Seniors Count of Greater St. Louis

Needs Assessment

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Introduction

Introduction

The Seniors Count of Greater St. Louis Needs Assessment (Seniors Count Report) was conducted at the request of Seniors Count of Greater St. Louis, a coalition of public and private service providers, funders, and policymakers committed to providing today's seniors with the support they need to maintain the greatest level of independence and quality of life possible while preparing for continued increases in the older adult population as the Baby Boom generation ages.

The Seniors Count Report considers the demographic characteristics and trends, economic and health status, and transportation, service, and resource needs of older adults, and is organized by the geographic and political subdivisions of St. Louis City, St. Louis County, and St. Charles County. For each of the geographies, this assessment relies on a combination of publicly accessible data resources, such as the US Census Bureau American Community Survey (ACS) and the Missouri Information for Community Assessment (MICA), as well as qualitative data collected from seniors, and perceptual data collected via survey from service providers. Primary data collection was conducted by St. Louis University (SLU) and Washington University (WU). Analysis of primary data was collaboratively conducted by SLU, WU, and the University of Missouri Office of Social and Economic Data Analysis (OSEDA). Secondary data collection and analysis was completed by OSEDA.

The organization and focus of the report was determined in consultation and collaboration with Seniors Count of Greater St. Louis, and informed by the outcomes of focus groups and interviews of Greater St. Louis seniors. The report begins with a methods section describing the source of data and analysis process. Within each geographic section of the report is a presentation of demographic characteristics of the senior population, including population projections through 2060; a presentation of indicators of economic security by demographic characteristics; a presentation of evidenced-based health status and health care indicators of well-being; and two final presentations that discuss transportation and other service and resource needs of seniors. The content of the body of the report is focused on highlighting the key issues in that policy area. The report concludes with appendices organized by analysis category that provide data collection instruments, detailed tables by item, and service provider/resource lists.

This report was designed to inform policymakers, service providers, and the public on the status and needs of the Greater St. Louis senior population. Further questions regarding the report can be directed to:

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Methods

Secondary Data Analysis

Demographic and health status analysis were conducted using secondary data sources, primarily the 2010 US Census, the US Census Bureau's American Community Survey, population projections provided by Proximity One (proximityone.com), and the Missouri Information for Community Assessment (MICA) data resource provided by the Missouri Department of Health and Senior Services.

Focus Groups

Seven focus groups were conducted to determine challenges facing St. Louis metro area seniors. All focus group participants were 65 years or older. In total, 72 seniors from St. Charles County (18), St. Louis County (32) and St. Louis City (22) participated. Focus group locations and participants were selected to reflect the diversity of the metro region's senior population. The focus groups were conducted by Seniors Count St. Louis with support from the Brown School of Social Work at Washington University. Analysis was conducted by the University of Missouri, Office of Social and Economic Data Analysis (OSEDA).

Each focus group was conducted using a shared instrument of questions and probes. Seniors were asked to describe and discuss barriers, challenges, and opportunities related to independent living and quality of life. They were also asked to identify gaps in services and resources. Each focus group was recorded and transcribed for analysis. Additionally, an observer recorded notes to identify issues of particular interest and concern to seniors. The data collected from the focus groups were coded using a content analysis methodology. Analysis in this report synthesizes analysis by OSEDA and Washington University.

Provider Survey

The Provider Survey was adapted from an instrument developed and validated by the City of Kalamazoo, Michigan. Potential survey respondents were identified to participate in the survey by the Seniors Count of Greater St. Louis Initiative, and were made up of the Initiative's member organizations and their contacts, and the Initiative's regional task force members and their contacts. In total, 220 senior service providers were contacted via email and asked to participate, with 157 completing the survey.

The survey was administered via an anonymous web-based survey tool. Survey questions were divided into five sections including demographics, health and wellbeing, services and resources, economic security, and transportation, mobility, and access. Survey respondents answered questions specific to the geographies they serve, St. Louis City, St. Louis County, and/or St. Charles County. In total, the survey included 82 possible questions. The number of questions any given respondent answered depended on how many counties they indicated they served.

Most survey questions involved asking respondents to rank needs, opportunities, and services available to seniors using a 6-point scale including excellent, good, fair, poor, very poor, and I don't know/not applicable. Additional questions asked respondents to indicate how problematic they perceived topics or themes to be for seniors in the counties they served. These were on a 5-point scale including not a problem, minor problem, moderate problem, major problem, and don't know/not applicable. Finally, Likert-scale questions asking respondents to indicate how affordable services or opportunities were in the counties they served were on a 3-point scale including affordable, not-affordable, and don't know/not applicable.

Senior service providers recruited for this study were those professionals who work with or on behalf of seniors, including representatives from the long-term care industry, retirement communities, home health agencies, hospitals, community-based organizations, private practitioners, colleges and universities, government offices and more; in St. Louis City, St. Louis County, and St. Charles County.

Data analysis included calculating frequencies for all questions, including count and percent totals as well as generating crosstabs to analyze data by county. All 6-point Likert-scale questions were rescaled to a 3-point scale including Excellent or Good, Fair, and Poor or Very Poor. Analysis results were transformed to the presentation graphics found in this report.

This study protocol was reviewed and approved as 'Exempt' by the Saint Louis University Institutional Review Board. No personally identifiable information was asked or collected from survey respondents.

The Seniors Count St. Louis Index of Economic Security

The Seniors Count St. Louis index of economic security was calculated by the University of Missouri Office of Social and Economic Data Analysis (OSEDA). The methodology used to calculate the index is drawn specifically from the Wider Opportunities for Women (WOW) and the Gerontology Institute at the University of Massachusetts Boston's Elder Economic Security Standard ™ (or Elder Index). The Index has been adjusted for use with the Public Use MicroSample (PUMS) data based on data collected for the American Community Survey for the 3-year period 2011-2013. Seniors Count of St. Louis and OSEDA gratefully acknowledge the support of WOW and the Gerontology Institute in constructing this analysis.

The index estimates household income needed by seniors to age in place with economic security, defining 'basic economic security' as having sufficient income to meet basic needs without public or private financial assistance. Consequently, the Elder Index defines and addresses economic hardship beyond what is measured by the federal poverty level.

The Index is calculated at the household level, taking into account household size, ownership status (rent/own), mortgage status for homeowners as well as estimates for costs related to maintaining a household such as food, transportation, and health care. The index illustrates the importance of looking beyond the typical poverty threshold when evaluating the economic security of seniors. For example, in 2014 a single homeowner without a mortgage in St. Louis County needs an income of $19,320, while the federal poverty threshold estimate for a single senior household was $11,354, a difference of $7,966 or 70%.

Criteria for households included in the analysis were:

- two or fewer persons who were spouses or partners,
- all household members aged 65 or older,
- no labor force participation,
- one-bed units only considered for rental category

The effect of these filters reduced the size of the senior household universe (i.e., all households with head aged 65 or more) by almost half (for example, of about 98,000 senior households in St. Louis County, about 44,000 were filtered out). The households that were filtered out are about half as likely as those not filtered to be categorized as Economically Insecure. See Appendix 2 for a report summarizing the number and characteristics of filtered and non-filtered households for the three counties.

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St. Louis City

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Executive Summary

Study findings indicate that 56% of seniors fall below the economic security threshold as compared to the estimated 10% rate nationally. This figure is substantially higher than the other two study areas. This indicates that a significant number of senior households in St. Louis City are likely faced with difficult decisions regarding health care and everyday living. The study also shows that 40.2% of seniors in St. Louis City have a disability. Frequencies for vision difficulty, cognitive difficulty, self-care difficulty and independent living difficulty are all 20% higher than state averages.

St. Louis City ranked worse than state averages on most health indicators. Only 40% of providers rated the quality of physical health services available to seniors as high. Approximately 70% of providers expressed concerns about the affordability of physical health services. Ratings for quality and availability of in-home care and mental health services were considerably lower.

"I have something someone to come in and talk to us…about pharmaceutical pharmacy sales. I have some medicine that is $300 and the copay is $70? Two years later the medicine is $49? Three years the same medication is $9? How are they playing the game they are doing this to us though our insurance has a copay are they competing with each other…?"

-Father Tolten Senior Center

St. Louis City's Older Adult

Demographics

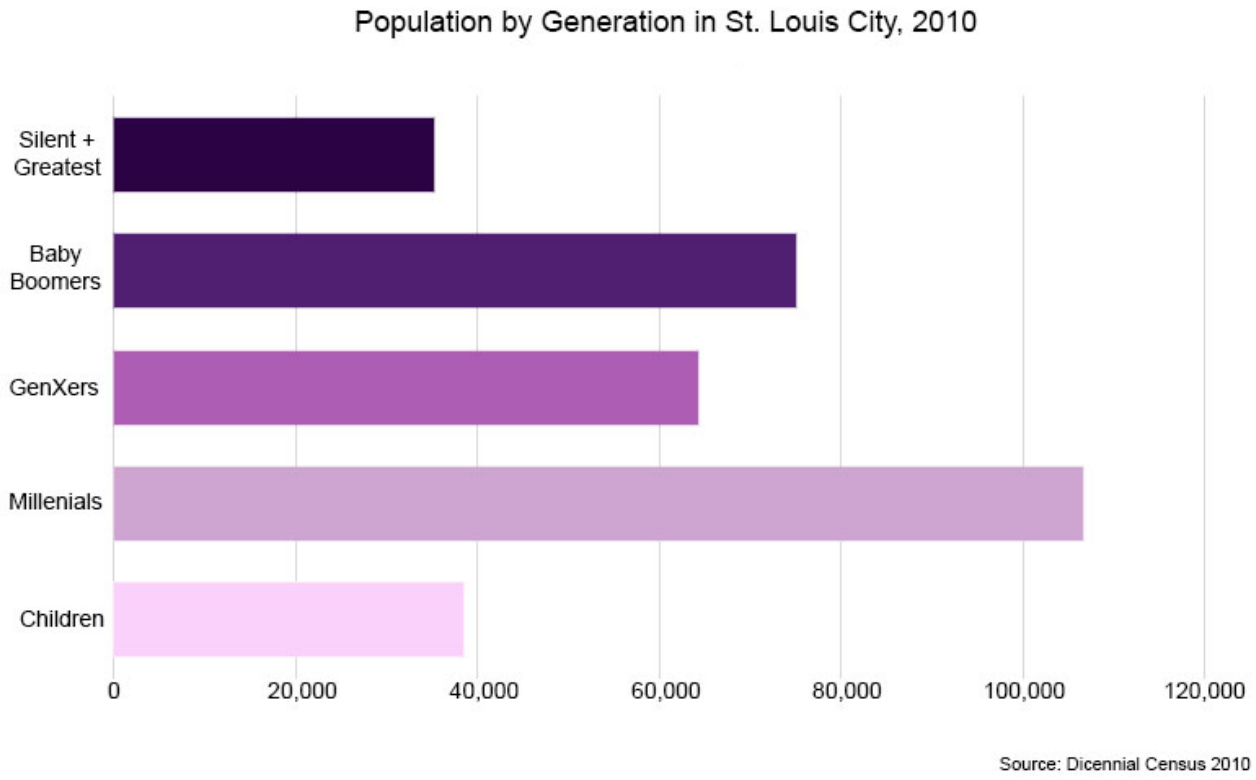
St. Louis City's Older Adults

Baby Boomers are the largest generation

The 2010 Census showed a total population of 319,294 for St. Louis City, of which 36% or approximately 115,000 are approximately 50 years of age and older.

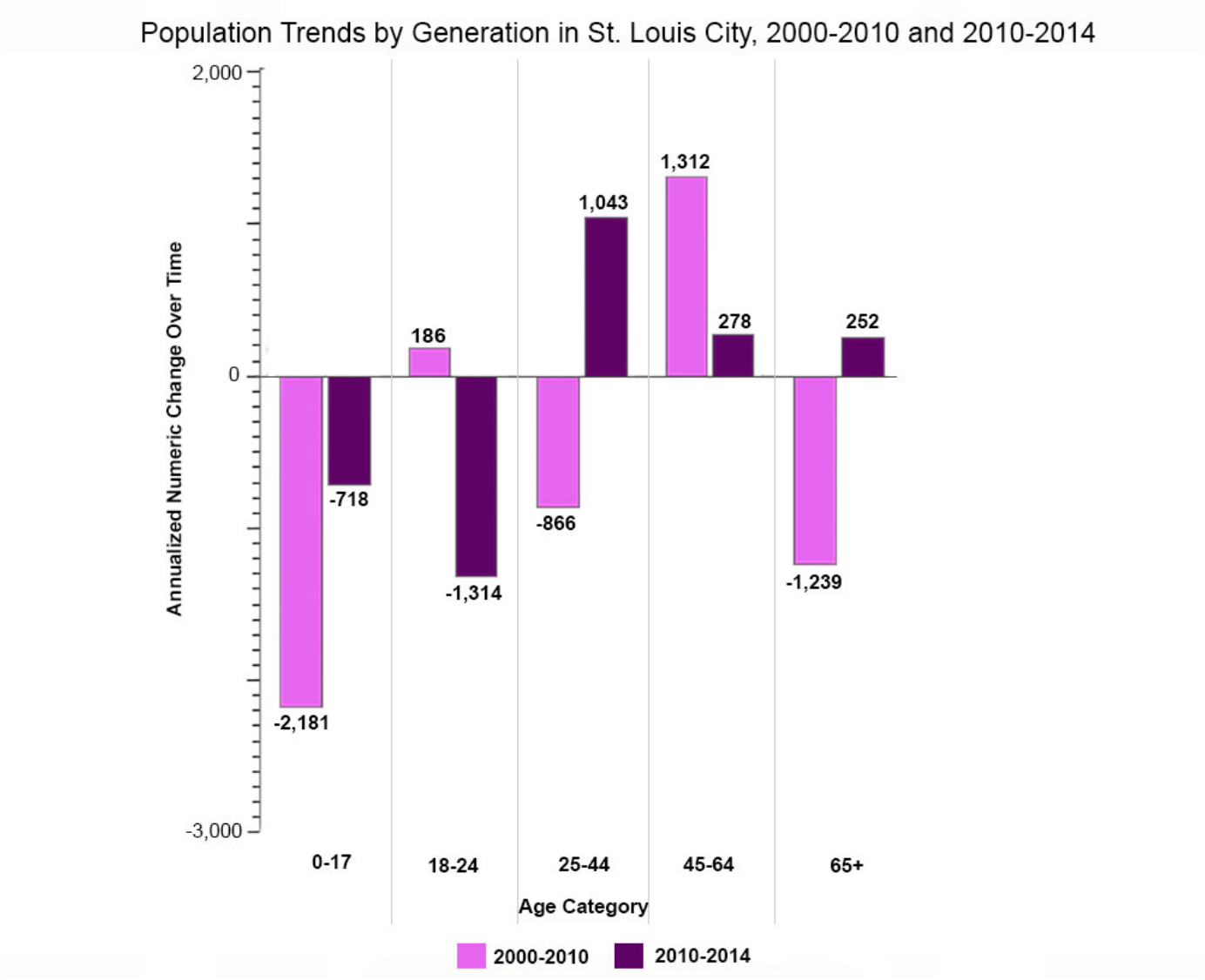
The aging of the Baby Boomers has been and will continue to be a major factor in changing the age profile of the City and of the entire country. During the decade from 2000 to 2010 the 45-to-64 cohort increased from 20% to 25.0% of the total population. The youngest of the Baby Boomers, born between 1946 and 1964 will reach 65 in 2029.

However, the over 65 population decreased over the 2000-2010 decade, declining from 13.7% to 11.0%.



The median age for the City reflects the decline in senior population, going from 36.9 in 2000 to 33.7 in 2010. This was not consistent with the general ageing trend for the state. The statewide median age went from 36.1 to 37.9 over the same 2000-2010 period.

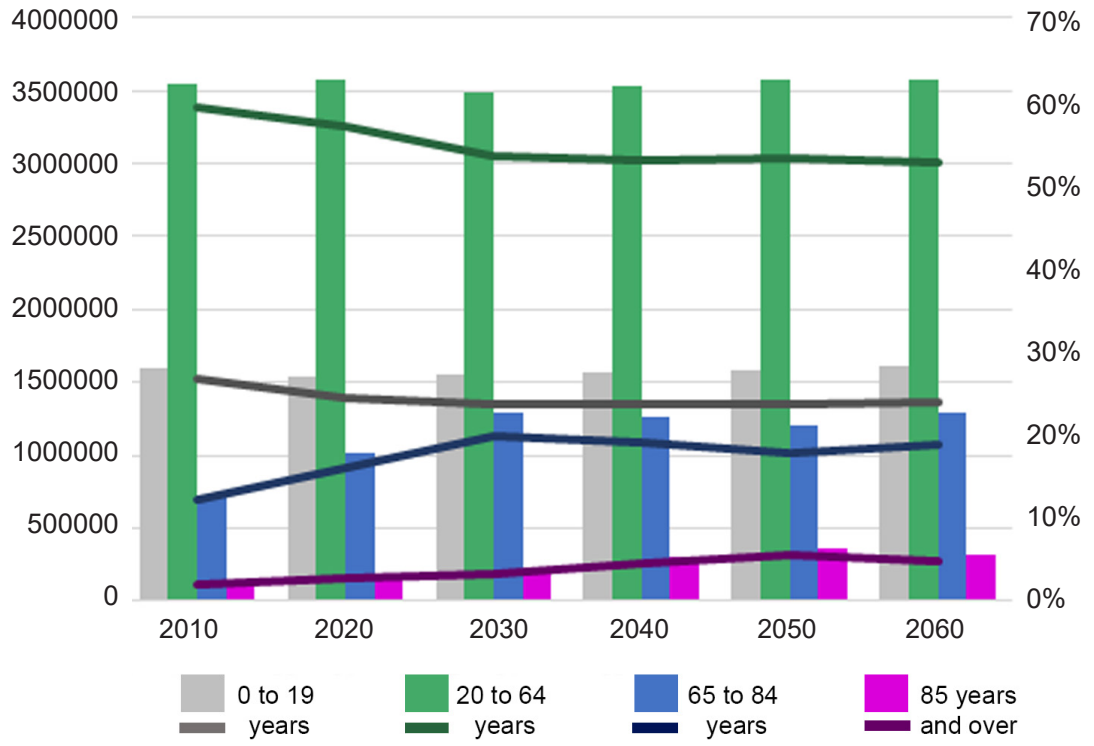
St. Louis City is home to approximately 5% of Missourians aged 45-64 and about 2% of seniors. In all age cohorts, St. Louis City continues to experience slower rates of population growth than surrounding metropolitan areas.



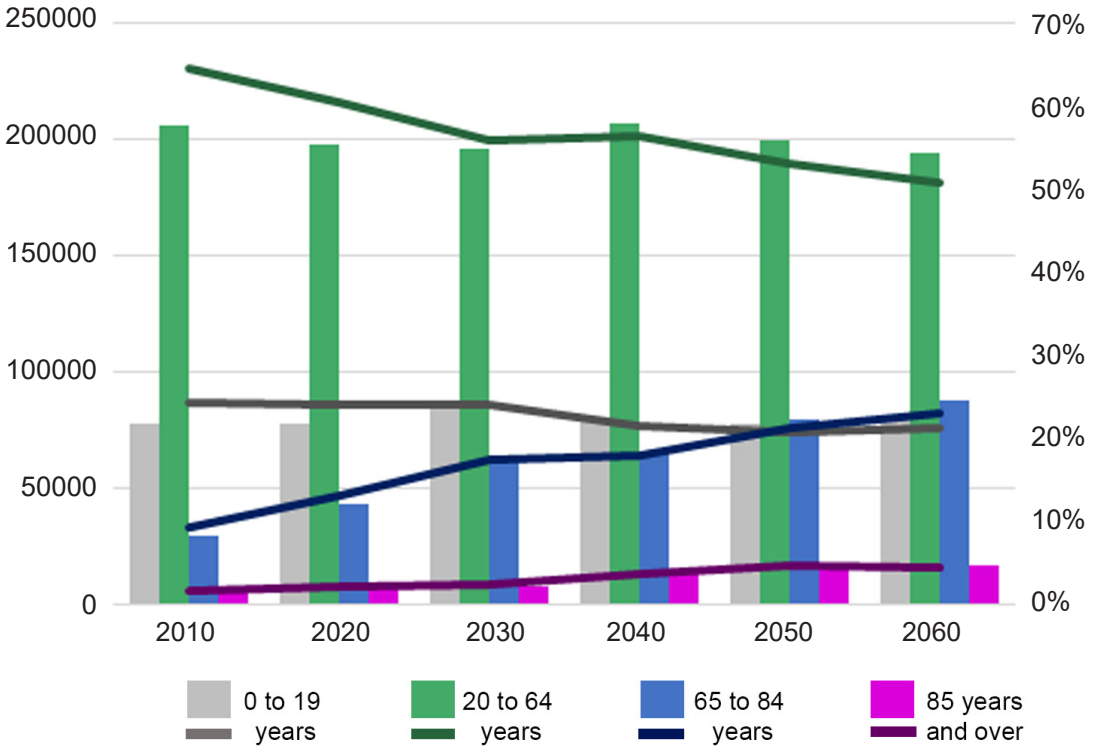
Source: Official Census Estimates Using NCHS Special Tabs with Bridged Race categories

Population projections for St. Louis City show a more rapid increase in senior populations (ages 64-84) through the year 2060 than the state projections. A slight decrease in 0-19- year old population and 20-64- year old population is evident. In the graphs below, the bars represent estimated population numbers while the lines represent estimated percentage.

Population Projections for Missouri

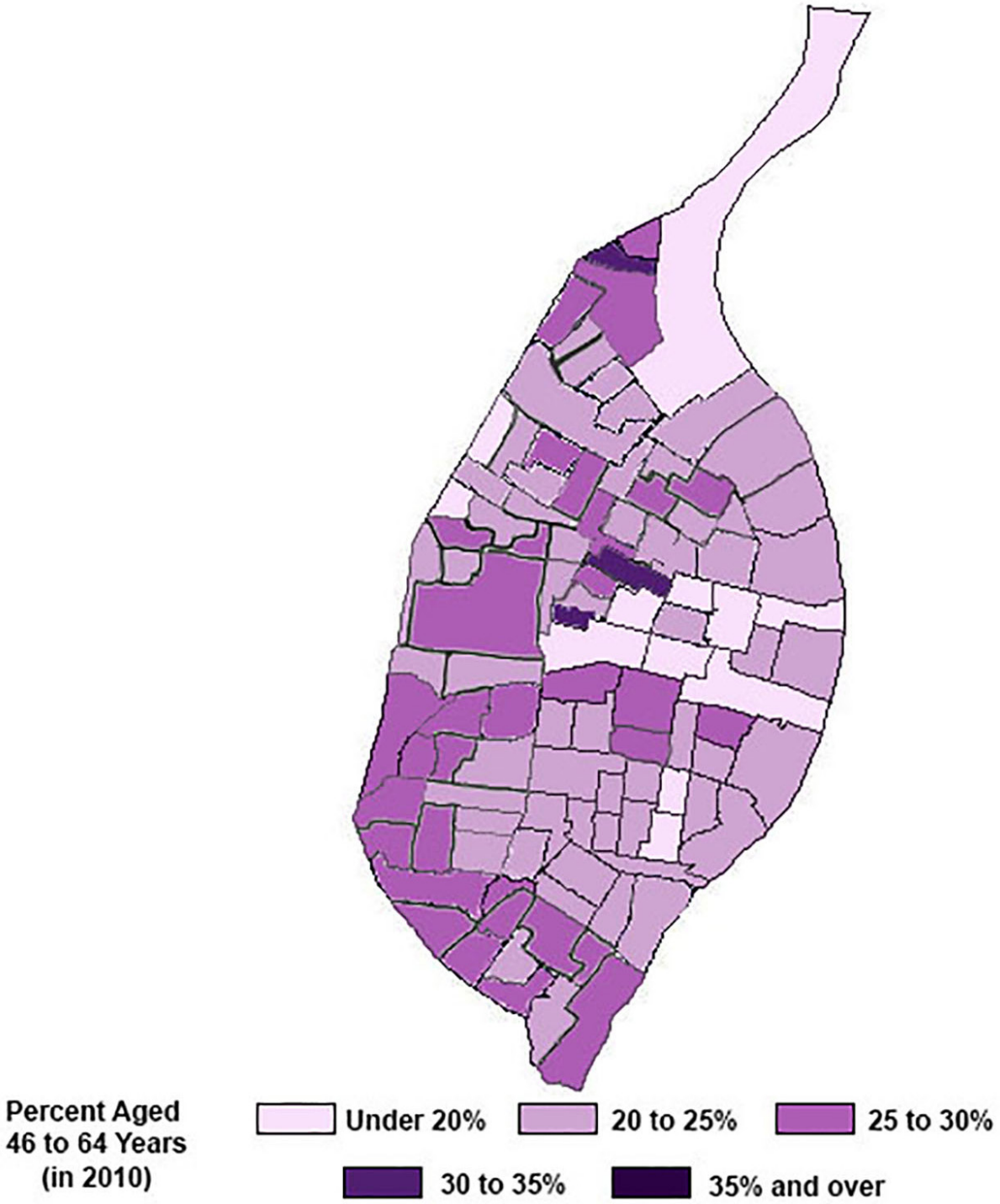


Population Projections for St. Louis City



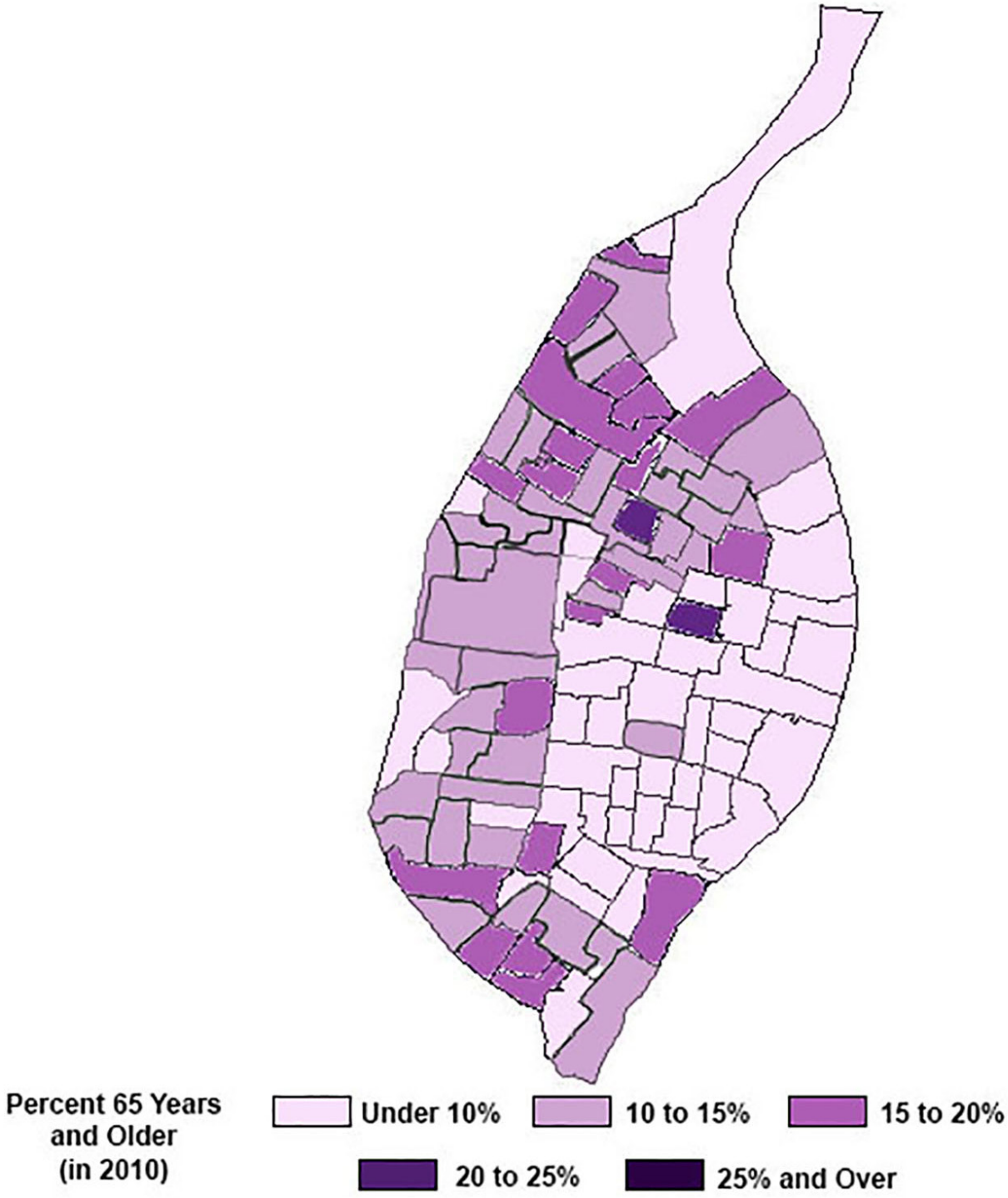
Where seniors live within the City

St. Louis City Age 46-64 Population



Source: 2013 Vintage ACS Estimates

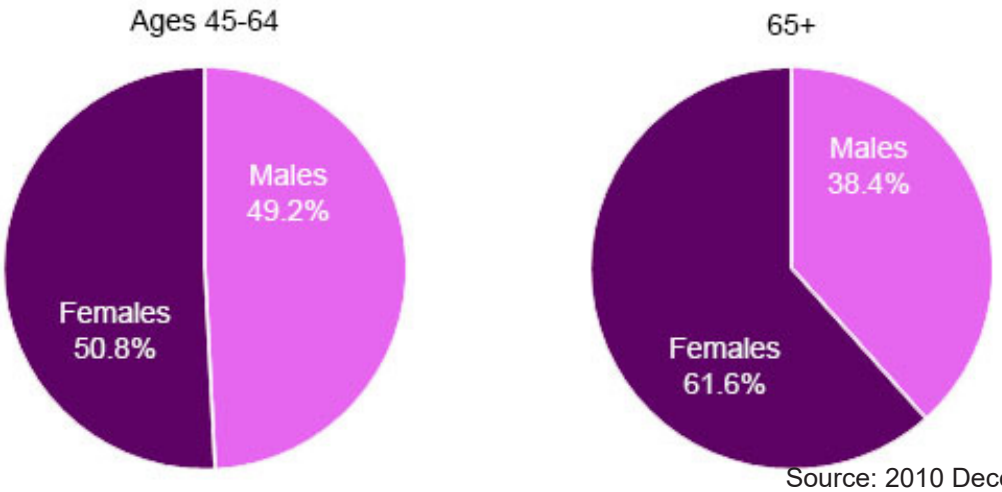
St. Louis City Age 65+ Population



Source: 2013 Vintage ACS Estimates

Women are outliving men

As is true pretty much everywhere, women in St. Louis City live longer than men. This is readily seen in the gender breakdowns of the Boomer and senior cohorts from the 2010 census. In the 45-64 group 50.8% are women. In the 65+ group this goes up to 61.6% females. Demographic data collected for many years shows that the older the age cohort, the higher the percentage of females.



Source: 2010 Decennial Census

Older adults are only slightly less racially diverse

St. Louis City is quite racially diverse, and the older adult population is only slightly less so. While the city as a whole is about 44% white, 50% African American, and 3.5% Hispanic, the corresponding figures for the 45-64 boomer cohort are approximately 47% white, 49% African American, and 2% Hispanic. Among seniors 65 and older the differences are similar, with about 50% white, 47% African American, and only 1.4% Hispanic. (Note that race values used here and throughout are the "race alone" measures, meaning only one race was chosen.)

These racial differences by age are also reflected in median age comparisons. The overall median age for St. Louis City is 33.9. For white persons the median is 36.6, while for African Americans it is 32.7 and for Hispanics just 27.2. Minorities are younger than whites, but not by nearly as much as elsewhere in the metro area.

Seniors living alone; some care for grandchildren

According to the most recent data from the American Community Survey (2009-2013 period estimates), there were about 140,652 total households in St. Louis City. Of these, about 50,000 (36%) were headed by Baby Boomers, and another roughly 25,000 or 18% by seniors age 65 and over. Of these senior households approximately 60% were single-person households. Senior women comprise about 70% of these single-person households.

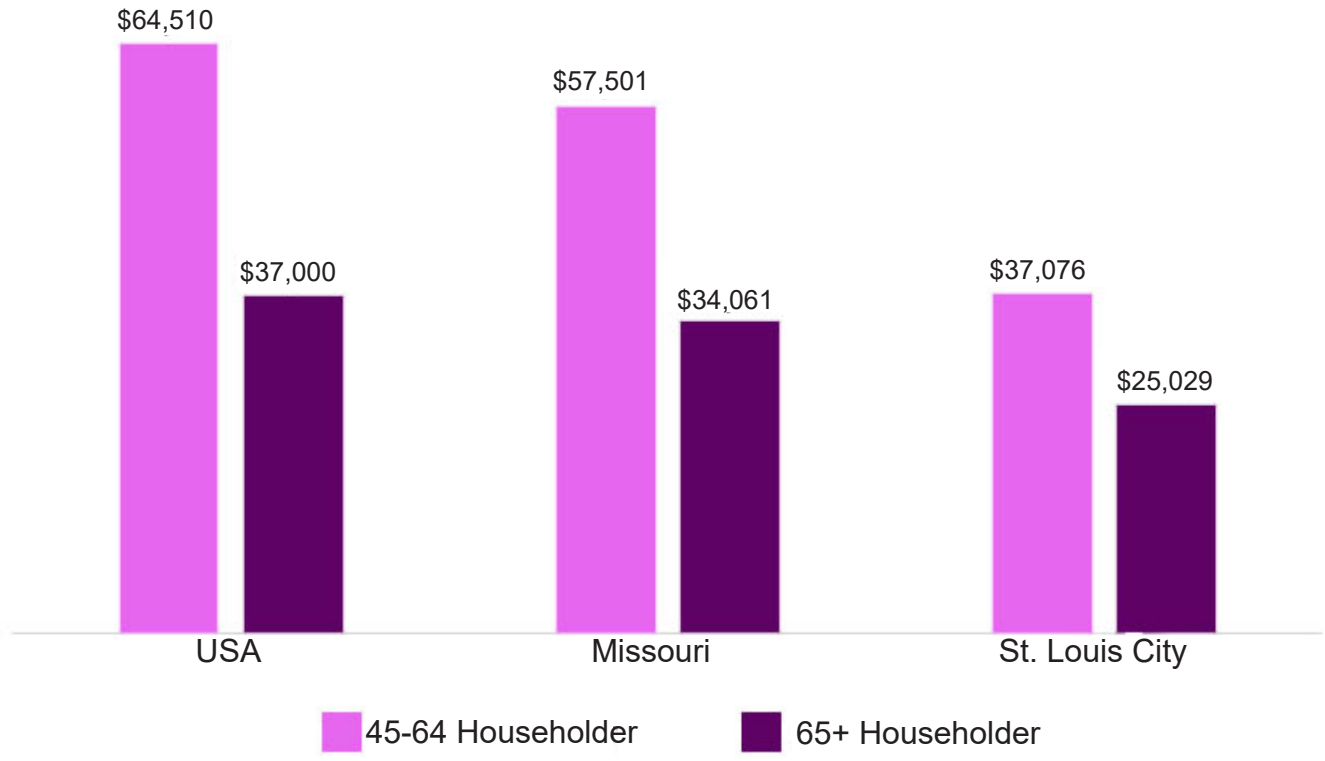
Looking at multi-generational households in the City of St. Louis, the ACS estimated that about 5,425 households (3.1%) included grandparents living with a grandchild. This translates into about 7,372 grandparents living with one or more of their grandchildren. In about 46.5% of these cases the grandparent was responsible for the care of the grandchildren.

