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*Harry S Truman School of Public Affairs*

# BOONE COUNTY ISSUES ANALYSIS: *INDEPENDENT LIVING*

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October 5, 2012

*Prepared for the City of Columbia, Boone County, and  
Heart of Missouri United Way*

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## EXECUTIVE SUMMARY

The City of Columbia, County of Boone, and the Heart of Missouri United Way (HMUW) desire to strengthen and support independent living lifestyles amongst seniors and those with disabilities in Boone County. Collectively, they provided \$530,412 in funding for independent living services in 2011. This report aims to provide pertinent data that will guide future funding strategies and inform HMUW and the Boone County Community Services Advisory Commission on the community's independent living needs and services.

Four sub-issues speak to independent living lifestyles of Boone County's senior population and people living with disabilities: 1) employment, 2) personal well-being, 3) community involvement, and 4) transportation. Some of these sub-issues correspond to quantitative and county-level data, while others rely on qualitative data published in scholarly journals and derived from national studies. Taken together, the quantitative and qualitative data presented in this report accurately summarize independent living lifestyles and challenges for Boone County seniors and people living with disabilities.

### ***Boone County Quantitative Findings:***

- Boone County was ranked fourth best small city to age in according to the Milken Institutes' *Best Cities for Successful Aging*, in 2010
- Of Boone's non-senior population between 2008 and 2010, 7 to 9 percent live with a disability
- Between 2008 and 2010, people with a disability in Boone County make on average 37 percent less than those without a disability
- Poverty measurements for seniors and people with disability are subject to very large margins of error
- Between 2005 and 2010, the average poverty rate among people with disabilities who are 18-64 years of age was 26 percent. The rate for disabled seniors, age 65+, during this same time period was just 13 percent
- Of the Boone County households receiving SNAP benefits during 2010, 43 percent had at least one person with a disability living in the home
- Boone County seniors, age 65-69, tend to be more active in the labor force than those of the same age in Missouri and U.S.
- Seniors, age 70+, in Boone County tend to be less active in the labor force and have very small margins of unemployment— findings that are consistent at the state and national levels
- In 2010, approximately 2,428 Boone County seniors relied on friends, family or public transit for their transportation needs

***Review of Literature and National-level Qualitative Findings:*** Seniors and people living with disabilities are very different populations, but they encounter many of the same barriers to personal well-being and community involvement. Many of the findings here have cross-over applications for both populations:



- Approximately half of the 54 million Americans with activity limitations or disabilities use assistive technology such as braces, walkers, wheelchairs, hearing aids, and motorized scooters to adapt to their home environments – many pay out-of-pocket for these devices
- Correlations of mistreatment among elderly include low social support and previous traumatic events of abuse
- Quality of life among seniors is compromised by a fear of falling – this can lead to activity restriction, balance deterioration, and functional decline
- Community participation is a vital component of independent living and can have positive health implications for seniors
- Community participation among people with disabilities is limited due to transportation barriers and limited social involvement
- People with disabilities report socializing or engaging in recreational activities less often than those without disabilities
- The World Health Organization’s *Quality of Life Instrument* outlines six broad measurements which aim to capture quality of life: physical health, psychological health, independence, social relationships, environmental factors, and spiritual/religion/personal beliefs. However, understanding these topics, specifically at the county-level, is challenging due to a lack of primary data
- Transportation is a vital component to personal well-being because it allows access to community involvement opportunities for those who are mobility-challenged

In this report, county level data is presented alongside national studies from scholarly journals to accurately describe and analyze seniors and those living with disabilities’ experiences in terms of independent living. Population trends, poverty levels, employment, community involvement, personal well-being, and transportation each play a part in the lifestyles of living independently for these populations. And while these two groups are very different, they share many of the same barriers to community involvement and personal well-being, and both access many of the same social services provided by Boone County. This report includes an inventory of services addressing independent living needs in Boone County that are available to seniors and people with disabilities.

## INTRODUCTION

Independent living can be defined as giving seniors and people with disabilities the opportunity to live just like everyone else – and contrary to its name, independent living should not just be defined in terms of living on one’s own.<sup>1</sup> This report assesses independent living in Boone County based upon the following issues: 1) employment, 2) personal well-being, 3) community involvement, and 4) transportation. These speak to the quality of life of Boone County’s senior population and people living with disabilities. Understanding the facets of independent living is a necessary step in order to target social service programs and funding.

In 2011, the Heart of Missouri United Way (HMUW), the City of Columbia, and Boone County invested \$530,000 (Appendix A: Table 1) in independent living services. Boone County Community Services Advisory Commission and HMUW are taking steps to know more about aspects of independent living for community residents to make wise use of future funding. The Commission contracted with the Institute of Public Policy (IPP) of the Truman School of Public Affairs at the University of Missouri to conduct an issues analysis of independent living in Boone County. This report and analysis will help guide future independent living funding decisions and inform the Commission and HMUW of pertinent areas of interest in the field. The Commission and HMUW wish to ensure the greatest positive impact of their investments in the community and this report will help achieve this goal by offering sound analysis on independent living in Boone County. In addition to sharing information on the four sub-issues, this report includes a resource inventory and descriptions of services available in Boone County to address independent living needs. This report begins with an examination of a national study on the best cities for successful aging, whereby, Columbia, Missouri, was ranked fourth out of the 259 smaller metropolitan areas included in the study.

### NATIONAL STUDY ON SUCCESSFUL AGING

Columbia, Missouri ranked fourth best small city to age in according to the Milken Institute’s *Best Cities for Successful Aging*,<sup>2</sup> published in 2010 and funded by AARP and Humana. The goal of the study aims to spread successful aging across America and shape the future of senior care. Researchers performed in-depth analyses on publicly available empirical data for a total of 359 cities, which were later divided into 100 large and 259 small metropolitan areas to account for disparities of resources. The cities were ranked according to eight subcomponents: general indicators, healthcare, wellness, living arrangements, transportation/convenience, financial well-being, employment/education, and community engagement. Each sub-component is composed of multiple indicators, some of which were weighted differently to account for the variance in needs among seniors based upon age.

Columbia’s highest scoring category in the report was healthcare services, where it ranked third, falling just behind Rochester, MN and Iowa City, IA. Out of all 259 small metropolitan cities included in the study, Columbia ranked first for the number of hospitals with geriatric services, rehabilitation services, and continuing-care facilities. Columbia’s large working-age population means a strong tax base that can help support services for seniors. The study cited Columbia has

<sup>1</sup> For more information, visit the Independent Living Institute <http://www.independentliving.org/>

<sup>2</sup> For more information, visit <http://successfulaging.milkeninstitute.org/bcsa.html>



room for improvement – most notably, the metro area needs more long-term care hospitals and facilities with Alzheimer’s units. The Milken report proposed Columbia’s high soda consumption and many fast-food outlets contribute to high obesity rates in the area.

While the Columbia area metro is found to be short on recreation and culture, overall it offers excellent educational facilities and healthcare. The abundant university-sponsored research in the area serves as an incubator for innovation and new businesses and the result is seniors have access to cutting-edge technology in healthcare and the community as a whole supports entrepreneurial activities.

## METHODOLOGY

### Data Collection

A variety of data and data sources were consulted in the process of this report. The primary data sources are the Bureau of Labor Statistics (BLS), Community Population survey (CPS), American Community Survey (ACS), the U.S. Census, and the Social Security Administration. BLS is part of the U.S. Department of Labor and is the Federal agency responsible for measuring labor market activity.<sup>3</sup> Its mission is to collect, analyze, and disseminate economic information used to support public and private decision-making. Many government agencies, private organizations, individual researchers, and the public-at-large use the data to understand the characteristics of the workforce.

The U.S. Census is conducted every ten years and serves as the leading source of data on the U.S. population.<sup>4</sup> The census collects and houses data on a multitude of topics used to distribute U.S. Congressional seats to states and make decisions about community services to provide a basis for distributing \$400 billion in federal funds to local, state, and tribal governments each year. It also is one of the more important sources for decision-making on a wide array of topics in the private, nonprofit and public sectors.

Prior to the 2010 decennial census, all households completed one of two surveys, either a long or short version. The short version was very brief and took only minutes to complete. The long version, however, was sent to one in six households and, in 2008, it was 38 pages long. In order to make population estimates for the years in between the decennial surveys, the Census Bureau relied upon the Current Population Survey (CPS) to formulate population extrapolations. CPS, sponsored jointly by the U.S. Census Bureau and BLS, is the primary source of labor force statistics for the U.S. population.<sup>5</sup> CPS is the recognized source for economic statistics on the national unemployment rate, and provides data on issues relating to earnings and employment. CPS collects extensive demographic data that complement and enhance the understanding of the labor market conditions at the national, state, and sub-state areas. Much of this information has relevance to population estimates and this is why the Census has historically relied on CPS data. However, beginning in 2005, the Census Bureau moved away from using CPS estimations and relied upon yearly survey data supplied by the American Community Survey (ACS).<sup>6</sup> ACS

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<sup>3</sup> For more information, visit <http://www.bls.gov/>

<sup>4</sup> For more information, visit <http://www.census.gov/>

<sup>5</sup> For more information, visit <http://www.census.gov/cps/>

<sup>6</sup> For more information, visit <http://www.census.gov/acs/www/>

samples a small percentage of the population every year and serves two primary functions. First, it gives communities annual<sup>7</sup> information they need to plan services. Second, it replaces the long version of the decennial census. More information on poverty, reporting practices, and data collection methods of the ACS and U.S. Census can be found in *Reading the Fine Print: Use of the U.S. Census and the American Community Survey in Describing Current Conditions in Boone County*, a data supplement by Lucht and Miller provided by IPP.

Census and ACS data are used in this report to determine poverty rates, supplemental nutrition assistance programs, elderly population demographics, median earnings, percent of the population living with disabilities, and transportation practices. U.S. Census and ACS data are published regularly, readily available at the local level and commonly used to monitor population trends.

### **Prioritization**

Previous *Boone County Issues Analysis* reports supported a primary community-level indicator prioritizing process. This report, however, branches away from the prioritization model due to a lack of viable, county-level data on seniors and people with disabilities in areas of independent living. In a general sense, personal well-being and community involvement indicators are not only difficult to define, but difficult to quantify in useful and meaningful ways. Across disciplines the conversation continues to evolve on ways to conceptualize independent living, quality of life, and personal wellbeing for people with disabilities and seniors. Therefore, in lieu of prioritization, this report contains a review of national studies and publications pertaining to independent living sub-issues and addresses seniors and people with disabilities. The latest national and interdisciplinary findings may guide Boone County's independent living discussion.

## **FINDINGS**

Before discussing findings for the four sub-issues, it is important to provide some contextual information and population statistics on Boone County seniors and people with disabilities. Following this synopsis, there is analysis on poverty trends for these two populations. Poverty is an important facet of independent living; however, it is too complex and broad in scope to be considered solely a sub-issue. The analysis on population and poverty trends in Boone County are continually compared to state and national rates.

### **Population Trends**

Between 2006 and 2010, the population of 65+ year olds increased in the U.S., Missouri, and Boone County. The Boone County rate increased more quickly than state and national levels (Appendix A: Table 2). Missouri Senior Rank Report, published by the State of Missouri Health and Senior Services<sup>8</sup> showed Boone to be a favorable home for the aging population. The report captures outcome indicators on economic well-being, workforce participation, economic contributions, housing, transportation, housing composition, civil engagement, long term care

<sup>7</sup> Annual data are only available for counties with 100,000+ population

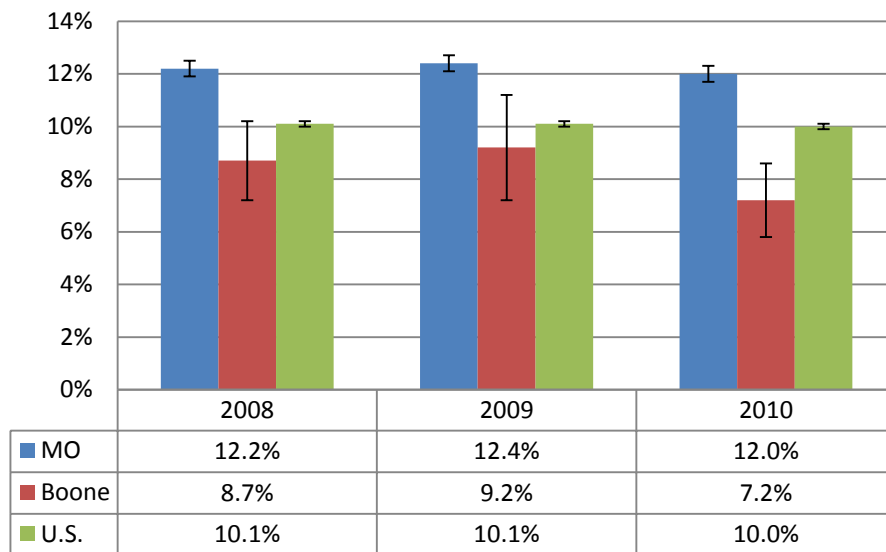
<sup>8</sup> For more information, visit <http://missouriseniorreport.org/>



costs, safety, health status, and healthcare access. Boone County’s composite score ranked first out of all 115 Missouri counties between 2006 and 2010 (Appendix A: Table 2).

The American Community Survey (ACS) measures the disability status of the non-institutionalized population by age. Figures 1 & 2 show the percent of the population who live with a disability by different adult age segments. In Figure 1, Missouri has consistently had higher rates of adults, aged 18-64, with disabilities than the U.S. Meanwhile, Boone County sits well below both the national and state rates. In Figure 2, Missouri and U.S. rates for 65+ population with disabilities has remained remarkably consistent, while Boone County has experienced a drop in 2009 and then an increase in 2010. One explanation for this volatility could be the margins of error that impact the Boone County rate (Appendix A: Table 3), in 2010 alone, the margin of error was 6.7 percentage points. These errors are represented with bands surrounding the columns in Figures 1 & 2. Specific error values may be found in Appendix A: Table 3. The ACS reports state, with 90 percent confidence, that the true disability rate falls within the bands. The Boone County error bands are very wide while the U.S. and Missouri’s are very small. The reason for this is explained by the law of large numbers – Boone County’s ACS survey covers a smaller number of people than the U.S. and Missouri surveys and is therefore subject to greater error. Furthermore, the Boone County population 65+ is considerably smaller than the 18-64 age group, this means the Boone County 65+ segment is vulnerable to even more sampling error in all areas of analysis, not just disability statistics.

