glossary of 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 Regulation and Licensure, Missouri Department of Health & Senior Services, 2007

Safety

Crime and Senior Abuse per 1,000 Persons

The number of property and violent crimes and senior abuse hotline calls per 1,000 persons.

Source: The Missouri Statistical Analysis Center, Missouri Department of Highway Patrol, Missouri Department of Public Safety, 2007, Missouri Elder Abuse and Neglect Hotline.

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 & Senior Services, 2004-2006

Health Care Access

Primary Care Physicians per 1,000 Seniors

The number of physician providing primary care services full or part-time in a county per 1,000 seniors.

Source: Missouri Division of Professional Registration database and the Missouri Department of Health and Senior Services Bureau of Narcotics and Dangerous Drugs (BNDD) database, 2007

Demographics

Total Population

Glossary of Status Indicators

Measures the total population for the years of 2000, 2007, 2015 and 2025.

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, 2007

Change in Total Population

A measure of the change in population between 2000 and 2007.

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, 2007

Population 65+

A measure of the total population that is 65 years old or older.

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, 2007. Population Division, U.S. Census Bureau

Percent of Population 65+

A measure of the percent of the total population that is 65 years old or older.

Source: Table 1, Annual Estimates of the Population by Sex and

Glossary of Indicators

Percent of Population 65+

A measure of both the total male and female population that is 65 years old or older for the years of 2015 and 2025. *Sources: Population projections are produced by OSEDA by using 2007 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 2001-2007 estimates.*

Quality of Life

Seniors in Owner-Occupied Housing

The percent of persons 65 years old and older living in owner-occupied housing.

Seniors Living in Families

The percent of persons 65 years old and older living in families.

Median Value of Own House

A measure of the median value, in dollars, of owner-occupied housing for persons 65 years old and older.

Seniors Living in Poverty

A measure of the percent of persons 65 years old and older who are living in poverty.

Average Income of Senior Households

A measure of the annual average household income, in dollars, for persons 65 years old and older.

Seniors with a College Education

A measure of the percent of persons 65 years old and older with a college degree or higher. *Sources: American Community Survey, U.S. Bureau of the Census 2007; Office of Social & Economic Data Analysis ACS Estimates, 2007*

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: 2007 County-Level Study, Community Profiles. Missouri

Footnotes

Falls Among Older Adults

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Long-Term Care Workforce

[1] See for example the following reports: National Commission on Nursing Workforce for Long-Term Care, 2006; HHS/DOL, 2003; Citizens for Long Term Care, 2002; National Alliance for Caregiving, 2001; Wunderlich and Kohler, 2001.

[2] BLS, Establishment Data, Employment Seasonally-adjusted

Footnotes

[3] Montgomery, based on an analysis of the 2000 Census, estimated there are almost 800,000 home care aides, including personnel employed privately by families and those employed in home care agencies who have been missed in other estimates

[4] Missouri's Fastest Growing Occupations, Data Sources: MERIC Short-term Occupational Projections, MERIC Occupational Employment and Wage Survey, and U.S. Bureau of Labor Statistics (BLS).

[5] 'A Balancing Act: State Long-Term Care Reform', AARP Public Policy Institute, July 2008

Health Disparities

¹ Missouri State Census Data Center population projections, 2008

² Selected Social Characteristics in the United States: 2007 for Missouri

³ MoDHSS County-level Study citation

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⁸ U.S. Census Bureau, CBSA county codes, 2007

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¹¹ MoDHSS, County-level Study citation.