Income relatively high and poverty relatively low for older adults

Income among St. Louis City's older adults varies widely. For Boomers, the most recent 5-year estimate from the ACS shows their median income was $37,076 (in 2013 dollars), about 7% higher than the median of $34,582 for all households. Senior households, which presumably include many retired persons, had a median income of $25,029, well below the $37,808 metropolitan area figure (includes Illinois counties) for senior households.

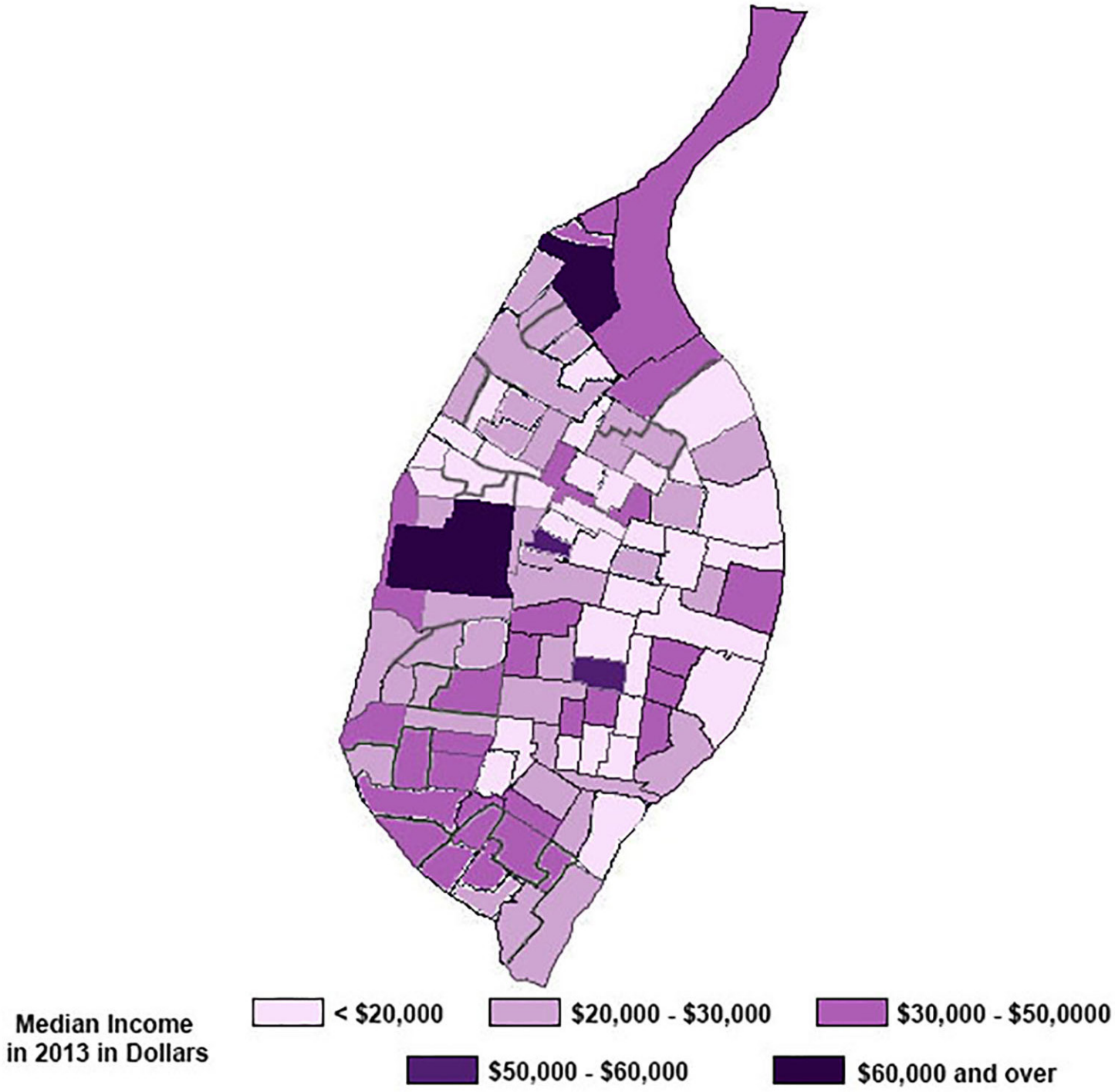
Almost 6,000 (17%) seniors lived below the poverty level in the City compared to 24% of Boomers (19,319 persons) and 27% of the total population in the city (nearly 85,000 persons). The 2013 federal poverty threshold for a one-person household under 65 years of age is $12,119, and for a two-person household it is $15,600. For seniors aged 65 and older, these thresholds were slightly lower at $11,173 and $14,081. These thresholds are adjusted annually.

Median Household Income for Older Adults in St. Louis City, 2013



Source: U.S Census Bureau, 2009-2013 5-year American commuity survey

Median Household Income of Seniors (65+) in St. Louis City



Source: 2013 Vintage ACS Estimates

Percent of Seniors (65+) Living Below Poverty Level In St. Louis City

Source: 2013 Vintage ACS Estimates

St. Louis City

Economic Security

Economic Security

Elder Index: a security standard for seniors in St. Louis City

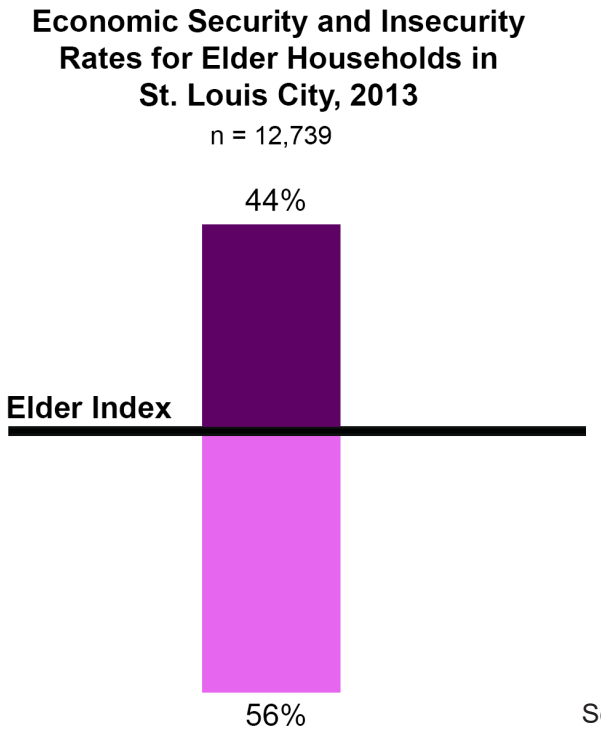
Federal poverty guidelines and thresholds are useful tools for understanding the relative income status of households; these measures are primarily administrative tools to both plan policy and implement programs. However, these measures are limited in telling the full story of the pressures, deficits, and resources affecting well-being and quality of life of citizens. The Elder Index examines resource availability and deficit for a subset of seniors. Please see Methods section for more information on how the Index is calculated. The following tables estimate the income seniors require to meet their living expenses by type of expenses for single seniors and couples.

	Single Elder		
Expenses/Monthly and Yearly Totals	**Owner w/o mortgage**	**Renter, one bedroom**	**Owner w/ mortgage**
Housing (inc. utilities, taxes, insurance)	$406	$674	$987
Food	$252	$252	$252
Transportation	$262	$262	$262
Health care	$353	$353	$353
Miscellaneous	$255	$255	$255
Elder Index per month	$1,528	$1,796	$2,109
Elder Index per year	$18,336	$21,552	$25,308

	Elder Couple		
Expenses/Monthly and Yearly Totals	**Owner w/o mortgage**	**Renter, one bedroom**	**Owner w/ mortgage**
Housing (inc. utilities, taxes, insurance)	$406	$674	$987
Food	$463	$463	$463
Transportation	$405	$405	$405
Health care	$706	$706	$706
Miscellaneous	$396	$396	$396
Elder Index per month	$2,376	$2,644	$2,957
Elder Index per year	$28,512	$31,728	$35,484

Well over half of seniors have incomes below the Economic Security threshold

Looking at St. Louis City senior households, we find approximately 56% have incomes that are below the index threshold. These economically insecure households had about 7,700 persons living in them. This estimate can be compared to the federal poverty guidelines that show only about 3,000 senior households, or 24%, classified as poor. This difference indicates the need to look beyond the usual poverty thresholds when discussing the economic security of seniors. The difference in these estimates reveals the "gap" found between the two criteria. This "gap" includes about 4,500 persons who did not meet poverty guidelines, but who were yet likely to be making tough choices regarding adequate housing, nourishing food, and medical expenses.



Source: 2011-2013 ACS PUMS

African-Americans, renter, and single women households have highest insecurity rates

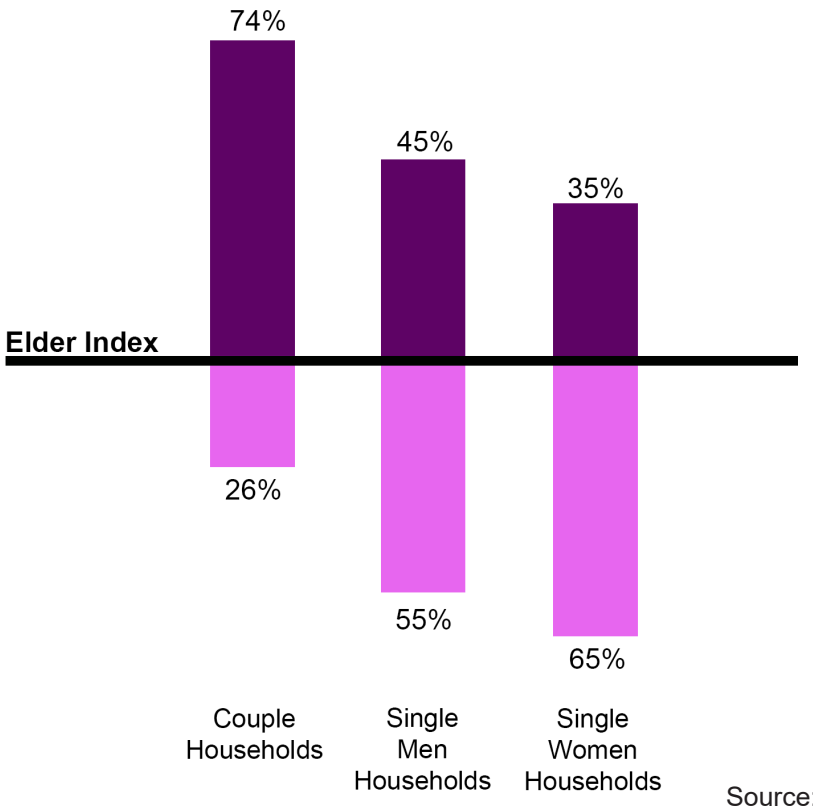
While the overall percentage of economically insecure households was estimated at 56%, 74% of African-American senior households were measured as economically insecure compared to 40% of white senior households.

Housing status (owning vs. renting, combined with having a mortgage or not) is a significant factor when looking at economic security. Renters had the highest Economic Insecurity rate among types of housing status. A full 81% of renters experience economic insecurity. These renters were about one in three of the senior households studied.

Among the homeowner households (the other 2/3), we see a significant difference between those with and without a mortgage. The household economic insecurity rates are 40% for households without a mortgage, but 57% for those with a mortgage.

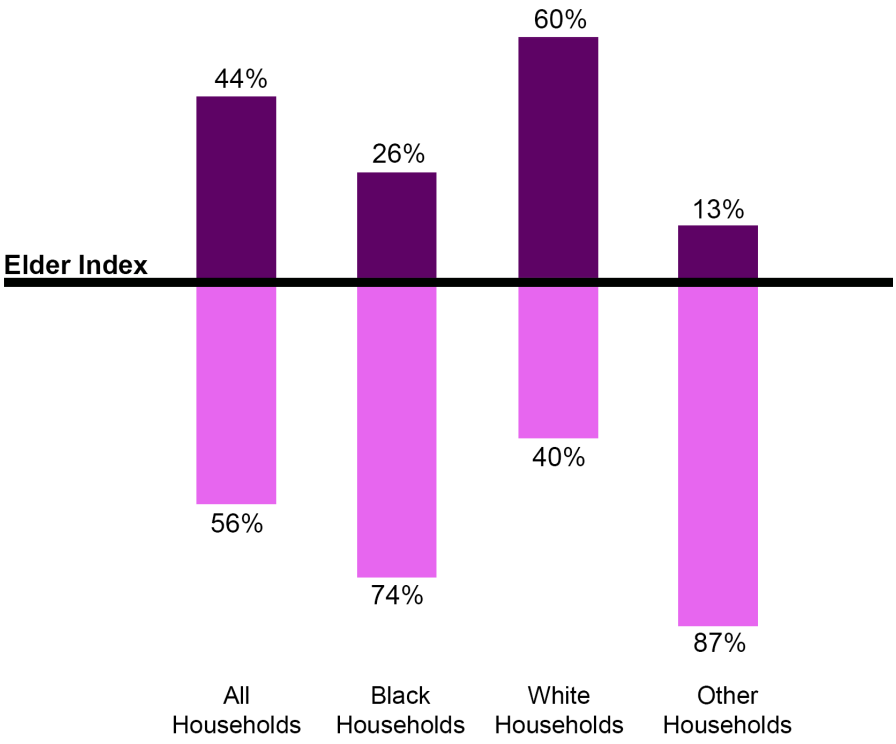
One of the most significant differences is between households with one person vs. those with two (couples). The insecurity rate is 62% (of households) for singles and only 26% for couples. About 65% of single women in the City of St. Louis are economically insecure compared to about 55% of single men.

Economic Security and Insecurity Rates for Elder Households, by Household Composition, in St. Louis City, 2013

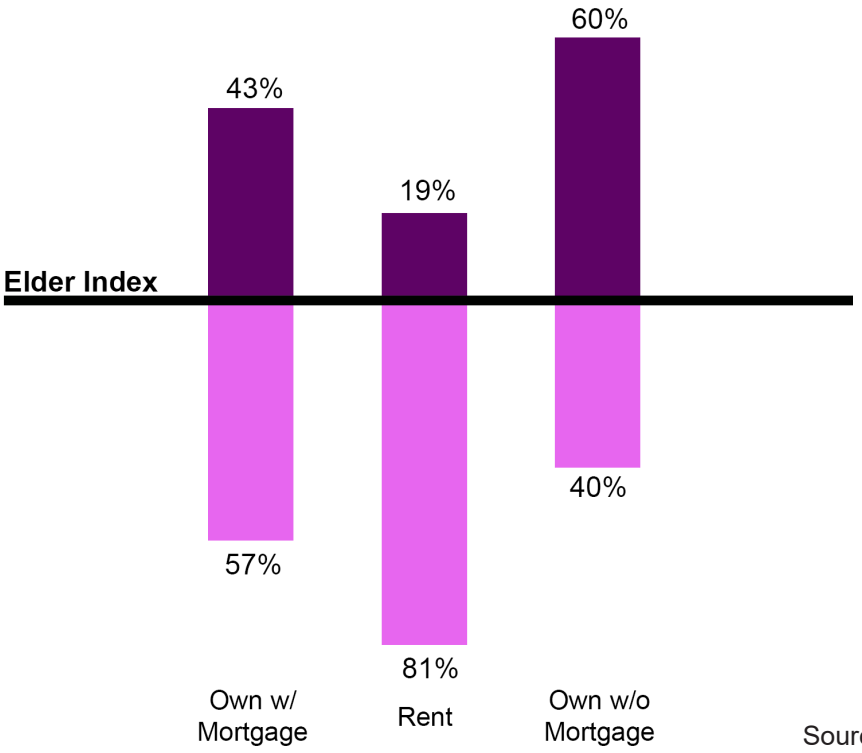


Source: 2011-2013 ACS PUMS

Economic Security and Insecurity Rates for Elder Households, by Race of the Householder, in St. Louis City, 2013

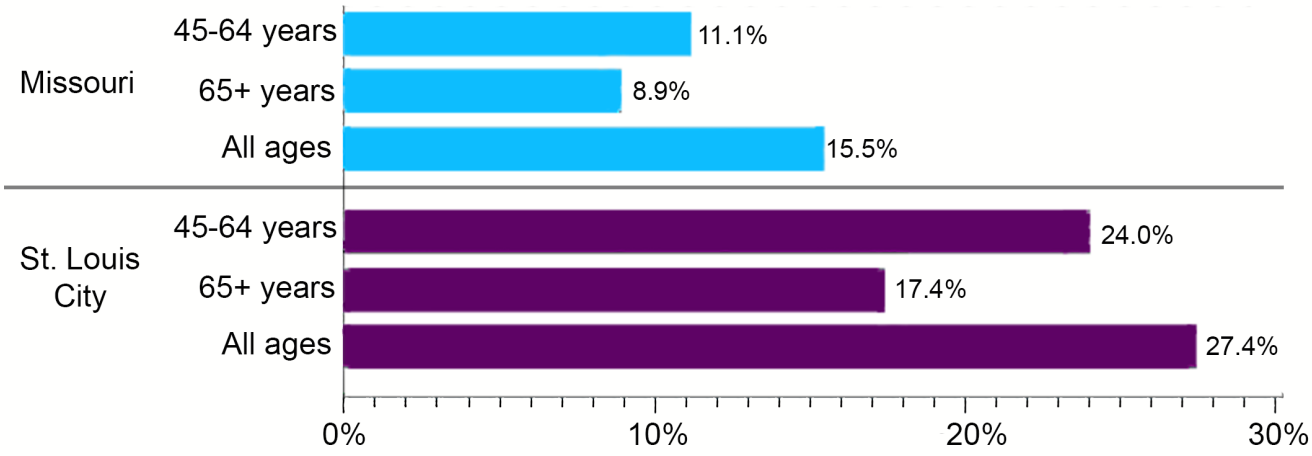


Economic Security and Insecurity Rates for Elder Households, by Housing Status in St. Louis City, 2013



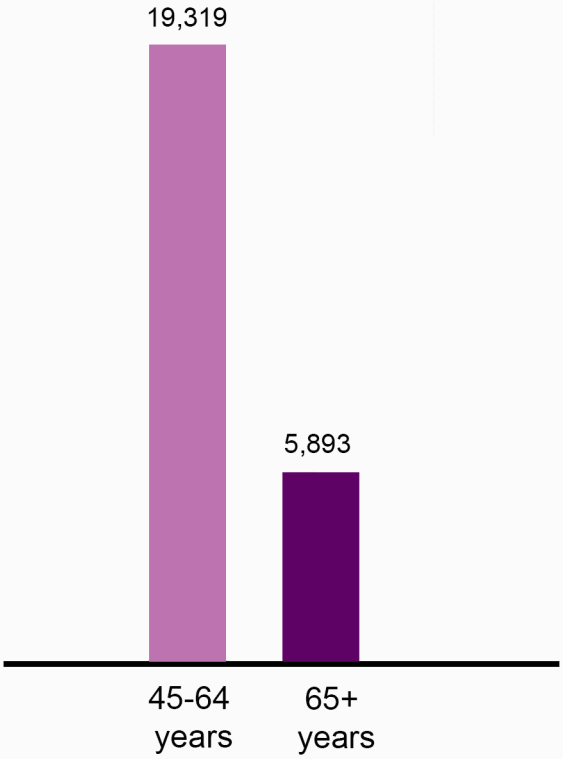
Source: 2011-2013 ACS PUMS

Poverty Rates for Older Adults (2009-2013)

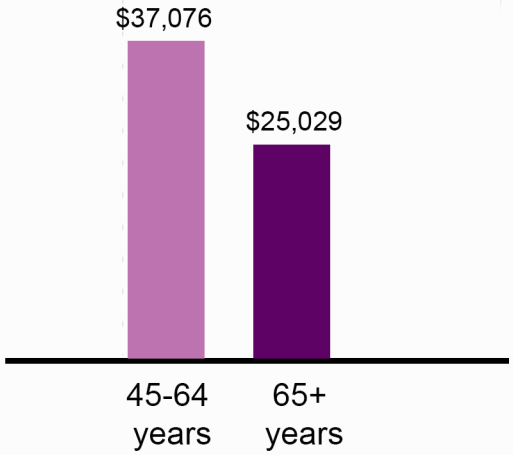


Source: 2013 Vintage ACS Estimates

Older Adults Below Poverty Line (2009-2013)



Median Income for Older Adult Households (2009-2013)



Source: 2013 Vintage ACS Estimates

Senior's Speak

One of the reoccurring themes among all the seniors in the focus group was the need for financial support. There were multiple barriers discussed by seniors, one of which mentioned by seniors at Saint Charles was that the cost of healthcare was becoming too expensive. Other seniors from SAJE mentioned that the cost of prescription drugs was too high and that Social Security did not meet all of the expenses that were incurred. According to one senior, "I have a wish list of things that need to be done in my home, and because I live on Social Security I don't consider myself poverty level but social security only goes so far." She goes on to say, "I mean, I can't open the basement doors, it needs a new door. There are things that make me happy, I would say fix my home up because I don't have the money" (SAJE, personal communication, March 26, 2015). This illustrates that home maintenance needs and lack of finances can prevent a senior from living in a safe, accessible and healthy environment at home, hence hindering their ability to age-in-place.

St. Louis City

Health & Well-Being

Health & Well-Being

This section is divided into parts based on important health topic areas: disability status, primary care, cardiovascular health, respiratory health, diabetes, and mental health. Each topic area has several indicators that address it, and data are typically reported for two different age cohorts: adults ages 45-64 and adults 65+. In addition, the indicator tables provide shading to show where there are differences between St. Louis City rates and rates for the state as a whole; red indicates rates at least 20% worse than the state average, and green indicates rates at least 20% better than the state average.

Chronic Disease

Chronic disease encompasses illnesses and conditions that last at least one year, require ongoing medical attention, and may limit daily living activities. Many chronic illnesses are preventable, such as heart disease, diabetes, and arthritis. Chronic disease are caused by factors that can be changed –such as our behavior—as well as factors that cannot be changed, such as heredity and increased age. Given that Missourians are living longer than before, there will likely be more adults living with chronic disease, particularly during the latter stages of life.[1]

According to the CDC, 80% of older adults in the U.S. have at least one chronic condition and 50% have two.[2] In Missouri, the rate is higher: 95% were found to have one condition, more than 80% had two, and about 65% had at least three.[3]

For older adults, access to quality care may be an issue given that there is a current statewide (and nationwide) shortage of geriatric doctors. The shortage will likely grow worse as the older adult population is growing at a faster rate than the number of geriatric doctors.[1] Unfortunately, during medical school, most students have relatively little exposure to geriatric care compared to other specialties, such as pediatrics, so those physicians who specialize in a non-geriatric field may not have the optimal training to treat older adults[4].

Two-fifths of seniors have a disability

According to the 2013 American Community Survey, more than two-fifths (40.2%) of St. Louis City adult ages 65+ have a disability. The table below shows type of disability for adults 65+; difficulties with walking and climbing (ambulatory difficulties), independent living difficulties, and hearing problems were the top three categories for St. Louis City. The rates for vision, cognitive, ambulatory, self-care, and independent living difficulties were more than 20% higher for St. Louis City adults ages 65+ compared to state rates.

Overall, St. Louis City adults 65+ are somewhat more likely to have a disability than Missourians of the same age group.

Disability Rates for Adults 65 and Older

	Missouri	St. Louis City
Having a disability	37.1%	40.2%
Hearing difficulty	16.1%	12.9%
Vision difficulty	6.6%	8.1%
Cognitive difficulty	8.9%	12.0%
Ambulatory difficulty	23.8%	27.9%
Self-care difficulty	8.0%	12.3%
Independent living difficulty	14.8%	18.5%

Red indicates 20% worse than state average

Green indicates 20% better than state average

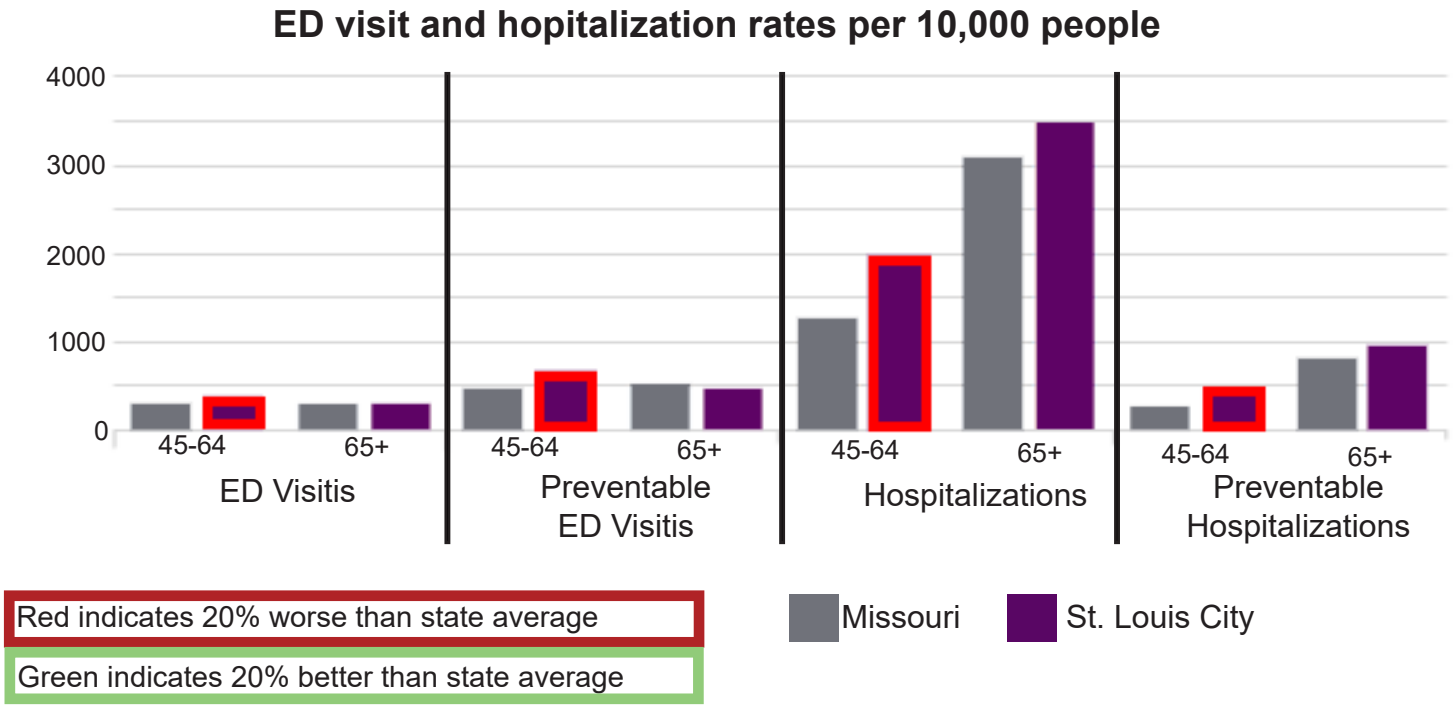
Source: 2013 American Community Survey, 1-year estimates

45-64 group fare worse than state in primary care

The indicators of preventable emergency department (ED) visits and preventable hospitalizations provide information on the extent to which people use emergency rooms and hospitals for conditions that are often dealt with successfully through prevention measures offered within primary care. Overall ED visits and hospitalizations provide background information about how often people access EDs and hospitals for all health conditions.

In St. Louis City, adults ages 45-64 used the ED more than 20% more for preventable visits and for all visits compared to all Missourians in the same age group. In addition, the overall hospitalization rate and hospitalization rate for preventable conditions were more than 20% higher for adults ages 45-64 compared to the state rates. For adults ages 65+, overall and preventable ED visit rates were slightly lower than the state rates, whereas both hospitalization rates were slightly higher. As expected, adults 65 and older had higher rates of hospitalizations than adults ages 45-64.

Overall, St. Louis City adults ages 45-64 fare worse on all primary care indicators, whereas adults 65+ are doing comparably to Missourians of the same age group.

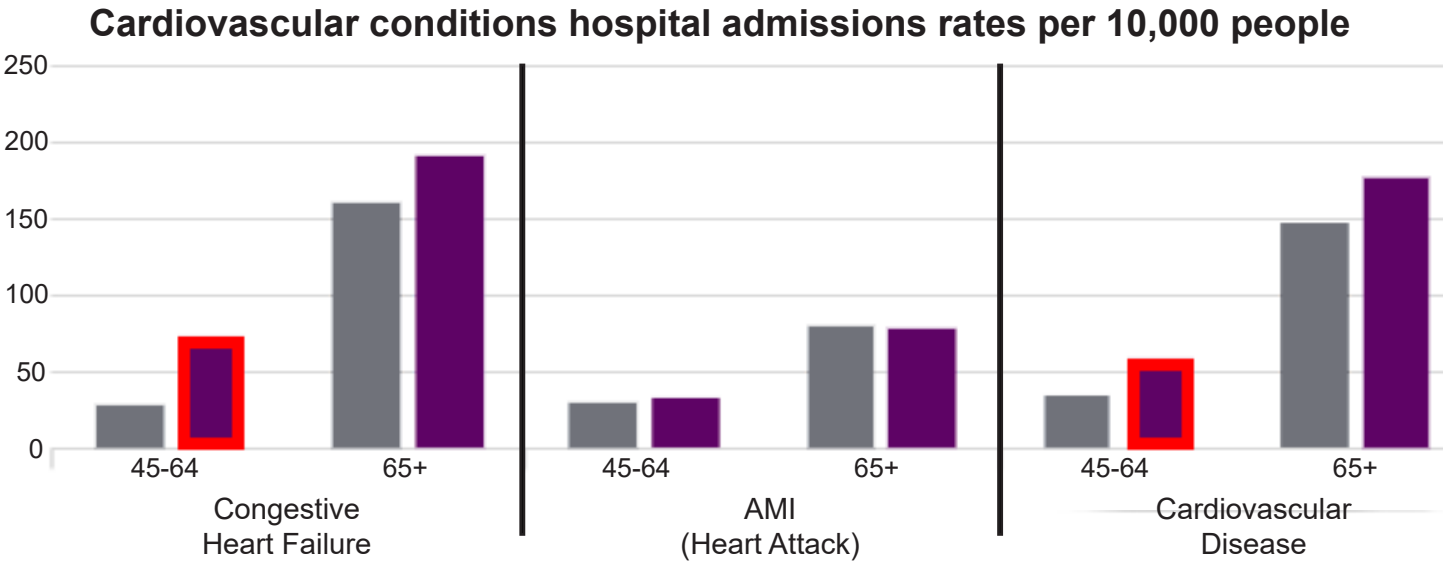


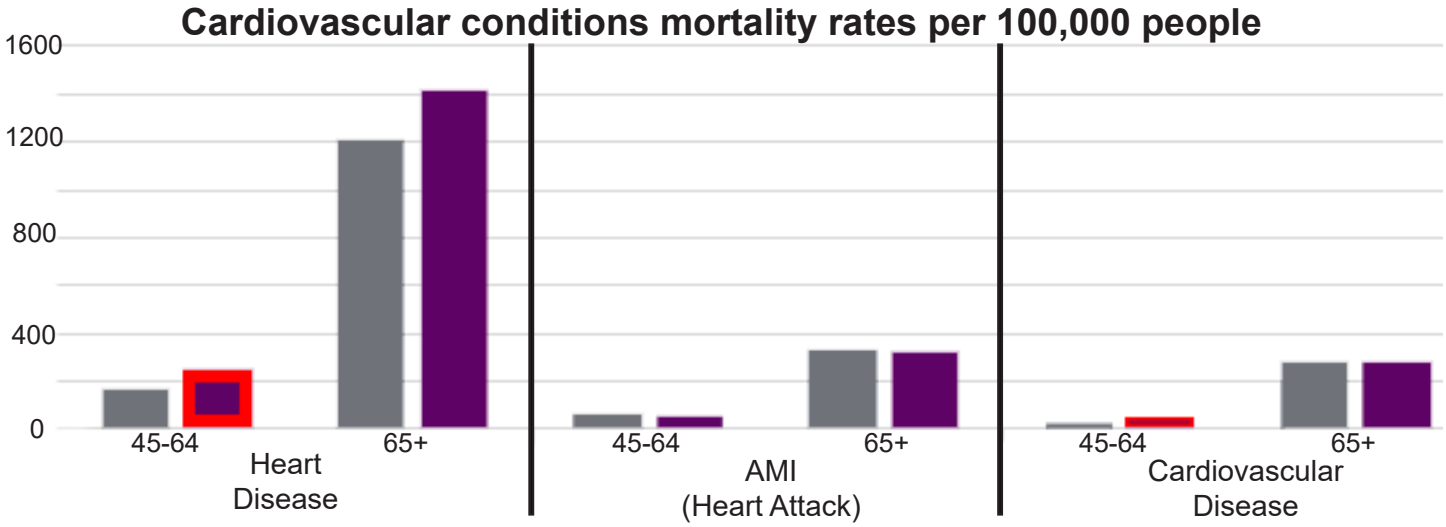
45-64 group fare worse in cardiovascular health

The indicators for cardiovascular health address disorders that affect the heart and blood vessels, including congestive heart failure, heart attack (AMI; acute myocardial infarction), and stroke.

For St. Louis City, adults ages 45-64 had hospitalization rates and mortality rates for congestive heart failure and stroke that were more than 20% higher than the state averages for the same age group. The heart attack hospitalization and mortality rates were similar to the statewide rates for 45-64 year-olds. For St. Louis City adults 65+, the hospitalization rate for congestive heart failure and the mortality rate for heart disease were somewhat higher than the state rates. All other rates were comparable to the state for adults 65+.

Overall, the cardiovascular health of St. Louis City residents 45-64 is worse than Missourians in the same age group, whereas the cardiovascular health of residents 65+ is comparable to Missourians in the same age group.