**FIGURE 1: PERCENT OF POPULATION WITH A DISABILITY, AGE 18-64, WITH MARGIN OF ERROR BARS**

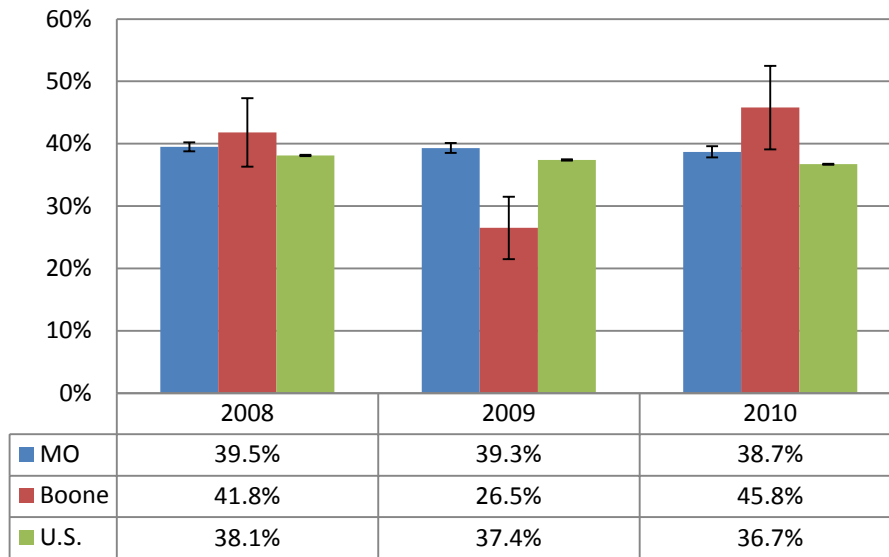


Source: American Community Survey one-year estimates, non-institutionalized population





**FIGURE 2: PERCENT OF POPULATION WITH A DISABILITY, AGE 65+ WITH MARGINS OF ERROR BARS**



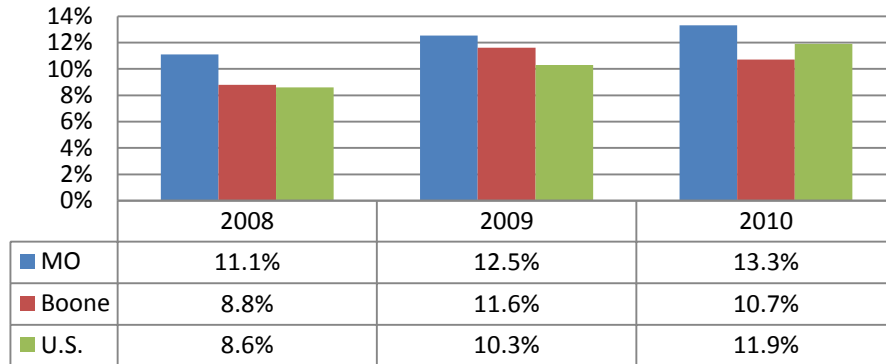
Source: American Community Survey one-year estimates, non-institutionalized population

### Poverty Trends

Poverty among seniors and people with disabilities has been examined at the county level in a number of ways: the number of Boone households participating in Supplemental Nutritional Assistance Program (SNAP), the median earnings for Boone residents, the percentage of the Boone senior population living in poverty, and the percentage of the disabled population living in poverty are included in this report. Additional national and state-level data offer information on populations receiving Supplemental Security Income (SSI) by age and by disability.

**Supplemental Assistance Program (SNAP):** In Boone County, the number of households participating in SNAP benefits rose between 2008 and 2010, a trend consistent with Missouri and the nation (Figure 3). Boone County, however, unlike Missouri and the U.S., experienced a drop in number of households receiving benefits between 2009 and 2010, while the state and nation continued to rise during this time.

**FIGURE 3: PERCENTAGE OF HOUSEHOLDS RECEIVING FOOD STAMPS/SNAP BENEFITS**

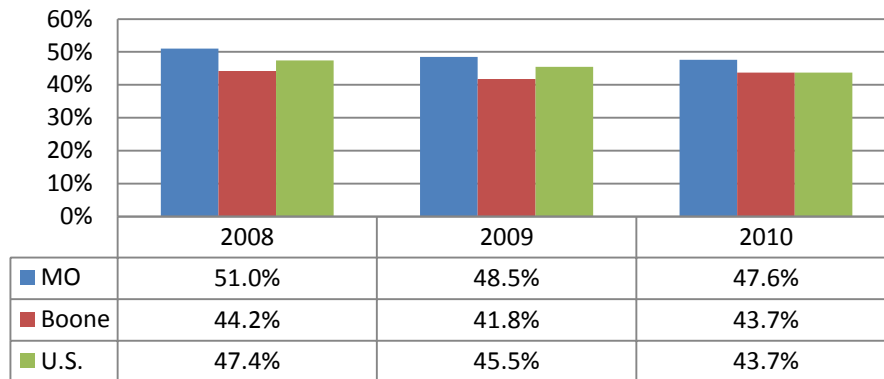


Source: American Community Survey's, one-year estimates, Table B22010

Of the households receiving SNAP benefits, a large majority have at least one person with a disability. Figure 4 shows this trend between 2008 and 2010, and shows a dip in the number of homes with a person with a disability receiving SNAP benefits in 2009, but then rose again in 2010. It is not likely that people with disabilities suddenly stopped receiving SNAP benefits or moved out of the county in such large numbers to explain the 2009 dip. Rather, the dip could be explained by an increase in the number of homes without a family member with disabilities participating in SNAP benefits, thereby pushing down the ratio of disabled households. This hypothesis echoes the findings in Figure 3, which shows an almost three point increase in overall benefits between 2008 and 2009. Between 2009 and 2010, the number of homes participating in SNAP with a person having a disability increased (Figure 4). While it is unlikely to find a population increase could account for this rise, one should consider if the number of the households withdrawing from SNAP benefits did not have a person with a disability in the home. If this is the case, the ratio of people with disabilities receiving SNAP would rise. This hypothesis echoes the findings in Figure 3 which shows a drop in the overall SNAP benefits between this same time period. For more information, see Appendix A: Table 4.



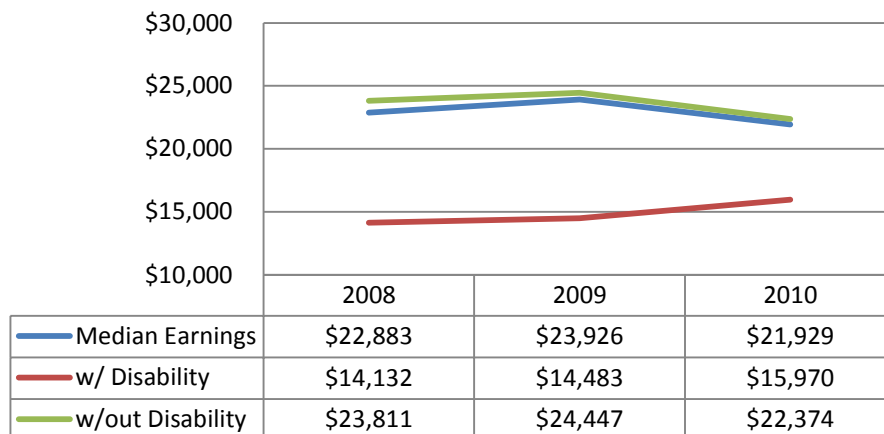
**FIGURE 4: OF HOUSEHOLDS RECEIVING FOOD STAMP/SNAP BENEFITS, THE RATE OF HOMES WITH AT LEAST ONE PERSON WITH A DISABILITY**



Source: American Community Survey's, one-year estimates, Table B22010

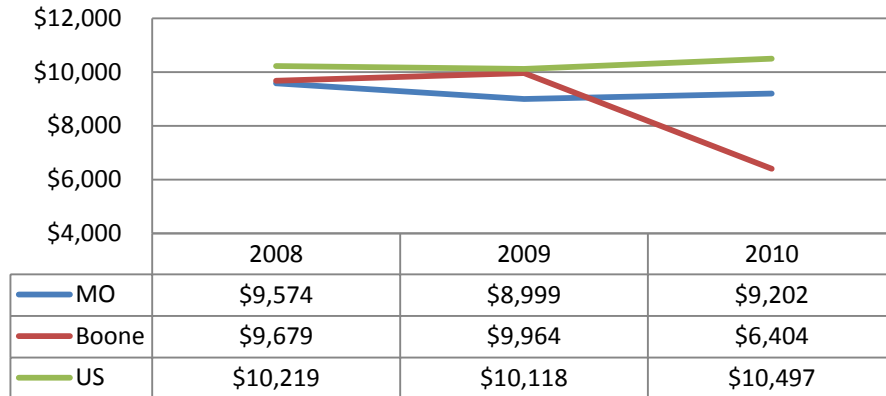
**Median Earnings:** The median earnings for Boone residents decreased between 2008 and 2010, but the median earnings for those with disabilities rose (Figure 5). In Missouri, the median earnings for people with disabilities have remained the same (Appendix B: Figure 1), while nationally earnings have declined for this population (Appendix B: Figure 2). The gap in median earnings between people with and people without disabilities in Boone has narrowed between 2008 and 2010. Nonetheless, the gap remains very large. Considering the data in Figure 5, Boone County people with disabilities make, on average, 35 percent less than the median earner and 37 percent less than people without disabilities in the county. In Missouri and U.S. the wage gap between those with and without disabilities continues to rise (Figure 6). More information can be found in Appendix A: Table 5.

**FIGURE 5: MEDIAN EARNINGS, BOONE COUNTY, MO**



Source: American Community Survey, one-year estimates

**FIGURE 6: MEDIAN EARNINGS GAP BETWEEN DISABLED AND NON-DISABLED WORKERS**



Source: American Community Survey's, one-year estimates

**Home Ownership:** 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.” Housing costs include mortgage or rent, taxes, insurance and utilities. Due to a large percent of their income spent on housing, these families may have difficulty affording other necessities such as food, clothing, transportation and medical care. Seniors living on fixed incomes are particularly vulnerable to fluctuations in housing costs. In 2001 in Boone County, 21.7 percent of seniors were considered “cost burdened.” This number increased to 24.8 percent in 2008.<sup>9</sup>

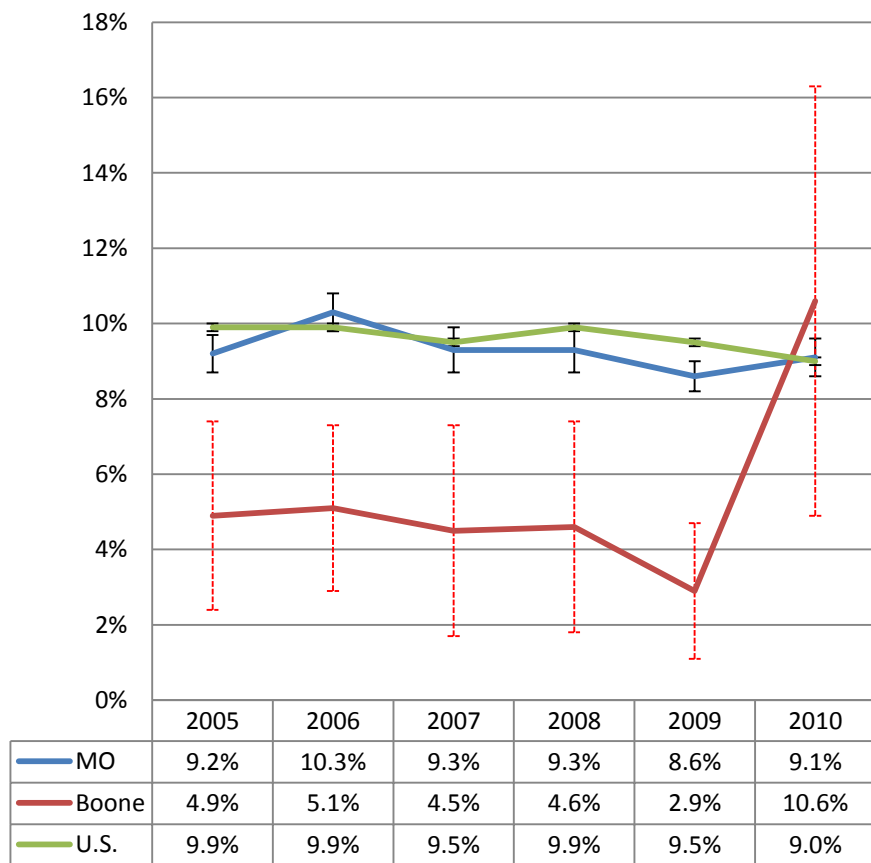
**Poverty Rate:** The percentage of the Boone County senior population living in poverty is depicted graphically in Figure 7a and Figure 7b. Both figures contain vertical error bands which represent margins of error. Margins of error signify the amount of random sampling error present in survey data at each data point. Margins of error are wide for small populations and narrower for large populations. Wide margins of error can mean the data are less reliable, or subject to more variance. Figure 7a data comes from the ACS one-year estimates and has large error bands. Figure 7b has smaller error bands because the data are from the ACS five-year estimate – an aggregate of many years. For this reason, ACS five-year data estimates are more reliable than one-year estimates. More information on data collection methods of the ACS and U.S. Census can be found in *Reading the Fine Print: Use of the U.S. Census and the American Community Survey in Describing Current Conditions in Boone County*, a data supplement by Lucht and Miller provided by IPP.

In Figure 7a, between 2005 and 2009, if one assumes the maximum error possible, Boone County senior poverty would remain far below the state and national averages. However, in 2010, there is a strong likelihood that the poverty rate for Boone seniors matches or lies above the state and national rates. Figure 7b contains notable smoother trend lines and has smaller Boone County margins of error than in Figure 7a. The Boone County poverty trend line is increasing but not nearly at the rate shown in the ACS one-year estimates (Figure 7a). More information can be found in Appendix A: Table 6.

<sup>9</sup> Missouri Senior Report, 2009. For more information, visit <http://missouriseniorreport.org/>