Red indicates 20% worse than state average

Green indicates 20% better than state average

Missouri

St. Louis City

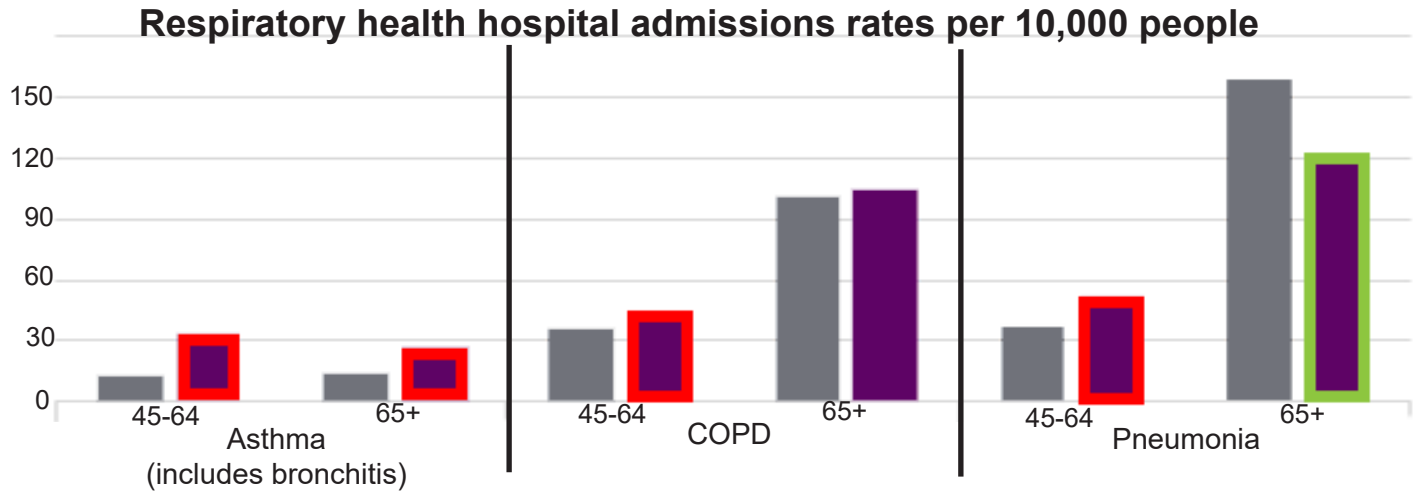
Respiratory health fares worse than state rate

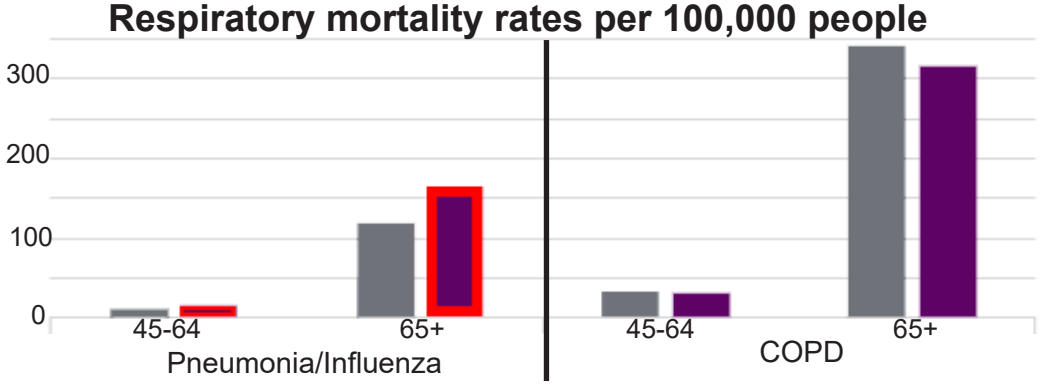
The respiratory health indicators include rates of asthma, Chronic Obstructive Pulmonary Disease (COPD), and pneumonia/influenza. Because most people suffering from respiratory ailments can be effectively managed on an outpatient basis with appropriate primary care, hospital admission rates provide insight into the accessibility and quality of primary care.

For St. Louis City, adults ages 45-64 had rates of hospitalization for all respiratory conditions that were more than 20% higher than the state rates for the same age group. In addition, adults ages 45-64 had a pneumonia/influenza mortality rate that was more than 20% higher than the state rate. For COPD mortality, St. Louis City adults ages 45-64 had a rate that was slightly lower than the state rate.

For adults ages 65+, the hospitalization rate for asthma, the ED asthma rate, and the mortality rate for pneumonia/influenza were more than 20% higher than the state rates for the same age group. The COPD hospitalization rate was comparable to the state rate, whereas the COPD mortality rate was slightly lower than the state rate. The pneumonia hospitalization rate was more than 20% lower than the state rate for all Missourians 65+.

Overall, St. Louis City adults ages 45-64 are faring worse on most respiratory health indicators than Missourians of the same age groups, whereas adults 65+ fare worse on asthma and pneumonia indicators.





Red indicates 20% worse than state average

Green indicates 20% better than state average

Missouri

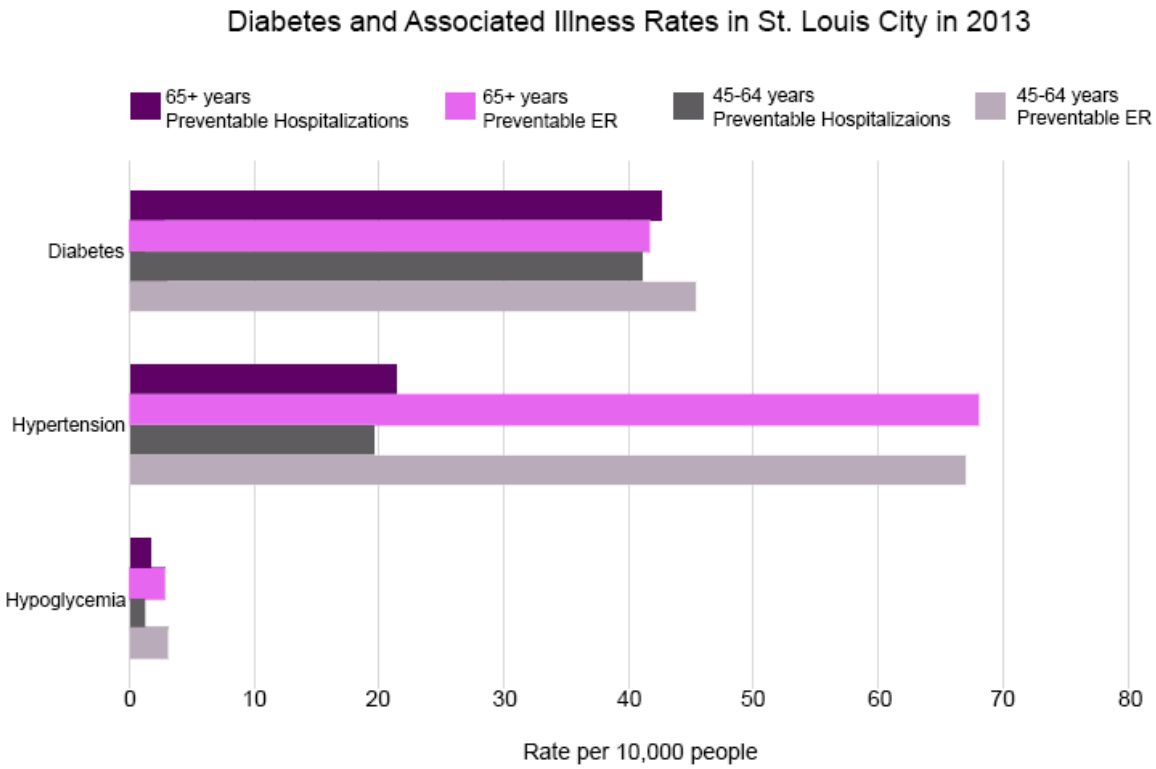
St. Louis City

Seniors faring worse on diabetes indicators

Diabetes and related conditions are a chronic and growing health concern for adults of all age groups, but particularly for older adults. The rate of diabetes in a community is closely related to the rates of risk factors for diabetes, including having a sedentary lifestyle and being overweight.

For St. Louis City, adults ages 45-64 and 65+ had diabetes hospitalization rates and diabetes mortality rates that were more than 20% higher than state averages for the same age groups. The graph belows shows hospitalization and ER visit rates for diabetes and diabetes-related conditions for both age groups. It is somewhat surprising to see that both age groups show similar patterns of hospitalization and ED visits across diabetic conditions and related illnesses.

Overall, St. Louis City adults ages 45-64 and 65+ are faring worse on the diabetes indicators compared to Missourians of the same age groups.



Diabetes Rates			
Indicator	**Age Cohort**	**Missouri**	**St. Louis City**
Diabetes, Hospital Admissions (per 10,000)			
	45-64	27.7	66.3
	65+	31.4	63.3
Diabetes, Mortality (per 100,000)			
	45-64	21.7	35.7
	65+	109.6	153.3

Red indicates 20% worse than state average
Green indicates 20% betterthan state average

Oral Health

Adults ages 60 and older are among the fastest growing segment of the American population, and today's newest cohort of seniors--the Baby Boomers, those born in 1946 or later—are different from years past in that they are more likely to retain their dentition, meaning they are at a greater risk for oral diseases . To further compound the issue, seniors often face a host of conditions that make oral health (i.e., dental care) a necessary component to their health—one about which they are often ill-informed and negligent. Approximately 30% of all prescriptions are dispensed to adults 65 and older with as many as 95% causing oral side effects such as dry mouth, soft tissue lesions, taste changes, gingival growth, burning oral sensations, and increased tooth decay. Many older adults also have receding gums which can result in decay along the gum line and, along with poor diet, can contribute to dental diseases in seniors. Furthermore, there is a common lack of understanding of the importance of oral health and its potential to impact overall health, especially in seniors.

Poor oral health has been associated with a number of serious health conditions and diseases. For example, the bacteria that causes periodontitis, an infection that attacks the soft tissue and bone that support teeth, has been positively associated with bacterial pneumonia and, on some occasions, has been shown to cause endocarditis, an infection of the heart chambers and valves. Poor oral health has been associated with chronic obstructive pulmonary disease, and can contribute to a qualitatively poorer diet, significant weight loss, sleeping problems, and psychological distress. Also, findings from the American Dental Association suggest a possible association between low dentition and the development of dementia late in life.

Barriers to accessing oral health care: financial

Among the greatest challenges for seniors in accessing oral health care is affordability. Many adults lose dental insurance at retirement, and those who lack access and insurance coverage for oral health services simply do not have the financial resources to pursue care with a private dentist. This leaves the Federally Qualified Health Centers (FQHC), dental schools, and a few other local clinics to serve the oral health care needs of those who are underserved. For many low-income adults these reduced fees are still financially out-of-reach.

Medicaid has made the challenge of accessing oral health care even more difficult for underserved, uninsured, and underinsured adults. It will only cover adults who have experienced trauma or injury to the mouth, jaw or teeth, or who have a disease affecting their dental health. Therefore, community care providers in Missouri have a difficult time treating adults who do not fall into these categories for oral health care because Medicaid does not reimburse them.

The Missouri Hospital Association reports that, in FY2013, nearly 28,000 uninsured residents and 22,000 Medicaid recipients were treated in emergency rooms for dental problems. Emergency room doctors and health care providers aren't equipped to properly address a patient's dental needs, and the American Dental Association suggests that a patient will seek ER care two or more times per dental problem.

Seniors especially have their own set of financial challenges in accessing care. Medicare does not cover routine oral health care, including cleanings, fillings, tooth extractions, dentures and other services. Medicare Part A will pay for certain dental services received at a hospital; it will also pay for hospital stays if an individual needs emergency or complicated dental services, but it will not pay for the services themselves—just the hospital stay. Under Medicaid, adults living in nursing homes are entitled to coverage of dental services, but those in significant need of services are the seniors who are homebound or socially isolated. In addition to being ineffective and inefficient, turning to emergency health practitioners for oral health care is significantly more expensive than visiting a dentist or dental hygienist.

Barriers to accessing oral health care: literacy

Oral health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic oral health information and services needed to make appropriate oral health decisions , and it is an important component of oral health care for seniors. The Academy of General Dentistry even suggests that "oral health literacy must be a cornerstone of improving utilization of care by underserved populations." A lack of oral health literacy can significantly affect oral health care as well as overall health. For instance, if a person does not know that dental sealants exist or that there is an oral cancer screening, they are unlikely to utilize such services. Often it is the individuals who need such services most who are the ones who lack the knowledge to obtain them.

Dentistry is geared especially toward preventive care, but many individuals believe that it is only necessary to receive oral health care if there is pain or an obvious condition to be treated. This mindset is detrimental and its consequences are apparent. According to results from the CDC's National Oral Health Surveillance System 2008 findings, 35.7% of Missouri adults aged 55-64 and 44.5% of adults aged 65 and older indicated that they had not visited a dentist or dental clinic in the past year. Similarly, 53.5% of Missouri adults aged 65 and older report having lost six or more teeth due to tooth decay or gum disease; 26.2% report having lost all of their teeth for those reasons. It's important to note that tooth loss is not a consequence of aging, but rather untreated disease or injury. That is to say, many oral health conditions are preventable, but many seniors are not getting the preventive care they need because they simply do not understand the need and the value in such care.

Barriers to accessing oral health care: allocation and availability of services

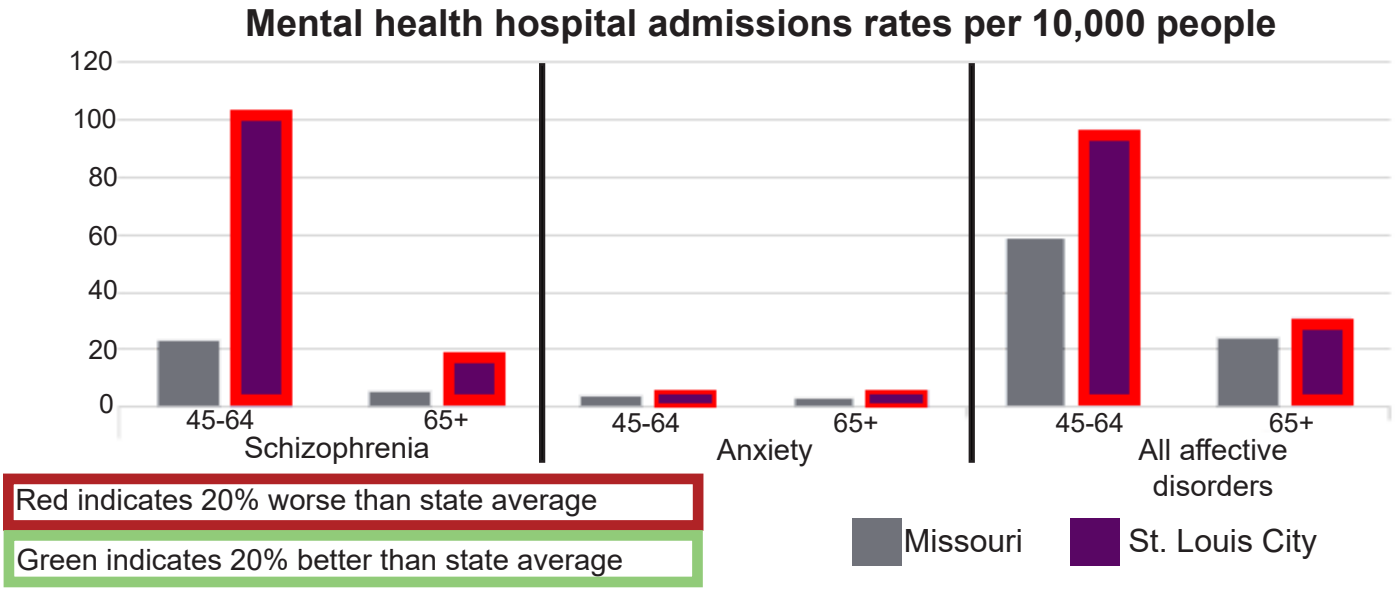
Seniors' access to oral health care can be significantly hindered by geography. The unequal distribution of services in St. Louis City, St. Louis County, and St. Charles County provides a great challenge to accessing care. Ten service providers were identified in St. Louis City, St. Louis County, and St. Charles County that are known to provide oral health care to low-income seniors. Of those, six had clinics in St. Louis City, three in St. Louis County, and two in St. Charles County. This allocation of services leaves significant geographic gaps and low-income seniors in these three counties have few, if any, options for care.

Mental health

The indicators for mental health include rates of hospitalization for schizophrenia, anxiety and anxiety-related conditions, all affective disorders (including depression and bipolar disorders), and self-inflicted injuries. In addition, suicide rates (deaths by self-inflicted injuries) are also included.

For St. Louis City, the hospitalization rates for adults ages 45-64 and 65+ for schizophrenia, anxiety, and all affective disorders were more than 20% higher than state averages for the same age groups. With respect to self-inflicted injuries, St. Louis City adults ages 65-74 had a rate of hospitalizations for self-inflicted injuries that was more than 20% higher than the rate for Missourians of the same age group, yet the suicide rate for this age group was more than 20% lower than the state rate. For adults 75+, the self-inflicted injury hospitalization and death rates were comparable to state rates for the same age group.

Overall, St. Louis City adults ages 45-64 and 65+ have higher rates of schizophrenia, anxiety, and affective disorders compared to Missourians of the same age groups. With respect to self-inflicted injuries, adults 75+ are comparable to their Missouri peers, whereas adults 65-74 have a lower suicide rate but a higher self-inflicted injury hospitalization rate compared to Missourians of the same age group.



Serious and persistent mental illness

Adults with serious and persistent mental illness comprise about 2% of the adult population, but a lower percentage among older groups. This population loses about twenty-five years of life expectancy as they age, due to:

- Smoking at rates that are two to three times the general population;
- Poor diets, leading to high rates of obesity and diabetes;
- Lack of exercise;
- Stigma which leads to sub-standard treatment for physical problems; and,
- Metabolic syndrome, including side-effects of psychotropic medications.

However, new holistic approaches to care coordination of adults with serious mental illness will lead to increases in life expectancy and issues of aging for this population. Currently, the implementation of Behavioral Healthcare Homes (i.e., Community Mental Health Center Health-care Homes under the Affordable Care Act) has led to behavioral and lifestyle changes in a large cohort of this population in the Greater St. Louis Area and promising life-extending outcomes.

In the recent past, people with developmental disabilities, similarly, were not expected to live into old age. With improvements in care, including issues of lifestyle, diet, and exercise, more will attain senior status with resulting added issues of aging. However, the same improvements in community-based care that have led to longer life-expectancies will lead to the necessary adjustments in lifestyle and supports.

The Missouri Department of Mental Health has been a national leader in the development of healthcare homes and their adaptation for the needs of these populations.

Depression and alcohol and drug misuse and abuse

A distinguishing feature of growing older is the probable increase in the experience of loss: loss of health; loss of status and roles; loss of significant others; diminished cognitive functioning and sensory impairment; loss of place, home, or neighborhood; and loss of social supports. What is different from other stages of our lives is that these losses are less likely to be offset by personal gains in our lives. The management and adaptation to these losses is a major life challenge. These losses can have a cumulative, even multiplier, effect on our daily functioning and sense of well-being. Seniors with mental health disorders are at greater risk of suffering a variety of consequences, including strained social relationships, increased isolation, diminished quality of life, and elevated suicide risk.

By the time they reach 75 to 85 years old, 20 to 30% of seniors have experienced problems with alcohol or drugs. However, hard drugs (e.g., heroin, methamphetamines, or cocaine) are a small factor, while alcohol abuse and prescription drug abuse are still issues with significant numbers of seniors. Substance abuse can exacerbate depression and accelerate deterioration of functioning. Drugs and alcohol also can interact negatively with prescription medications, including anti-depressants, which can be especially dangerous.

Depression affects one in six seniors. Depression in seniors is not inevitable, but it is understandable that it is the major behavior disorder associated with aging. It can be under-diagnosed easily, especially in the presence of stigma and denial. A number of health conditions - dementias, cardiac disorders, and diabetes,- can increase the probability of or mimic depression, as can the interactions of multiple medications to treat co-occurring medical conditions. Adding medications for depression to the mix can increase senior's problems and further diminish functioning. For seniors, under-diagnosing and under-treating depression is associated with increased visits to primary care physicians and to emergency rooms and with longer hospital stays for other physical conditions.

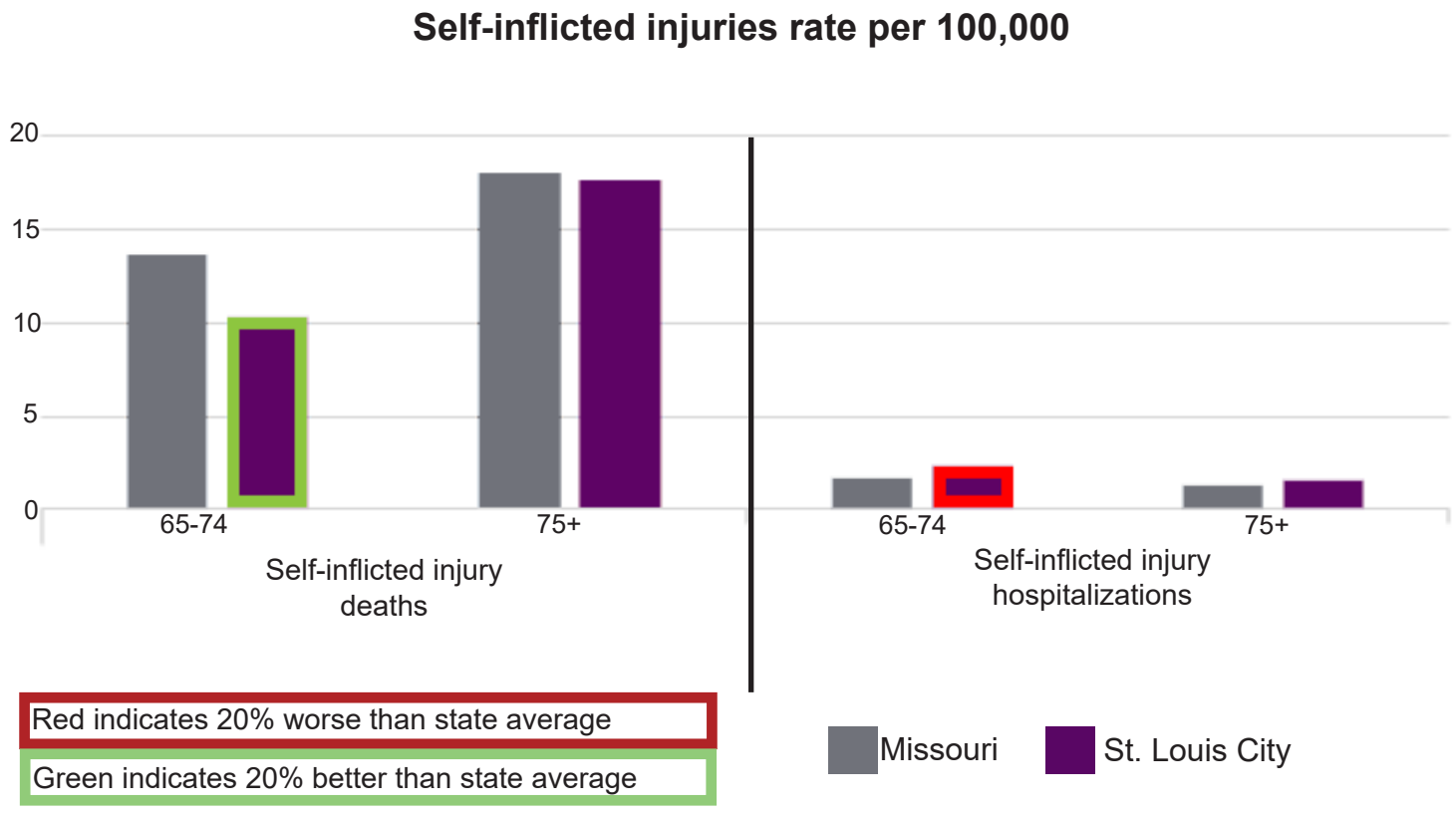
Suicide

Suicide among older white men (i.e., 65 years of age or older) occurs at three times the rate of other adults (11 per 100,000), rising with age to a rate of 37.5 per 100,000 for over 75 year-old white males and reaching its peak in white men over 85 (51 per 100,000). Older white men are eight times more likely to kill themselves than are women. Compared with white males ages 65 and older, African American males (9.2 suicides per 100,000), Hispanic males (15.6), and Asian/Pacific Islander males (17.5) in the same age range had significantly lower suicide rates. A number of factors come into play in the high suicide rates of older white men:

- They are more likely to use very lethal means, especially firearms (80% of all firearm suicide deaths were white males).
- They are less likely to be treated for mental health issues, particularly depression.
- Although 70% had seen a primary care physician within a month of their suicide, the large majority of these men were not screened for suicide risk, depression, or substance abuse.

Because there are so many cultural factors in white male suicides among seniors, preventive strategies have focused on:

- Public-health campaigns to help people recognize risk factors and symptoms; and,
- Better detection and interventions with people at risk of suicide in late life, including more training for primarycare-health providers who are likely to come into contact with seniors who are at risk.



Current behavioral health services and gaps

Across the Greater St. Louis area, there are not any free, reduced, or manageable sliding-fee-scale behavioral health treatment agencies with significant tailored services for seniors. However, there are a number of not-for-profits that indicate a willingness to move in this direction, especially as part of a larger, supported effort to implement evidence-based programs that would focus on seniors.

There are a few limited sliding-fee and reduced-fee resources for general counseling and psychotherapy services currently available across the region, including Jewish Family and Children's Services, Catholic Family Services, Lutheran Family and Children's Services, and graduate school psychology and counseling programs (Washington University, University of Missouri St. Louis, St. Louis University, etc.). There are some agencies where the sliding fee is higher, like Provident Counseling, and some private practitioners, like Agape Christian Counseling.

Low-cost psychiatry is problematic to access, except for those meeting the very strict qualifications of the Missouri Department of Mental Health. For St. Louis County residents, the Family Mental Health Collaborative has a limited number of available slots for psychiatry. The Schiele Clinic of the St. Louis Psychoanalytic Institute is a very limited resource for psychiatry. A few Federally Qualified Health Centers (FQHCs) have psychiatric slots available for their primary care patients, including Family Care Health Center and Grace Hill Neighborhood Health Centers. Again, access to psychiatrists with geriatric training is very limited.

General adult alcohol and drug abuse treatment and rehabilitation services are available from Preferred Family Health, Bridgeway Behavioral Health, Queen of Peace Center, and Comtrea. Again, none is specifically focused on seniors.

With the passage of national Mental Health Parity legislation in 2008 and its recent implementation, followed by legislation and rules that changed Medicare mental health service coverage, it is likely that most mental health services, including psychotherapy, will be more accessible to seniors.

However, the Greater St. Louis area, like the rest of Missouri and the country, suffers from a workforce shortage of experienced geriatric-trained specialists in healthcare, including primary care physicians, nurses, psychiatrists, psychologists, and social workers. Others are addressing the very expensive and long-term issue of increasing the supply and better deploying these necessary specialists. It is possible to promote more coordinated care, even integrated care, and practices which better utilize the resources we do have.

"Like this gentleman I take care of. He says his mind is gone, he says he wash and I say no you don't wash and he says yes I do. So I got to care somebody came in for $7 every 50 minutes so I guess the longer they stay the more it cost."

-Five Star Senior Center

Senior's Speak

Seniors in multiple focus groups discussed barriers that have the ability to negatively impact an older adult's physical, mental, and emotional health. Barriers to such things as exercise, assistance for medicine, cooking assistance, and mental health services are detrimental to the health of aging adults.

Research by Kemmler, Stengel, Engelke, Haberle, and Kalender[5], supports existing data that a "single multipurpose exercise program that is based on low-volume, high-intensity philosophy and is designed for the elderly improves overall fitness, maintains bone health, and reduces fall risk" (p. 180). Furthermore, other research shows emotional health benefits such as a reduced fear of falling, reduced anxiety, and increased confidence.[6] Exercising in groups also serves as a mental health benefit as older adults can come together and socialize while exercising. One senior from SAJE mentioned that they did not have access to exercise programs at the community center. Another senior at Saint Charles stated that subsidized buildings for seniors did not offer exercise programs because of liability issues. Moreover, another senior mentioned that there weren't any moderate exercise classes offered for those who couldn't do rigorous exercise.

When asked what services currently work, seniors at Saint Charles and SAJE mentioned that they enjoyed congregate meals at various community centers. Congregate meals provide seniors with a meal and an opportunity to socialize with other seniors, hence contributing positively to their physical and emotional health. One senior at SAJE, mentioned congregate meals as a place to "get companionship and food" (personal communication, March 26, 2015). The Elderly Nutrition Program (ENP) is a program to improve dietary intake and nutrition status of seniors while providing socializing opportunities.

Seniors from SAJE shared that nurses also help seniors get connected to services. The nurse also sits down with seniors to discuss supplements and explain the medicine they are taking. The nurse has proved to be an important resource and advocate for seniors in maintaining their health.

Some of the seniors discussed improvement for existing services and new ideas to maintain their physical, mentalhealth. One suggestion was that Meals on Wheels should provide fresh instead of frozen meals. Another suggestion was giving seniors the option to purchase water aerobics and other exercise classes on a per-class basis, rather than charging for a package of classes. Lastly, a senior from Maryland Heights mentioned it would be beneficial to have a reliable source of information about maintaining positive mental health.

Seniors at Maryland Heights mentioned access to affordable medical alert services. One of the seniors from SAJE said that it "would be excellent for the community to provide that for seniors rather than having to go to these companies who are vying for business and you don't know which way to go or they could subsidize even half the cost" (SAJE, personal communication, March 26, 2015).

(1) Cousins, C. (2014) Missouri Foundation for Health, Health Equity Series: Older adult health disparities in Missouri. Retrieved from http://www.mffh.org/mm/files/Older%20Adult%20Health%20Disparities%20in%20MO.pdf

(2)Centers for Disease Control and Prevention. (2011). Healthy aging: helping people to live long and productive lives and enjoy a good quality of life. Retrieved from http://www.cdc.gov/chronicdisease/resources/publications/AAG/aging.htm

(3)Yun, S., Kayani, N., Homan, S., Li, J., Pashi, A., McBride, D., Wilson, J. (2013). The burden of chronic diseases in Missouri:pProgress and challenges. Jefferson City, MO: Missouri Department of Health and Senior Services. Retrieved from http://health.mo.gov/atoz/pdf/burdenofchronicdiseasesinmissouri.pdf

(4) Association of American Medical Colleges. (2015, April). More seniors, fewer geriatricians: shifting demographics pose challenges for medical education. Retrieved from https://www.aamc.org/newsroom/reporter/april2015/429722/fewer-geriatricians.html

(5) Kemmler, W., von Stengel, S., Engelke, K., Häberle, L., & Kalender, W. A. (2010). Exercise effects on bone mineral density, falls, coronary risk factors, and health care costs in older women: the randomized controlled senior fitness and prevention (SEFIP) study. *Archives of Internal Medicine*, 170(2), 179-185.

(6) Sandlund, E. S., & Norlander, T. (2000). The effects of Tai Chi Chuan relaxation and exercise on stress responses and well-being: An overview of research. *International Journal of Stress Management*, 7(2), 139-149.

St. Louis City

Transportation, Mobility, & Accessibility

Transportation, Mobility, & Accessibility

As people age they tend to cut back on driving by staying off the highways, avoiding rush-hour traffic, and not driving at night. However their transportation needs don't diminish. When chronic illness or a combination of medical problems arises, it can cause a cascade of new and specific transportation needs. Once individuals can no longer drive, they often rely on family and/or friends to get them to medical appointments, the pharmacy, and shopping.

Transportation is a determinant of health according to the World Health Organization because of the role it plays in independence and how it shapes individuals access to resources. Transportation issues pervade the seniors' independent living literature. In essence, transportation can be the major factor in a senior's access to the resources and services necessary to continue living independently at home. Activities and programs for seniors will be limited in effectiveness if the program is difficult to access.

Driving status and transportation have an effect on the loneliness and social isolation of the elderly because of their role in facilitating access to the social network. For example, driving cessation was associated with a decrease in out-of-home activity levels[1], which, in turn, may have negative consequences such as isolation and ill health. Increasing evidence supports the idea that out-of-home activity levels affect health status, well-being, and survival in old age. Furthermore, loneliness and immobility were the most commonly mentioned effects of the forfeiture of a driver's license by the elderly.[2]

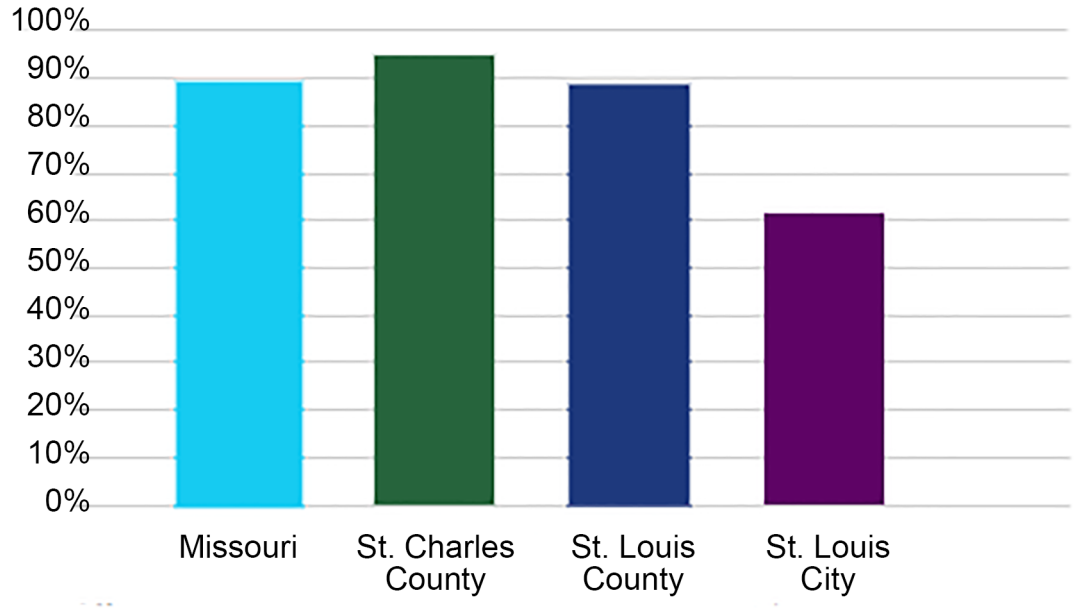
Seniors who do not have reliable and affordable transportation options are more likely to experience increased isolation and deteriorating physical and mental health. Transportation for seniors improves their quality of life by providing connections to the community, resulting in maintained health and wellness and sustained independence. This is especially important to the degree transportation is critical to seniors for access to food shopping, medical appointments, and valued socialization opportunities.