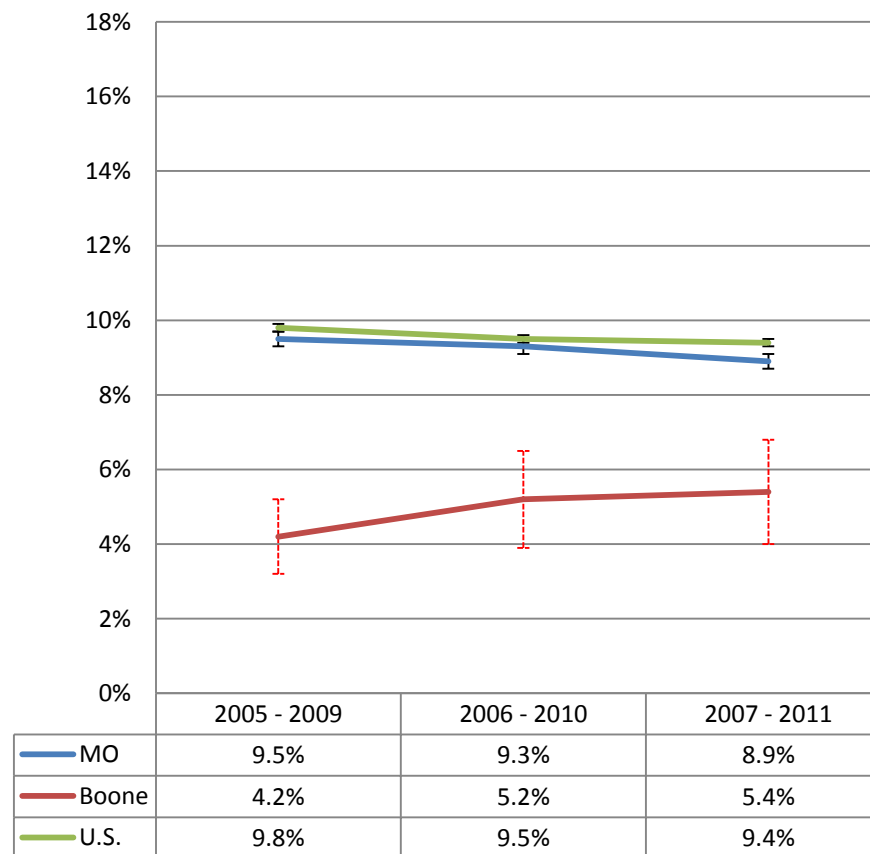


**FIGURE 7A: POVERTY RATE AMONG 65+ ACS ONE-YEAR ESTIMATES WITH MARGINS OF ERROR**



Source: American Community Survey, one-year estimates

**FIGURE 7B: POVERTY RATE AMONG 65+ ACS FIVE-YEAR ESTIMATES WITH MARGINS OF ERROR**

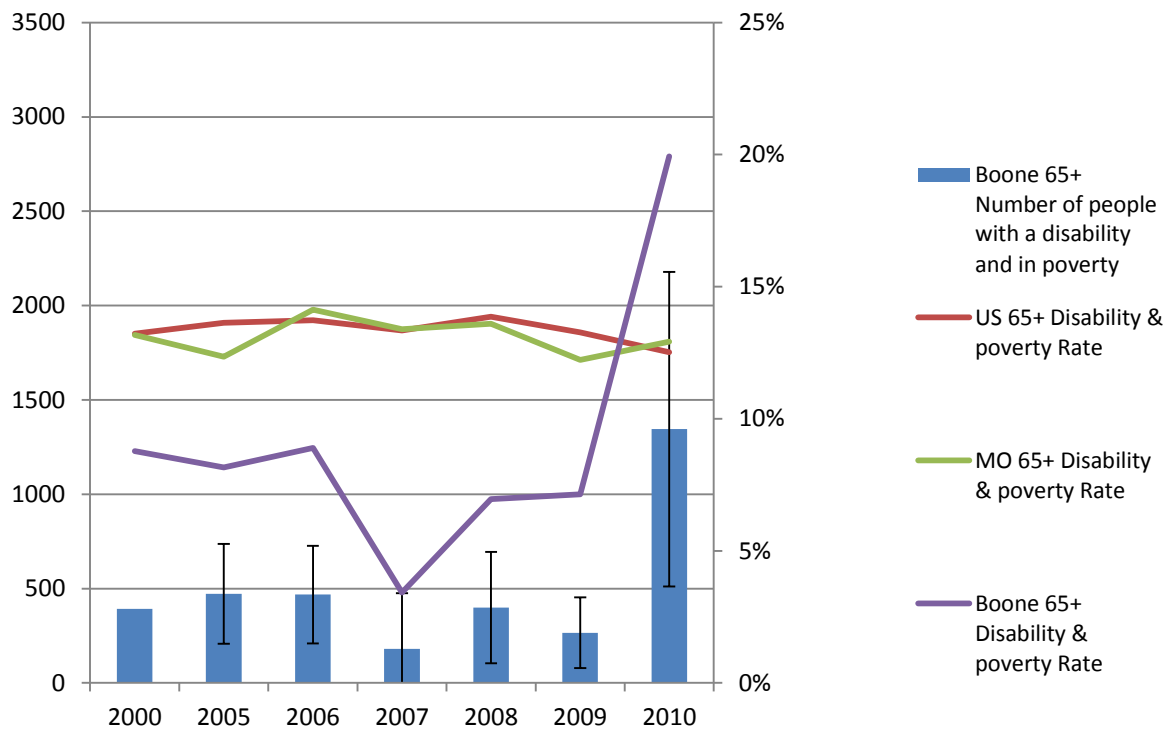


Source: American Community Survey, five-year estimates



The number of 65+ year olds living in poverty with a disability has increased dramatically between 2009 and 2010 (Figure 8). The error bars should be noted on this figure because they account for a wide variance in the true poverty rate of this population. The poverty rate for this population in Missouri and the U.S. hover between ten and fifteen percent, also found in Figure 8. More information is found in Appendix A: Table 7.

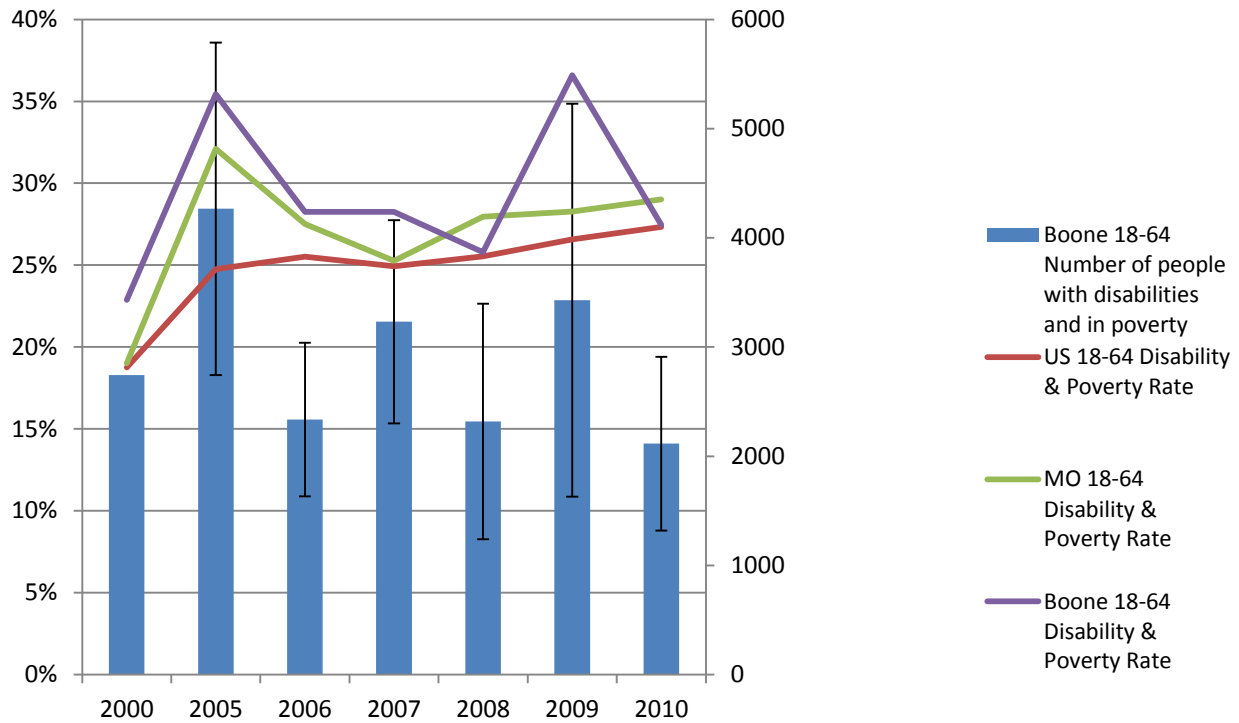
**FIGURE 8: POVERTY AMONG AGE 65+ WITH A DISABILITY**



Source: 2000 US Census & 2005-2010 American Community Survey's one-year estimates

Poverty among people with disabilities between 18 and 64 years of age is much higher than the senior segment (Figure 8). Like the seniors, the 16-64 age segment is prone to large margins of error and Figure 9 assists in depicting the number of people with disabilities in poverty as well as their rates at the state and national level. The Missouri poverty rate has the tendency to remain above the national rate for this age segment and time period. More information is found in Appendix A: Table 7.

**FIGURE 9: POVERTY AMONG AGE 18-64 WITH A DISABILITY**



Source 2000 US Census & 2005-2010 American Community Survey's, one-year estimates

**Supplemental Security Income (SSI):** The Supplemental Security Income (SSI) program is a federal program funded by general tax revenues, not Social Security Taxes. SSI guarantees a minimum level of income for needy aged, blind or disabled individuals by providing cash-transfer payments to meet basic needs for food, clothing, and shelter.<sup>10</sup> Data on populations receiving aid is available in SSI Annual Statistical Reports,<sup>11</sup> which classifies data by age group and by disability type, but is available at the state and national level only. Boone Senior Rank Report takes data published by the Bureau of Labor Statistics to calculate SSI payments as a percentage of total personal income, and in Missouri 0.33 percent of total personal income state wide consisted of SSI payments. In 2001 Boone’s estimate was 0.24 percent and later decreased to 0.23 in 2007.<sup>12</sup>

At the state and national levels, SSI payments for people with disabilities constitute the majority of all SSI payments, this number continues to rise between 2002 and 2010 (Figures 10 & 11). Disabled Missourians account for 89 to 93 percent of SSI recipients in the state (Figure 10), while at the national level, the disabled population accounts for 80 and 84 percent of SSI recipients (Figure 11). The number of aged and blind SSI recipients has steadily decreased at the

<sup>10</sup> For more information, visit <http://www.ssa.gov/ssi/>

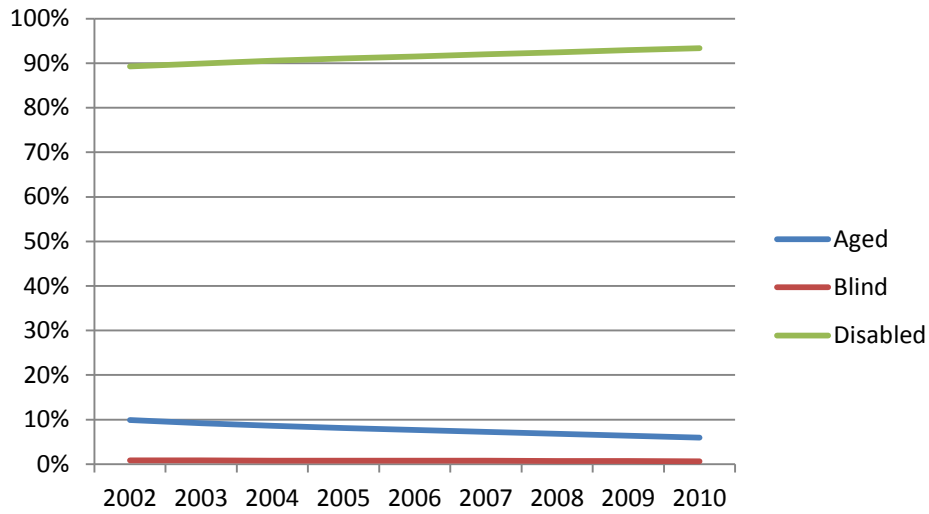
<sup>11</sup> For more information, visit [http://www.ssa.gov/policy/docs/statcomps/ssi\\_asr/index.html](http://www.ssa.gov/policy/docs/statcomps/ssi_asr/index.html)

<sup>12</sup> For more information, visit <http://missouriseniorreport.org/>



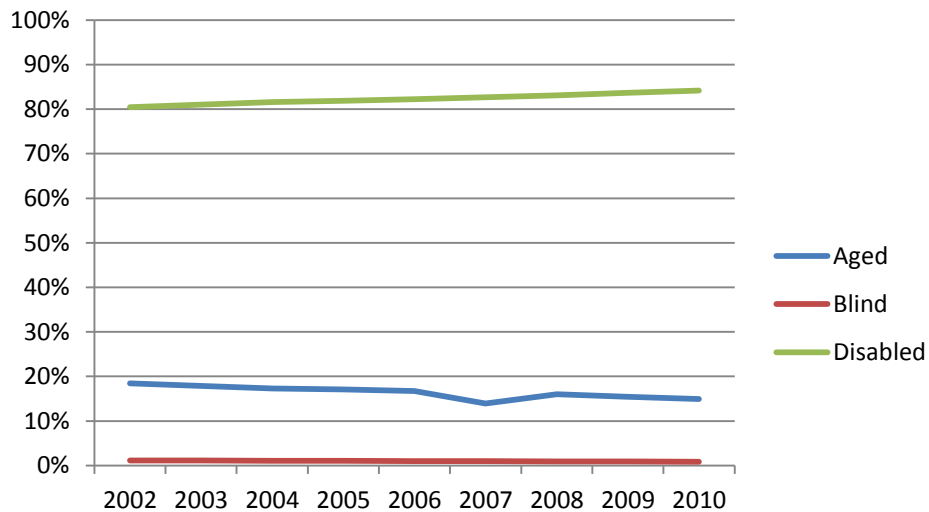
state and national levels between the same time periods (Figures 10 & 11). More information is available in Appendix A: Table 8.

**FIGURE 10: FEDERALLY ADMINISTERED SUPPLEMENTAL SECURITY INCOME (SSI) PAYMENTS BY DISABILITY IN MISSOURI**



Source: Social Security Administration, SSI Annual Statistical Reports

**FIGURE 11: FEDERALLY ADMINISTERED SUPPLEMENTAL SECURITY INCOME (SSI) PAYMENTS BY DISABILITY IN U.S.**



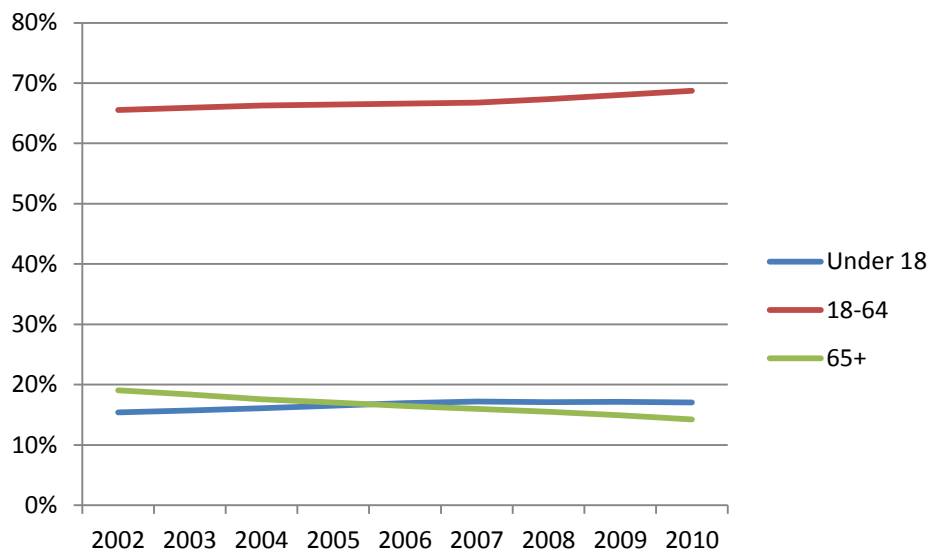
Source: Social Security Administration, SSI Annual Statistical Reports





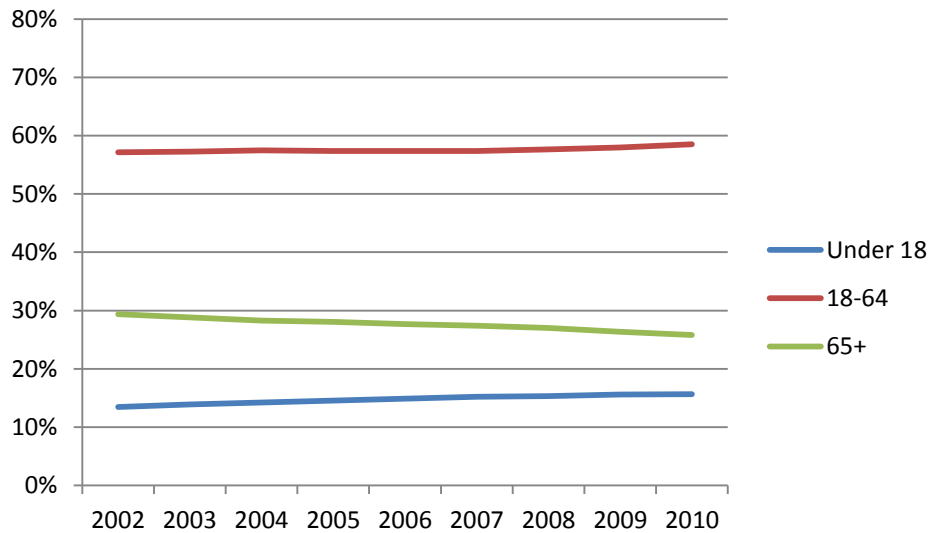
The 18 to 64 age segment captures the largest population group, thus, it is logical for this age segment to consume the majority of SSI payments in Missouri and in the U.S. (Figure 12 & 13 and Appendix A: Table 8). However, an interesting shift occurred in Missouri between the senior (65+) and children (under 18) populations. Figure 12, 2002 shows the Missouri senior population as receiving more SSI payments than the child population, but between 2005 and 2006 these numbers converge. By 2007, children emerge as receiving more SSI payments than seniors. This trend continues through 2010. A similar change is evident at the national level (Figure 13), however, the senior population began at a considerably higher rate (29 percent) in 2002 than Missouri seniors (19) in the same year, therefore is logical for the U.S. senior and child lines may take more time to converge. This will be an interesting data point to observe in future ACS surveys.

**FIGURE 12: FEDERALLY ADMINISTERED SUPPLEMENTAL SECURITY INCOME (SSI) PAYMENTS BY AGE IN MISSOURI**



Source: Social Security Administration, SSI Annual Statistical Report

**FIGURE 13: FEDERALLY ADMINISTERED SUPPLEMENTAL SECURITY INCOME (SSI) PAYMENTS BY AGE IN U.S.**



Source: Social Security Administration, SSI Annual Statistical Report

**Conclusion:** Poverty among seniors and people with disabilities is a challenging demographic to measure at the county level because it contains extreme variance, due to margins of error. The rate of SNAP benefits among households with at least one person with a disability is decreasing at all levels, but the Boone County rate is not falling as quickly as the state and national rates. Median income in Boone County among those with a disability is increasing, while the median income for those without a disability is decreasing. SSI payment analysis shows a shift in the number of payments between the senior population and the child population, while the overwhelming majority of aid recipients continue to be those with disabilities.

## Employment

**Collection of Indicators:** Understanding employment statistics for Boone County seniors and people living with disabilities hinges upon understanding their inclusion or exclusion from the labor force. The Bureau of Labor Statistics (BLS) defines the labor force as all civilians classified as employed and unemployed.<sup>13</sup> The unemployed category includes civilians who have no job, but are available for work, or currently looking for employment. BLS labor force categorization excludes retired, disabled, full-time students, and homemakers from labor statistics. However, if a senior citizen or a person with a disability is actively looking for employment but cannot find a job, or is employed, they are considered part of the labor force. ACS data tracks seniors' and people with disabilities' participation in the Boone County labor force and this data is examined as a sub-issue of independent living. However, IPP emphasizes that the Boone County senior population and the population of people living with disabilities are extremely small in their total number. Therefore, statistical collection methods on these two

<sup>13</sup> For more information, visit <http://www.bls.gov/home.htm>

populations, used by ACS, have large and naturally occurring margins of error. When possible, this report will reference and display margins of error which should be considered alongside the data on hand.

**Labor Force Participation among People with Disabilities, Age 18 to 64:** Beginning in 2009, ACS uniformly collected labor force participation among people with disabilities between the ages of 18 and 64. Between 2009 and 2010, the unemployment rate of this population in Boone County, decreased from 15.3 percent to 11.1 percent. Missouri and U.S. followed this same trend during the same time period (Appendix A: Table 9). Of all the people excluded from the Boone County labor force in 2009, 23 percent had a disability. This number dropped to 15 percent the following year. Meanwhile, in Missouri's unemployed labor force, there was a higher proportion of people with disabilities, 32.6 percent in 2009, a number which was relatively unchanged the following year. Of all the people excluded from the U.S. labor force in 2006, 26 percent had a disability, a number that was relatively unchanged the following year. For more information, see Appendix A: Table 9.

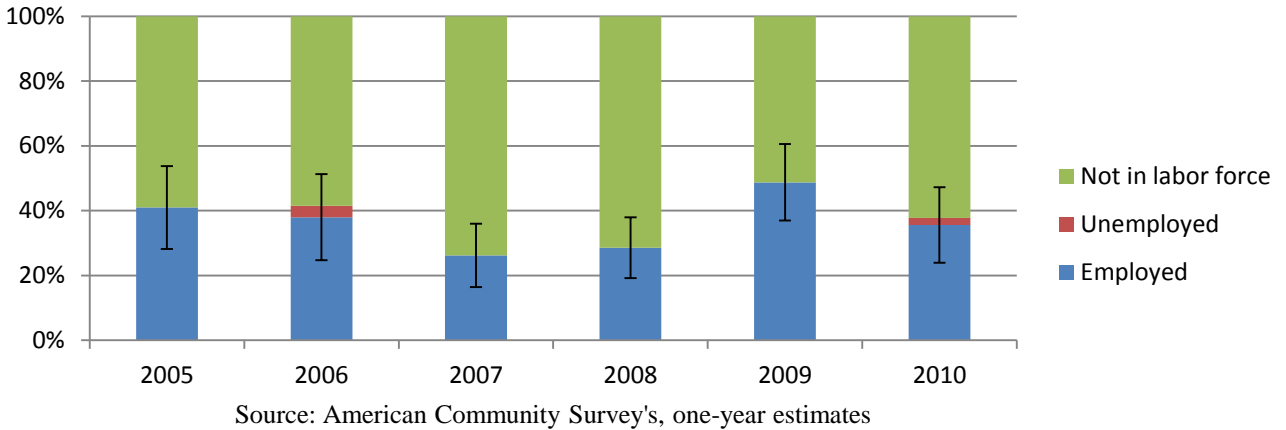
**Labor Force Participation among Senior Citizens:** Between 2005 and 2010, 24 to 44 percent of Boone County seniors aged 65-69 participated in the labor force. The majority of which were employed (either full- or part-time) and only twice in the six years of data presented here, was unemployment reported for this age segment (Figure 14). There is noticeable volatility in Boone County's employment rate of seniors of this age segment between 2005 and 2010, with a climax occurring in 2009. Figure 14 includes the margins of error measurements on the employment bar graphic. This is included to depict the potential variance in the rate of employment of seniors in the 65-69 age segment. Boone's 65-69 age segment employment rate generally sits above Missouri and U.S.'s, but unlike Boone, the state and nation have consistent levels of unemployment of seniors within this age group (Appendix B: Figure 3 & Figure 4).

Between 2005 and 2010, 12 to 22 percent of Boone County seniors aged 70-74 participated in the labor force and no unemployment was reported for this age segment (Figure 15). Figure 15 includes the margins of error measurements on the employment bar graphic. This is included to depict the potential variance in the rate of employment of seniors in the 70-74 age segment. Boone's 70-74 age segment employment rate generally mirrors Missouri and U.S.'s, but unlike Boone, the state and nation have consistent levels of unemployment of seniors within this age group (Appendix B: Figure 5 & Figure 6).

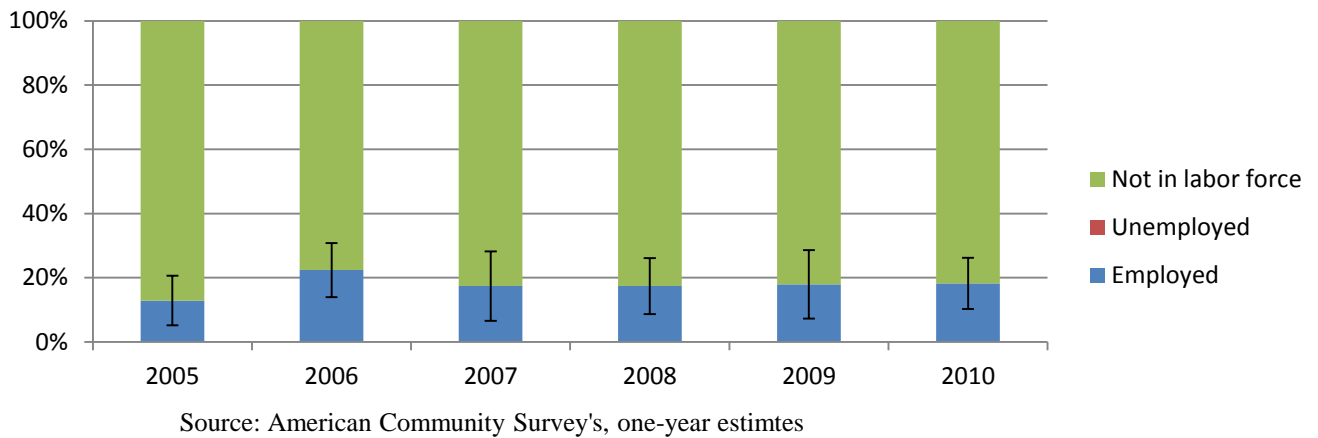
Between 2005 and 2010, 1 to 10 percent of Boone County seniors aged 75+ participated in the labor force. The majority of which were employed (either full- or part-time) and only three times in the six years of data presented here, was unemployment reported for this age segment (Figure 16). Figure 16 includes the margins of error measurements on the employment bar graphic. This is included to depict the potential variance in the rate of employment of seniors in the 75+ age segment. Between 2008 and 2010, the error bars dip below zero. This means there is a chance that no 75+ year olds were employed in Boone County. Boone's 75+ age segment employment rate generally mirrors Missouri and U.S.'s, but unlike Boone, the state and nation have consistent levels of unemployment of seniors within this age group (Appendix B: Figure 7 & Figure 8).



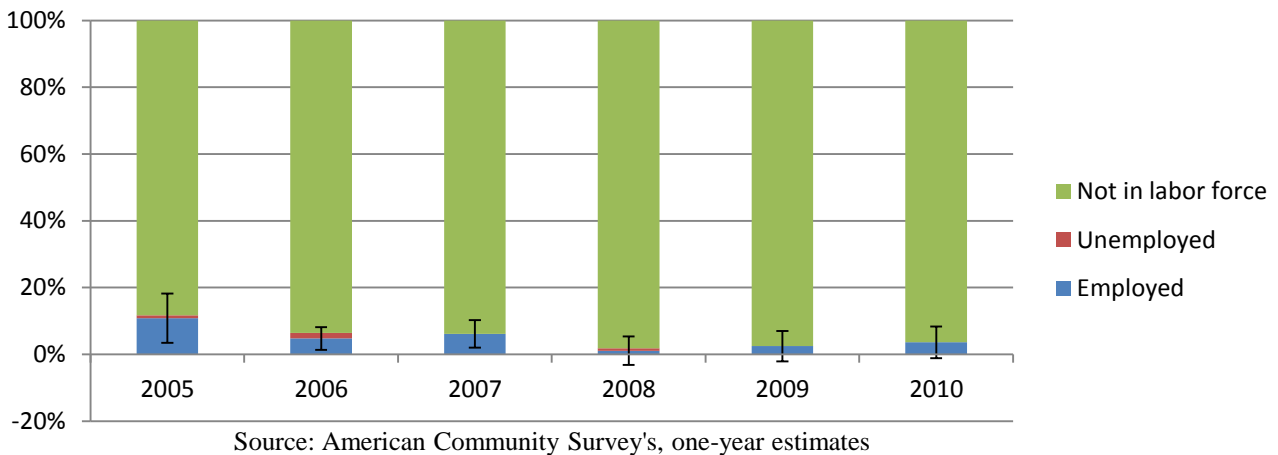
**FIGURE 14: BOONE COUNTY SENIOR EMPLOYMENT (AGE 65-69) MARGINS OF ERROR NOTED FOR "EMPLOYED"**



**FIGURE 15: BOONE COUNTY SENIOR EMPLOYMENT (AGE 70-74) MARGINS OF ERROR NOTED FOR "EMPLOYED"**

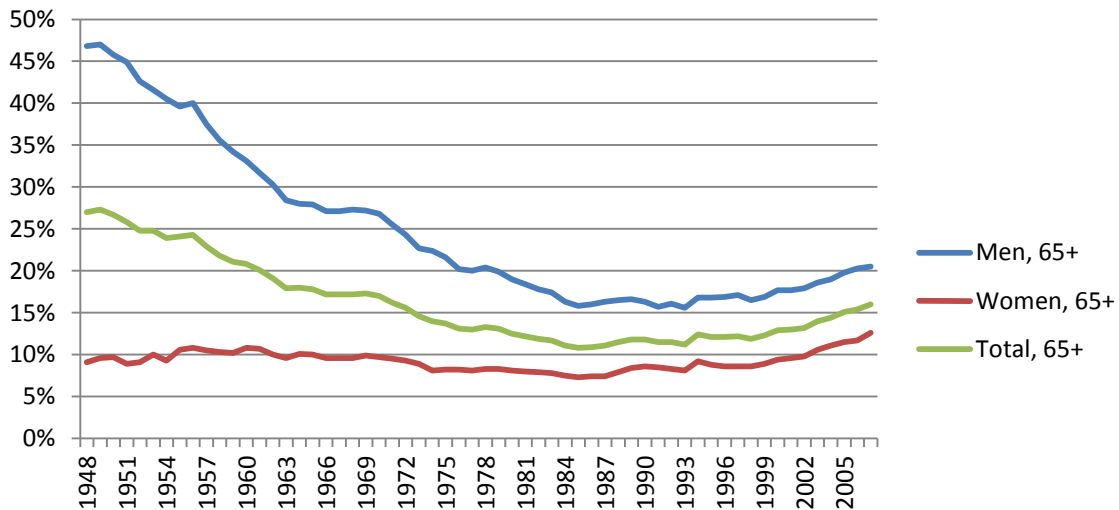


**FIGURE 16: BOONE COUNTY SENIOR EMPLOYMENT (AGE 75+) MARGINS OF ERROR NOTED FOR "EMPLOYED"**



**U.S. Labor Force Participation Rate by Gender 1948-2007:** In 2007, BLS conducted a special spotlight report on senior’s participation in the labor force. Figure 17 describes the trend in males and females work behaviors between 1947 and 2007. During this time, the number of 65+ workers in the labor force has plummeted. The decrease levels off in the late 1980s and early 1990s and a slow increase occurs that continues to trend upwards through 2007. As of 2007, women, age 65+, were participating in the labor force at their highest rates since the BLS began collecting this data.

**FIGURE 17: NATIONAL LABOR FORCE PARTICIPATION RATE OF WORKERS 65+, 1947-2007**



Source: Bureau of Labor Statistics, *Older Workers Spotlight Report, 2008*, Chart Data

**Conclusion:** Boone County’s labor force participation for seniors behaves more like state and national trends as the age segments for the seniors increase. Meaning, Boone County seniors age 70-74 and 75+ mirror state and national labor force behaviors of individuals in the same age segments. However, Boone’s 65-69 age group tend to be more active in the labor force than similar aged individuals in Missouri and U.S. Nationally, there was a decrease in the number of seniors participating in the labor force between 1947 and the late 1980s. Since the late 1990s, this group’s work force participation has increased.

**Personal Well-being**

**Community-Level Indicators:** Understanding personal well-being for Boone County seniors and people with disabilities is challenging due to inconsistency in defining personal well-being for various sub-populations, lack of acceptable personal well-being measures, and more importantly, a dearth of data on personal wellness measures. In Boone County, understanding the senior population and population with disabilities presents more challenges because small population sizes are subject to tremendous measurement error. Nonetheless, useful analysis is achieved in this report by examining information available on long-term care, personal assistance needs, mobility, services for independent living, and elder abuse.