> "Father Tolten needs transportation; we need a bigger bus…we need access to a library regularly."
>
> -Father Tolten Senior Center

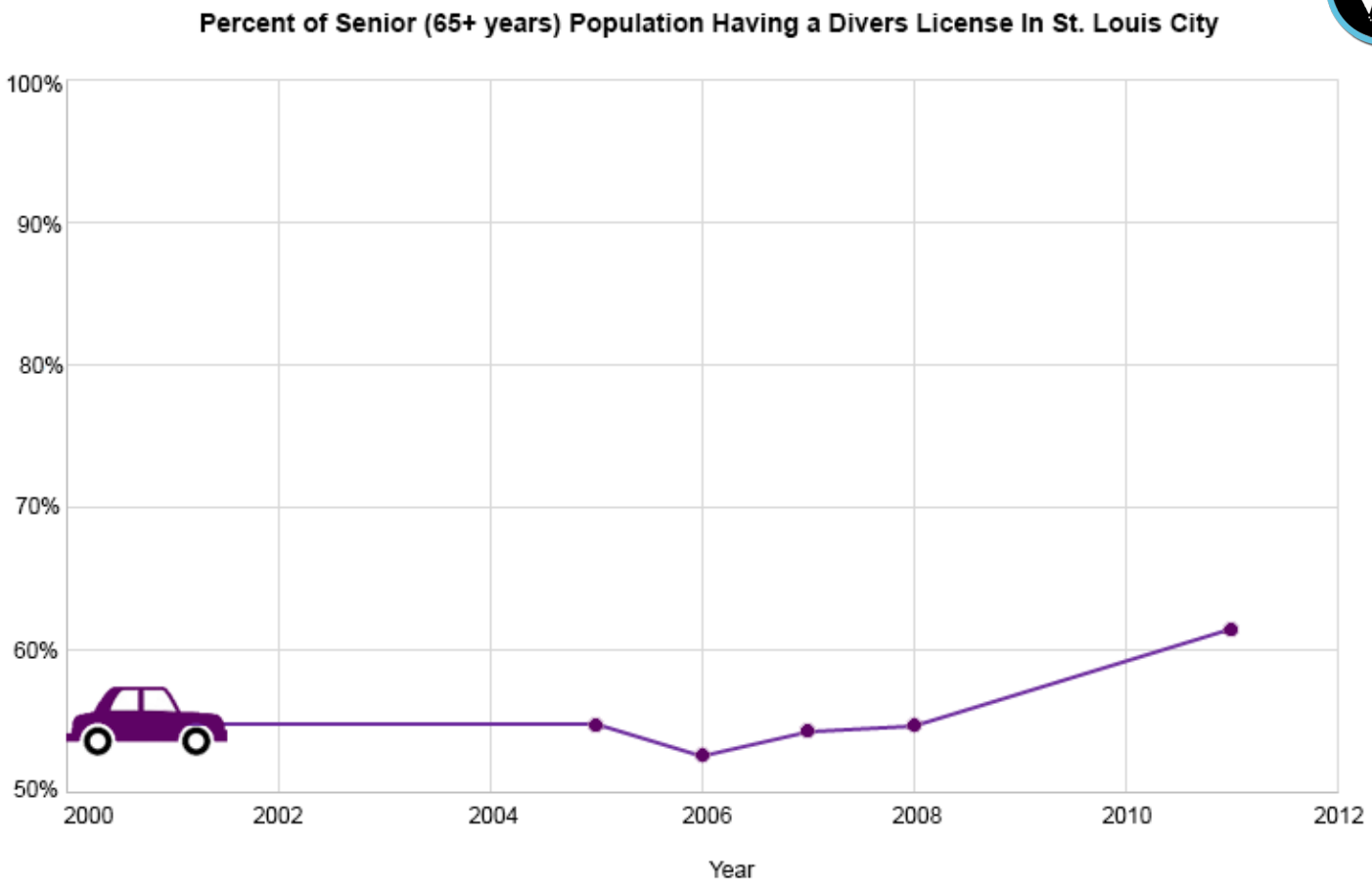
Seniors' ability to access services, recreation, and community is key to quality of life and sustaining independence, but this ability can be compromised for seniors due to declines in physical health and cognitive capacity as well as by financial limitations and pressures. As a culture, many Americans assume access to privately-owned and -operated automobiles, and consequently, with the exception of a handful of large metropolitan areas, many lack sustained commitment to accessible, affordable public transportation utilized across the demographic and socioeconomic spectrum. This reality creates challenges to even understanding, and thus, measuring, the full extent to which seniors' quality of life and well-being are impacted by transportation and mobility issues.

A starting point to understanding these issues is to consider seniors' access to common modes of transportation. Seniors in the City of St. Louis are less likely to have drivers licenses and access to automobiles than either county-based seniors in the metropolitan area or as seniors throughout Missouri, and the latter trend is accerbated by age, though the percent of St. Louis City seniors with licenses has been increasing over time.

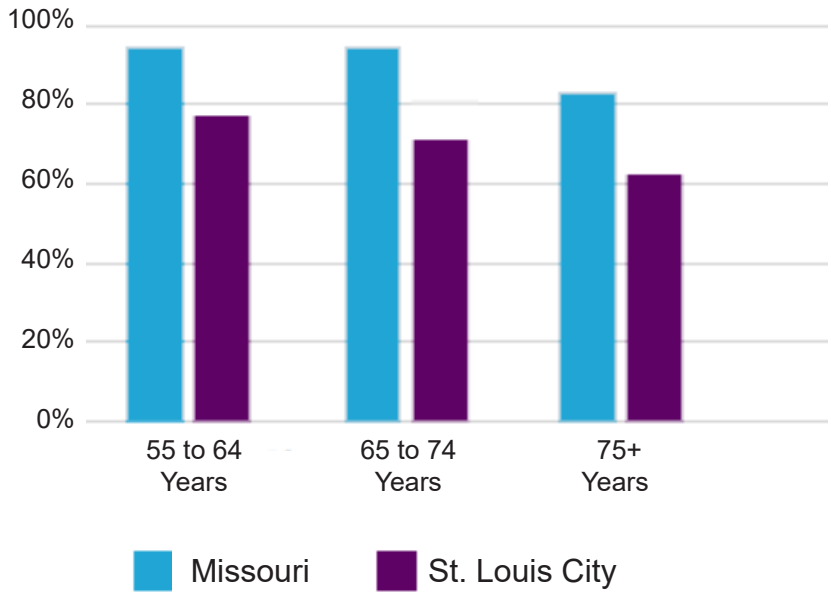
Percent of Elder Population (age 65 and older) with a Driver's License in 2011



Source: Missouri Senior Count



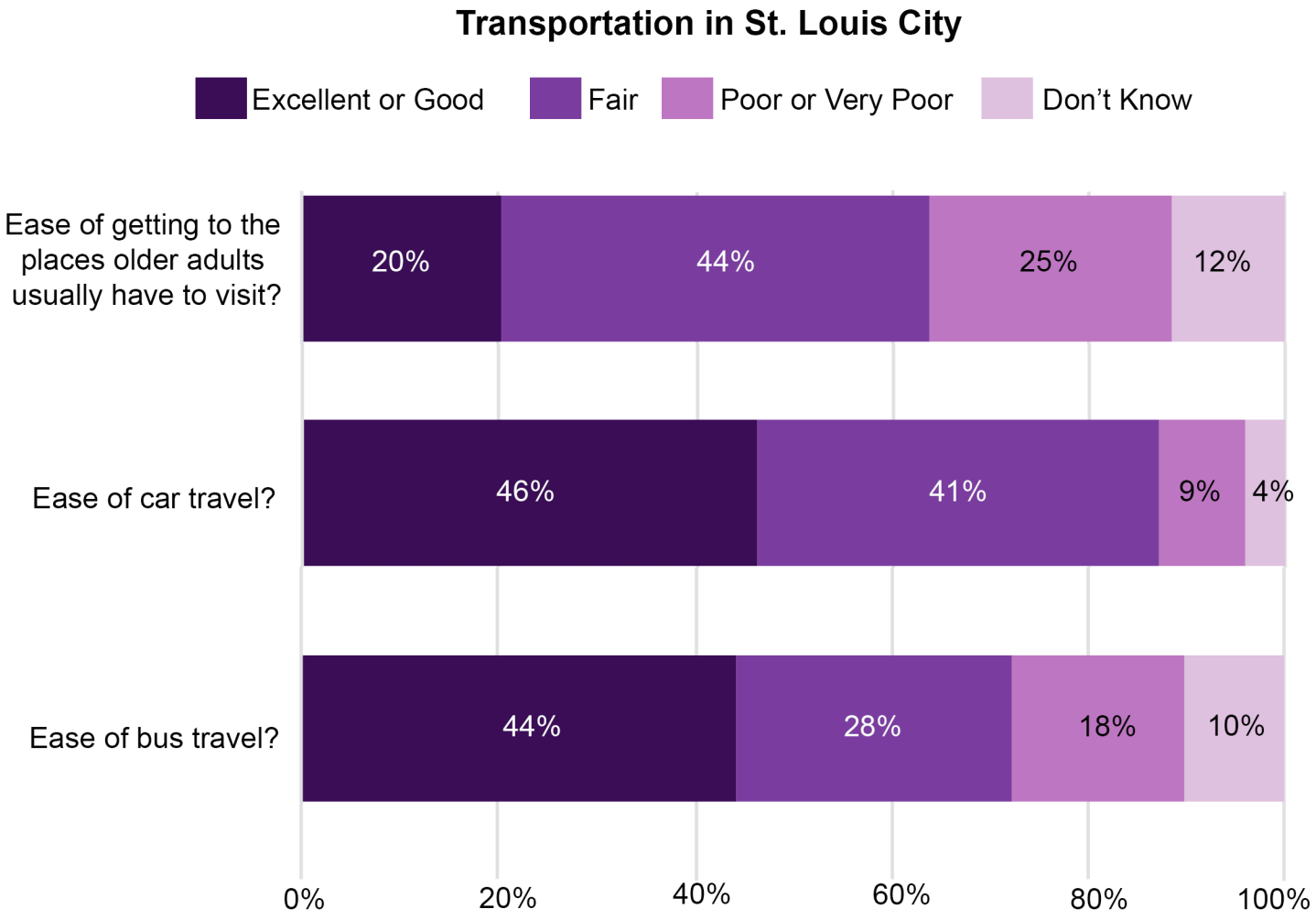
Source: Missouri Senior Count



Source: 2011-2013 ACS PUMS

Vehicle availability data shows the number of passenger cars, vans, and pickup or panel trucks of one-ton capacity or less kept at home and available for the use of household members.

When St. Louis City service providers were asked to assess the quality of transportation opportunities and services for seniors, about half suggested ease of car travel could be problematic for seniors and nearly 70% suggested traffic and access issues affected seniors' ease of getting to and from places older adults usually visit. Approximately 45% of survey respondents suggested the bus system provided 'Excellent' or 'Good' service to seniors.



Existing Transportation Services and Gaps

Existing transportation services for all three jurisdictions are outlined below. Generally, most of these resources fall into the following general categories:

- Municipal or County transportation services:
  - Many are limited to trips within the municipality, with exceptions for medical visits which may be limited to a few facilities;
  - Trips may be limited in some municipalities to one or two a month;
  - Reservations are usually necessary, from one day to a week in advance;
  - Shopping may be restricted to one or a few locations;
  - Availability of the service is usually set to fixed hours (e.g., 10:00 A.M. to 2:00 P.M.) and may be limited to a few days per week (e.g., usually not available to attend religious services); and,
  - St. Charles City has a fixed route bus which will also connect to MetroLink at the North Hanley Station. Seniors need to be ambulatory enough to walk from fixed stops to essential services.
- Medical transportation services:
  - Trips may be limited to one or two a month;
  - Reservations are usually necessary, many at five business days (a week) in advance, making the coordination of medical appointments and rides very difficult;
  - Many result in all-day trips for a medical appointment (e.g., being picked up at home at 8:30 for an 11:00 appointment and then being picked up at 3:00 at the doctor's office and returned home at 4:00); and,
  - Dialysis appointments may be especially problematic (e.g., if the dialysis is not completed in time, the senior has to pay for an expensive cab ride home).
- Congregate Senior Living vans:
  - Many will not transport individuals (group activities only). For example if an ambulance transports the resident to the Emergency Room, a taxi has to bring the resident home at the resident's expense.
- Non-profit Senior Services:
  - Area Agencies on Aging:
    - MEAAA limited to senior centers four days per week, medical one day per week, and grocery shopping twice a month;
    - SLAAA limited to senior centers and metro passes for other needs (for those ambulatory enough to use the bus).
  - Specialized services:
    - Limited to people with a targeted condition or disability; and,
    - Many limited by volunteer availability.
- For-profit transportation services:
  - Limited by cost charged to the senior.

Existing Socialization Opportunities and Services in the Region

The St. Louis metro area offers multiple opportunities for community dwelling seniors to become engaged. Many of these are provided at little or no cost and do not have a waiting list to attend. Some of these opportunities include:

- Senior centers and many churches/synagogues offer active seniors groups;
- Volunteering opportunities at libraries, hospitals, churches, and non-profit service programs;
- Service clubs or groups, such as Kiwanis, Zonta, Lions, Rotary, etc.;
- Many colleges/universities allow seniors to audit classes at a low cost or no cost;
- Parks and recreation centers offer programs and classes specifically for seniors;
- Outings with a friend for lunch, shopping, or other activities (e.g., the senior men's gathering at breakfast time at the corner table of many local fast food restaurants and diners);
- Many banks offer senior clubs that provide trips and classes;
- Gym, fitness centers, and the YMCA offer classes specifically designed for older adults;
- OASIS offers wellness classes; and,
- Libraries provide books to homebound seniors.

The gap is not in the availability of socialization opportunities throughout the region. It is not an issue of seniors being turned away as much as it is either:

- an issue of access due to lack of appropriate transportation options; or,
- the presence of a disabling condition, such as mobility issues and/or depression.

Many programs are free and do not have a waiting list. The gaps in services are those that accrue to the homebound person.

Therefore, it is not recommended that significant additional resources be set aside for an expansion of socialization programs for seniors in any of the three areas. Rather, the priority should be to make these programs more accessible through the expansion of transportation services, both in scope and flexibility, and in any needed expansion of congregate meals for seniors.

> "Transportation is the most important thing because it gives you a chance to get out of your house, go somewhere, and do something. Reliable transportation is very important."
>
> -Five Star Senior Center

Senior's Speak

One of the barriers that seniors discussed at St. Charles, SAJE, and Five Star was the lack of transportation in their community and access to transportation. Seniors discussed lack of transportation services to assist with medical appointment, shopping, attending community meeting on advocacy for seniors, and traveling between between municipalities. According to Giraldez-Garcia et al.[3], "in advanced age, barrier-free spaces, health and social services, easy access to transportation and social supporting in the residential environment are of great importance to older adult's well-being and health." This was echoed by a senior from SAJE who said "Once you're like a prisoner, you feel like you're a prisoner in your own home, you become isolated, and you get depressed" (personal communication, March 26, 2015). Another senior from SAJE shared similar sentiments in regards to lack of socialization because of transportation when she said "Yeah, I don't drive at night anymore. If they have activities, sometimes I would like to participate but I can't take the chance" (personal communication, March 26, 2015). Therefore, having access to reliable, consistent, and affordable transportation at all times of the day is important to senior's maintaining their lifestyle and connection to the community. Optimal mobility is incredibly important as one's relationships, medical trips and will to participate in their community are affected by one's mobility.

Some of the services that seniors mentioned were Call-a-Ride, OATS, and CORP transportation. There are also hospitals that provide transportation to and from medical appointments, as well as pharmacies that deliver prescriptions if they are of a certain amount. Seniors from 5 Star Senior Center, recommended transportation services that provide one-one transportation like a Senior Service Cab, so seniors would not have to wait for their transportation. Seniors from Maryland Heights and St. Charles mentioned that transportation that crosses municipalities, counties, and the city should be provided so seniors who have medical appointments in another part of St. Louis can easily access them.

(1) Mooney, J. (2003). Driving status and out-of-home social activity levels: the case of older male veterans. Simon Fraser University. MA Dissertation

(2) Johnson, J (1999). Urban Older Adults and the forfeiture of a driver's license. *Journal of Gerontological Nursing* Dec.; Vol 25 (12_: P 12-18.

(3) Giraldez-Garcia, C., Forjaz, M. J., Prieto-Flores, M. E., Rojo-Perez, F., Fernandez-Mayoralas, G., & Martinez-Martin, P. (2013). Individual's perspective of local community environment and health indicators in older adults. *Geriatrics & Gerontology International*, 13(1), 130-138.

St. Louis City

Services & Resources

Services & Resources

As our population continues to age, the number of older adults wishing to remain in their homes – independently– grows. Many of these older adults may not have access to services that they need due to limited finances, limited sophistication in accessing needed care, and medical conditions. Older adults commonly experience health decline, chronic conditions, isolation, and complicated and fragmented service systems. Care Coordination addresses these issues to help older adults remain safe and independent by providing in-home assessment of needs, education on resources, access to coordination of health and social services, and help in filing applications for eligible benefits.

Care Coordination/Case Management (CC) is defined as the organized implementation of a customized course of action determined for a person's unique medical care and social support needs. These services help guide older adults through often fragmented systems of care and available services so they can make the most informed decisions that will lead to a healthier, more dignified independence.

CC managers can be licensed social work and health care professionals providing assessment, treatment planning, health care and social service facilitation, and advocacy. In many settings, CC managers can be supplemented with paraprofessional or peer team members on the front lines. These peers may be able to develop close rapport with clients and can demonstrate high degrees of cultural competency. Trained CC professionals work directly with the person and/ or their family to assess complex social and health conditions and then coordinate the best options for care. CC services assess situations related to:

- home safety,
- eligibility for services/benefits, and
- the need for coordination of services.

CC managers also:

- provide necessary referrals,
- assist with filling out applications, and/or arrange transportation to apply for benefits, and ensure that older adults will have access to needed no cost or low-cost services and resources.

CC services are offered at nonprofit organizations, hospitals, adult day care, independent living facilities, hospice, clinics, and more.

Case for Care Coordination/Case Management

Care Coordination and Case Management can directly improve health outcomes for many seniors and also provide long-term savings in the Medicare program through reducing hospitalizations and eliminating duplicative services. However, the majority of Medicare beneficiaries with chronic conditions (80%) do not have access to care coordination. Seniors with five or more complex conditions account for more than 75% of total Medicare spending. Care Coordination improves quality of life by helping seniors through complex and multiple social and health problems. In a Case Management Study in the Community[1], older adults who received CC had reduced risk for hospital admissions, improved physical health, a reduction in the decline of cognitive status, and improved financial savings. Another Care Management Model Study[2] showed that older adults with care management had fewer falls; case management reduced the risk of falls by 73%.

Research has proven the value of CC for older adults, particularly those offered in a natural environment, through demonstrated decreases in nursing home admissions and increased periods of time in which they are able to remain independent[3]. Older adults who are able to remain living at home in a community of their choice are at significantly lower risk for depression than those who become socially isolated and/or are living in a nursing home or institution. The prevalence and anticipated increase in low income seniors in our area drives the need for CC services that provide a connection to community resources.

It makes sense at the economic, individual, familial, and community level to enable older adults at any socioeconomic status to remain living independently for as long as possible[4].

Many older adults in the region have multiple chronic conditions or limited literacy that hampers their ability to complete daily activities. For example, diabetes can complicate oral health; arthritis may impact an older adult's ability to write. A stroke may impact a person's ability to communicate. Vision loss may hinder an older adult's ability to read mail or do laundry. An older adult who didn't finish high school may not be able to complete an application or understand information in brochures.

Many Care Coordination services under the aegis of non-profit social service agencies provide education on resources available to seniors at low or no cost. Private practice Geriatric Social Workers and those in healthcare settings in the St. Louis metropolitan area often require clients to pay for services with a fee range of $50 - $145 per hour.

CC occurs in different forms in healthcare and social service settings. Most of these are paid for by third parties. In the cases where third party payers exclude or severely limit CC, these non-profits usually have sliding fee scales.

- In primary care, CC is taking the form of the Medical Home or Healthcare Homes. This involves a healthcare worker, usually a nurse care manager, coordinating care across specialists and mobilizing and coordinating health-affecting services which impact the success of the treatment plan. For example, this can include dietetic education or cooking classes for people with chronic conditions like diabetes or obesity.
- In specialized settings, working with people challenged with chronic conditions, such as serious mental illness or substance abuse disorders, CC has developed into a long-term treatment and recovery service. Some of these settings have become CMHC Healthcare Homes (i.e., Behavioral Healthcare Homes) under the Affordable Care Act to coordinate care across medical and social domains. The CMHC Healthcare Homes serving the three jurisdictions are Independence Center, Places for People, BJC Behavioral Health, Hopewell Center of the Betty Jean Kerr People's Health Center, and Crider Health Center. In addition, Bridgeway Behavioral Health, Queen of Peace Center, and Preferred Family Health provide CC to people in treatment and in recovery from substance abuse.
- The Alzheimer's Association, Memory Care Home Solutions, AMC Care, and American Parkinson's Disease Association, serve people challenged with specific chronic medical conditions.

The region's immigrant seniors are often identified as having even higher needs than seniors in general. Not only are their struggles related to financial challenges, but research suggests they are at increased risk of physical, emotional, and social decline due to transportation and language barriers, as well as increased rates of social isolation when compared to the general older adult population[5].

"If I had somebody to clean my house once in a while and didn't charge a lot that would be great."

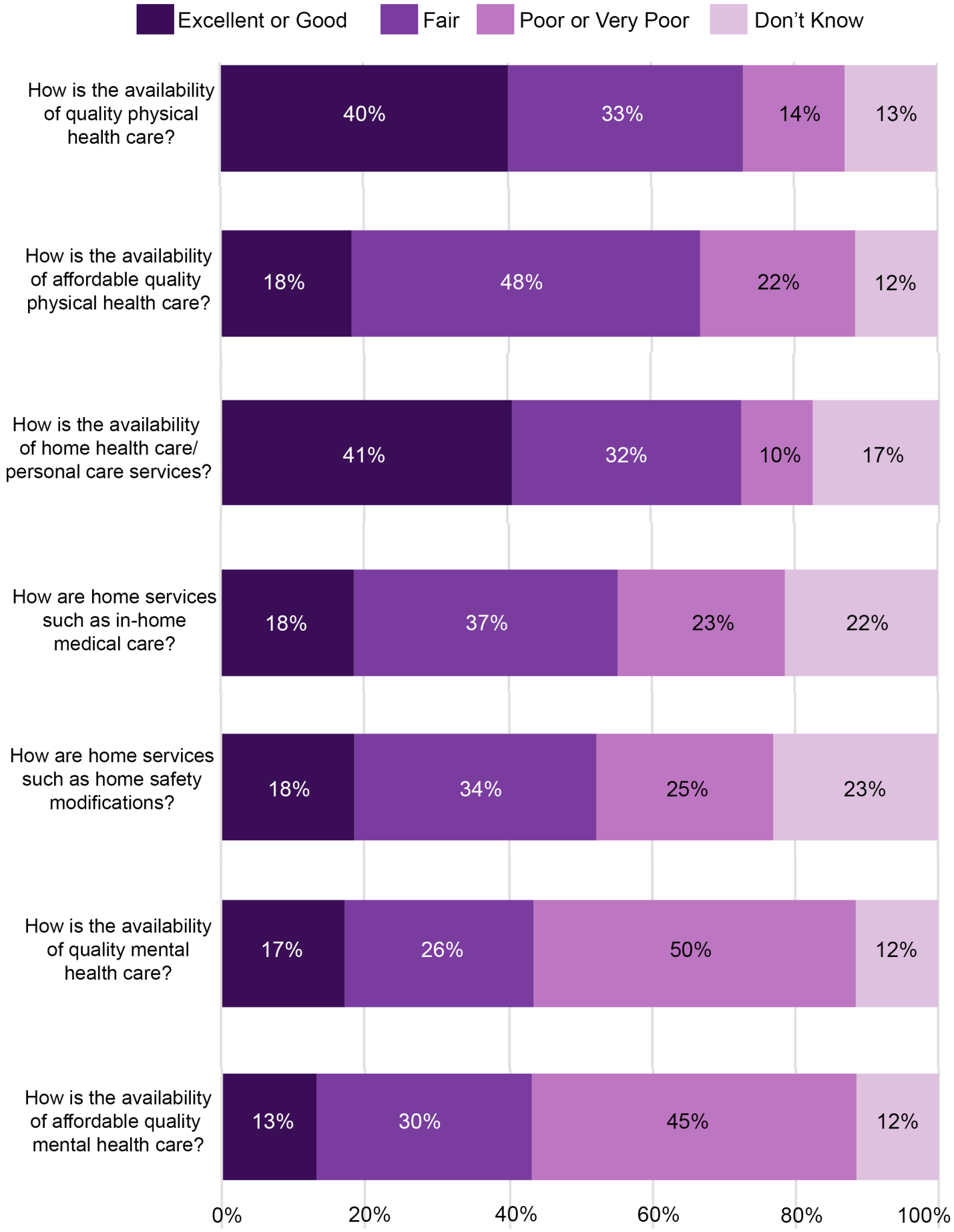
-Five Star Senior Center

Provider Survey for St. Louis City

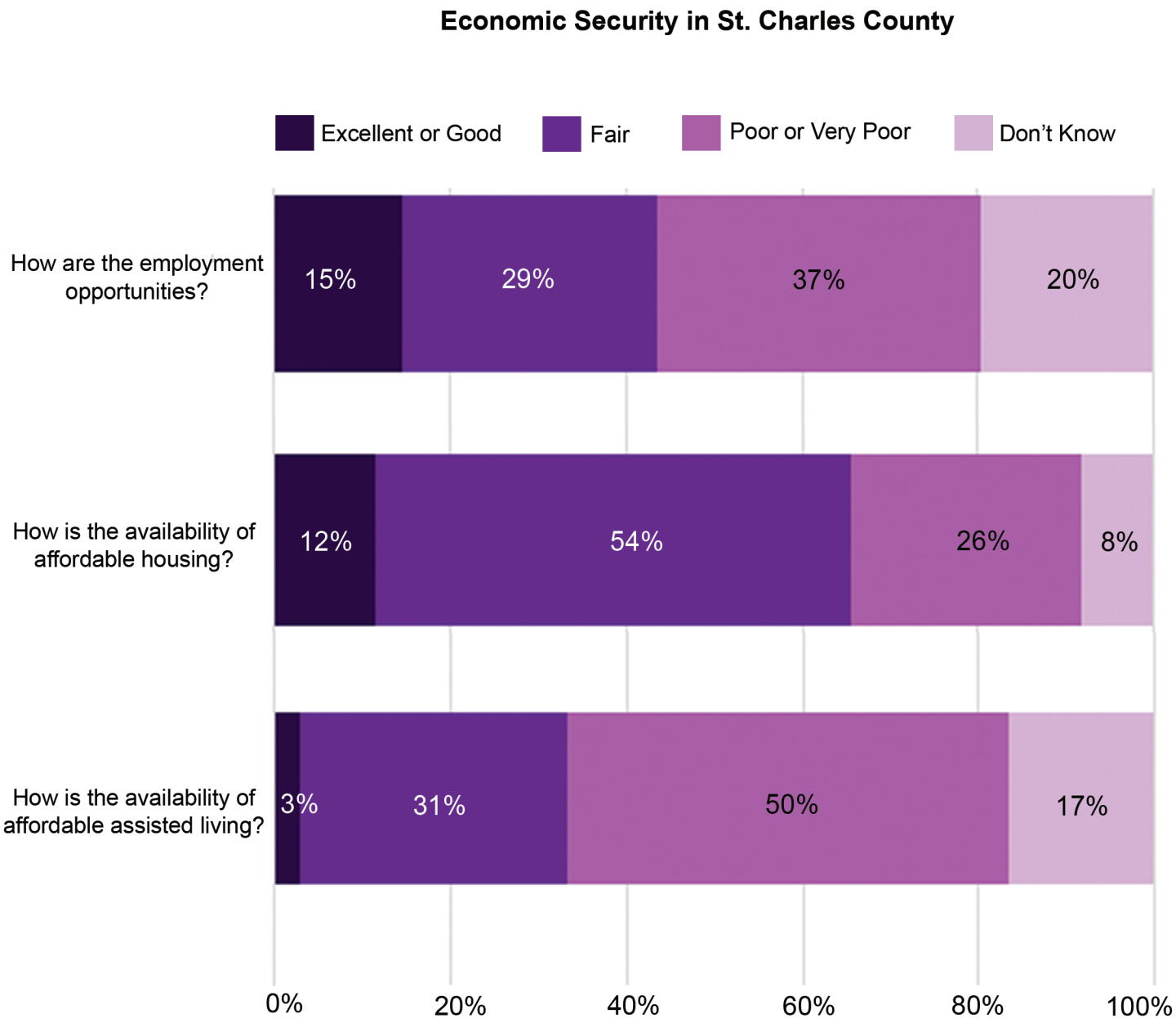
The availability and quality of services available to seniors strongly affects both seniors quality of life and ability to remain independent. To understand the range of services currently available to seniors and gauge current and potential gaps in service, providers were asked to assess the availability and quality of services available to seniors as well as to assess the well-being of the senior population in the context of available services. Survey results related to seniors' health, economic, and social well-being are discussed in this section. Responses to all survey questions are available in the the Appendices of this report.

In St. Louis City, 40% of providers consider seniors' access to physical health care to be of high quality. However, 70% of responding providers expressed concern regarding the affordability of care. Similarly, slightly more than 40% of St. Louis City respondents considered in-home care and services to be highly available, but less than 20% rated the quality of services as 'Excellent or Good.' Consistent with the availability of services across the country and in Missouri, service providers ranked the availability, affordability, and quality of mental health services for seniors in St. Louis City at levels far below physical health care. Only 17% of respondents considered services to be highly available and 75% ranked the availability of affordable, quality services as 'Fair, Poor, or Very Poor.'

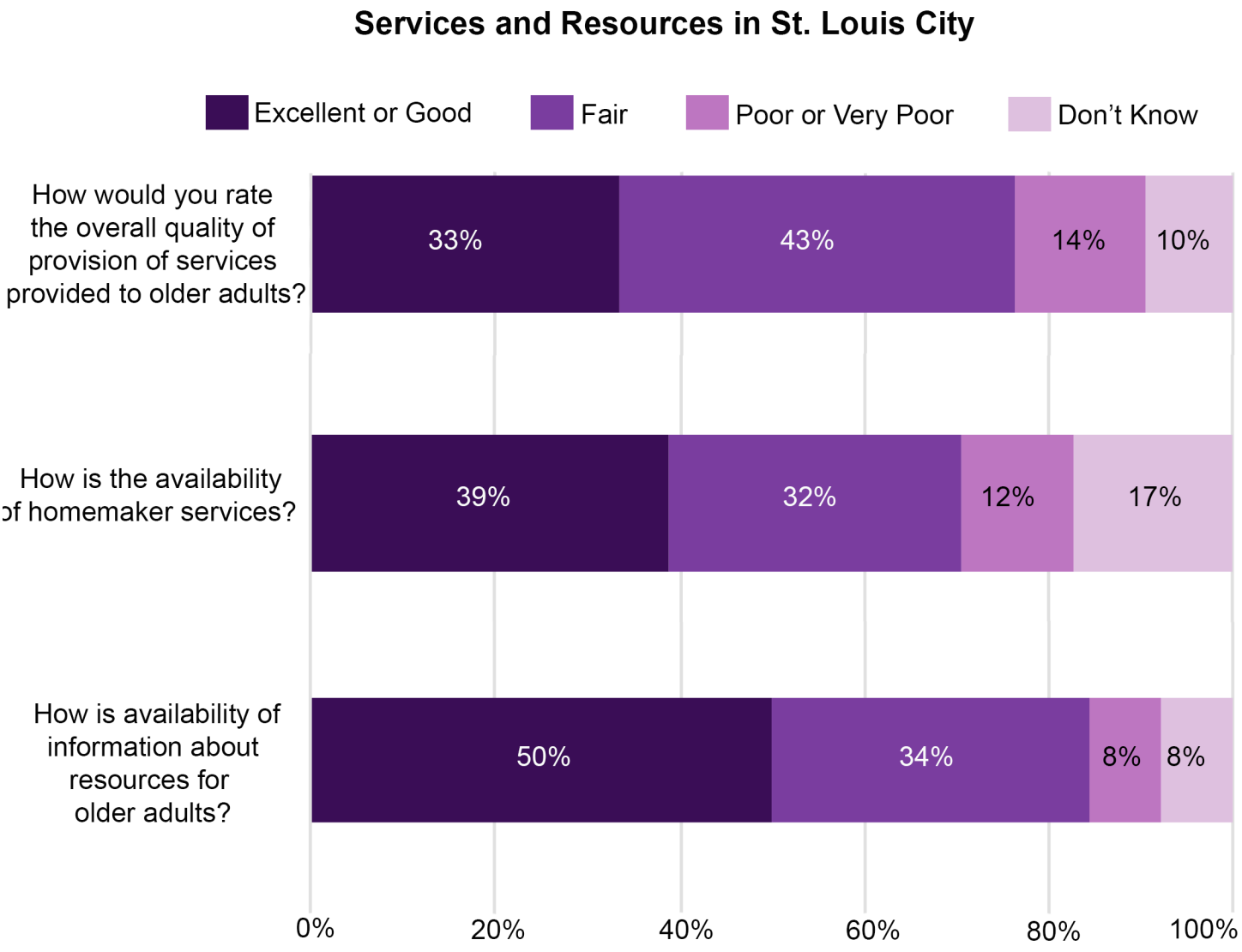
Health Indicators in St. Louis City



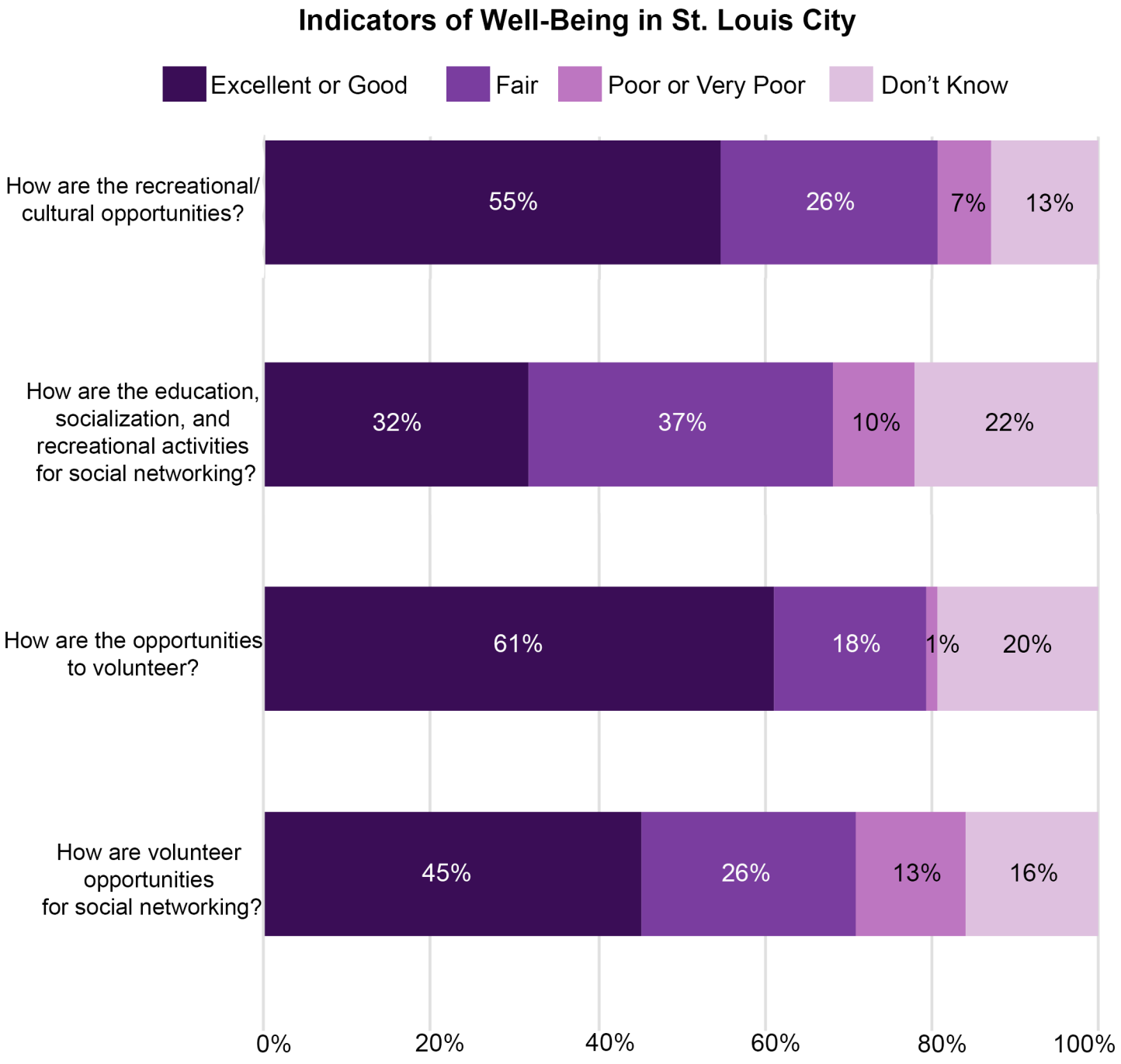
As for most households, the economic security of seniors living independently is determined by the affordability of housing and reliability of income. While most senior households' incomes are bolstered by public and private retirement savings, many seniors choose or need to remain in the workforce on a full- or part-time basis. Forty-four percent of St. Charles County providers ranked employment opportunities for seniors as 'Excellent, Good, or Fair' and 66% considered the availability of affordable housing to share those categories of response. However, a full 50% of respondents considered the availability of affordable assisted living to be 'Poor or Very Poor.'