**Long-term Care:** Long-term care represents a significant healthcare cost for seniors, who tend to have limited incomes. The number and monetary value of long-term care insurance policies would be a useful measure for this indicator; however, that information is not reported at the county level. An alternative data option is the portion of long-term care costs paid by Medicaid for in-home and institutional long-term care services on a per capita basis. In 2002 in Boone County, Medicaid paid \$60 per capita for in-home and institutional long-term care. This number increased to \$75 per capita in 2008.<sup>14</sup>

**Personal Assistance Needs:** Personal assistance comes in many forms, including full-time, part-time or temporary personal assistance inside and outside of the home and assistive technology. There is a variety of specialized equipment and new technology that can improve quality of life and enable more individuals to live independently. These include braces, walkers, wheelchairs, motorized scooters, hearing aids, and vision devices. Use of assistive devices has increased significantly over the past 30 years as new technology continues to be developed. Approximately half of the 54 million Americans with activity limitations or disabilities use assistive technology to adapt to their environments.<sup>15</sup> In other studies, Carlson & Ehrlich (2005) found that the most common form of payment for assistive technology is out-of-pocket by the consumer, or by family and friends. While it is not possible to determine how many Americans want/need additional adaptive technologies but are unable to access them, the payment method used could indicate a likely gap in access. Demand for support-services and coordination-of-care assistants are increasing as they can assist individuals in accessing funding for personal assistant equipment and services from state and federal programs.<sup>16</sup>

**Mobility:** The *Journal of Patient Safety* published a study in 2010 examining the fear of falling among seniors. They found this issue has the potential to alter seniors' quality of life and morbidity because activity restriction, rooted in fear of falling, can lead to limited mobility, balance deterioration, and functional decline. The study found anxiety surrounding social and leisure physical activity opportunities can result in compromised quality of life and health.<sup>17</sup> A study in 2009, published in *Topics in Geriatric Rehabilitation*, used focus group data to explore the interconnectedness between independent mobility and personal well-being for older-aged individuals. The study examined the way seniors talk about mobility and adapting to age-related mobility restrictions. Results found seniors believe independent mobility is closely tied to everyday-life routines and serves as a means by which to maintain one's personal lifestyle. The study found that obstacles to independent mobility can be overcome by access to equipment and specialized technology.<sup>18</sup>

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<sup>14</sup> Missouri Senior Report, 2009. For more information, visit <http://missouriseniorreport.org/>

<sup>15</sup> Carlson & Ehrlich, 2005, Assistive Technology and Information Technology Use and Need by Persons with Disabilities in the United States, 2001. US Department of Education National Institute on Disability and Rehabilitation Research. pg. 145; based on studies conducted over 10 years ago. Accessed at <http://www.ed.gov/rschstat/research/pubs/at-use/at-use-2001.doc>.

<sup>16</sup> Community Engagement: A necessary condition for self-determination and individual funding (1999). John O'Brien: <http://thechp.syr.edu/ComEng.pdf>

<sup>17</sup> Fletcher, Paula C., Guthrie, Dawn M., Berg, Katherine, & Hirdes, John P, (2010). Risk Factors for Restriction in Activity Associated With Fear of Falling Among Seniors Within the Community. *Journal of Patient Safety*, (6)3, 187-191

<sup>18</sup> Siren, Anu, & Hakamies-Blomqvist, Liisa (2009). Mobility and Well-being in Old Age. *Topics in Geriatric Rehabilitation*, (25)1, 3-11

**Services for Independent Living:** The *Archives of Physical Medicine and Rehabilitation* suggests that many of the problems encountered by people with disabilities come from being dependent on professionals, family members, and medical personnel. *Topics in Geriatric Rehabilitation* finds the problems encountered by seniors are center around their living environments.<sup>19</sup> For both seniors and people living with disabilities, the independent living model emphasizes that *all* individuals should be able to make personal decisions regarding community activity, housing, and employment – all of which are components of independence.<sup>20</sup> In Boone County, one of several options for assistance is Services for Independent Living (SIL), a non-profit center that promotes independence for persons with disabilities. Their philosophy states, “All persons, regardless of disability, are entitled to and should have equal access to the rights and responsibilities that other citizens are provided; to be as active and productive a member of society as they choose.”<sup>21</sup>

There are four main services proved by SIL in Boone County: advocacy, skills training, information and referrals, and finally, peer support. Advocacy services assist individuals to acquire needed services and benefits. Skills training offers group classes and training based upon consumer needs in areas such as cooking, home management, and work readiness. Information and referral services provide internal and community resources to individuals to make informed decisions and maximize independence. Peer support provides group networking opportunities and one-on-one support. Here, individuals learn from others with disabilities by sharing personal experiences.

**Elder Abuse:** In 2010, the *American Journal of Public Health* published a study examining the correlations among emotional, physical, sexual, and financial mistreatment and neglect of older adults. The study, originally funded by the U.S. Department of Justice, examined a randomly selected nationally representative sample<sup>22</sup> of adults ages 60+ in the U.S. Data was collected on demographic, risk factors, and mistreatment prevalence. Of the individuals included in the sample, the researchers found that at any given point in the course of a year: 4.6 percent experienced emotional abuse, 1.6 percent experienced physical abuse, 0.6 percent experienced sexual abuse, 5.1 percent experienced potential neglect, and 5.2 percent reported current financial abuse by a family member. One in 10 respondents reported emotional, physical, or sexual mistreatment or potential neglect in the past year. The study found the most consistent correlations of mistreatment across abuse types were a) low social support and b) previous traumatic event of abuse. The *American Journal of Public Health* data analysis shows the prevalence of elder abuse in the community and believes that addressing low social support, paired with preventative interventions, could have significant public health implications.<sup>23</sup>

**Conclusion:** Perceptions of aging well have common themes including having good physical health, having a positive mental outlook, being cognitively alert, having a good memory, and

<sup>19</sup> DeJong, G. (1979). Independent Living: From social movement to analytic paradigm. *Archives of Physical Medicine and Rehabilitation*, 60, 435–446.

<sup>20</sup> Frieden, L. (1980). Independent living program models. *Rehabilitation Literature*, 41, 169–173.

<sup>21</sup> Columbia, Missouri Services for Independent Living <http://www.silcolumbia.org/>

<sup>22</sup> N=5,777

<sup>23</sup> Acierno, Ron, Hernandez, Melba A., Amstadter, Amanda B., Resnick, Heidi S., Steve, Kenneth, Muzzy, Wendy, & Kilpatrick, Dean G. (2010). Prevalence and Correlates of Emotional, Physical, Sexual, and Financial Abuse and Potential Neglect in the United States: The National Elder Mistreatment Study, *American Journal of Public Health*, (100)2, 292-297



being socially involved.<sup>24</sup> Access to personal assistance services, maintaining mobility, and tapping into services for independent living in Boone County contribute to maintaining the personal well-being of seniors and people with disabilities. The *American Journal of Public Health* helps one understand the indicators of abuse among the elderly, and these findings may have relevance in understanding and preventing abuse towards individuals with disabilities. Research suggests that addressing low social support, paired with preventative interventions, could have significant public health implications for seniors – findings that may have cross-over implications for people with disabilities. Finally, the *Archives of Physical Medicine and Rehabilitation* suggests that many of the problems encountered by people with disabilities come from being dependent on professionals, family members, and medical personnel – findings that may have cross-over implications for seniors. While these two populations are very different, they encounter many of the same barriers to personal well-being and independent living.

### Community Involvement

**Community-Level Indicators:** As seen in the Mobility section of this report, fear of falling can prevent community involvement among seniors. According to the NOD/Harris Survey of Americans with Disabilities, the most comprehensive survey of its kind, people with disabilities report socializing or engaging in recreational activities less often than those without disabilities.<sup>25</sup> This is an unfortunate discovery because community participation is a vital component to independent living and individuals should be as active as they desire to be in their communities.<sup>26</sup> County-level data on community involvement is limited; however, understanding components of quality life and opportunities for involvement of the senior population and people with disabilities is a necessary first step to understanding broad-reaching community involvement. In this report, useful analysis is achieved by examining information available on quality of life from the World Health Organization, *Senior Games* participation, and *Special Olympic* participation.

**Quality of Life:** *The National Disability Status and Program Performance Indicators* defines quality of life as “having the means and wherewithal to pursue happiness—however defined by each person,”<sup>27</sup> and goes on to suggest that quality of life issues can hinge upon having choices and being empowered to make those choices. Practitioners in the field find choice is the cornerstone of self-determination for individuals with disabilities and elderly.

The World Health Organization (WHO) defines quality of life as individual’s perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns.<sup>28</sup> WHO admits quality of life is a broad-ranging concept that is affected by a person’s health, psychological state, level of independence, social relationships, and personal beliefs. In 1997, WHO published a report on *Quality of Life*

<sup>24</sup> Laditka, Sarah B., Corwin, Sarah J., Laditka, James M., Liu, Rui, Tseng, Winston, Wu, Bei, Beard, Renée L., Sharkey, Joseph R., & Ivey, Susan L. (2009). Attitudes About Aging Well Among a Diverse Group of Older Americans: Implication for Promoting Cognitive Health. *The Gerontologist* (2009) 49 (S1): S30-S39.

<sup>25</sup> Keeping Track: National Disability Status and Program Performance Indicators, April 2008, pg. 67.

<sup>26</sup> Keeping Track: National Disability Status and Program Performance Indicators, April 2008, pg 34.

<sup>27</sup> Keeping Track: National Disability Status and Program Performance Indicators, April 2008, pg 34.

<sup>28</sup> For more information, visit [http://www.who.int/mental\\_health/media/68.pdf](http://www.who.int/mental_health/media/68.pdf)



*Instruments* which outlines the instrument, its development, how the instrument is scored, and variety in its uses in medical and mental health practices.<sup>29</sup>

The WHO's *Quality of Life Instrument* outlines six broad domains of measures which aim to measure quality of life cross-culturally and regionally. These domains and facets (Table 1) reflect the issues that a group of scientific experts and lay people in WHO field centers felt were important to quality of life and have no specific classifications based upon age or disability status:

TABLE 1: WORLD HEALTH ORGANIZATION QUALITY OF LIFE MEASUREMENT DOMAINS & FACETS	
DOMAIN	FACETS INCORPORATED WITHIN DOMAINS
<b>Physical health</b>	<ul style="list-style-type: none"> <li>• Energy and fatigue</li> <li>• Pain and discomfort</li> <li>• Sleep and rest</li> </ul>
<b>Psychological</b>	<ul style="list-style-type: none"> <li>• Bodily image and appearance</li> <li>• Negative feelings</li> <li>• Positive feelings</li> <li>• Self-esteem</li> <li>• Thinking, learning, memory and concentration</li> </ul>
<b>Level of independence</b>	<ul style="list-style-type: none"> <li>• Mobility</li> <li>• Activities of daily living</li> <li>• Dependence on medical substances and medical aids</li> <li>• Work capacity</li> </ul>
<b>Social relationships</b>	<ul style="list-style-type: none"> <li>• Personal relationships</li> <li>• Social support</li> <li>• Sexual activity</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>• Financial resources</li> <li>• Freedom, physical safety and security</li> <li>• Health and social care: accessibility and quality</li> <li>• Home environment</li> <li>• Opportunities for acquiring new information and skills</li> <li>• Participation in and opportunities for recreation/leisure</li> <li>• Physical environment (pollution, noise, traffic, climate)</li> <li>• Transport</li> </ul>
<b>Spirituality /Religion/ Personal beliefs</b>	<ul style="list-style-type: none"> <li>• Religion, spirituality, personal beliefs</li> </ul>
Source: World Health Organization <i>Quality of Life – Measuring Quality of Life</i> Report, 1997. World Health Organization Division of Mental Health and Prevention of Substance Abuse	

The WHO domains and facets are broad in scope and designed for cross-cultural application in the field of mental health. Quality of life measures are not systematically collected for individuals with disabilities on a national scale much less at the state or county level.<sup>30</sup> For this reason, the WHO quality of life indicators may serve as a guide for understanding and

<sup>29</sup> *Ibid.*

<sup>30</sup> Eustis, Nancy. Consumer-Directed Long-term-Care Services: Evolving Perspectives and Alliances, *Generations*, Fall 2000.

conceptualizing quality of life issues for all populations in Missouri and Boone County. Locally, there are ways for some of the WHO quality of life indicators, particularly those related to social involvement, to be satisfied.

**Civic Engagement:** Library membership, taking advantage of parks and recreational complexes, belonging to organizations, church membership, and volunteering are ways in which all community members find engagement and social connections. Seniors contribute to their communities through a wide range of civic activities and capturing rates of participation among these activities remains a challenge. However, one civic engagement measure—voting, is quantifiable. In 2008, 57.5 percent of registered seniors in Boone County participated in elections in 2008, no data was available from the 2004 election cycle.<sup>31</sup>

Opportunities for involvement have different meanings for seniors and people living with disabilities because these groups are not like the rest of the population. *The Journal of Gerontology* examined panel data to assess the long-term impact of volunteering on the life satisfaction and perceived healthy people aged 60+.<sup>32</sup> The results showed older volunteers experienced greater life satisfaction over time as a result of their volunteering experience – especially for those with higher rates of volunteering. *The Journal of Information, Community and Society* found that people with disabilities are less likely to live in homes with computers, less likely to use computers, and are less likely to be on-line.<sup>33</sup> This study examined the connectedness of people with disabilities and helps one understand potential barriers to civic engagement. The cultural shift of community organizations, library services, volunteer opportunities, community organizing, and social networking to web-based access may prevent seniors and people with disabilities from fully realizing their community engagement potential.

Boone County civic engagement outlets for seniors and people with disabilities are many of the same outlets available to non-seniors and people without disabilities. Although tracking participation in civic organizations is challenging, a method of measuring involvement is needed in order to identify gaps in participation, specifically among seniors and people with disabilities. The review of literature in this report has shown community involvement has positive health implications for community members who choose to be socially engaged.

**Senior Games:** The National Senior Games Association (NSGA) is a non-profit member of the United States Olympic Committee dedicated to motivating seniors to lead healthy lifestyles through involvement in the games. NSGA is committed to senior health, wellness, quality of life, and community involvement by providing information to support education and research initiatives enabling senior athletes and others to be better informed about ways to ensure healthy aging. The NSGA support state-level organizations that host Senior Games or Senior Olympics.<sup>34</sup> The Missouri State Senior Games is an affiliate of NSGA and aims to provide an annual physical fitness event for Missourians to promote social, competitive, athletic and recreational

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<sup>31</sup> Missouri Senior Report, 2009. For more information, visit <http://missouriseniorreport.org/>

<sup>32</sup> Van Willigen, Mariëka (2000). Differential Benefits of Volunteering Across the Life Course. *The Journal of Gerontology*, 55(5), S308-S318.

<sup>33</sup> Dobransky, Kerry & Hargittai, Eszter (2006). The Disability Divide in Internet Access and Use. *The journal of Information, Communication & Society*, 9(3), 313-334.

<sup>34</sup> For more information, visit <http://www.nsga.com/>

activity for older adults while promoting an interest in lifetime sports, physical wellness and enhancing the quality of one's life.<sup>35</sup>

**Special Olympics:** The mission of Special Olympics is to provide year-round sports training and athletic competition in a variety of Olympic-type sports for children and adults with intellectual disabilities, giving them continuing opportunities to develop physical fitness, demonstrate courage, experience joy, and participate in a sharing of gifts, skills and friendship with their families, other Special Olympics athletes, and the community.<sup>36</sup> The Missouri Special Olympics division is admittedly more than just sports. They are proud to focus on developing confidence and skills of athletes with disabilities so they can hold jobs, get better education, and earn respect by providing the opportunity for all individuals to feel accepted and be involved in the community.<sup>37</sup>

**Conclusion:** The breadth of WHO's *Quality of Life Indicators*' touch upon many of the domains and facets of life which apply to seniors and people living with disabilities. The objectives outlined in the Missouri Senior Games and Special Olympics organization mirror many of the WHO indicators including the importance of: personal relationships, self-esteem, social support, mobility, and participation in recreation and leisure. Boone County is fortunate to host both of these events locally and Boone residents may benefit from ease of local participation. Beyond extracurricular games, there are a number of outlets where seniors and people with disabilities could exercise their civic engagement, but there is a need for quantifiable methods of measuring their community involvement. Primary data collection, surveys, and focus groups may present opportunities for further research on Boone County populations of interest.

## Transportation Barriers

**Community Level Indicator:** The *Americans with Disabilities Act* was passed in 1990, and since that time the City of Columbia and nonprofit organizations have provided curb-to-curb transportation service to citizens who are ADA-eligible and unable to ride Columbia-Transit's fixed-bus route system.<sup>38</sup> Understanding transportation barriers for Boone County seniors and people with disabilities is challenging due to a lack of data on the topic. Nonetheless, useful analysis is achieved in this report by examining the estimated transit-dependent Boone County population.

**Estimated Transit-Dependent Populations:** Accessible transportation is vital not only to reach necessities like grocery stores, doctors' appointments, and employment, but also to be active participants in the community. According to the Missouri Senior Report in 2008,<sup>39</sup> 83.7 percent of Boone County seniors have a driver's license, which is comparable to the Missouri average. This leaves approximately 16 percent,<sup>40</sup> or 2,428 Boone County seniors to rely on friends, family or public transportation. Adults with disabilities often need transportation services and according to the Boone County Coordinated Transportation Service report from 2006, only about

<sup>35</sup> For more information, visit [http://www.smsg.org/senior\\_games/](http://www.smsg.org/senior_games/)

<sup>36</sup> For more information, visit <http://www.specialolympics.org/>

<sup>37</sup> Mo Special Olympics, for more information, visit <http://somo.org/>

<sup>38</sup> For more information, visit <http://www.gocolumbiamo.com/PublicWorks/Transportation/>

<sup>39</sup> Boone County data, 2008 Missouri Senior Report

<sup>40</sup> Percentage based upon American Community Survey 2010 one-year estimates



half of the estimated transportation need for the target population is being met.<sup>41</sup> In addition, based on a client survey of human services agencies in the county, one in five respondents said they had “either lost a job or had problems finding a job due to lack of transportation.”<sup>42</sup> The report also estimated the number of potential transit-dependent residents in the county in four groups (see Table 2 below).<sup>43</sup>

TABLE 2: ESTIMATED TRANSIT-DEPENDENT POPULATION, BOONE COUNTY		
	Count	Percent
Estimated total population	143,241	100%
Estimated population 60 +	16,488	11.5%
Estimated mobility-limited population	7,922	5.5%
Zero-vehicle households	3,673*	6.5%*
Total below poverty	19,422	13.6%
* Households		
Source: Boone County Coordinated Transportation Study, 2006		

**Conclusion:** Transportation is a vital component to personal well-being because it can allow access to community involvement opportunities for those who are mobility-challenged. In Boone County, understanding the transportation challenges of seniors and people with disabilities means identifying methods for quantifying the transportation gap and measuring the true impact of initiatives. Primary data collection, surveys, and focus groups may present opportunities for further research on Boone County populations of interest.

### RESOURCE ASSESSMENT

An inventory of current resources directed at independent living was conducted using United Way’s 211 information center. The resource inventory was a great start to creating a resource list for services available to Boone County residents; it was not and should not be considered a comprehensive list of all independent living services available within Boone County.

<sup>41</sup><http://www.gocolumbiamo.com/Planning/Documents/Attachment3ExecutiveSummary-CoordinatedTransportationStudy12-14-06.pdf>

<sup>42</sup> *Ibid.*

<sup>43</sup> See pages VIII 8-9 for a breakdown by census block groups of each of these populations. <http://www.lscs.com/projects/Boone%20County/final/Report.pdf>



<b>INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE</b>			
<b>Agency</b>	<b>Program Name</b>	<b>Service Description</b>	<b>Eligibility</b>
American Home Care, Columbia Office	Respite Care	In home respite care is provided.	Families on Medicaid (both children and adults) and those with VA benefits. Do not need to be homebound.
American Parkinson Disease Association, Information and Referral Center	Individual and Family Support Services	Patient Services Program: Respite care for caregivers, Adult Day Care for Parkinson's patients and Medical Alert Systems.	Must have Parkinson's Disease Medicaid recipients are not eligible or those receiving services through another agency and financial need-income guidelines
Boone Council on Aging		Information, referral, volunteer services and case management	No restrictions
Boone County Family Resource Center	Supported Living	Allow people with disabilities to live independently while receiving assistance and supervision	No restrictions
Boone County Family Resources	Boone County Group Homes & Family Support		No restrictions
Burrell Outpatient Clinic	Burrell Behavioral Health, Adult Services		No restrictions
Central Missouri Area on Aging	Respite Care	Provide temporary relief (respite care services) to unpaid caregivers of the elderly.	Caregiver or Care-recipient must be over 60
Central Missouri Agency on Aging	Adult Day Care	Provides temporary relief of caregiving responsibilities.	Anyone who is 60 years of age or over or a caregiver of someone 60 years of age or over: the caregiver and the older person must reside at the same residence. Service can be provided through our vendor contract.



<b>INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE</b>			
<b>Agency</b>	<b>Program Name</b>	<b>Service Description</b>	<b>Eligibility</b>
Central Missouri Agency on Aging	Senior Center with Meals	Services offered through the Senior Centers include noon-time congregate meals, home-delivered meals to surrounding communities, social, recreational, and educational activities.	60 years or older: or married to someone 60+
Columbia Area Senior Center		Provides meals and activities while promoting senior citizens' abilities to maintain a lifestyle of independence and growth.	No restrictions
Columbia Transit	Para Transit	Transportation to those individuals who cannot take established bus routes and need personal transportation assistance	No restrictions
Department of Social Services: Rehabilitation	Services for the Blind	Create opportunities for blind and visually impaired persons in order that they may attain personal and vocational success	No restrictions
Home Instead Senior Care		Non-medical in-home services for seniors- companionship and homemaker services like meal preparation and clean-up, laundry, organizing, light housekeeping, errands, shopping and incidental transportation.	No restrictions



INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE			
Agency	Program Name	Service Description	Eligibility
Homemaker Healthcare, Inc.		Homemaker Healthcare helps retain independence with: Nursing Services, Physical Therapy, Occupational Therapy, Evaluation Home Health Aid, Home Telemonitoring, Respite Care, Personal Care, Such as Bathing, Shampoo and Nail Care, Laundry, Housekeeping Duties, Meal Planning and Preparation, Shopping and Errands.	Low income seniors or persons with disabilities
Independent Living Center of Mid Missouri	Services for Independent Living	Evaluates and authorizes in home services for persons age 60 and over and-or permanently and totally disabled. Personal care, homemaker chore and respite services.	Program restricted to low income Citizenship is required
Integrity Home Care	Skilled Nursing Care		No restrictions
Meals on Wheels of Columbia, Inc.	Meals On Wheels	Nutritional Supplementation, home delivery	No restrictions



INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE			
Agency	Program Name	Service Description	Eligibility
Missouri Assistive Technology	Show Me Loans	<p>Home Access Modifications - Loans may be obtained for home modification purposes such as: wheelchair ramps, stairway lifts, widening doorways, and bathroom modifications and more. Loans toward the purchase of homes are not available. Vehicle Access Modifications - Persons may obtain loans for disability-related modifications to motor vehicles such as wheelchair lifts, ramps, or hand controls. Loans for purchases of vehicles cannot be made. Other assistive technology eligible for loans includes but is not limited to braille equipment, hearing aids, and environmental controls. For most borrowers the interest rate will range from 2% to 4%.</p>	<p>Individuals with a disability, or a family member or someone with a disability, can apply, and must be purchasing assistive technology that will enable one or more individuals with a disability to become more independent.</p>





INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE			
Agency	Program Name	Service Description	Eligibility
Missouri Assistive Technology	TAP-I (Telecommunication Access Program for the Internet)	The Telecommunications Access Program for Internet (TAP-I) provides Missourians who cannot use traditional computer equipment, the adaptive computer equipment necessary for basic access to the Internet and e-mail. The program provides such equipment as screen enlargement software, screen readers, adaptive keyboards or alternative pointing devices such as trackballs or rollerballs. TAP-I provides web sites that are adapted for assistive technology users. Also provided: consumer support to applicants in determining the adaptive computer equipment needed for Internet access and training on how to use the adaptive equipment to access the Internet and e-mail.	There are four qualifications for the Telecommunications Access Program for Internet. The applicant must: (1) be a Missouri resident; (2) have an annual household income under \$60,000 for two people: with \$5,000 being added for each additional dependent; (3) have a computer in their home; and, (4) have internet access.



<b>INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE</b>			
<b>Agency</b>	<b>Program Name</b>	<b>Service Description</b>	<b>Eligibility</b>
Missouri Assistive Technology	Information and Assistance	Information is provided to schools, public agencies and individuals on the various aspects of Assistive Technology (access to employment, education, textbook initiatives, and state and local statutes concerning assistive technology standards). Can be accessed through the Internet and by phone.	No restrictions
Missouri Assistive Technology	Assistive Technology Demonstration Centers	Assistive Technology Demonstration Centers are located in Kansas City, Columbia, Springfield, Cape Girardeau, Kirksville, Farmington, St. Joseph, and St. Louis. These centers are charged with providing hands-on demonstrations of a range of assistive technology. For more info and exact locations, contact David at (816) 655-6703 or email david.bkr@att.net.	No restrictions



<b>INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE</b>			
<b>Agency</b>	<b>Program Name</b>	<b>Service Description</b>	<b>Eligibility</b>
Missouri Assistive Technology	Assistive Technology, Technical Assistance and Training	<p>MoAT provides technical assistance and resources to individuals with disabilities, their family members, and agencies. Current legislative and policy information is provided to keep consumers and providers informed of important issues. A disability listserv is operated to provide timely information on disability related legislation and policy.</p> <p>MoAT provides training events on assistive technology, policies and related issues through direct sponsorship of training programs, coordination of training, and production and distribution of training materials.</p>	Individuals with disabilities and their families and agencies supporting them
Missouri School for the Deaf	Educational Attainment	Prepares students for the world of work and for post-secondary education	No restrictions
MU Adult Day Connection	The Eldercare Center	State licensed adult day care offering therapeutic activities, exercise, nursing care and supervision	Older adults or adults with disabling conditions
New Horizons, Community Support Services, Inc.			



<b>INDEPENDENT LIVING RESOURCES REGISTERED IN 211 DATABASE</b>			
<b>Agency</b>	<b>Program Name</b>	<b>Service Description</b>	<b>Eligibility</b>
OATS Inc. – Mid-MO Region	Transportation Service	Provides transportation for seniors and people with disabilities throughout mid-Missouri	No restrictions
Woodhaven Learning Center	Community Living	Community based support for adults with disabilities, promotes independent living and maintains a safe environment	No restrictions



## CONCLUSION

The Boone County analysis of independent living has revealed a dearth of community-level data on senior populations and those people living with disabilities. This report has identified many areas which would benefit from primary data collection including surveys, and/or focus group research. Useful county, state, and national level data is available on population statistics, poverty trends, and employment, while national studies and journal publications supply contextual information and discussions on the majority of independent living sub-issues of this report.

Poverty among Boone County seniors is rising, although it is difficult to understand the true population impact due to large margins of error. The number of Boone County seniors is rising more quickly than in Missouri and the U.S. Boone County seniors age 70-74 and 75+ mirror state and national labor force behaviors of individuals in the same age segments. However, Boone 65-69 age group tend to be more active in the labor force than similar aged individuals in Missouri and U.S.

The WHO's *Quality of Life Instrument* has strong possibilities for guiding future measurements of independent living not just for seniors and people with disabilities, but for all Missourians. Specialized investigation of the WHO's instrument implementation and methodology is still needed. Based on the secondary data presented here, this report finds personal well-being for seniors and people with disabilities is linked to personal assistance technologies, mobility, and transportation services. These bolster community involvement, which has been shown to enhance quality of life. Boone County has outlets for seniors and people with disabilities' involvement in the community. Finally, this report concluded with an extensive list of independent living services available locally for seniors and people with disabilities, and one should not be quick to dismiss the Milken Institute's findings which state Columbia, Missouri, is the fourth best small city in their ranking report, *Best Cities for Successful Aging*.



APPENDIXES

A. TABLES

TABLE 1: CURRENT FUNDING FOR ECONOMIC OPPORTUNITY, 2012					
Project	Organization	United Way	City	County	Total Funding
Boone County Council on Aging	Senior Connect	\$81,727	\$23,778	\$13,838	\$119,343
Independent Living Program	CHA Low-Income Services		\$7,000		\$7,000
In-Home Services (Homemaker, personal care, respite services)	City of Columbia – Division of Human Services		\$56,000	\$12,776	\$68,776
Home Delivered Meals	Meals on Wheels	\$47,305	\$50,000		\$97,305
Adult Day Care	MU Adult Day Connection (Elder Care)	\$38,000	\$20,000	\$1,900	\$59,900
Transportation	Services for Independent Living (SIL)	\$106,154	\$15,000	\$7,580	\$128,734
Transportation	OATS, Inc.	\$27,690			\$27,690
Respite Care	Alzheimer’s Association	\$21,665			\$21,665
Total Agency Allocations for Independent Living		\$322,541	\$171,778	\$36,094	\$530,412
Total funding for Social Services		\$2,219,725	\$893,556	\$98,869	\$3,212,150
Percent of total funding		14.5%	19.2%	36.5%	16.5%

Source: City of Columbia Social Services Spending Report (2012) & Heart of Missouri United Way Funding FY2012



TABLE 2: OVERVIEW OF SENIORS IN BOONE COUNTY						
Indicator	Geography	2006	2007	2008	2009	2010
MO Senior Report Rank	Boone	1 <sup>st</sup> out of 115 counties	1 <sup>st</sup> out of 115 counties	1 <sup>st</sup> out of 115 counties	1 <sup>st</sup> out of 115 counties	1 <sup>st</sup> out of 115 counties
% Population age 65 and above	Boone	8.9% (13,369)	9.1% (13,895)	9.3% (14,498)	9.2% (14,347)	10.2% (15,741)
	Missouri	13.3%	13.4%	13.6%	13.7%	14.1%
	U. S.	12.4%	12.5%	12.8%	12.9%	13.1%

Sources: Missouri Senior Report 2009, US Census: American Community Survey (ACS) one year estimates

TABLE 3: PERCENT OF POPULATION WITH A DISABILITY BY AGE							
		2008		2009		2010	
		Rate	Margin of Error	Rate	Margin of Error	Rate	Margin of Error
Percent of population with a disability: 18-64	Boone	8.7% (9,140)	+/- 1.5	9.2%	+/- 2.0	7.2%	+/- 1.4
	Missouri	12.2%	+/- 0.3	12.4%	+/- 0.3	12.0%	+/- 0.3
	U.S.	10.1%	+/- 0.1	10.1%	+/- 0.1	10.0%	+/- 0.1
Percent of population with a disability: 65+	Boone	41.8% (5,735)	+/- 5.5	26.5%	+/- 5.0	45.8%	+/- 6.7
	Missouri	39.5%	+/- 0.7	39.3%	+/- 0.8	38.7%	+/- 0.9
	U.S.	38.1%	+/- 0.1	37.4%	+/- 0.1	36.7%	+/- 0.1