In addition to health care and economic stability, older adults thrive and contribute to their communities with quality support around common daily needs. Providers were asked to rank the overall quality of service provision in St. Louis City for seniors, of which 76% ranked as 'Excellent, Good, or Fair.' Nearly 40% ranked availability of 'homemaker services' as of high quality, and half of respondents ranked information and referral services for seniors in that category.



While older adults certainly require supports as they age to remain healthy and independent, quality of life for seniors is importantly defined by the depth and breadth of social networks and community engagement. Over 80% of St. Louis City service providers ranked seniors access to quality recreational and cultural opportunities as 'Excellent, Good, or Fair,' and 69% ranked these opportunities as effective means of socializing in the 'Excellent, Good, or Fair' categories. Opportunities to volunteer in St. Louis City were ranked as 'Excellent or Good' by 61% of survey respondents, and 45% of respondents rated these volunteer experiences as 'Excellent or Good' opportunities for socialization.



As people age, motor and cognitive skills such as mowing the lawn, fixing a light bulb, or cleaning dishes become more difficult. Recognizing the difficulties in maintaining one's home and environment is significant to better understanding how to create an environment in which seniors can age-in-place. Seniors in all five senior centers stated difficulties regarding chores and home maintenance such as cleaning their house, windows, changing light bulbs, lawn care, ice/snow removal, access to laundry, and carrying groceries from the car to the kitchen. Not being able to maintain a clean, safe and accessible environment could impact senior's health and prevent them from being able to age-in-place. According to Kelly, Fausset, Rogers and Fisk[6], a majority of older adults spend the largest part of the day in the home thus engaging in ADLs (activities of daily living) and IADLs (instrumental activities of daily living) are important to aging-in-place. Other activities that do not fall under ADL and IADLs, like mowing one's lawn, are also incredibly important. As McCunn and Gifford[7] state, "for many elderly individuals, the home is a setting central to a positive lifestyle, autonomy, self-determination and well-being" (p. 19).

One senior at SAJE, recalled a story about accessing her laundry: "When I'm doing my wash down in the basement, I'm afraid of carrying the basket by myself because I'm afraid I'll fall down the steps, so I just throw the basket down the steps and then I hold on to the railing" (personal communication, March 26, 2015). Safe and comfortable access to laundry is an example home modifications that allow seniors to live in place. Services such as grocery delivery services and carrying groceries into the house provide seniors with daily food and other necessities such as soap, toothpaste, and towels.

Some suggestions seniors had were creating pro-rated home repair programs and services where people could be hired for affordable cleaning, gardening, laundry, and home repair. One senior from St. Charles expressed frustration regarding her garden when she said, "Some years ago I had a beautiful garden and now all I've got is weeds and I can't do it." She went on to say "I need somebody that knows gardening. I'd be willing to pay a nominal fee."(St. Charles, personal communication, March 27, 2015).

(1) Bernabei R., Landi F., Gambassi G., Sgadari A., Zuccala G., Mor V., & Carbonin P. (1998). Randomised trial of impact of model of integrated care and case management for older people living in the community. *British Medical Journal*, 316, 1348–135

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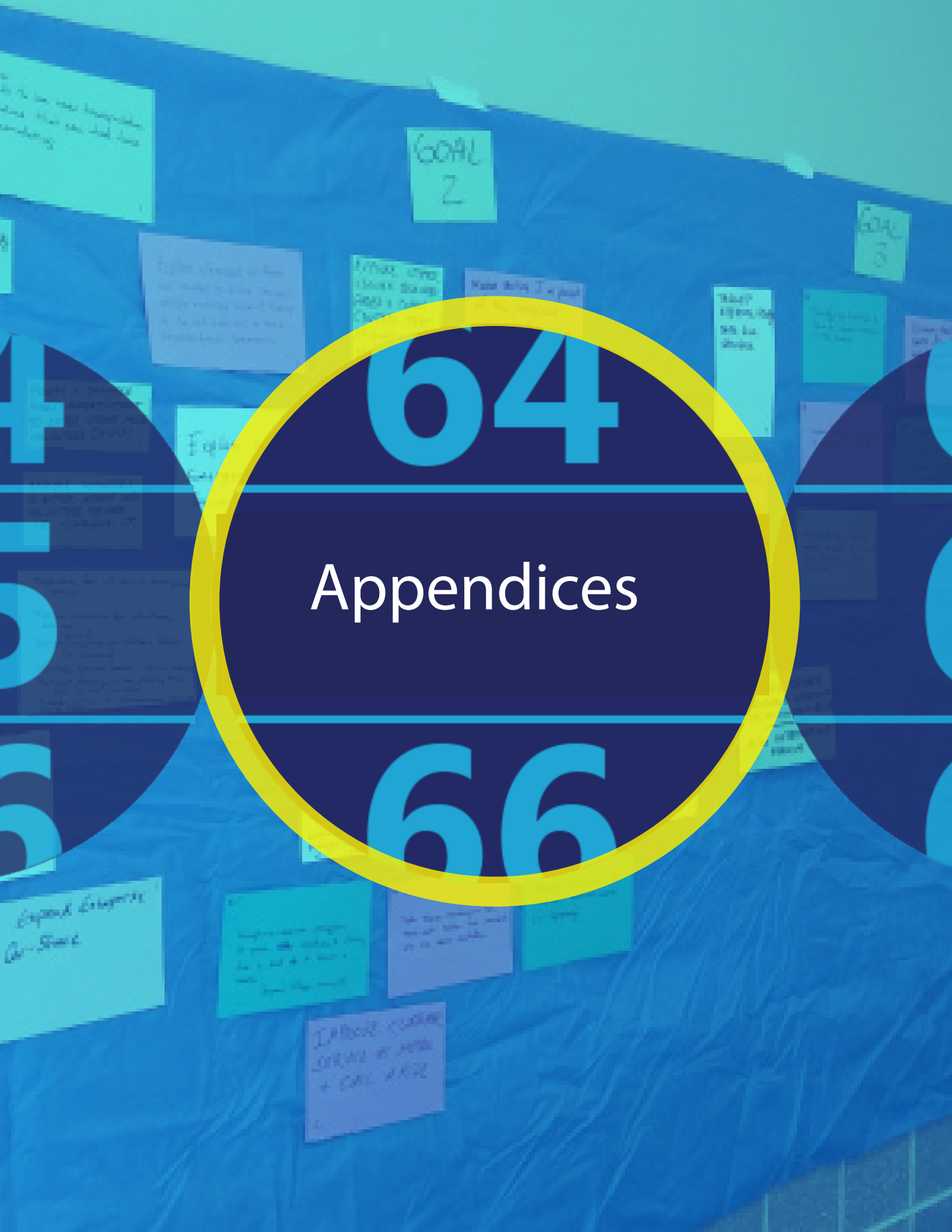
(4) Kaye, H.S., LaPlante, M.P., & Harrington, C. (2009). Do noninstitutional long term care services reduce Medicaid spending? *Health Affairs* 28(1), 262-272.

(5) Lai, D.W., & Chau, S.B. (2007). Predictors of health service barriers for older Chinese immigrants in Canada. *Health and Social Work*, 32(1), 57-65

(6) Kelly, A. J., Fausset, C. B., Rogers, W., & Fisk, A. D. (2014). Responding to Home Maintenance Challenge Scenarios The Role of Selection, Optimization, and Compensation in Aging-in-Place. *Journal of Applied Gerontology*, 33(8), 1018-1042.

(7) McCunn, L., & Gifford, R. (2014). Accessibility and Aging in Place in Subsidized Housing. *Seniors Housing & Care Journal,* 18.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Appendices
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Appendix 1: General

Seniors Count Homebound Survey Questionnaire Statistics (N=27)

Question		Count	Percentage
Age			
	75+	16	59%
	60-74	11	41%
Martial Status			
	Married	7	26%
	Divorced	4	15%
	Widowed	12	44%
	Single, never married	4	15%
County			
	St. Charles County	4	15%
	St. Louis County	9	33%
	St. Louis City	14	52%
Gender			
	Male	9	33%
	Female	18	67%
	Transgender	0	0%
Highest Level of Education			
	< High School	2	7%
	High School	9	33%
	Some College	8	30%
	Bachelor's	6	22%
	Master's	1	4%
	Doctorate/Professional	1	4%

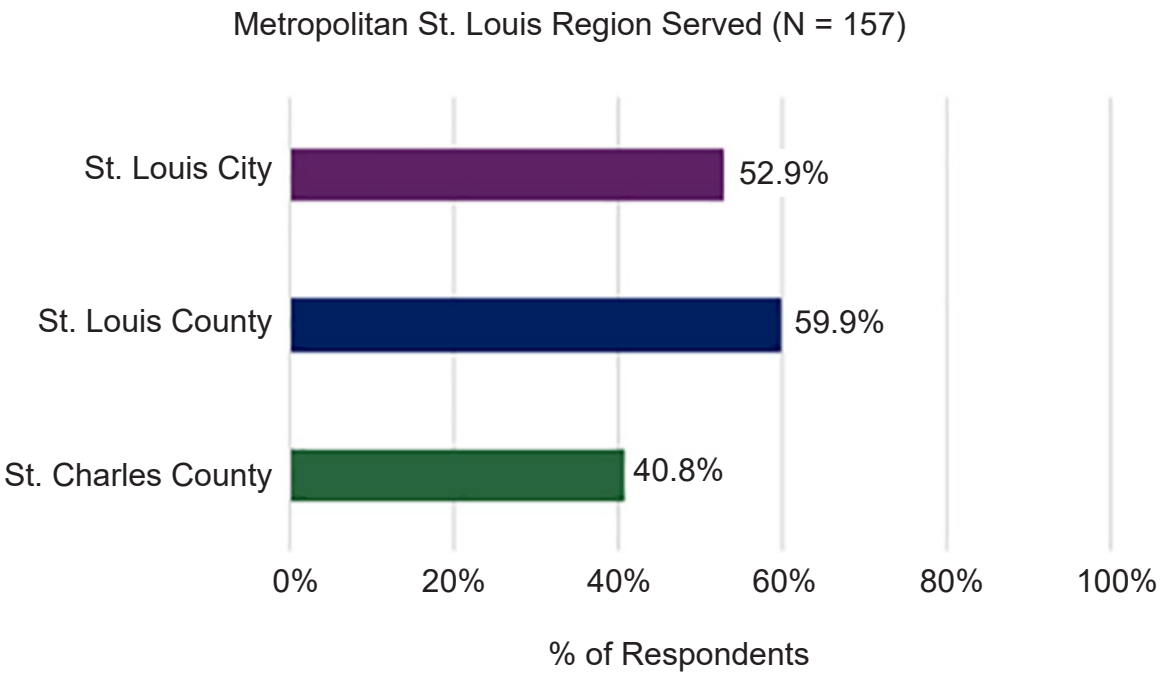
Seniors Count Homebound Survey Questionnaire Statistics

Question	Count	Percentage
Does your annual income provide for all your basic needs?		
Yes	17	63%
No	7	26%
Sometimes	3	11%
Current living arrangement		
Live alone	16	60%
Live with spouse/SO	7	26%
Live with adult family member	3	11%
Live with adult family member in a household with minor children	0	0%
Live with non-related adults	1	4%
Current living housing		
Single family home	14	52%
Duplex	2	7%
Apartment	11	41%
If you live independently, do you have a mortgage?		
Yes	3	11%
No	20	74%
No Answer	4	15%
Is your residence located in designated Senior Housing?		
Yes	9	33%
No	15	56%
No Answer	3	11%
How would you rate your health?		
Much worse than average	0	0%
Lower than average	9	33%
About average	16	60%
Higher than average	2	7%
Much higher than average	0	0%

Seniors Count Homebound Survey Questionnaire Statistics (N=27)

Question	Count	Percentage
How would you rate how active you are?		
Much worse than average	2	7%
Lower than average	10	37%
About average	10	37%
Higher than average	4	15%
Much higher than average	1	4%
Do you feel like health problems stand in the way of doing things you want to do?		
Never	4	15%
Sometimes	12	44%
Often	11	41%
Do you currently receive extra assistance with personal care activities?		
Yes	13	48%
No	13	48%
No Answer	1	4%
Do you feel access to transportation stands in your way of doing things you want to do?		
Not at all	5	19%
Sometimes	10	37%
A great deal	11	41%
No Answer	1	4%

Provider Survey Demographics, All Metropolitan St. Louis Regions



Description of Services Provided by Survey Respondents	St. Louis City (N = 204)	St. Louis County (N = 203)	St. Charles County (N = 133)
Legal, Financial, and Advocacy	10.2%	9.6%	5.7%
Information/Case Management	25.5%	22.3%	15.9%
Health and Prevention	29.9%	29.3%	19.7%
Transportation and Driving	12.1%	11.5%	7.6%
Home and Community Support	28.0%	26.1%	17.2%
Other	24.2%	30.6%	18.5%

Types of Service Providers Represented by Survey Respondents	St. Louis City (N = 81)	St. Louis County (N = 92)	St. Charles County (N = 60)
For Profit	18.5%	19.6%	21.7%
Not-For-Profit/Governmental	76.5%	75.0%	71.7%
Other	4.9%	5.4%	3.3%
Don't Know	0.0%	0.0%	3.3%

Primary Roles of Survey Respondents		
	n	%
Assistant	1	0.8%
Administrator	8	6.6%
Coordinator	16	13.1%
Counselor	5	4.1%
Manager/Supervisor	21	17.2%
Director	19	15.6%
Executive Director	25	20.5%
Other	27	22.1%

Description of Service Duties of Survey Respondents		
	n	%
I provide direct services to clients (health care provider, case manager, etc.)	31	25.6%
I support direct service providers in delivering services to clients (administrative staff, kitchen staff, maintenance staff)	4	3.3%
I supervise direct service providers (executive director, manager, etc.)	39	32.3%
My work supports the overall organization (fundraising, event planning, strategic communications)	24	19.8%
Other	23	19.0%

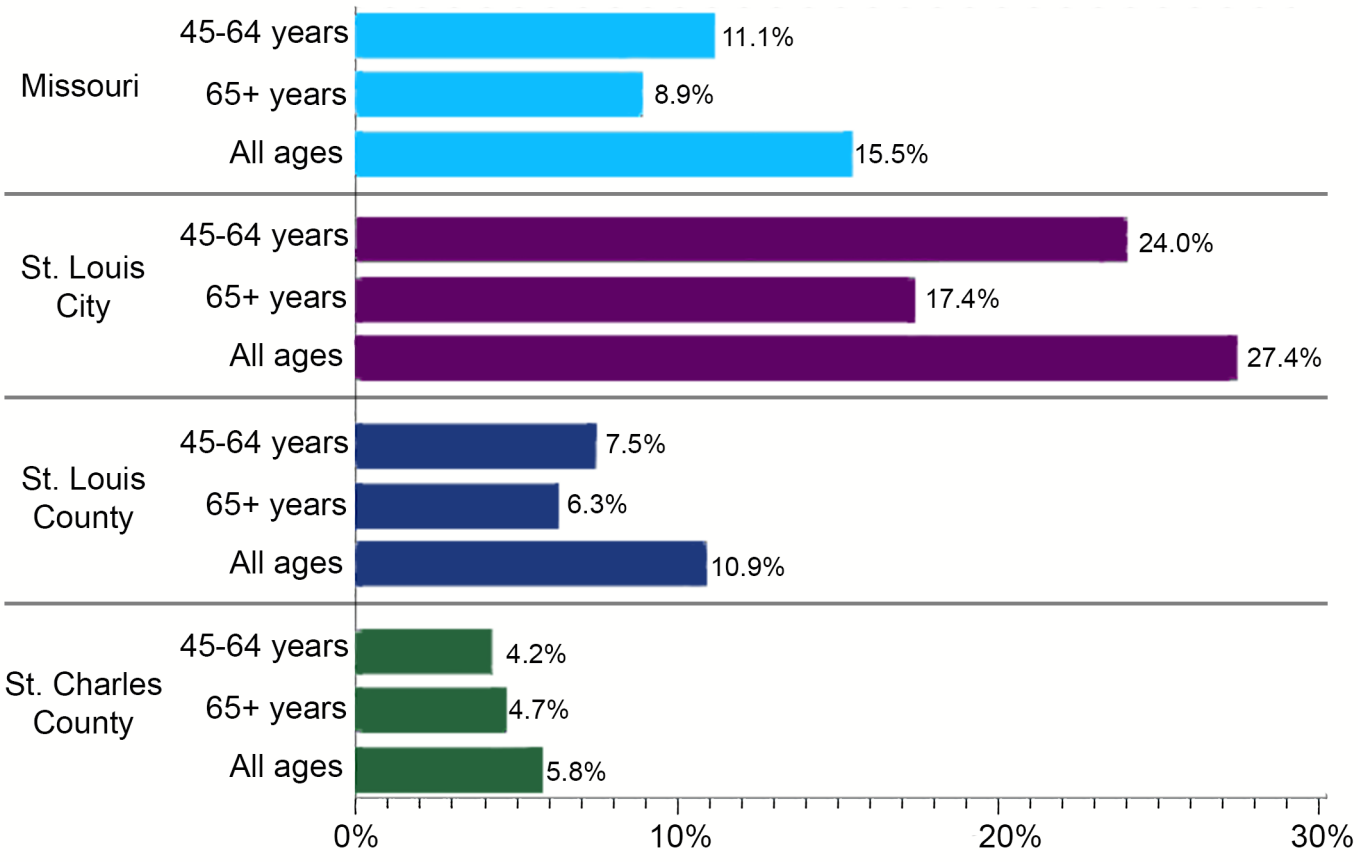
Number of Years Survey Respondent Has Been with the Organization		
	n	%
Less than 1 year	17	13.8%
1-5 years	39	31.7%
5-10 years	26	21.1%
More than 10 years	41	33.3%

Age of Survey Respondents						
	St. Louis City (N = 62)		St. Louis County (N = 76)		St. Charles County (N = 51)	
	n	%	n	%	n	%
Under 18	0	0.0%	0	0.0%	0	0.0%
18-24	0	0.0%	0	0.0%	0	0.0%
25-44	17	27.4%	17	22.3%	15	29.4%
45-64	34	54.8%	44	57.9%	27	52.9%
Over 65	11	17.7%	15	19.7%	9	17.6%

Highest Level of Education Attainment of Survey Respondents						
	St. Louis City (N = 62)		St. Louis County (N = 76)		St. Charles County (N = 51)	
	n	%	n	%	n	%
High School Graduate	1	1.6%	2	2.6%	1	1.9%
Some College, No Degree	0	0.0%	2	2.6%	1	1.9%
Associate's Degree, Occupational	1	1.6%	0	0.0%	0	0.0%
Associate's Degree, Academic	2	3.2%	4	5.3%	0	0.0%
Bachelor's Degree	15	24.2%	16	21.1%	14	27.5%
Master's Degree	36	58.1%	44	57.9%	31	60.8%
Professional Degree	4	65.%	4	5.3%	3	5.9%
Doctoral Degree	3	4.8%	4	5.3%	1	1.9%

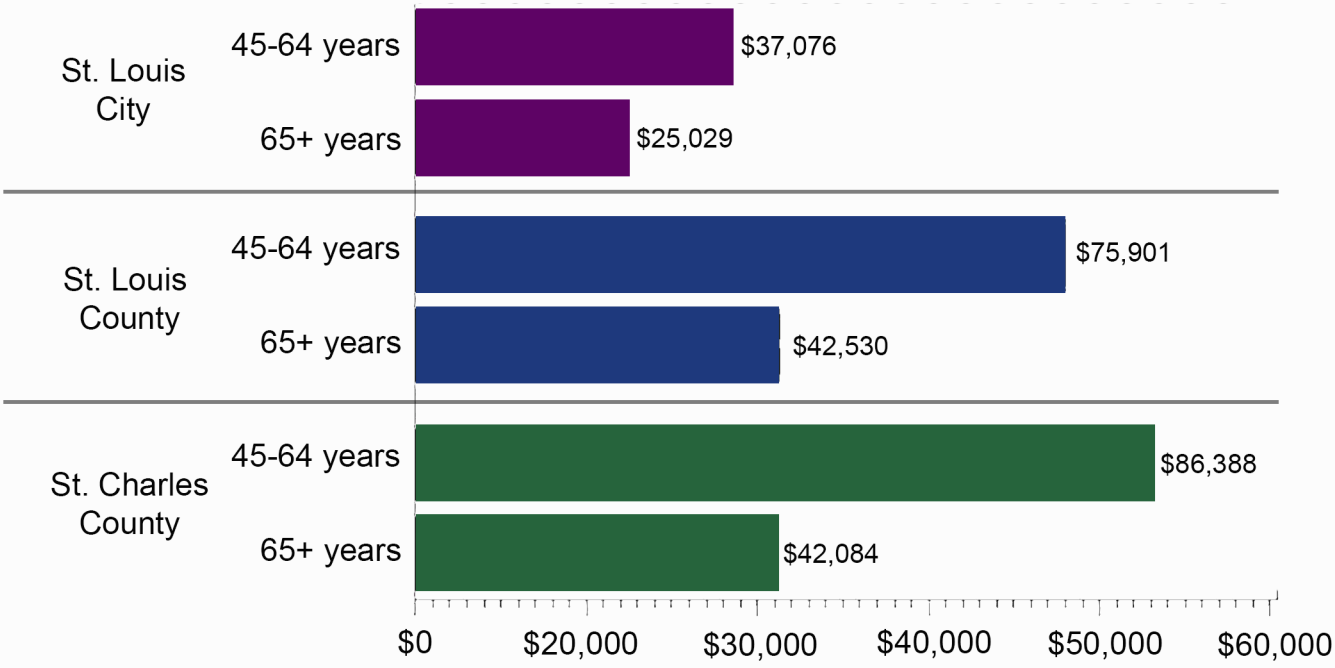
Appendix 2:
Economic Security

Poverty Rates for Older Adults (2009-2013)



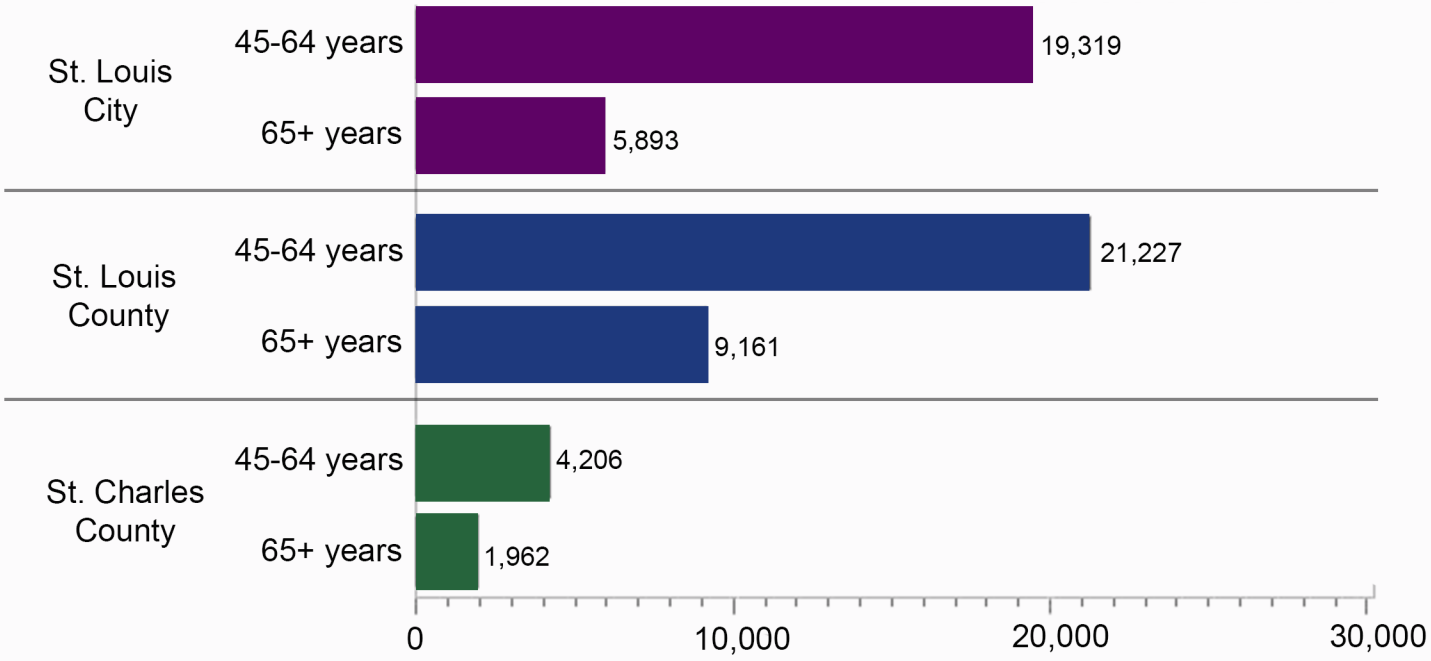
Source: 2013 Vintage ACS Estimates

Median Income for Older Adult Households (2009-2013)

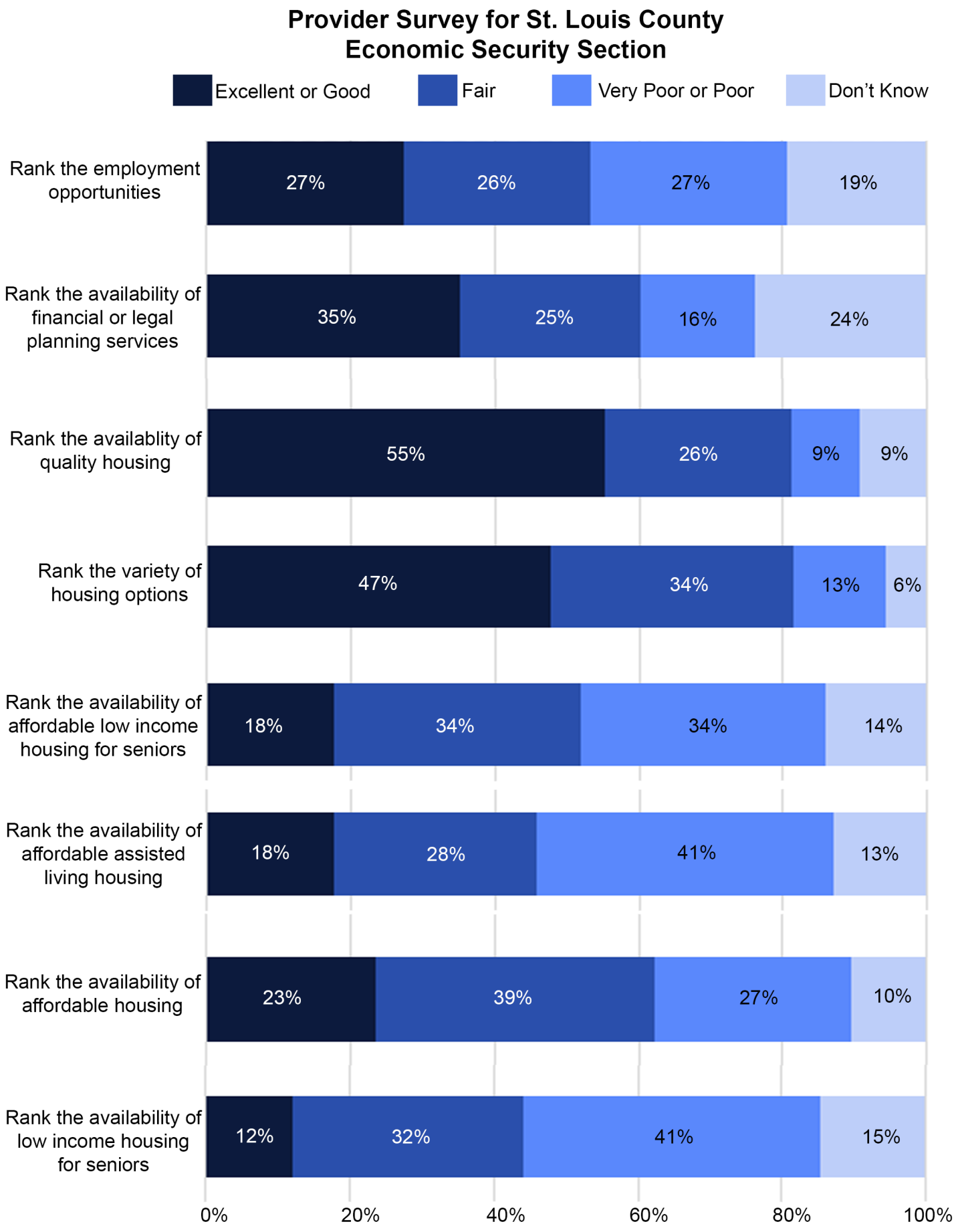


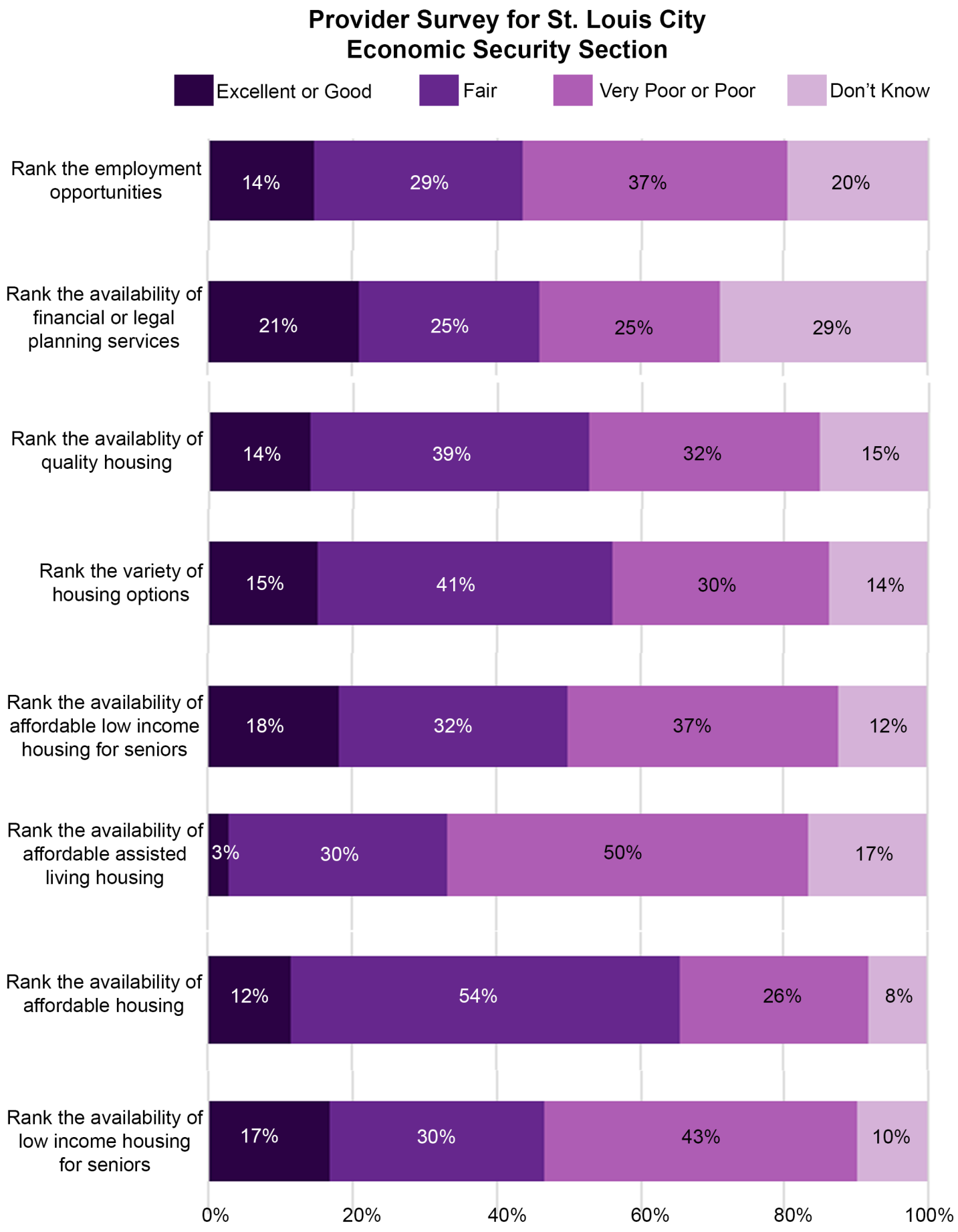
Source: 2013 Vintage ACS Estimates

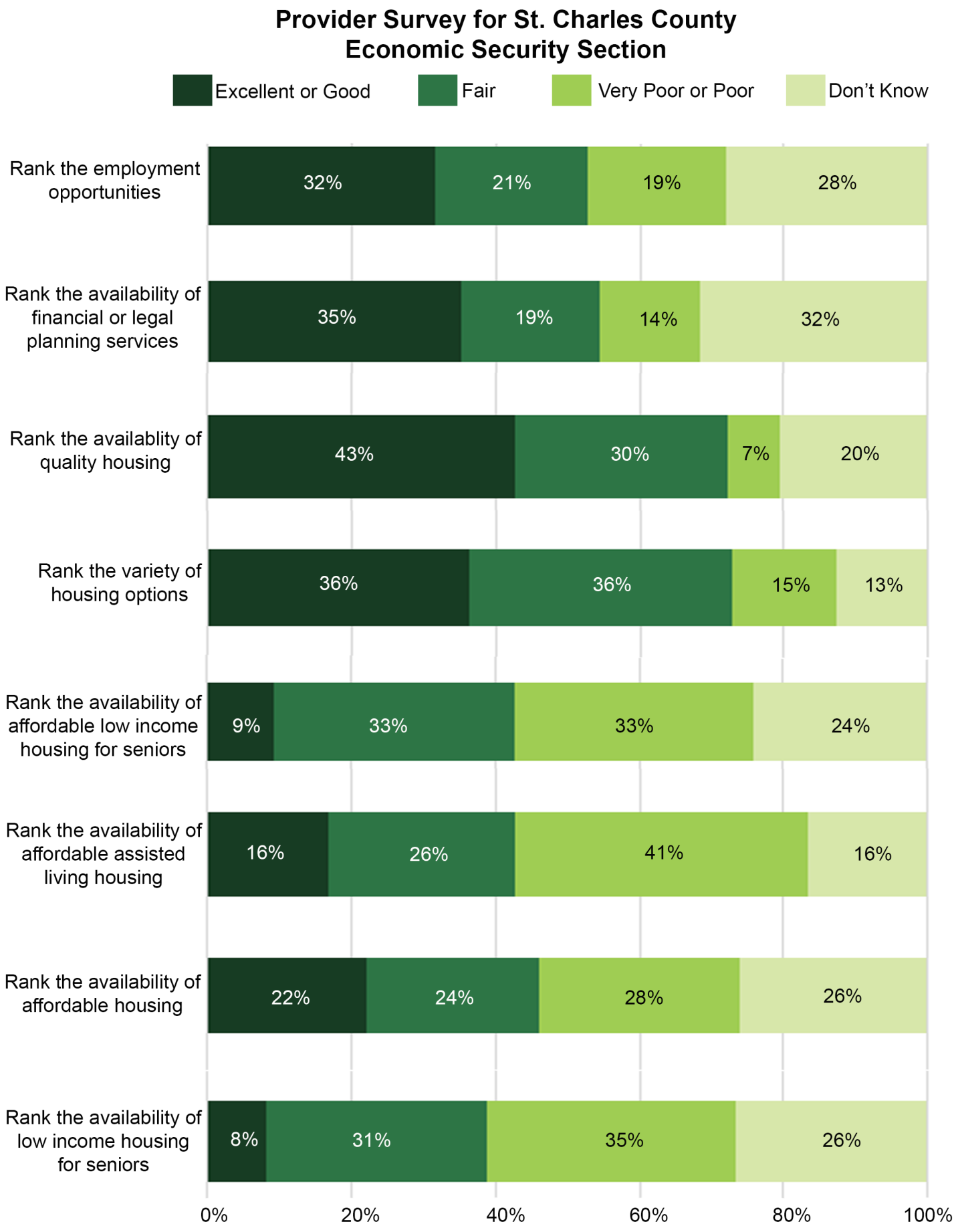
Older Adults Below Poverty Line (2009-2013)