Source: American Community Survey, Status of non-institutionalized population, one-year estimates



TABLE 4: HOUSEHOLDS RECEIVING FOOD STAMPS/SNAP IN THE PAST 12 MONTHS									
	2008			2009			2010		
	<i>Boone</i>	<i>Missouri</i>	<i>U.S.</i>	<i>Boone</i>	<i>Missouri</i>	<i>U.S.</i>	<i>Boone</i>	<i>Missouri</i>	<i>U.S.</i>
Total Households	63,220	2,330,040	113,101,329	65,893	2,339,684	113,616,229	64,639	2,350,628	114,567,419
Households receiving SNAP	8.8% (5,550)	11.1%	8.6%	11.6% (7,675)	12.5%	10.3%	10.7% (6,887)	13.3%	11.9%
Households with 1+ persons with a disability	44.2% (2,452)	51.1%	47.4%	41.8% (3,211)	48.5%	45.5%	43.7% (3,015)	47.6%	43.7%
Households with no persons with a disability	55.8% (3,098)	48.9%	52.55%	58.1% (4,464)	51.5%	54.4%	56.2% (3,872)	52.3%	56.2%

Source: American Community Survey 2008, 2009, 2010, one-year estimates, Table B22010





	2008			2009			2010		
	<i>Boone</i>	<i>Missouri</i>	<i>U.S.</i>	<i>Boone</i>	<i>Missouri</i>	<i>U.S.</i>	<i>Boone</i>	<i>Missouri</i>	<i>U.S.</i>
Overall median earnings	\$22,883	\$26,987	\$29,960	\$23,926	\$26,264	\$28,404	\$21,929	\$26,659	\$29,010
With a disability	\$14,132	\$18,121	\$20,250	\$14,483	\$18,114	\$18,865	\$15,970	\$18,033	\$19,500
No disability	\$23,811	\$27,698	\$30,469	\$24,447	\$27,113	\$28,983	\$22,374	\$27,235	\$29,997
Earnings gap between disabled and non-disabled populations	\$9,679	\$9,574	\$10,219	\$9,964	\$8,999	\$10,118	\$6,404	\$9,202	\$10,497

Source: ACS 2010: Table B18140: Median earnings in past 12 months for non-institutionalized population 16 years and over by disability status

		Boone		MO		U.S.	
		<i>Rate</i>	<i>Error</i>	<i>Rate</i>	<i>Error</i>	<i>Rate</i>	<i>Error</i>
One-year ACS estimates	2005	4.9%	2.5%	9.2%	0.5%	9.9%	0.1%
	2006	5.1%	2.2%	10.3%	0.5%	9.9%	0.1%
	2007	4.5%	2.8%	9.3%	0.6%	9.5%	0.1%
	2008	4.6%	2.8%	9.3%	0.6%	9.9%	0.1%
	2009	2.9%	1.8%	8.6%	0.4%	9.5%	0.1%
	2010	10.6%	5.7%	9.1%	0.5%	9.0%	0.1%
Five-year ACS estimates	2005-2009	4.2%	1.0%	9.5%	0.2%	9.8%	0.1%
	2006-2010	5.2%	1.3%	9.3%	0.2%	9.5%	0.1%
	2007-2011	5.4%	1.4%	8.9%	0.2%	9.4%	0.1%

Source: American Community Survey, one-year estimates and five-year estimates



TABLE 7: POVERTY AMONG DISABLED BY AGE SEGMENTS 18-64 AND 65+							
	2000	2005	2006	2007	2008	2009	2010
Boone 18-64 Number of people with disabilities and in poverty	2,744 (+/- 0)	4,266 (+/- 1,521)	2,336 (+/- 702)	3,232 (+/- 930)	2,319 (+/- 1,079)	3,429 (+/- 1799)	2,115 (+/- 795)
Boone 65+ Number of people with a disability and in poverty	392 (+/- 0)	472 (+/- 265)	468 (+/- 259)	180 (+/- 294)	399 (+/- 295)	266 (+/- 187)	1,345 (+/- 833)
US 18-64 Disability & Poverty Rate	18.75%	24.75%	25.51%	24.92%	25.53%	26.57%	27.33%
US 65+ Disability & poverty Rate	13.22%	13.64%	13.73%	13.34%	13.87%	13.27%	12.51%
MO 18-64 Disability & Poverty Rate	19.01%	32.10%	27.51%	25.26%	27.97%	28.27%	29.01%
MO 65+ Disability & poverty Rate	13.18%	12.35%	14.13%	13.40%	13.60%	12.23%	12.92%
Boone 18-64 Disability & Poverty Rate	22.88%	35.44%	28.25%	28.25%	25.78%	36.60%	27.47%
Boone 65+ Disability & poverty Rate	8.77%	8.16%	8.90%	3.42%	6.96%	7.14%	19.93%
Source: 2000 Census & American Community Survey 2005-2010, one-year estimates							



**TABLE 8: SUPPLEMENTAL SECURITY INCOME (SSI) - NUMBER OF RECIPIENTS OF FEDERALLY ADMINISTERED PAYMENTS, BY AGE AND DISABILITY 2002-2010**

Missouri								U.S						
	Disability Category			Age Group				Disability Category			Age Group			
	Total	Aged	Blind	Disabled	Under 18	18-64	65+	Total	Aged	Blind	Disabled	Under 18	18-64	65+
<b>2002</b>	114,127	11,271	973	101,883	17,612	74,774	21,741	6,787,857	1,251,528	77,658	5,458,671	914,821	3,877,752	1,995,284
<b>2003</b>	115,069	10,606	970	103,493	18,075	75,835	21,159	6,902,364	1,232,778	77,082	5,592,504	959,379	3,953,248	1,989,737
<b>2004</b>	116,131	10,006	932	105,193	18,709	76,973	20,449	6,987,845	1,211,167	75,924	5,700,754	993,127	4,017,108	1,977,970
<b>2005</b>	117,613	9,537	955	107,121	19,451	78,126	20,036	7,113,879	1,214,296	75,039	5,824,511	1,036,498	4,082,807	1,994,511
<b>2006</b>	119,795	9,219	975	109,601	20,269	79,800	19,726	7,235,583	1,211,656	73,418	5,950,509	1,078,977	4,152,130	2,004,476
<b>2007</b>	121,876	8,829	950	112,097	20,992	81,393	19,491	7,359,525	1,024,512	71,727	6,083,286	1,121,017	4,221,920	2,016,588
<b>2008</b>	124,449	8,509	916	115,024	21,293	83,822	19,334	7,520,501	1,203,256	70,325	6,246,920	1,153,844	4,333,096	2,033,561
<b>2009</b>	128,132	8,194	911	119,027	21,976	87,179	19,157	7,676,686	1,185,959	69,302	6,421,425	1,199,788	4,451,228	2,025,610
<b>2010</b>	133,843	7,981	879	124,983	22,796	91,969	19,078	7,912,226	1,183,853	69,289	6,659,124	1,239,269	4,631,507	2,041,490

Missouri								U.S						
	Disability Category			Age Group				Disability Category			Age Group			
	Total	Aged	Blind	Disabled	Under 18	18-64	65+	Total	Aged	Blind	Disabled	Under 18	18-64	65+
<b>2002</b>	114,127	9.88%	0.85%	89.27%	15.43%	65.52%	19.05%	6,787,857	18.44%	1.14%	80.42%	13.48%	57.13%	29.39%
<b>2003</b>	115,069	9.22%	0.84%	89.94%	15.71%	65.90%	18.39%	6,902,364	17.86%	1.12%	81.02%	13.90%	57.27%	28.83%
<b>2004</b>	116,131	8.62%	0.80%	90.58%	16.11%	66.28%	17.61%	6,987,845	17.33%	1.09%	81.58%	14.21%	57.49%	28.31%
<b>2005</b>	117,613	8.11%	0.81%	91.08%	16.54%	66.43%	17.04%	7,113,879	17.07%	1.05%	81.88%	14.57%	57.39%	28.04%
<b>2006</b>	119,795	7.70%	0.81%	91.49%	16.92%	66.61%	16.47%	7,235,583	16.75%	1.01%	82.24%	14.91%	57.38%	27.70%
<b>2007</b>	121,876	7.24%	0.78%	91.98%	17.22%	66.78%	15.99%	7,359,525	13.92%	0.97%	82.66%	15.23%	57.37%	27.40%
<b>2008</b>	124,449	6.84%	0.74%	92.43%	17.11%	67.35%	15.54%	7,520,501	16.00%	0.94%	83.07%	15.34%	57.62%	27.04%
<b>2009</b>	128,132	6.39%	0.71%	92.89%	17.15%	68.04%	14.95%	7,676,686	15.45%	0.90%	83.65%	15.63%	57.98%	26.39%
<b>2010</b>	133,843	5.96%	0.66%	93.38%	17.03%	68.71%	14.25%	7,912,226	14.96%	0.88%	84.16%	15.66%	58.54%	25.80%

Source: Social Security Administration, SSI Annual Statistical Reports, Table 9



**TABLE 9: LABOR FORCE PARTICIPATION RATES (AGES 18-64) IN 2009 & 2010**

	<b>2009</b>			<b>2010</b>		
	<b>Boone County</b>	<b>Missouri</b>	<b>United States</b>	<b>Boone County</b>	<b>Missouri</b>	<b>United States</b>
<b>Employed (% in labor force employed)</b>						
<i>With disability</i>	4.8% (3,895)	6.1%	5.0%	3.9% (3,158)	5.5%	4.8%
<i>W/out disability</i>	95.2% (76,569)	93.9%	95.0%	96.3% (76,567)	95.4%	95.2%
<b>Unemployed (% in labor force not employed)</b>						
<i>With disability</i>	15.3% (831)	14.6%	11.48%	11.1% (649)	13.5%	10.3%
<i>W/out disability</i>	84.6% (4,573)	85.3%	88.5%	8.8% (5,829)	86.5%	89.7%
<b>Not in labor force (% of total population not in the labor force)</b>						
<i>With a disability</i>	23.6% (5,140)	32.6%	26.1%	15.4% (4,321)	32%	26.3%
<i>W/out a disability</i>	76.4% (16,643)	67.4%	73.9%	84.5% (23,687)	67.8%	74.7%
Source: American Community Survey 2009 & 2010, Table C18120: Employment status by disability status						

TABLE 10: LABOR FORCE PARTICIPATION BY AGE SEGMENTS WITH MARGINS OF ERROR: BOONE COUNTY, MISSOURI, U.S. 2005-2010

	US		MO		Boone	
	Number	Margin of Error	Number	Margin of Error	Number	Margin of Error
<b>2005</b>						
Total Population 65-69	10018548	34938	206255	3819	3485	548
In labor force	2794537	21918	57394	2627	1428	446
Employed	2678147	20627	55876	2651	1428	446
Unemployed	116390	5567	1518	452	0	362
Not in labor force	7224011	32764	148861	3644	2057	537
Total Population 70-74	8341261	34079	183151	3675	3261	547
In labor force	1332771	17760	27751	2147	420	251
Employed	1279703	17040	26874	2127	420	251
Unemployed	53068	3343	877	515	0	362
Not in labor force	7008490	33012	155400	3747	2841	923
Total Population 75+	16400718	12825	331732	1502	5273	250
In labor force	986494	14527	22900	2107	615	400
Employed	946113	14333	21586	1896	571	388
Unemployed	40381	2799	1314	993	44	267
Not in labor force	15414224	13875	308832	2651	4658	375
<b>2006</b>						
Total Population 65-69	10370950	30057	212350	4188	3479	470
In labor force	2999880	22986	61312	4802	1444	440
Employed	2886227	22551	58820	2960	1322	463
Unemployed	113653	5299	2492	712	122	149
Not in labor force	7371070	20510	151038	4210	2035	309
Total Population 70-74	8565736	28793	183569	4042	3650	488
In labor force	1392428	15451	31075	2345	817	308
Employed	1341045	15222	30011	2254	817	308
Unemployed	51383	3110	1064	460	0	357
Not in labor force	7173308	27763	152494	3905	2833	482
Total Population 75+	18254318	13025	383686	1268	6436	313
In labor force	995180	13742	22585	1910	410	246
Employed	959750	13832	21796	1901	305	217
Unemployed	35430	2848	789	375	105	283
Not in labor force	17259138	18288	361101	2282	6026	394
<i>Continued on next page →</i>						

TABLE 10 CON'T.: LABOR FORCE PARTICIPATION BY AGE SEGMENTS WITH MARGINS OF ERROR: BOONE COUNTY, MISSOURI, U.S. 2005-2010 (CONTINUED)

	US		MO		Boone	
	<i>Number</i>	<i>Margin of Error</i>	<i>Number</i>	<i>Margin of Error</i>	<i>Number</i>	<i>Margin of Error</i>
<b>2007</b>						
Total Population 65-69	10762697	31834	223157	4748	4546	670
In labor force	3182659	24789	62930	2708	1193	444
Employed	3069701	24258	60678	2802	1193	444
Unemployed	112958	5275	2252	637	0	360
Not in labor force	7580038	28218	160227	4674	3353	635
Total Population 70-74	8634566	31553	179022	4551	2792	623
In labor force	1448128	16761	31999	2382	486	301
Employed	1397252	16523	31025	2360	486	301
Unemployed	50876	3217	974	403	0	360
Not in labor force	7186438	30701	147023	4212	2306	594
Total Population 75+	18443295	12579	384022	1390	6189	149
In labor force	1033694	13243	21564	1838	379	255
Employed	994791	12994	20902	1722	379	255
Unemployed	38903	2506	662	356	0	360
Not in labor force	17409601	17796	362458	2156	5810	295
<b>2008</b>						
Total Population 65-69	11377363	32910	231188	3926	4127	615
In labor force	3521348	25069	70116	3120	1178	386
Employed	3384806	24174	67652	3006	1178	386
Unemployed	136542	5060	2464	588	0	363
Not in labor force	7856015	34260	161072	4156	2949	587
Total Population 70-74	8788237	32422	183317	3946	3486	599
In labor force	1488192	15918	30865	2075	606	304
Employed	1429986	14753	29697	1995	606	304
Unemployed	58206	3699	1168	459	0	363
Not in labor force	7300045	31721	152452	4041	2880	578
Total Population 75+	18646653	12925	387934	1398	6731	329
In labor force	1068971	15521	23861	2136	125	151
Employed	1028405	15606	22844	2052	73	284
Unemployed	40566	2808	1017	432	52	73793
Not in labor force	17577682	19398	364073	2334	6606	364
<i>Continued on next page →</i>						

TABLE 10 CON'T.: LABOR FORCE PARTICIPATION BY AGE SEGMENTS WITH MARGINS OF ERROR:  
BOONE COUNTY, MISSOURI, U.S. 2005-2010 (CONTINUED)