Source: 2013 Vintage ACS Estimates


Provider Survey for St. Louis County
Economic Security Section
Excellent or Good
Fair
Very Poor or Poor
Don't Know
Rank the employment opportunities
27%
26%
27%
19%
Rank the availability of financial or legal planning services
35%
25%
16%
24%
Rank the availablity of quality housing
55%
26%
9%
9%
Rank the variety of housing options
47%
34%
13%
6%
Rank the availability of affordable low income housing for seniors
18%
34%
34%
14%
Rank the availability of affordable assisted living housing
18%
28%
41%
13%
Rank the availability of affordable housing
23%
39%
27%
10%
Rank the availability of low income housing for seniors
12%
32%
41%
15%
0%
20%
40%
60%
80%
100%


Provider Survey for St. Louis City
Economic Security Section
Excellent or Good
Fair
Very Poor or Poor
Don't Know
Rank the employment opportunities
14%
29%
37%
20%
Rank the availability of financial or legal planning services
21%
25%
25%
29%
Rank the availablity of quality housing
14%
39%
32%
15%
Rank the variety of housing options
15%
41%
30%
14%
Rank the availability of affordable low income housing for seniors
18%
32%
37%
12%
Rank the availability of affordable assisted living housing
3%
30%
50%
17%
Rank the availability of affordable housing
12%
54%
26%
8%
Rank the availability of low income housing for seniors
17%
30%
43%
10%
0%
20%
40%
60%
80%
100%


Provider Survey for St. Charles County
Economic Security Section
Excellent or Good
Fair
Very Poor or Poor
Don't Know
Rank the employment opportunities
32%
21%
19%
28%
Rank the availability of financial or legal planning services
35%
19%
14%
32%
Rank the availablity of quality housing
43%
30%
7%
20%
Rank the variety of housing options
36%
36%
15%
13%
Rank the availability of affordable low income housing for seniors
9%
33%
33%
24%
Rank the availability of affordable assisted living housing
16%
26%
41%
16%
Rank the availability of affordable housing
22%
24%
28%
26%
Rank the availability of low income housing for seniors
8%
31%
35%
26%
0%
20%
40%
60%
80%
100%

Economic Insecurity Rates for Selected Elder Households, Various Filtered Categories St. Charles County

	Total	Economically Insecure		Poor		Poverty Ratio
	N	#HHs	%HHs	#HHs	%HHs	Mean
All Households	28,038	7,476	27%	1,773	6%	315.439
Filtered						
No	15, 869	5,355	34%	925	6%	291.972
Yes	12,169	2,121	17%	848	7%	346.041

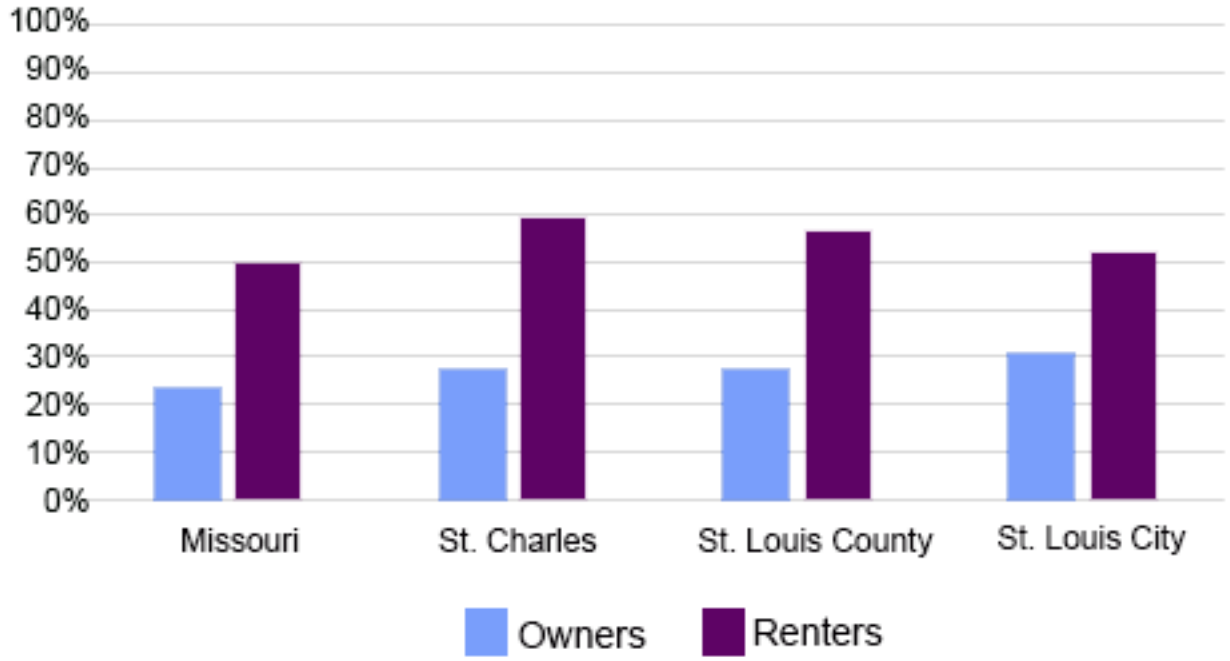
Economic Insecurity Rates for Selected Elder Households, Various Filtered Categories St. Louis County

	Total	Economically Insecure		Poor		Poverty Ratio
	N	#HHs	%HHs	#HHs	%HHs	Mean
All Households	98,102	27,747	28%	8,107	8%	315.247
Filtered						
No	54,046	20,094	37%	5,336	10%	286.034
Yes	44,056	7,653	17%	2,771	6%	351.083

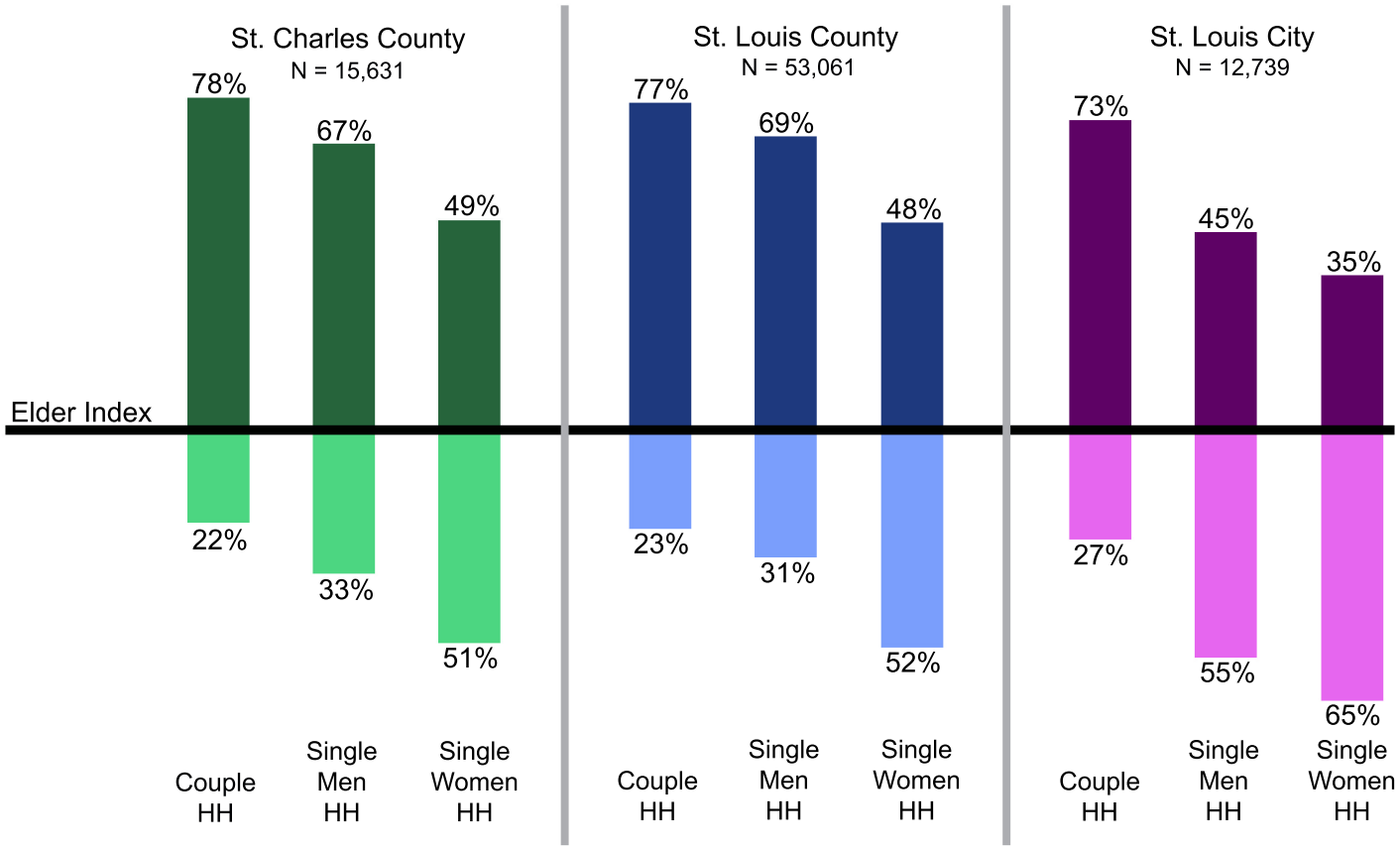
Economic Insecurity Rates for Selected Elder Households, Various Filtered Categories St. Louis City

	Total	Economically Insecure		Poor		Poverty Ratio
	N	#HHs	%HHs	#HHs	%HHs	Mean
All Households	24,803	10,833	44%	4,907	20%	233.318
Filtered						
No	13,525	7,709	57%	3,401	25%	199.152
Yes	11.278	3,124	28%	1,506	13%	274.291

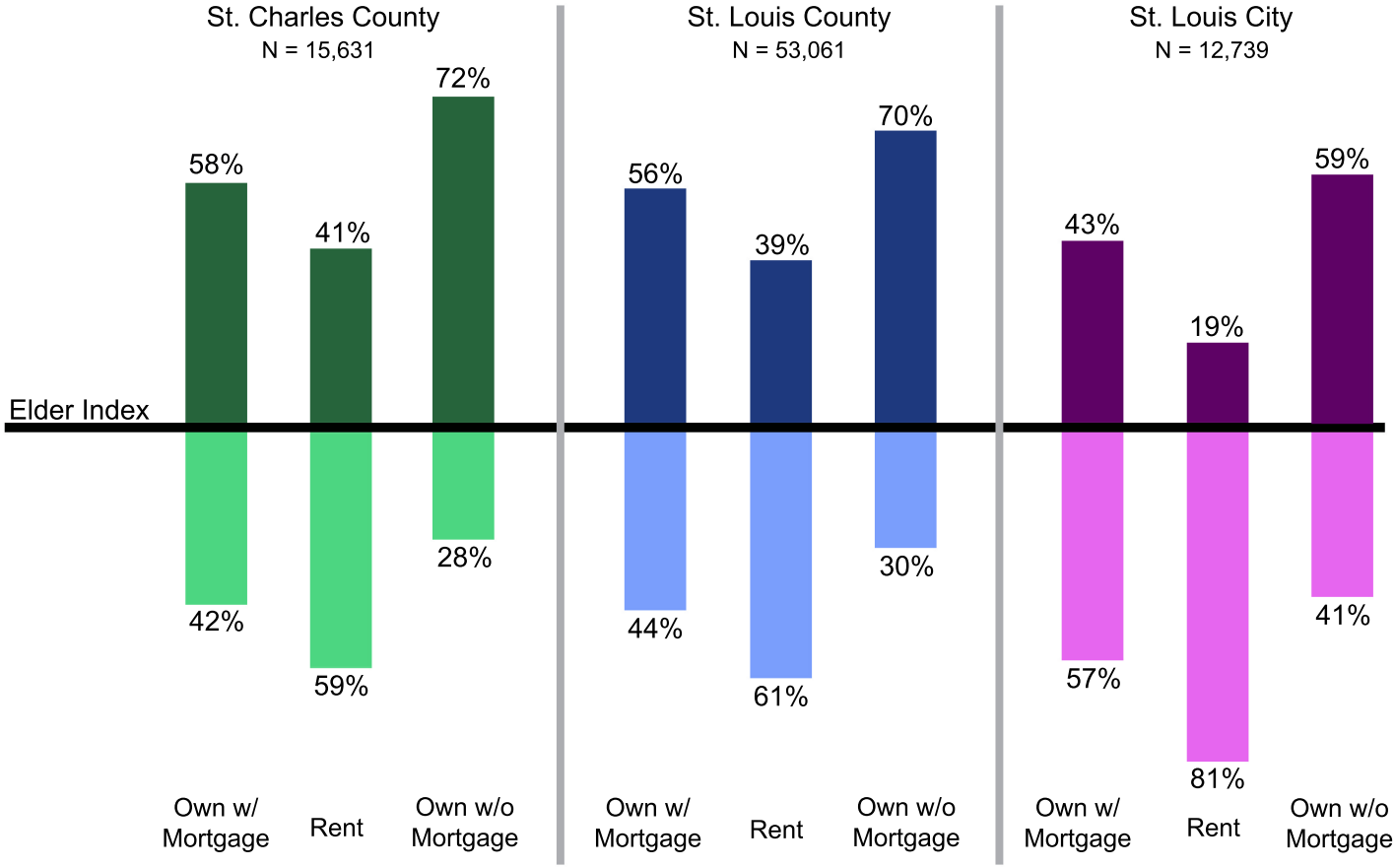
Cost Burdened Households of Seniors (age 65 and up)



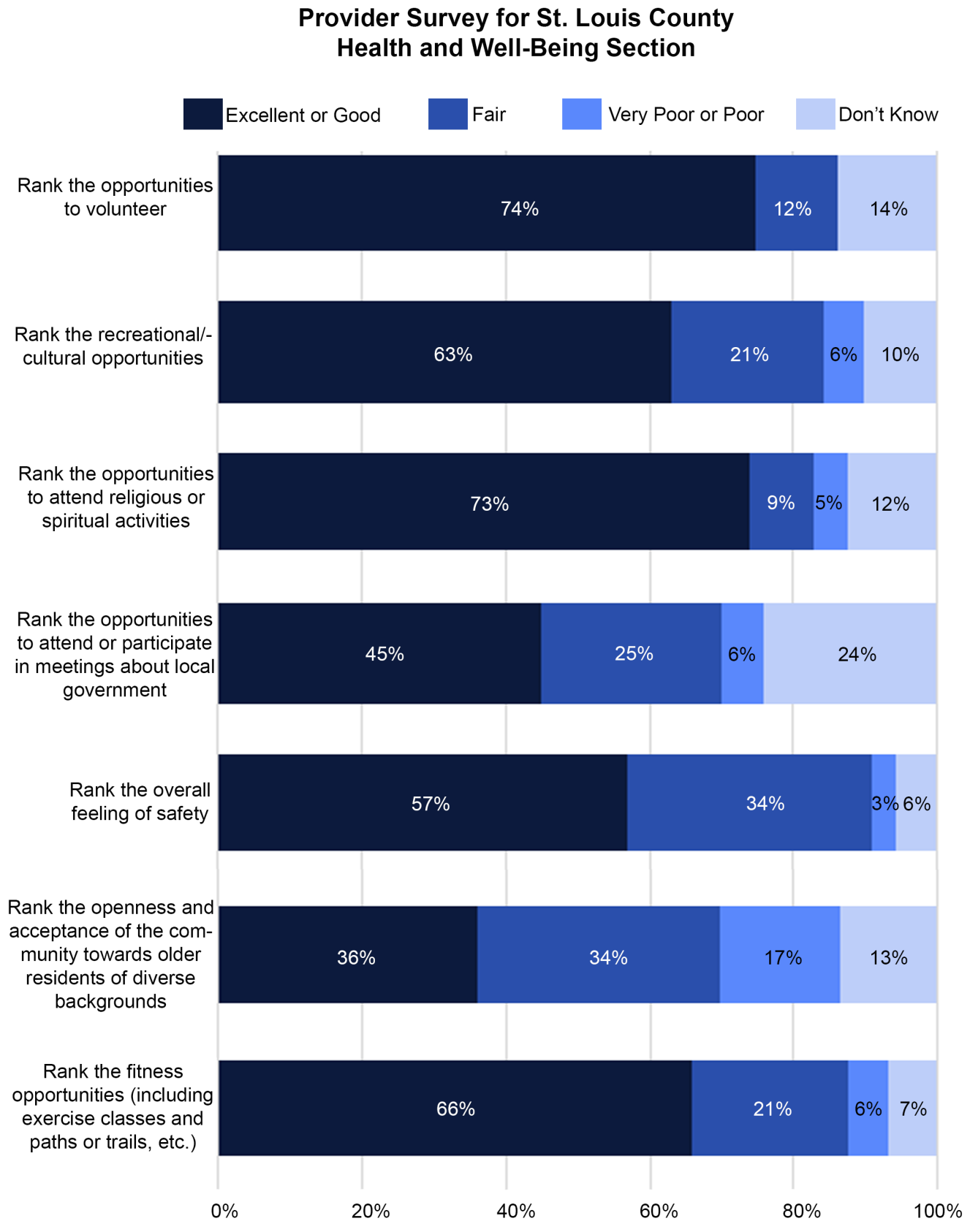
Economic Security and Insecurity Rates for Elder Households, by Household Composition, in St. Charles, St. Louis County, and St. Louis City, Missouri, 2013



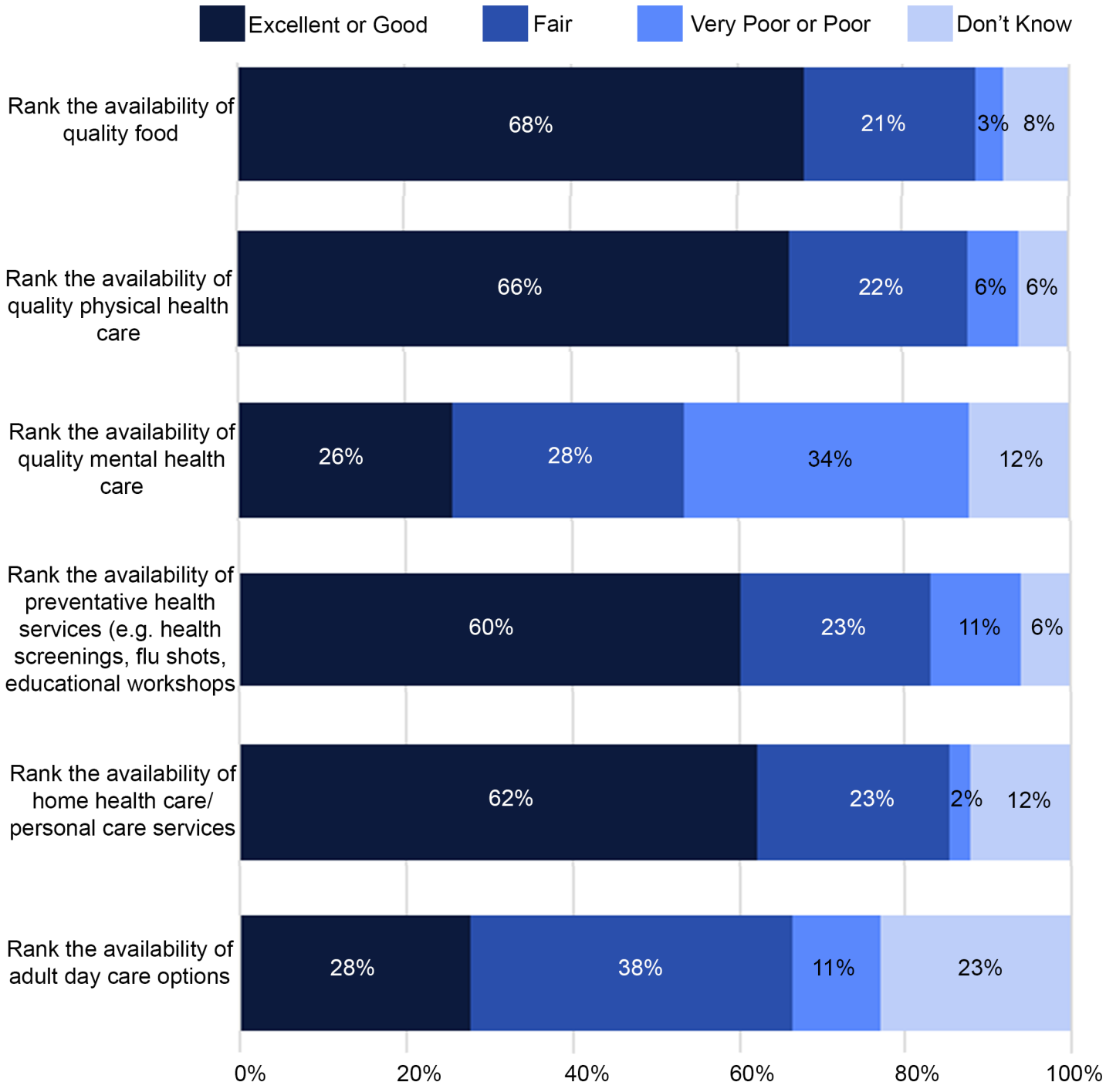
Economic Security and Insecurity Rates for Elder Households, by Housing status, in St. Charles, St. Louis County, and St. Louis City, Missouri, 2013



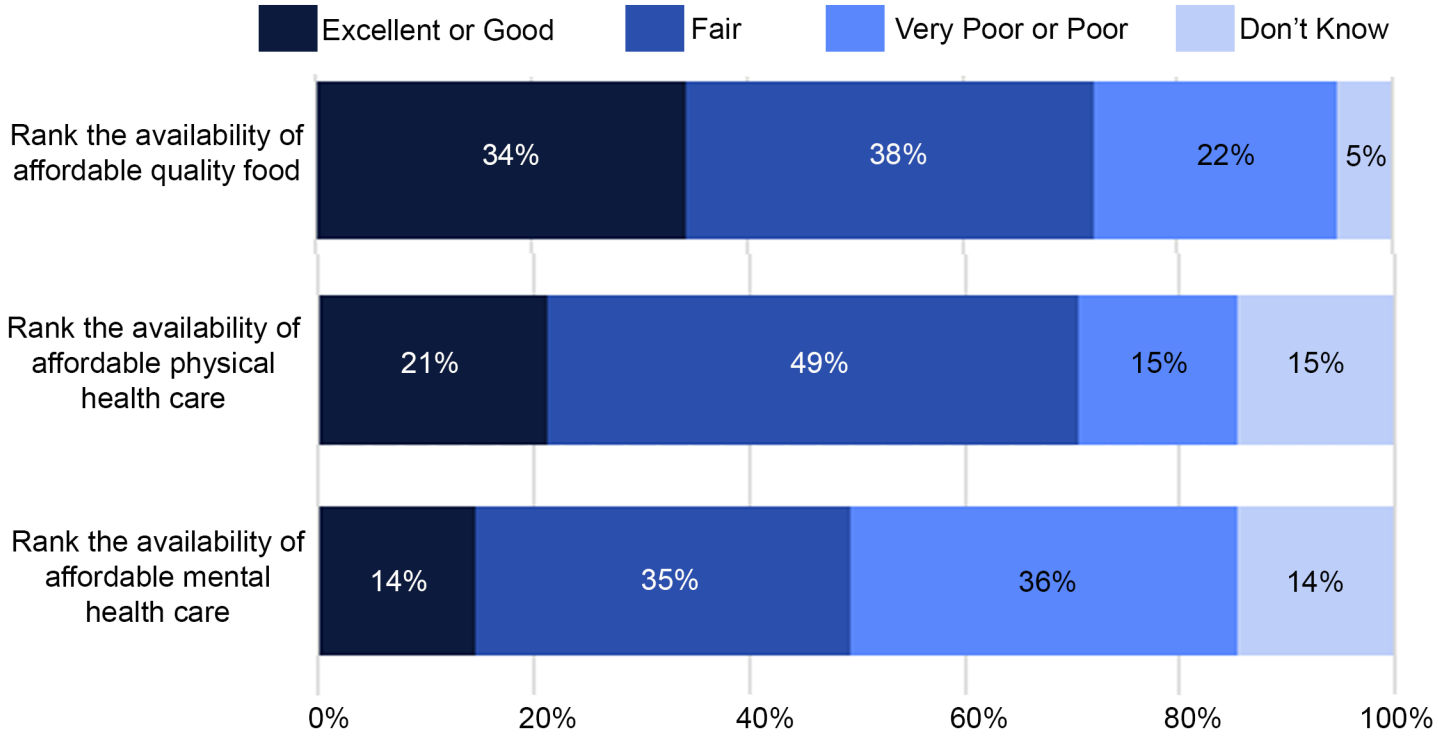
Appendix 3:
Health and Well-being



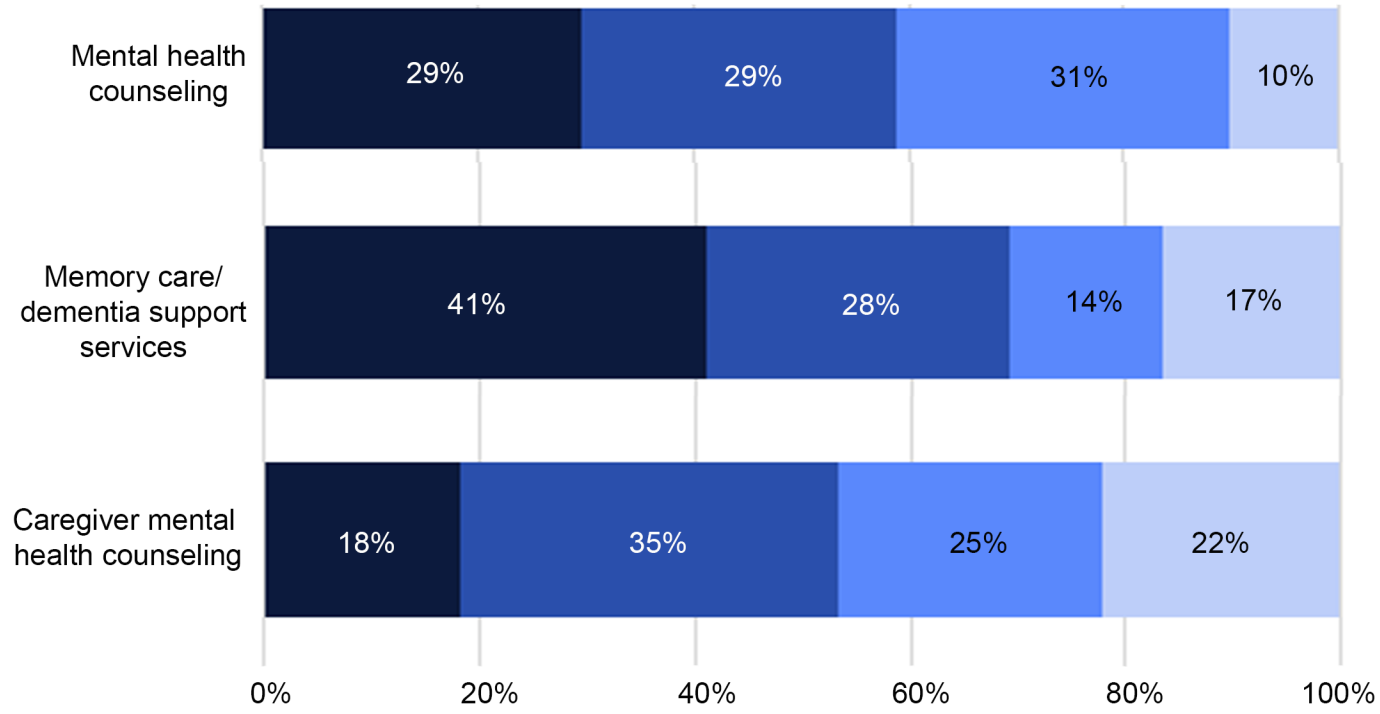
Provider Survey for St. Louis County Health and Well-Being Section



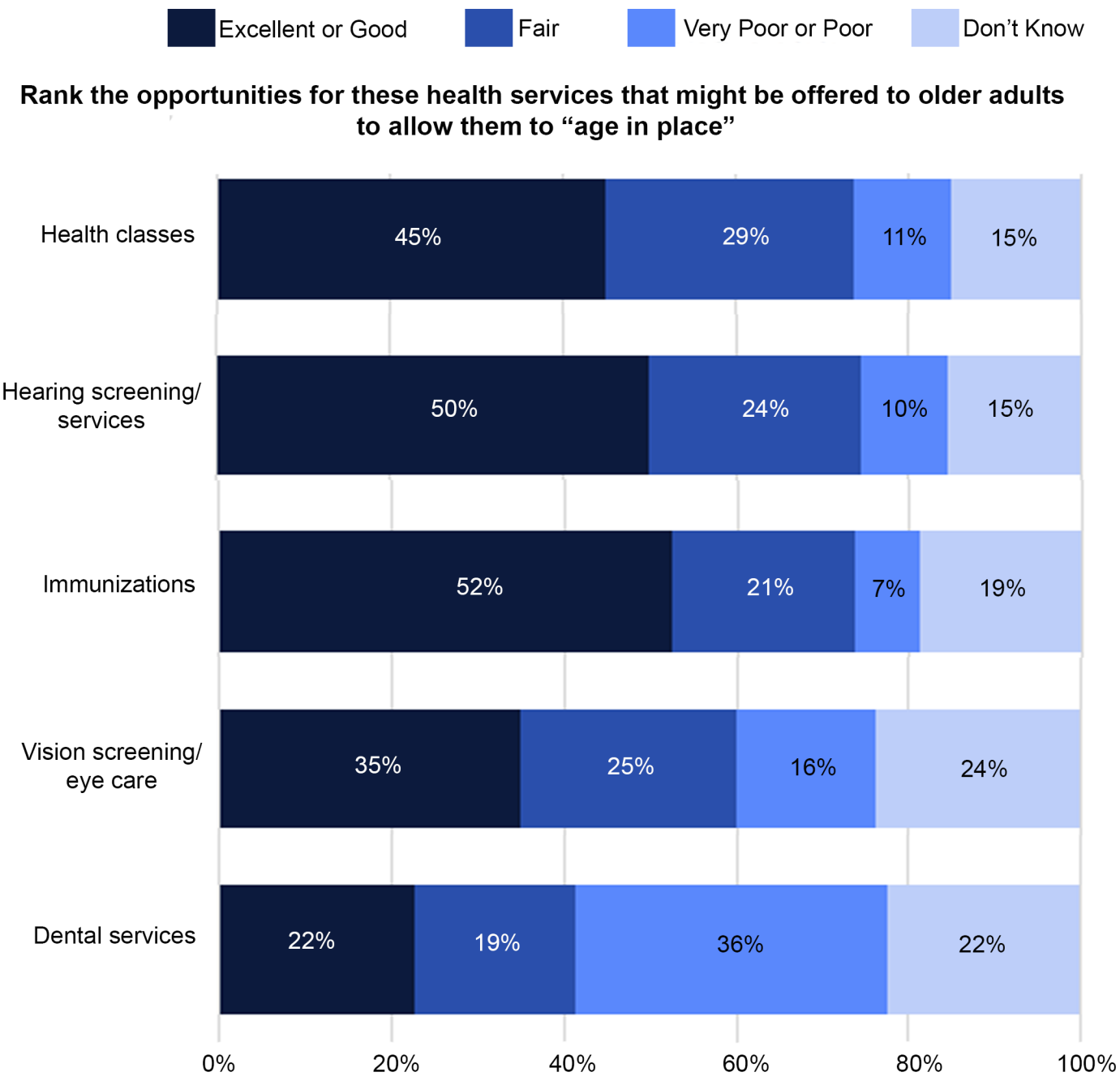
Provider Survey for St. Louis County Health and Well-Being Sections



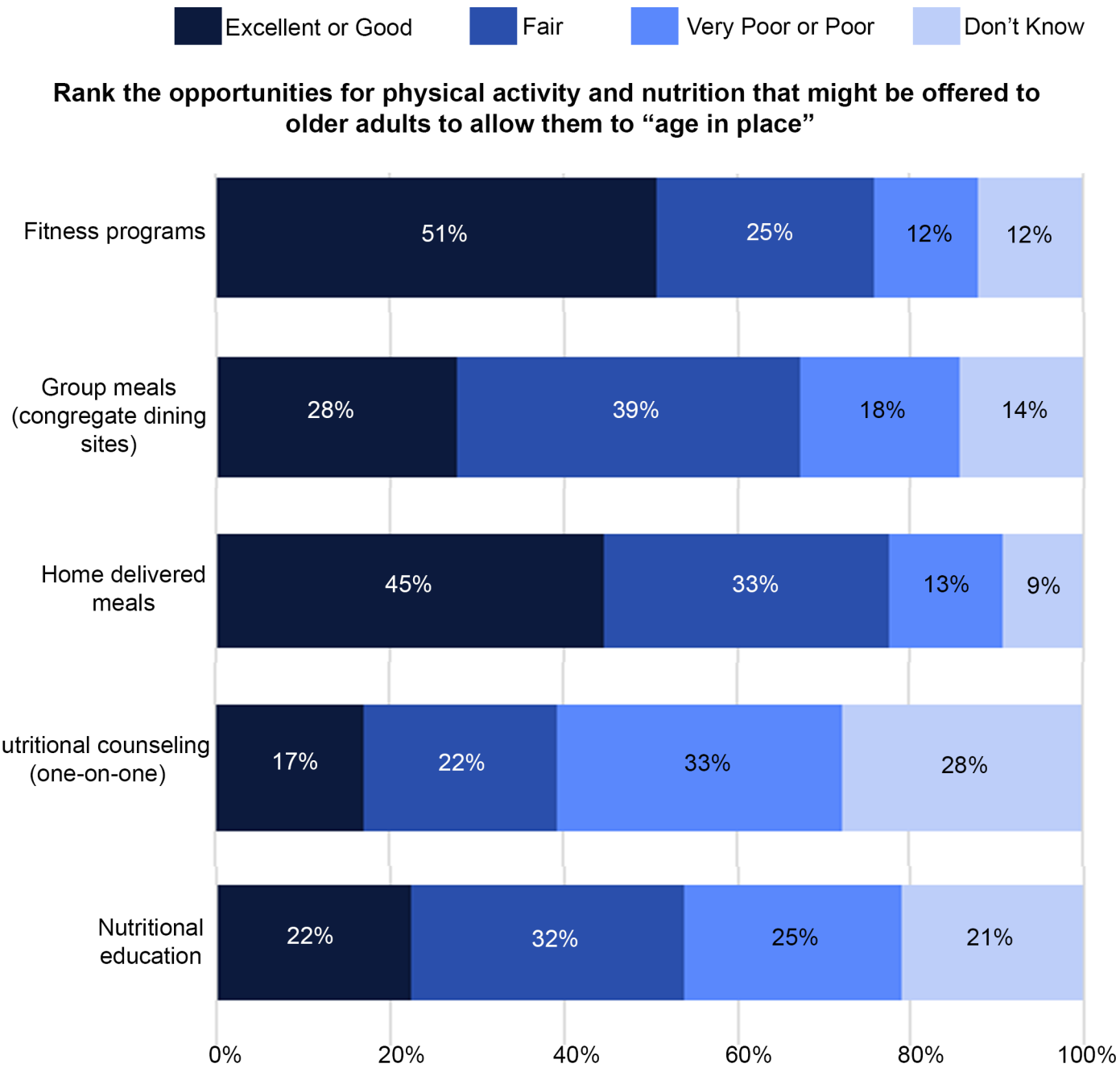
Rank the mental health services that might be offered to older adults to allow them to "age in place"



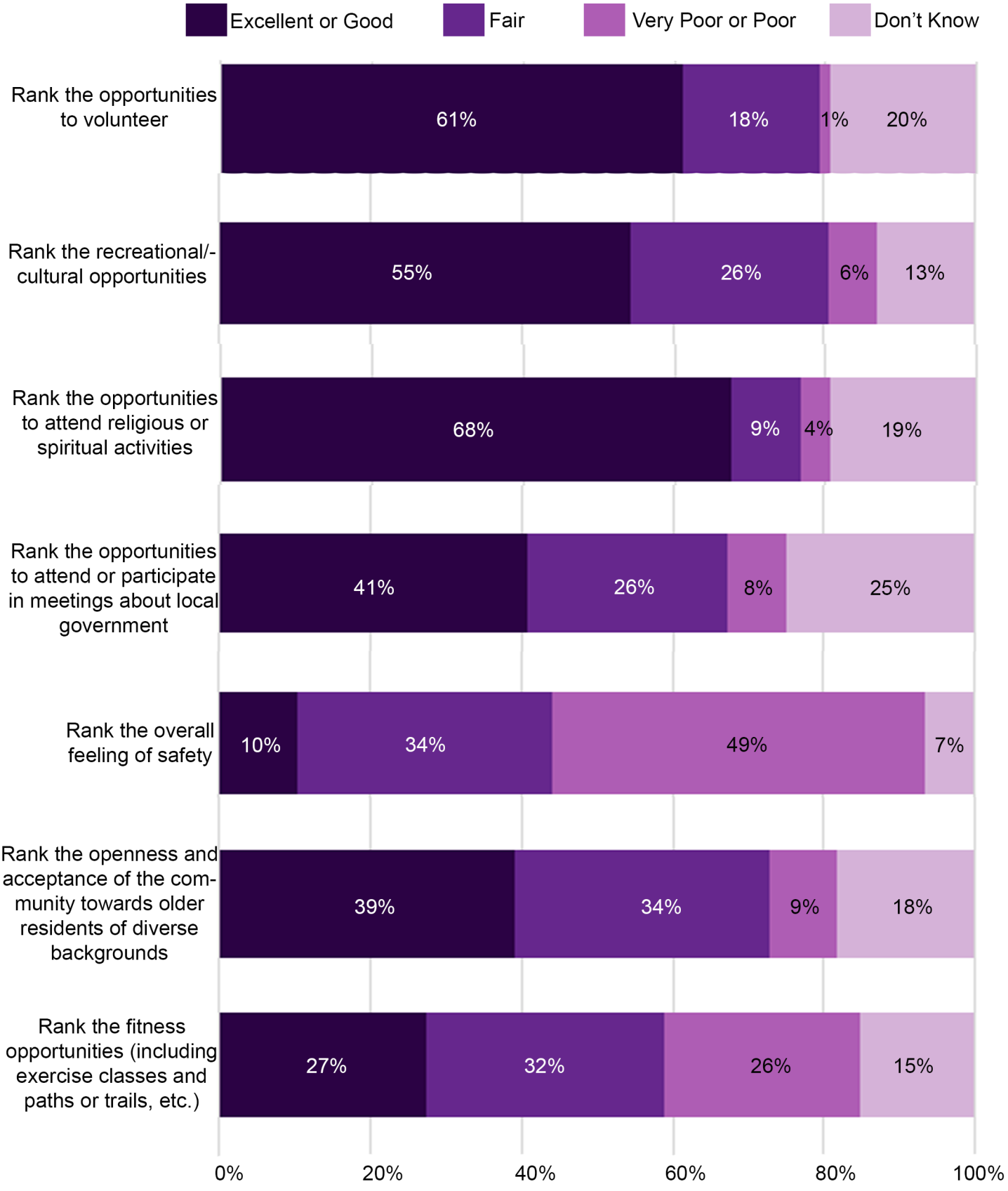
Provider Survey for St. Louis County
Health and Well-Being Section



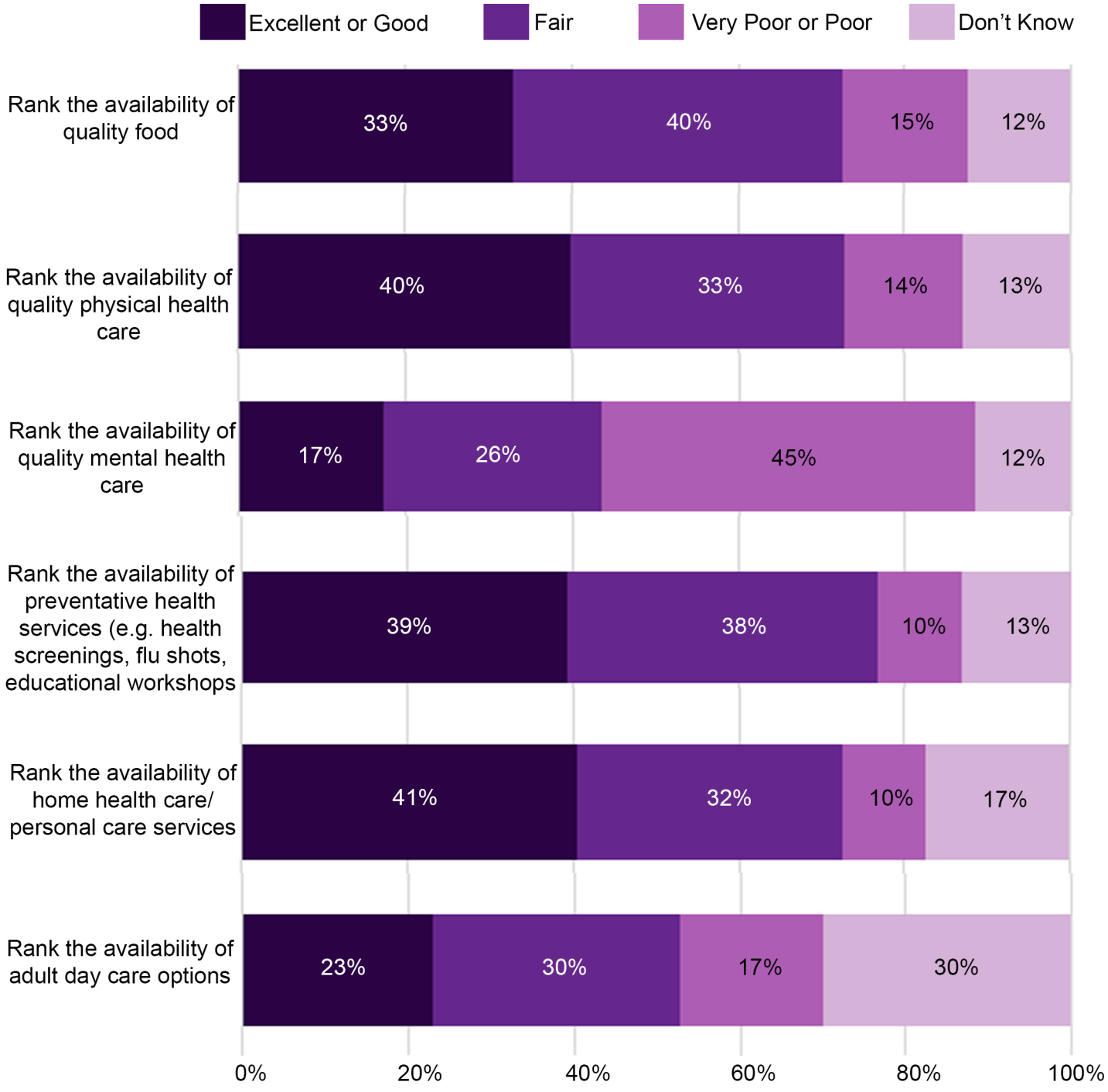
Provider Survey for St. Louis County Health and Well-Being Section



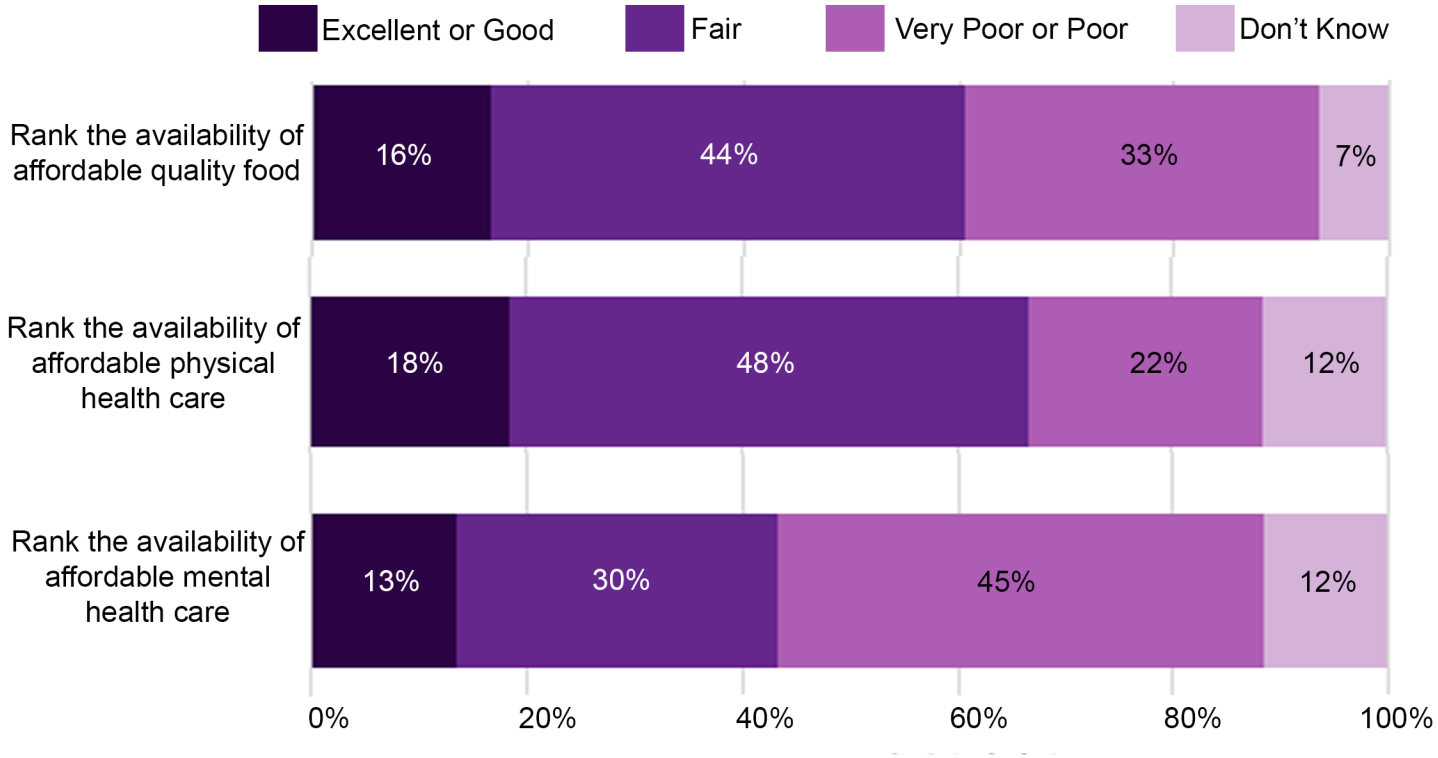
Provider Survey for St. Louis City
Health and Well-Being Section



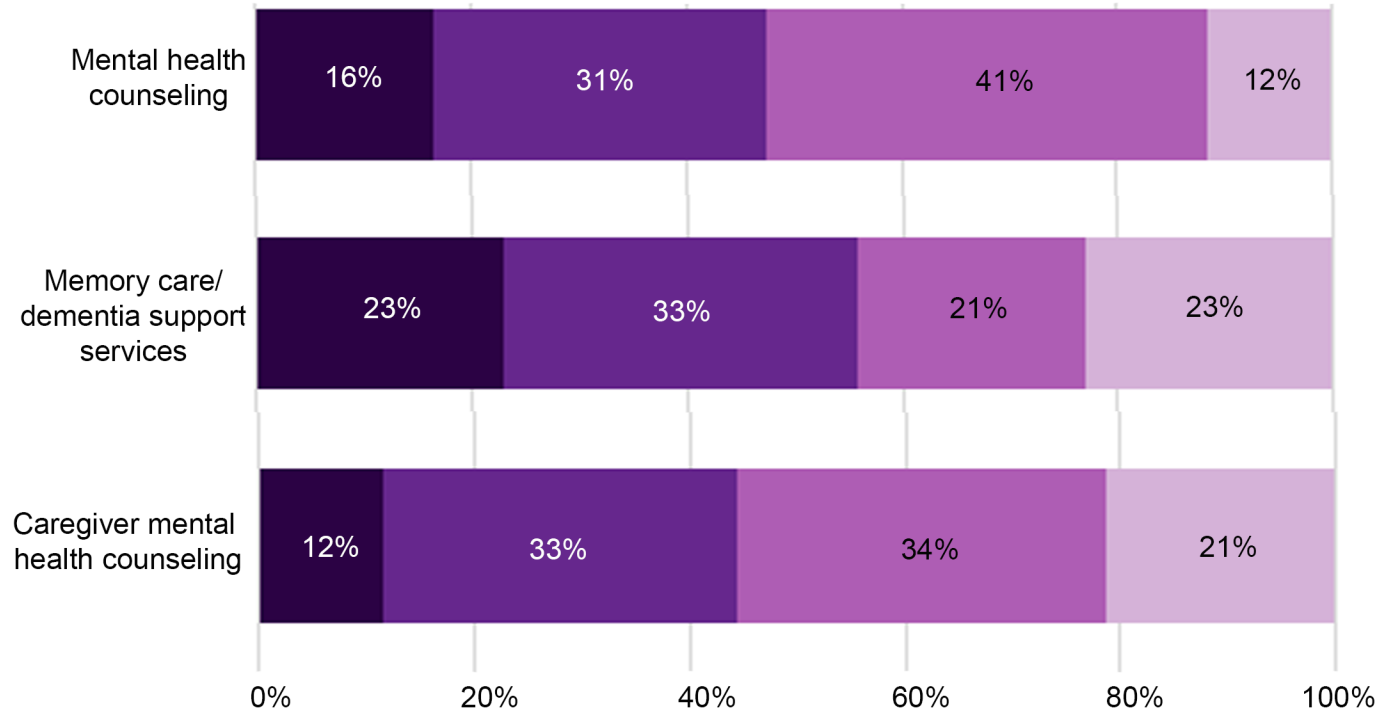
Provider Survey for St. Louis City
Health and Well-Being Section



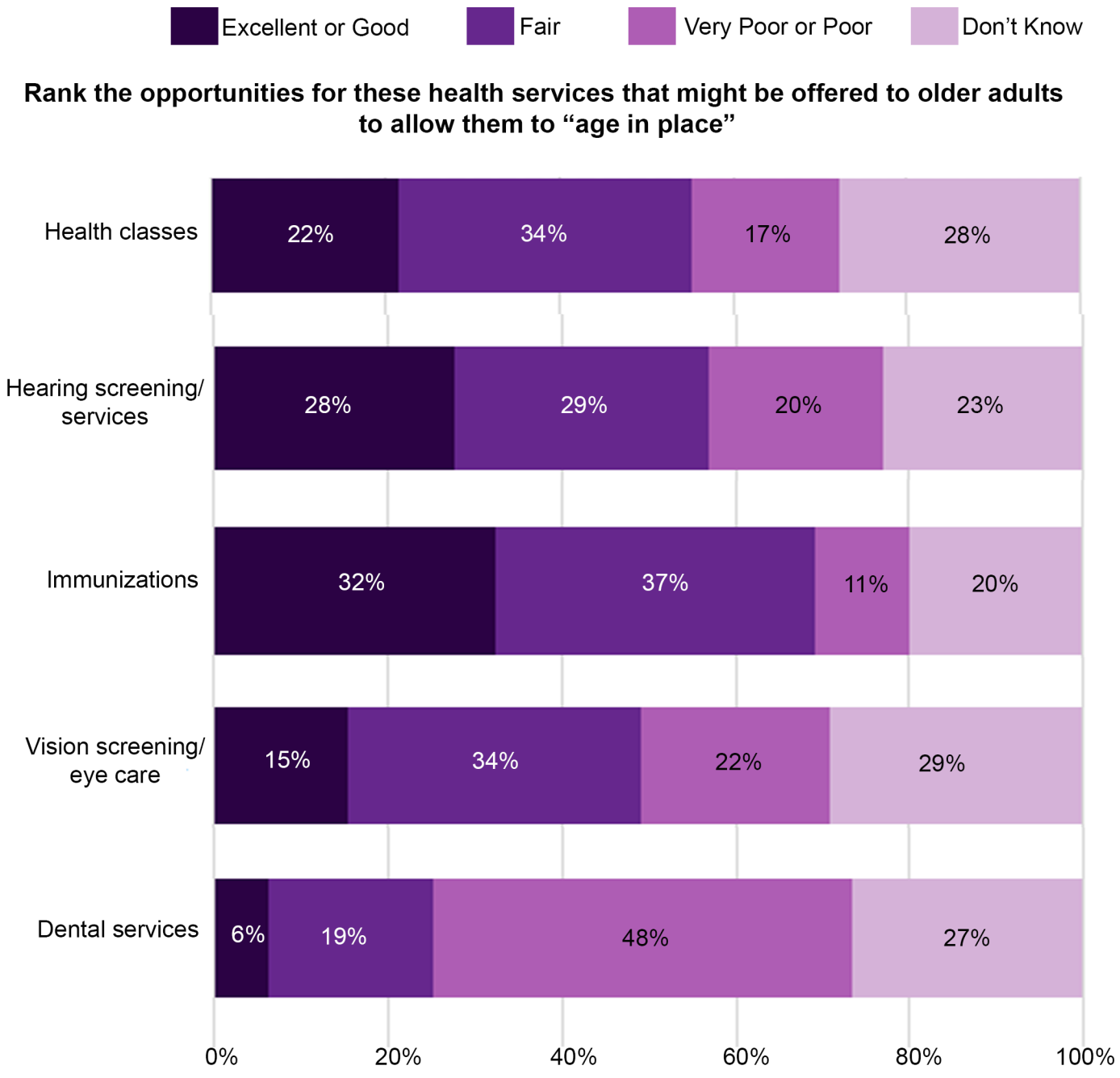
Provider Survey for St. Louis City
Health and Well-Being Section



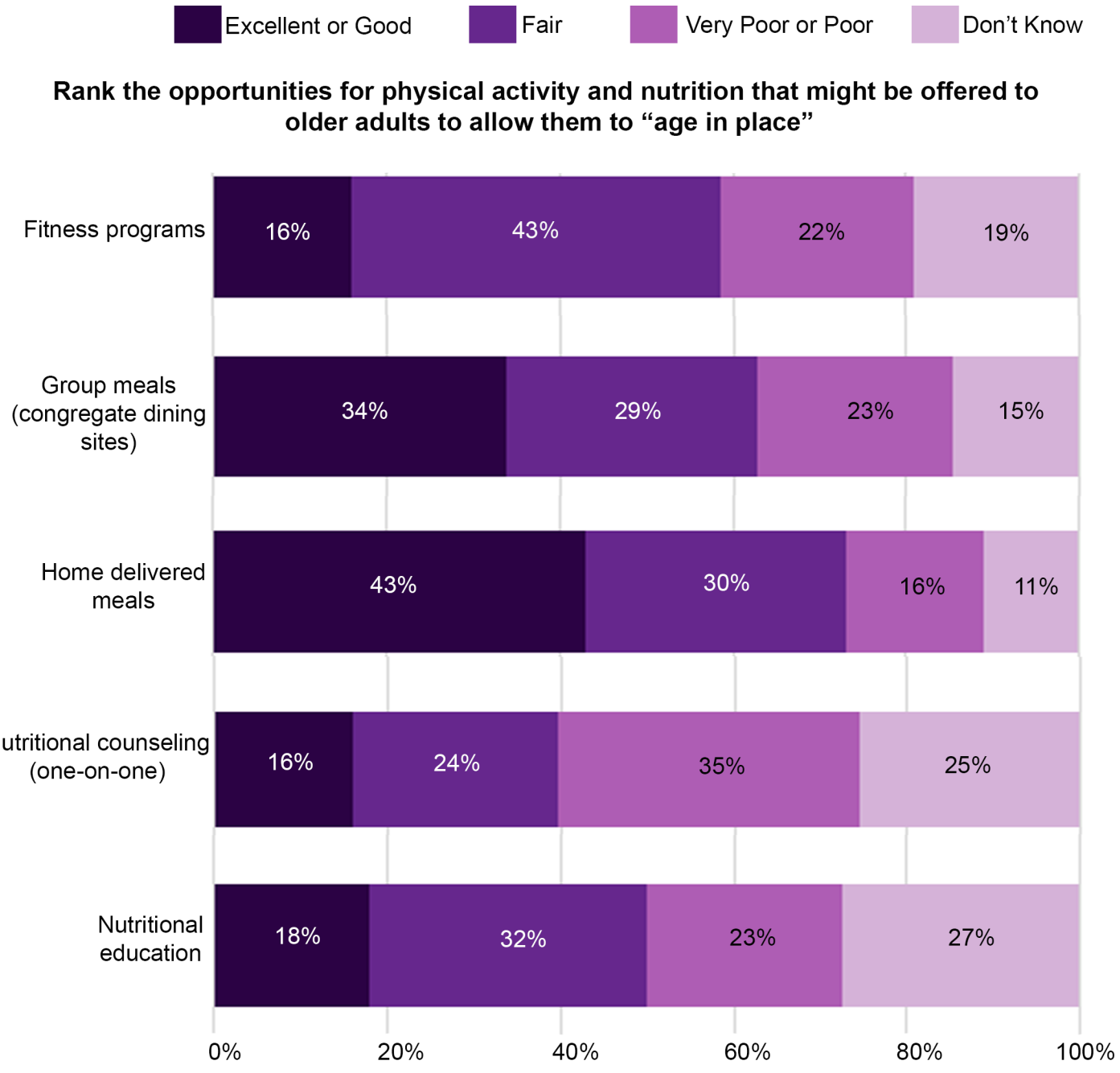
Rank the mental health services that might be offered to older adults to allow them to "age in place"



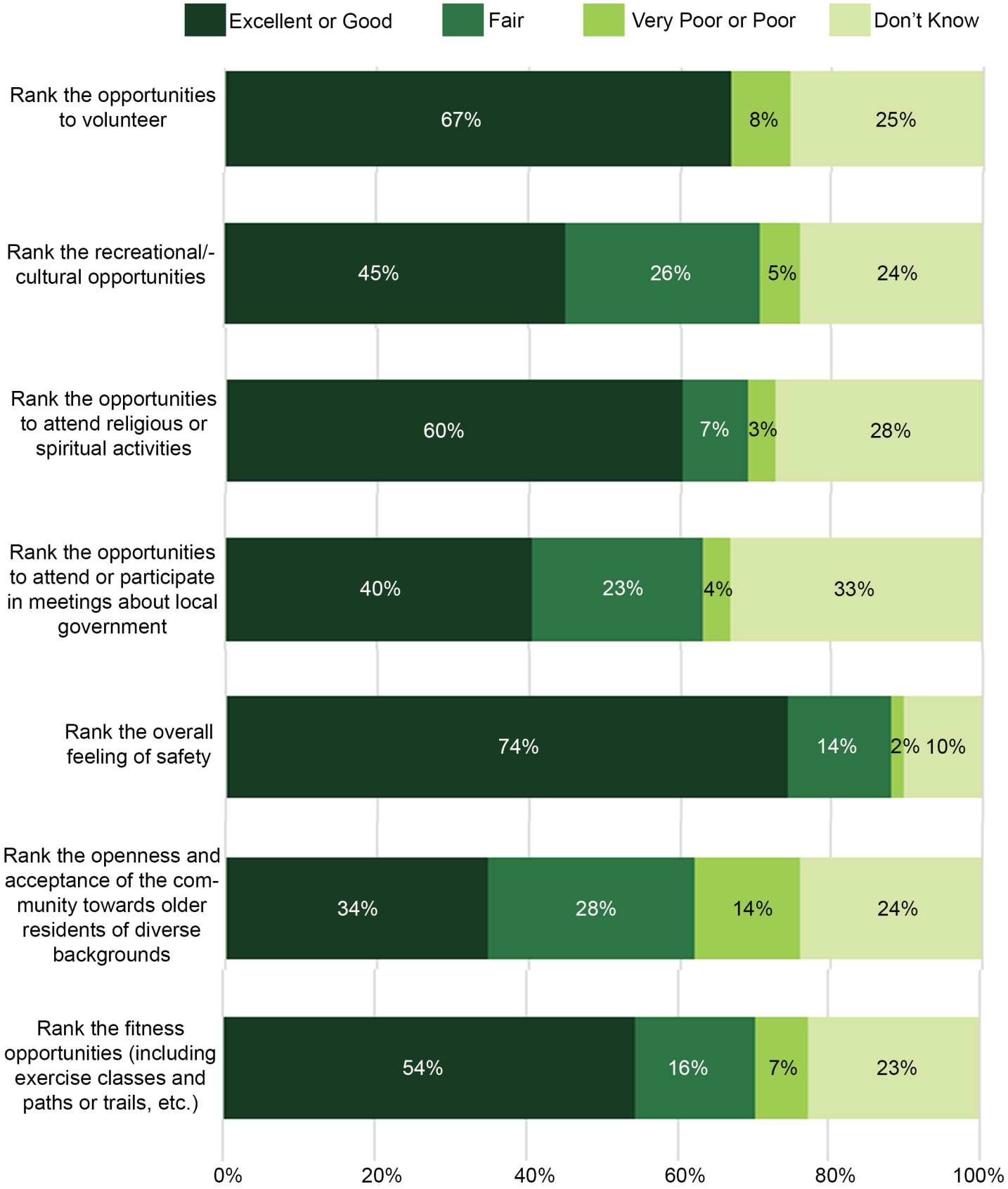
Provider Survey for St. Louis City
Health and Well-Being Sections



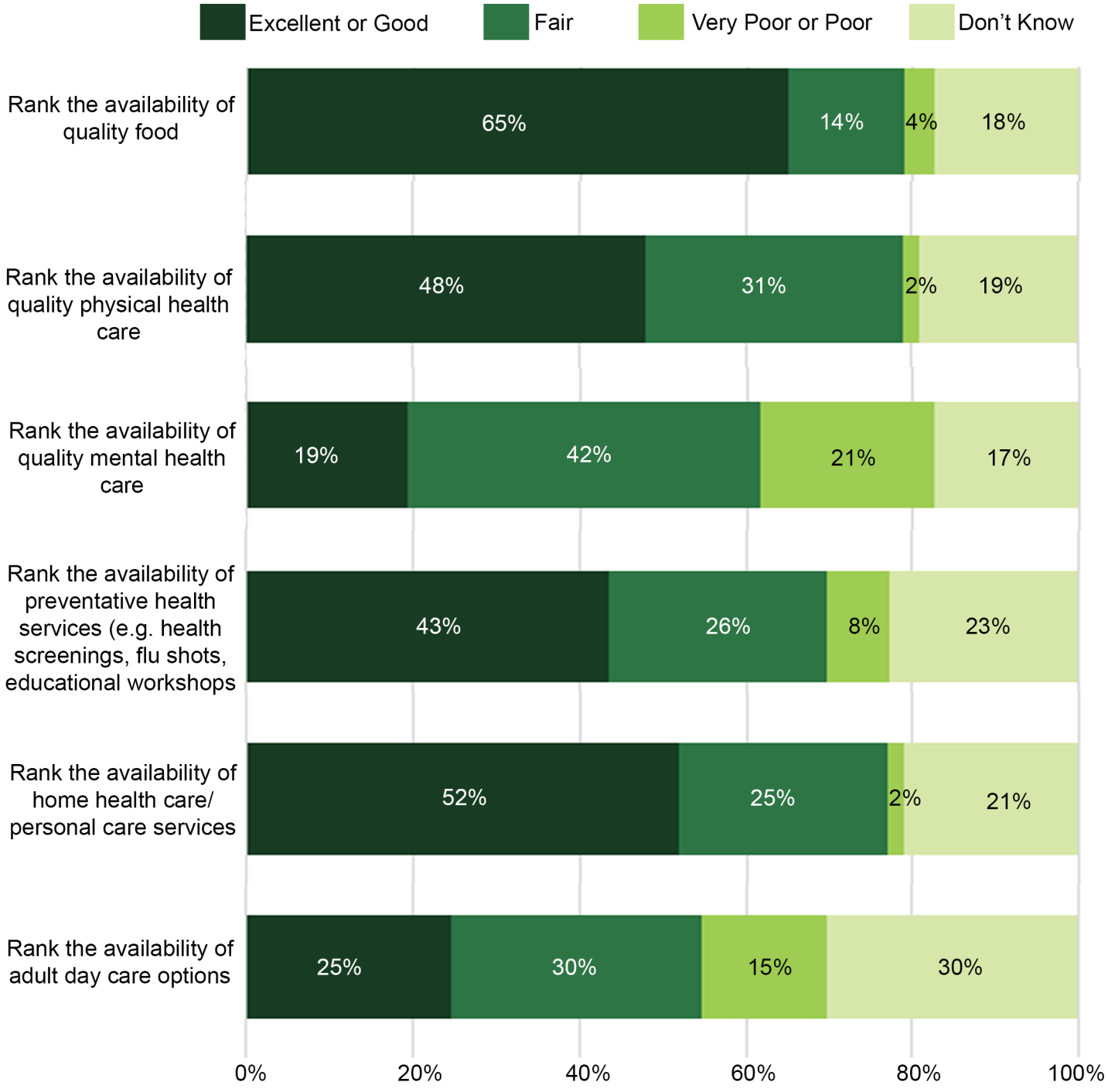
Provider Survey for St. Louis City
Health and Well-Being Section