	US		MO		Boone	
	<i>Number</i>	<i>Margin of Error</i>	<i>Number</i>	<i>Margin of Error</i>	<i>Number</i>	<i>Margin of Error</i>
<b>2009</b>						
Total Population 65-69	11809543	33034	250109	4908	4653	608
In labor force	3633927	23603	75269	3531	2268	549
Employed	3394122	22514	71628	3386	2268	549
Unemployed	239805	6918	3641	824	0	366
Not in labor force	8175616	33945	174840	4819	2385	489
Total Population 70-74	9016094	34465	181854	4841	2763	543
In labor force	1534059	17177	32201	2807	494	294
Employed	1438624	17442	31137	2766	494	294
Unemployed	95435	4154	1064	380	0	366
Not in labor force	7482035	33465	149653	4352	2269	539
Total Population 75+	18681011	13067	390213	2013	6931	233
In labor force	1042627	12563	21579	2046	169	317
Employed	981992	12085	21001	2007	169	317
Unemployed	60635	3395	578	333	0	366
Not in labor force	17638384	17191	368634	2766	6762	298
<b>2010</b>						
Total Population 65-69	12495973	33328	254804	4637	4332	714
In labor force	3848575	28366	74835	3132	1636	519
Employed	3536512	27931	69691	3154	1543	504
Unemployed	312063	6971	5144	1052	93	299
Not in labor force	8647398	32684	179969	4403	2696	706
Total Population 70-74	9358062	33190	197861	4698	3995	648
In labor force	1580950	17365	32057	2521	729	319
Employed	1461449	16790	30527	2489	729	319
Unemployed	119501	4760	1530	514	0	366
Not in labor force	7777112	31326	165804	4338	3266	632
Total Population 75+	18579490	13904	390220	2226	6889	322
In labor force	1062352	14813	19409	1902	248	328
Employed	988925	14208	18265	1791	248	328
Unemployed	73427	3830	1144	486	0	366
Not in labor force	17517138	20415	370811	3099	6641	461
Source: American Community Survey, one-year estimates						

**TABLE 11: U.S. LABOR FORCE PARTICIPATION RATE BY GENDER AND 65+, 1948-2007**

<b>Year</b>	<b>Total, 65+</b>	<b>Men, 65+</b>	<b>Women, 65+</b>	<b>Year</b>	<b>Total, 65+</b>	<b>Men, 65+</b>	<b>Women, 65+</b>
1948	27%	46.80%	9.10%	1978	13.30%	20.40%	8.30%
1949	27.30%	47%	9.60%	1979	13.10%	19.90%	8.30%
1950	26.70%	45.80%	9.70%	1980	12.50%	19%	8.10%
1951	25.80%	44.90%	8.90%	1981	12.20%	18.40%	8%
1952	24.80%	42.60%	9.10%	1982	11.90%	17.80%	7.90%
1953	24.80%	41.60%	10%	1983	11.70%	17.40%	7.80%
1954	23.90%	40.50%	9.30%	1984	11.10%	16.30%	7.50%
1955	24.10%	39.60%	10.60%	1985	10.80%	15.80%	7.30%
1956	24.30%	40%	10.80%	1986	10.90%	16%	7.40%
1957	22.90%	37.50%	10.50%	1987	11.10%	16.30%	7.40%
1958	21.80%	35.60%	10.30%	1988	11.50%	16.50%	7.90%
1959	21.10%	34.20%	10.20%	1989	11.80%	16.60%	8.40%
1960	20.80%	33.10%	10.80%	1990	11.80%	16.30%	8.60%
1961	20.10%	31.70%	10.70%	1991	11.50%	15.70%	8.50%
1962	19.10%	30.30%	10%	1992	11.50%	16.10%	8.30%
1963	17.90%	28.40%	9.60%	1993	11.20%	15.60%	8.10%
1964	18%	28%	10.10%	1994	12.40%	16.80%	9.20%
1965	17.80%	27.90%	10%	1995	12.10%	16.80%	8.80%
1966	17.20%	27.10%	9.60%	1996	12.10%	16.90%	8.60%
1967	17.20%	27.10%	9.60%	1997	12.20%	17.10%	8.60%
1968	17.20%	27.30%	9.60%	1998	11.90%	16.50%	8.60%
1969	17.30%	27.20%	9.90%	1999	12.30%	16.90%	8.90%
1970	17%	26.80%	9.70%	2000	12.90%	17.70%	9.40%
1971	16.20%	25.50%	9.50%	2001	13%	17.70%	9.60%
1972	15.60%	24.30%	9.30%	2002	13.20%	17.90%	9.80%
1973	14.60%	22.70%	8.90%	2003	14%	18.60%	10.60%
1974	14%	22.40%	8.10%	2004	14.40%	19%	11.10%
1975	13.70%	21.60%	8.20%	2005	15.10%	19.80%	11.50%
1976	13.10%	20.20%	8.20%	2006	15.40%	20.30%	11.70%
1977	13%	20%	8.10%	2007	16%	20.50%	12.60%

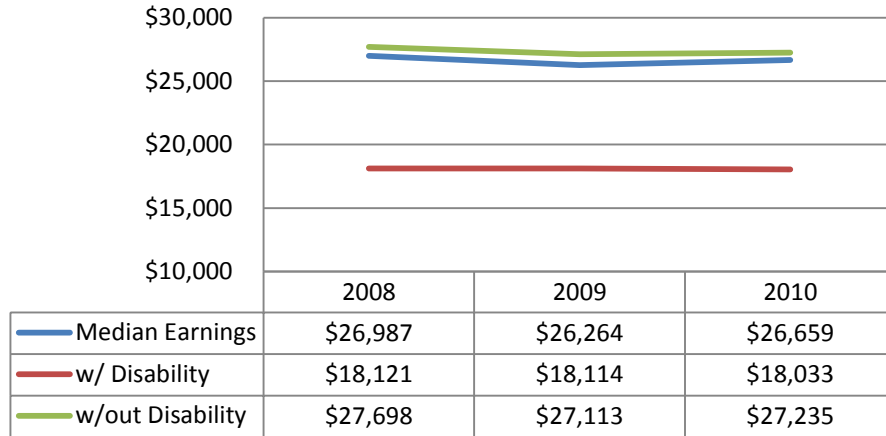
Source: Bureau of Labor Statistics, *Older Workers Spotlight Report*, 2008, Chart data





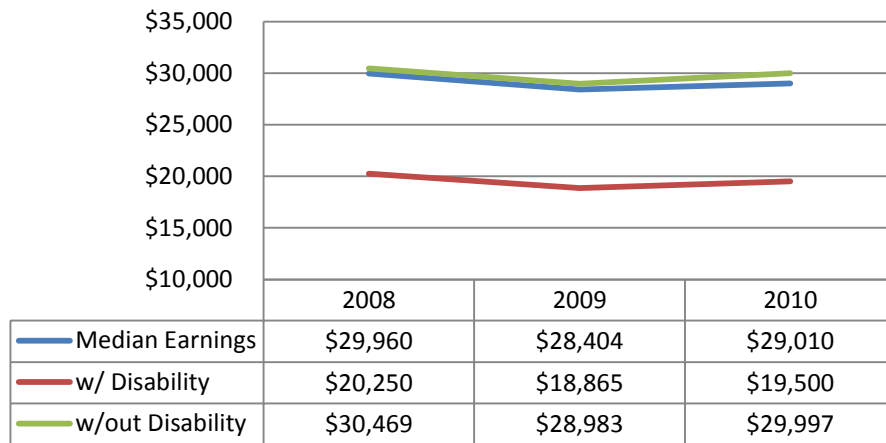
**B. FIGURES**

**FIGURE 1: MEDIAN EARNINGS, MISSOURI**



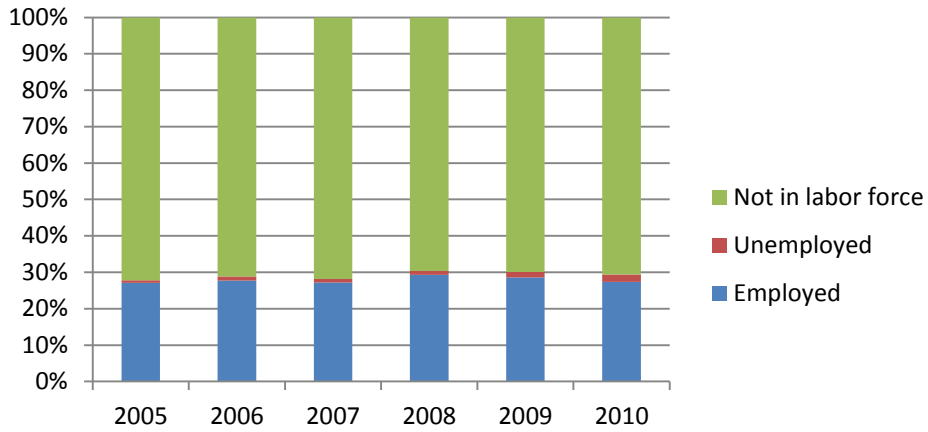
Source: American Community Survey, one-year estimates

**FIGURE 2: MEDIAN EARNINGS, U.S.**



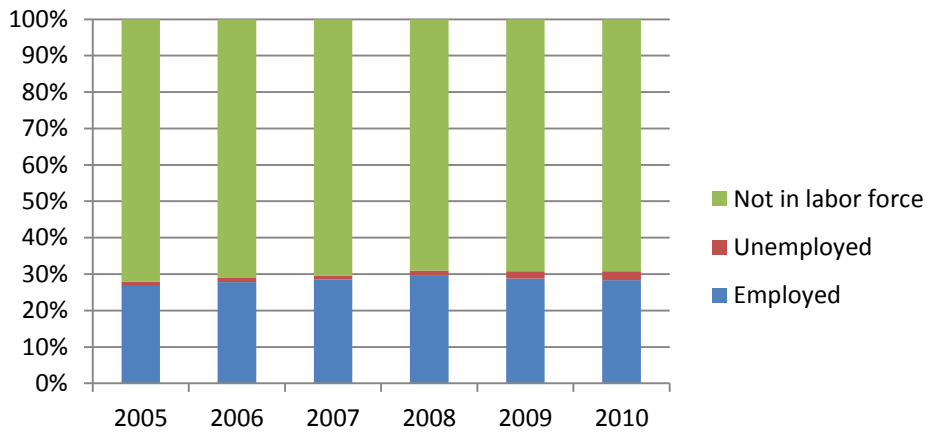
Source: American Community Survey, one-year estimates

**FIGURE 3: MISSOURI, AGE 65-69**



Source: American Community Survey's, one-year estimates

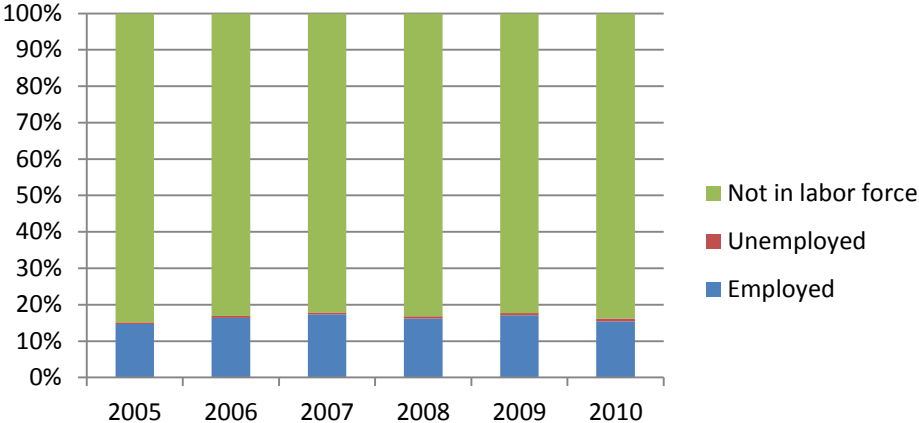
**FIGURE 4: U.S., AGE 65-69**



Source: American Community Survey's, one-year estimates

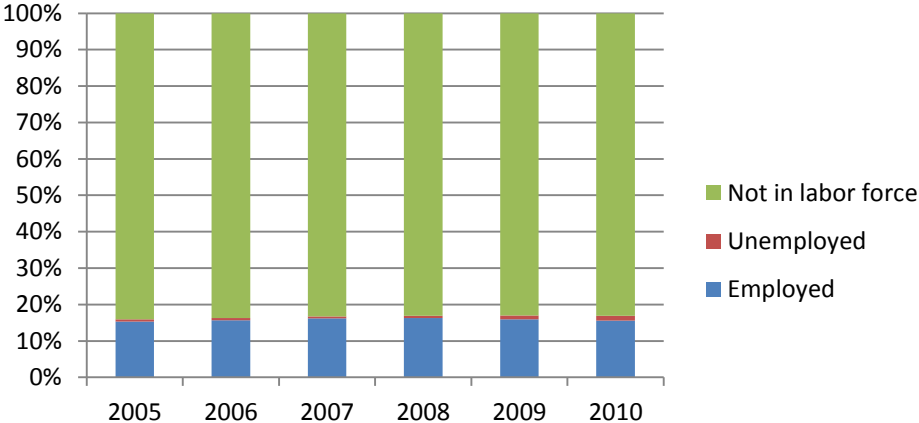


**FIGURE 5: MISSOURI, AGE 70-74**



Source: American Community Survey's, one-year estimates

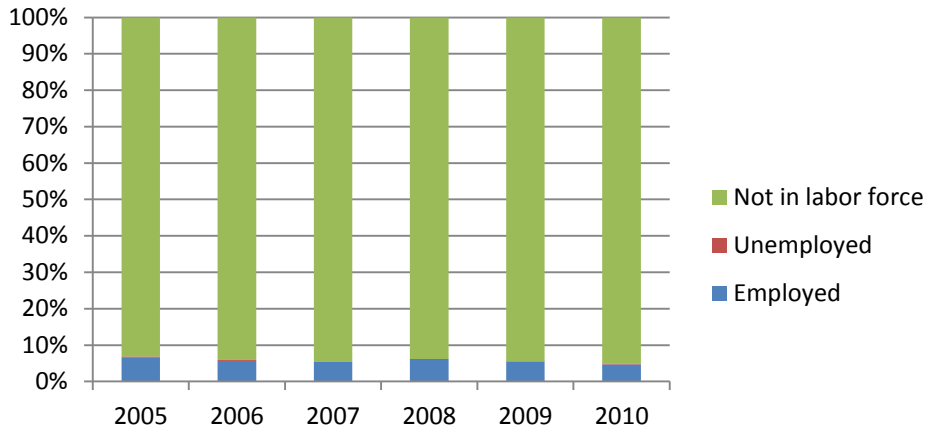
**FIGURE 6: U.S., AGE 70-74**



Source: American Community Survey's, one-year estimates

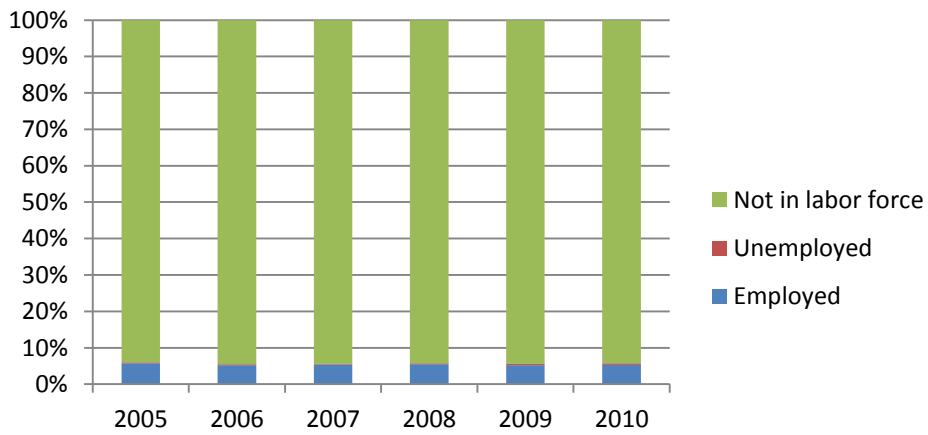


**FIGURE 7: MISSOURI, AGE 75+**



Source: American Community Survey's, one-year estimates

**FIGURE 8: U.S., AGE 75+**



Source: American Community Survey's, one-year estimates





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