Provider Survey for St. Charles County Health and Well-Being Sections

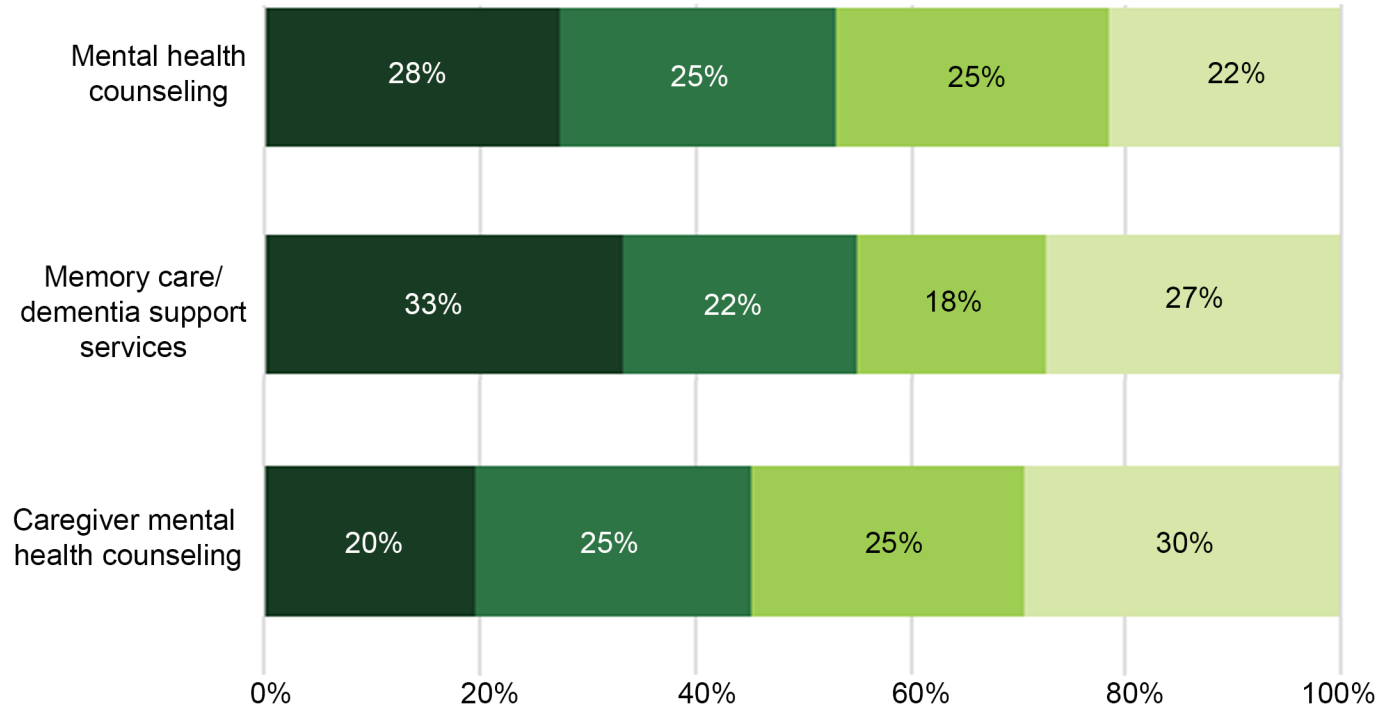


Provider Survey for St. Charles County
Health and Well-Being Sections

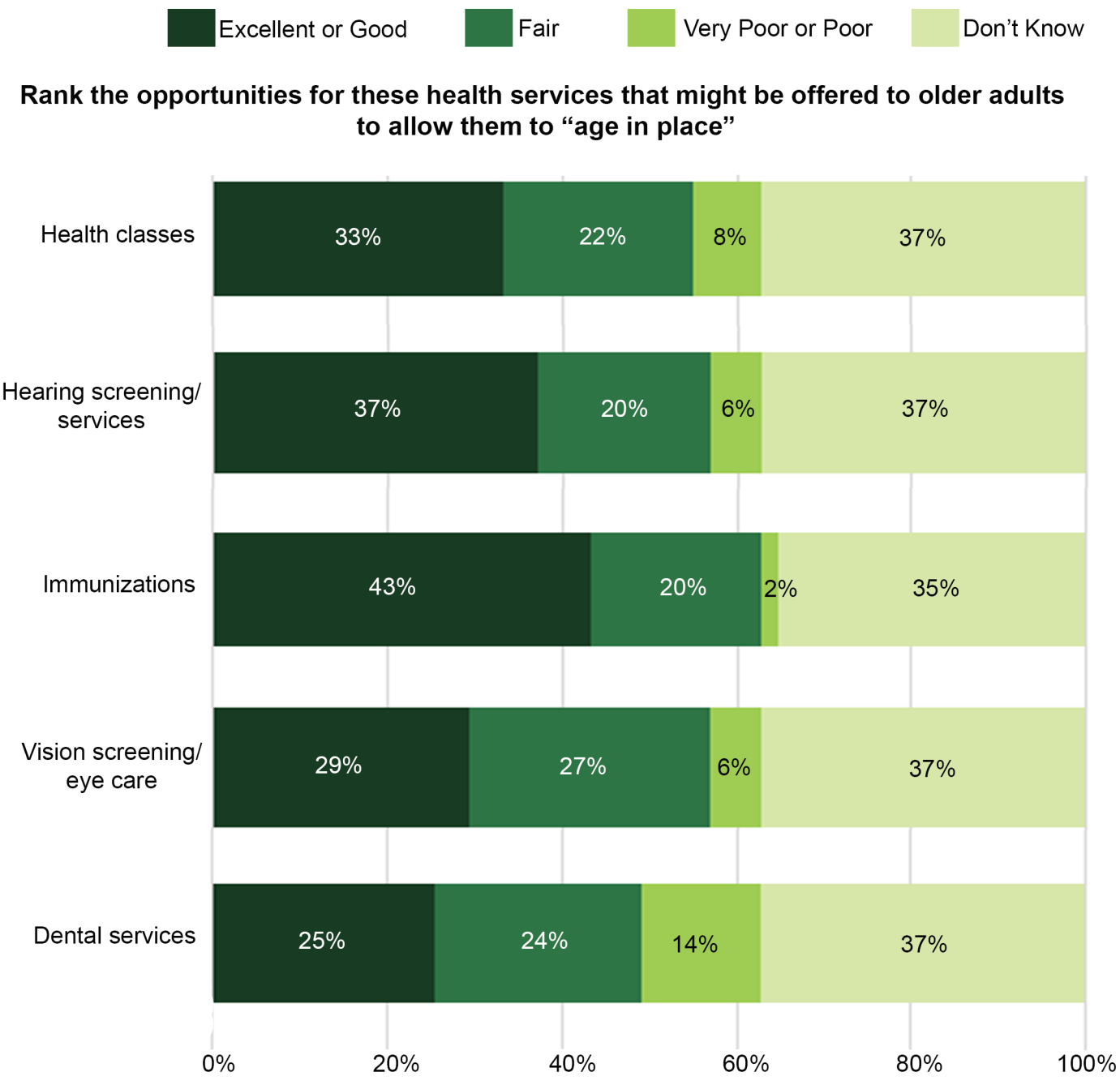


Provider Survey for St. Charles County Health and Well-Being Sections

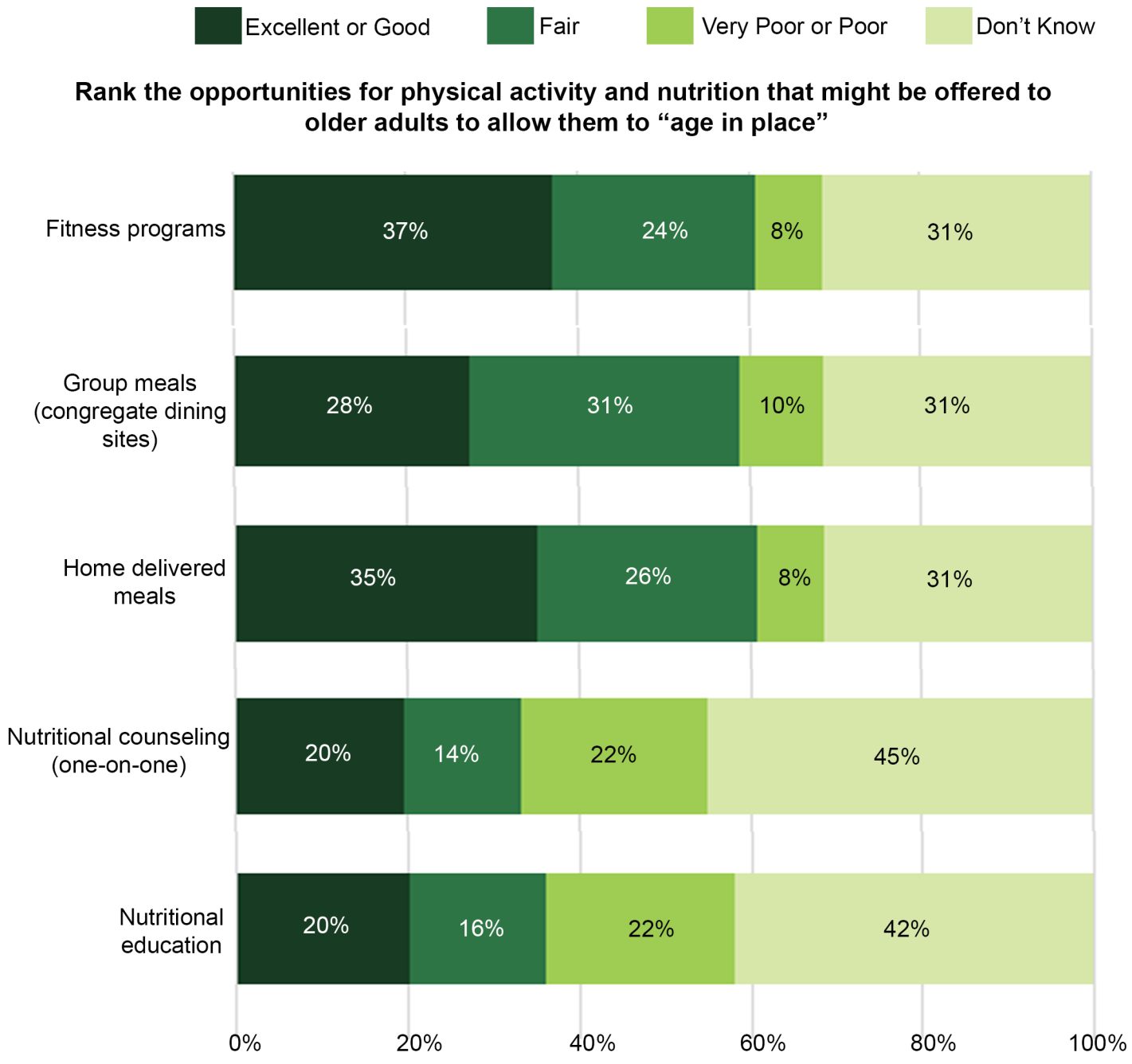
Rank the mental health services that might be offered to older adults to allow them to "age in place"



Provider Survey for St. Charles County
Health and Well-Being Sections



Provider Survey for St. Charles County Health and Well-Being Sections



Cardiovascular Health Hospital Admissions Rate per 10,000 People

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
Congestive Heart Failure					
	45-64	28.2	33.3	74.3	12.9
	65+	161.1	174.6	191.6	154.6
AMI (heart attack)					
	45-64	30.8	24	33	22
	65+	80.8	79.7	78.3	78.7
Cerebrovascular Disease (Stroke)					
	45-64	35.6	38.4	59.8	30
	65+	148.3	167.6	176.8	148.4

Cardiovascular Health Mortality Rate per 100,000 People

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
Heart Disease					
	45-64	164.2	136.4	249.9	89.1
	65+	1211.3	1227.3	1416.7	982.8
AMI (heart attack)					
	45-64	62.7	38.1	50.5	11.8
	65+	328.5	379.6	315	291.1
Cerebrovascular Disease (Stroke)					
	45-64	22.2	18.1	43.1	11.7
	65+	275.7	272	281.1	220

Red indicates 20% worse than state average

Green indicates 20% better than state average

Diabetes Rates

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
Diabetes, Hospital Admissions (per 10,000)					
	45-64	27.7	28	66.3	15.7
	65+	31.4	36.1	63.3	26.9
Diabetes, Mortality (per 100,000)					
	45-64	21.7	17.7	35.7	11.8
	65+	109.6	109.1	153.3	90.4

Primary Care - ED Visit Rates per 10,000 people

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
ED Visit					
	45-64	282.5	216.7	389.6	182.1
	65+	295.6	234	276.8	263.9
Preventable ED Visit					
	45-64	466	317.5	659.1	203
	65+	521.1	317.1	449.2	323.3

Primary Care - Hospitalization Rates per 10,000 people

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
Hospitalizations					
	45-64	1269.1	1218.3	1964.5	964.2
	65+	3083.7	3245.6	3492.8	2971
Preventable Hospitalizations					
	45-64	253.1	220	451.9	145
	65+	806.1	787	952.6	682.9

Red indicates 20% worse than state average

Green indicates 20% better than state average

Mental Health Hospital Admissions Rates per 10,000 People

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
Schizophrenia					
	45-64	23.3	24.9	102.9	12.3
	65+	5.5	8.2	18.2	2.9
Anxiety					
	45-64	4.1	3.4	5.3	1.8
	65+	3.1	2.9	5.1	1.8
All Affective Disorders					
	45-64	59.1	59.3	97	59.2
	65+	23.7	27.9	31.2	37.5

Respiratory Health Hospital Admissions Rates per 10,000 People

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
Asthma (includes Bronchitis)					
	45-64	12.1	14.8	34	7.7
	65+	13.2	13.9	28.1	8.2
Chronic Obstructive Pulmonary Disease (COPD)					
	45-64	35.3	20.9	44.9	12.4
	65+	100.5	64.9	104.7	65.3
Pneumonia					
	45-64	36.4	26.4	52.4	22.3
	65+	158.8	132	122.3	136.3
ED Asthma Visits (per 1,000)					
	45-64	2.6	2.3	7.5	0.9
	65+	1.1	0.8	2.4	0.6

Red indicates 20% worse than state average

Green indicates 20% better than state average

Respiratory Health Mortality Rates per 100,000 People

Indicator	Age Cohort	Missouri	St. Louis County	St. Louis City	St. Charles County
Chronic Obstructive Pulmonary Disease (COPD)					
	45-64	33.9	16.9	30.8	13.8
	65+	340.7	251.3	315	262.5
Pneumonia/Influenza					
	45-64	9	6.4	14.8	6.9
	65+	118.6	123.6	165.8	113.2

Red indicates 20% worse than state average

Green indicates 20% better than state average

Percent of Adults who Visited a Dentist in the Year 2012 in Missouri

Sex	
Female	65.0%
Male	58.3%
Age Group	
18-24 years	63.9%
24-34 years	58.2%
35-44 years	63.4%
45- 54 years	61.2%
55-64 years	66.5%
65+ years	58.7%
Race	
African American	57.7%
White	62.8%
Other	54.3%
Ethnicity	
Hispanic	60.8%
Education	
Less than high school	35.9%
High school or G.E.D.	58.7%
Some post-high school	64.1%
College graduate	77.9%
Annual Income	
Less than $15,000	37.2%
$15,000-24,999	44.1%
$25,000-34,999	56.8%
$35,000-49,999	60.7%
$50,000+	79.7%
Overall	**61.8%**

Source: Missouri 2012 BRFSS

Oral Health among Low-Income Seniors in the St. Louis Metropolitan Area

Prepared by Missouri Department of Health and Senior Services, Oral Health Program
for the Daughters of Charity Foundation of Saint Louis and Partners

The Missouri Oral Health Program (MOHP) within the Missouri Department of Health and Senior Services (DHSS), Office of Primary Care and Rural Health recognizes that low-income adults and older adults in Missouri each have oral health needs that are often not adequately addressed. The following report compiles state, regional, and county level data in order to assist the Daughters of Charity Foundation and its partners in assessing oral health needs among low-income older adults in Saint Charles County, Saint Louis County, and the City of Saint Louis.

Statewide Data

Before diving into local level data, a few statewide trends are worth noting.
1. Adults who are 65 years of age and older visit the dentist at slightly lower rates than adults as a whole. However, individuals who have less educational attainment and lower annual income are much less likely to have visited the dentist than individuals from higher education and income categories (Table 1).

2. About a quarter of adults 65 years of age and older have lost all their permanent teeth due to tooth decay and gum disease. Those with no high school education are nearly 8 times more likely than those with a college education to have lost all their permanent teeth. Adults in the lowest income category are three times more likely to have lost all their permanent teeth than those within the highest income category (Table 2).

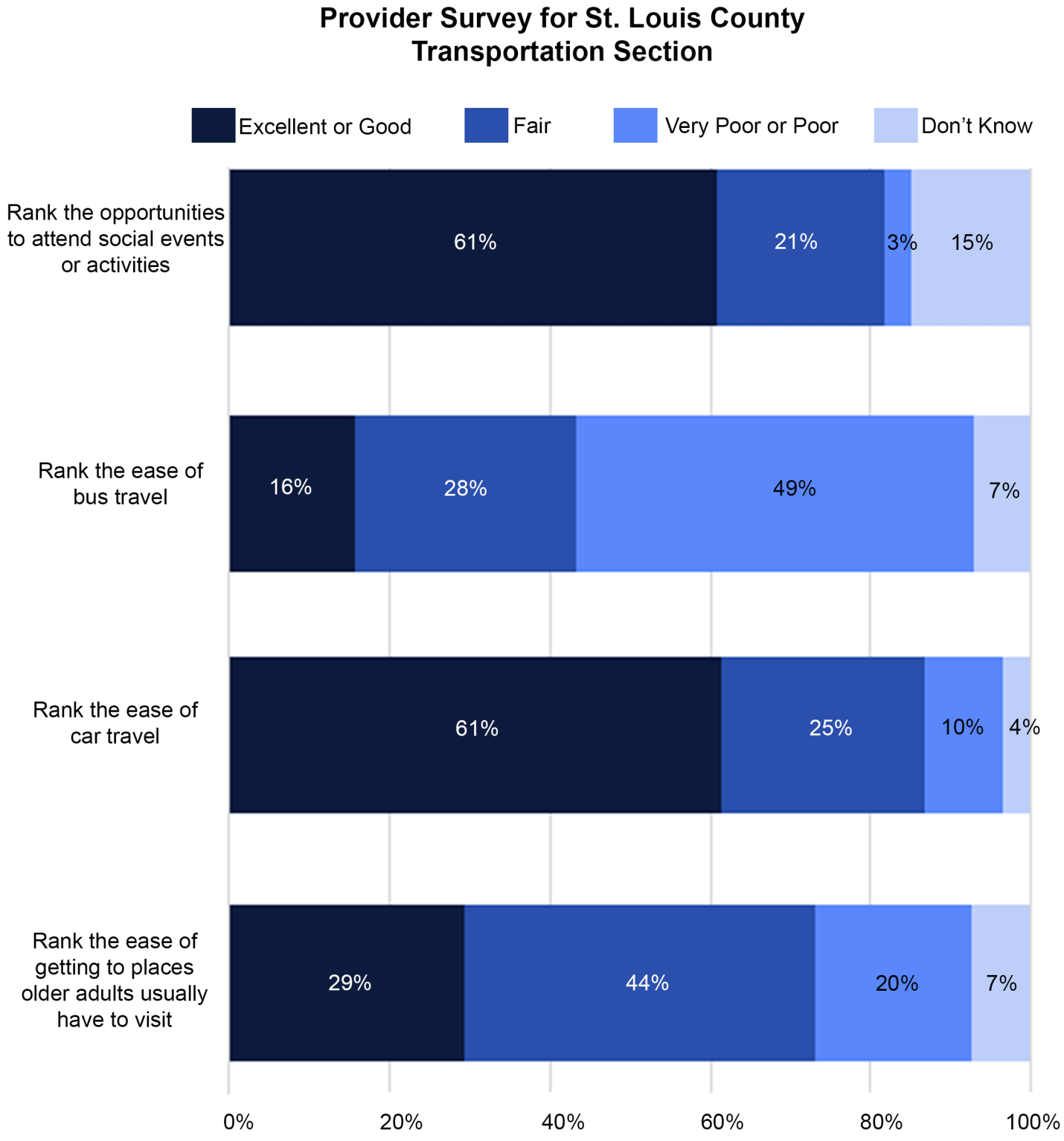
3. In a screening study of older Missourians living independently and within assisted living facilities, those living independently had much higher dental visit rates, lower rates of poor oral hygiene, untreated tooth decay, gum disease, and tooth loss (Table 3).

4. Emergency department (ED) visits and inpatient hospitalizations for non-traumatic oral complaints has been described as a national problem, and Missouri is no different. Statewide in 2012, there were more than 58,000 ED visits at an estimated cost of $17.5 million and 610 inpatient hospitalizations with $13.5 million in hospital charges. These visits have been described elsewhere as preventable and ineffective at treating the root cause of the complaints that can be most effectively addressed by a dentist.

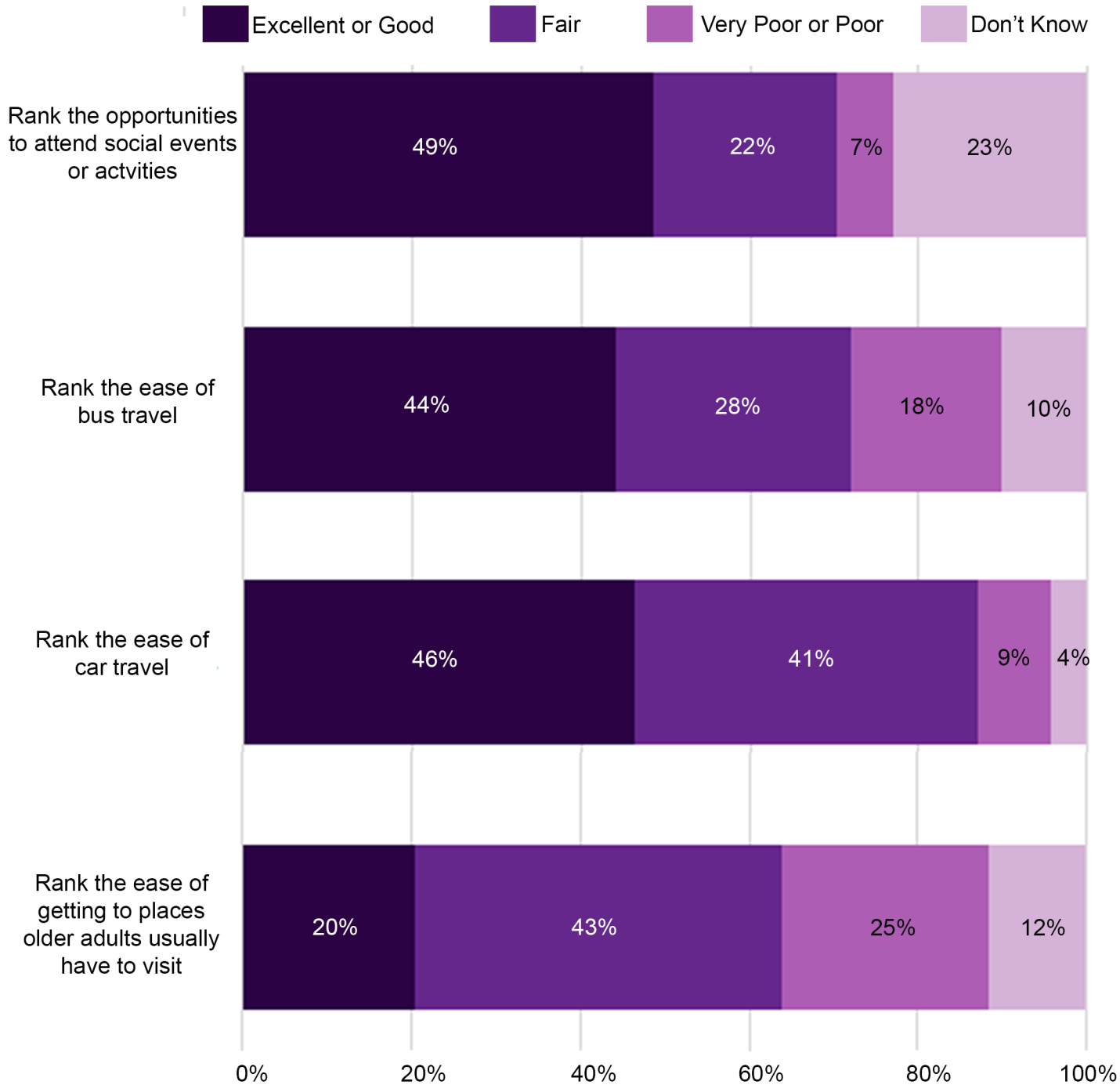
Interestingly, dental complaints are not frequently reported by hospitals for those 65 years of age and older, representing only about 1.3% of all ED visits for dental complaints and 14.4% of inpatient hospitalizations (see the Burden Report for population-based rates). It is unclear why seniors do not turn to hospitals for oral health complaints as frequently as younger individuals. However, numbers and estimated costs or inpatient charges are available at the county level and are reported in the Local Data section.

A complete review of these statistics is available at http://health.mo.gov/living/families/oralhealth/oralhealthsurv.php in "Oral Health in Missouri -2014" and the "Adult Oral Health Assessment Executive Summary". These resources describe data collection and analysis methods and sources in more complete detail than is presented here

Appendix 4: Transportation



Provider Survey for St. Louis City Transportation Section



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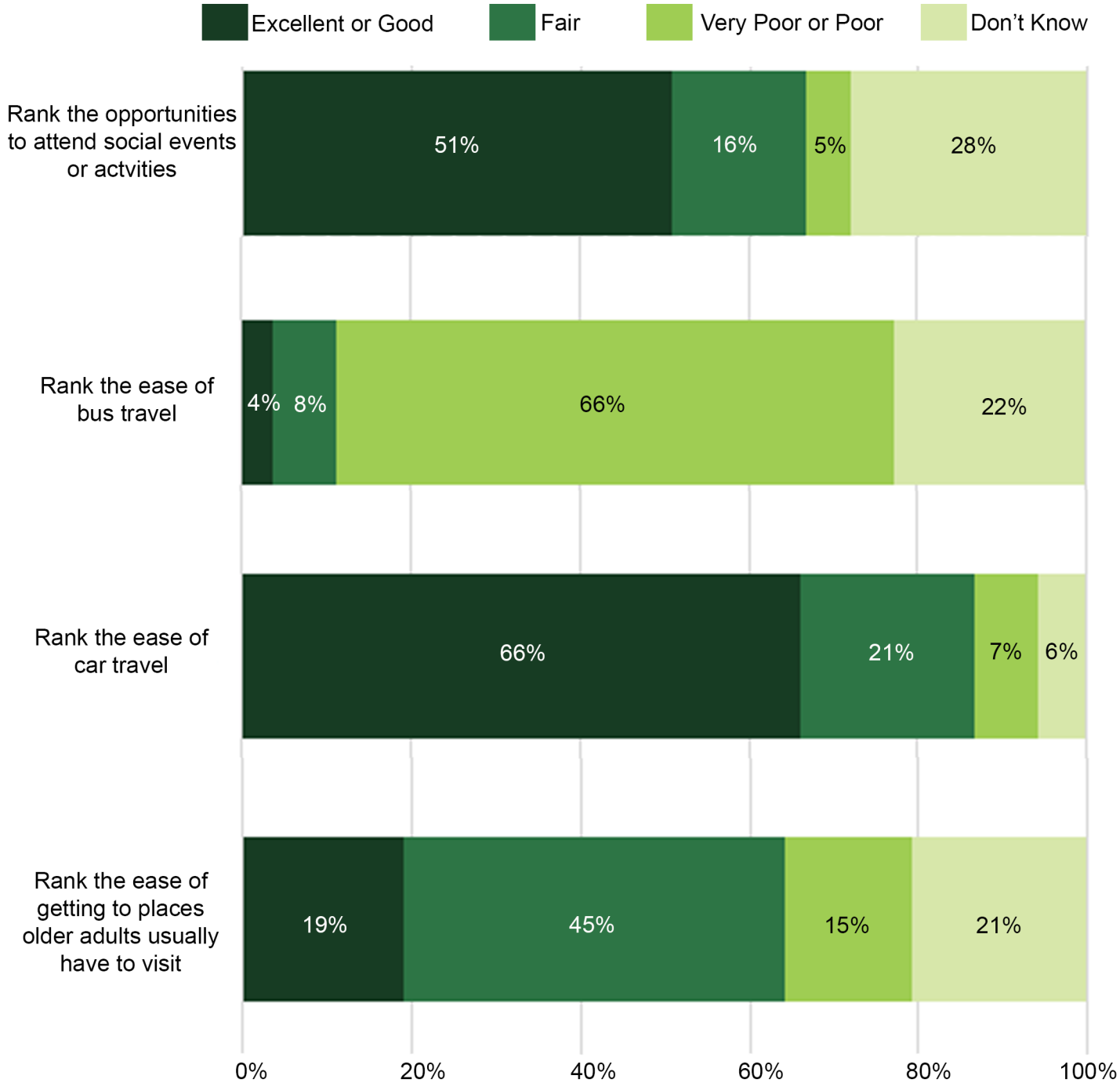
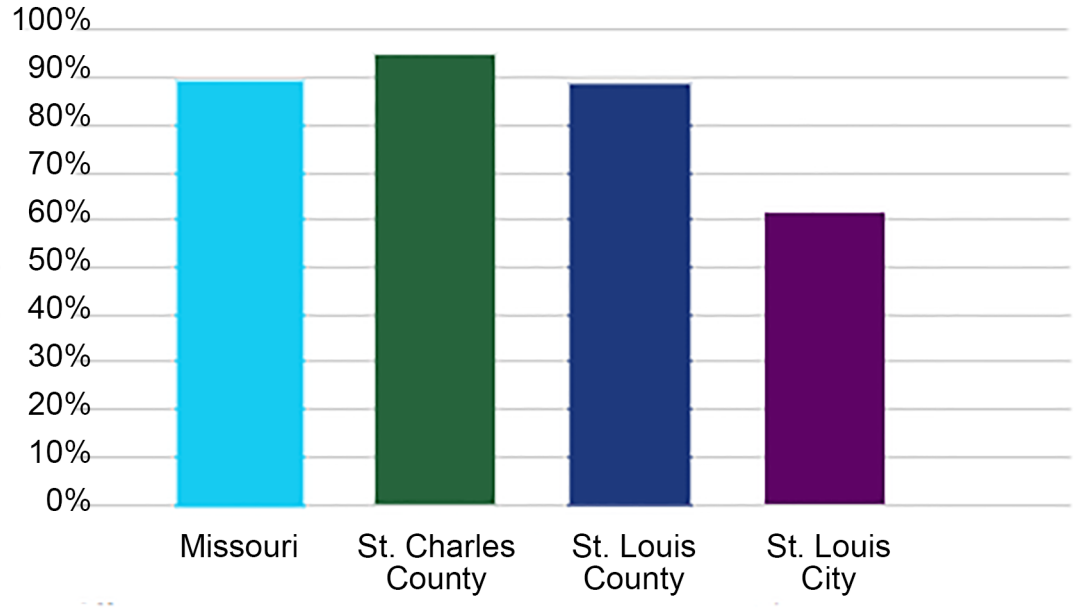
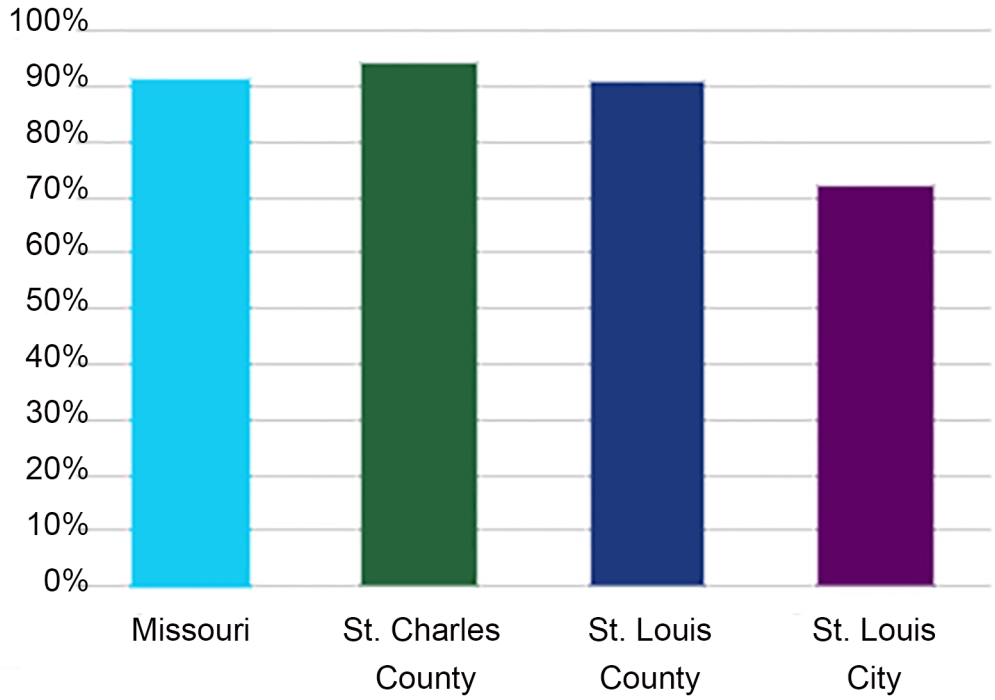


Percent of Elder Population (age 65 and older) Having a Drivers License in 2011

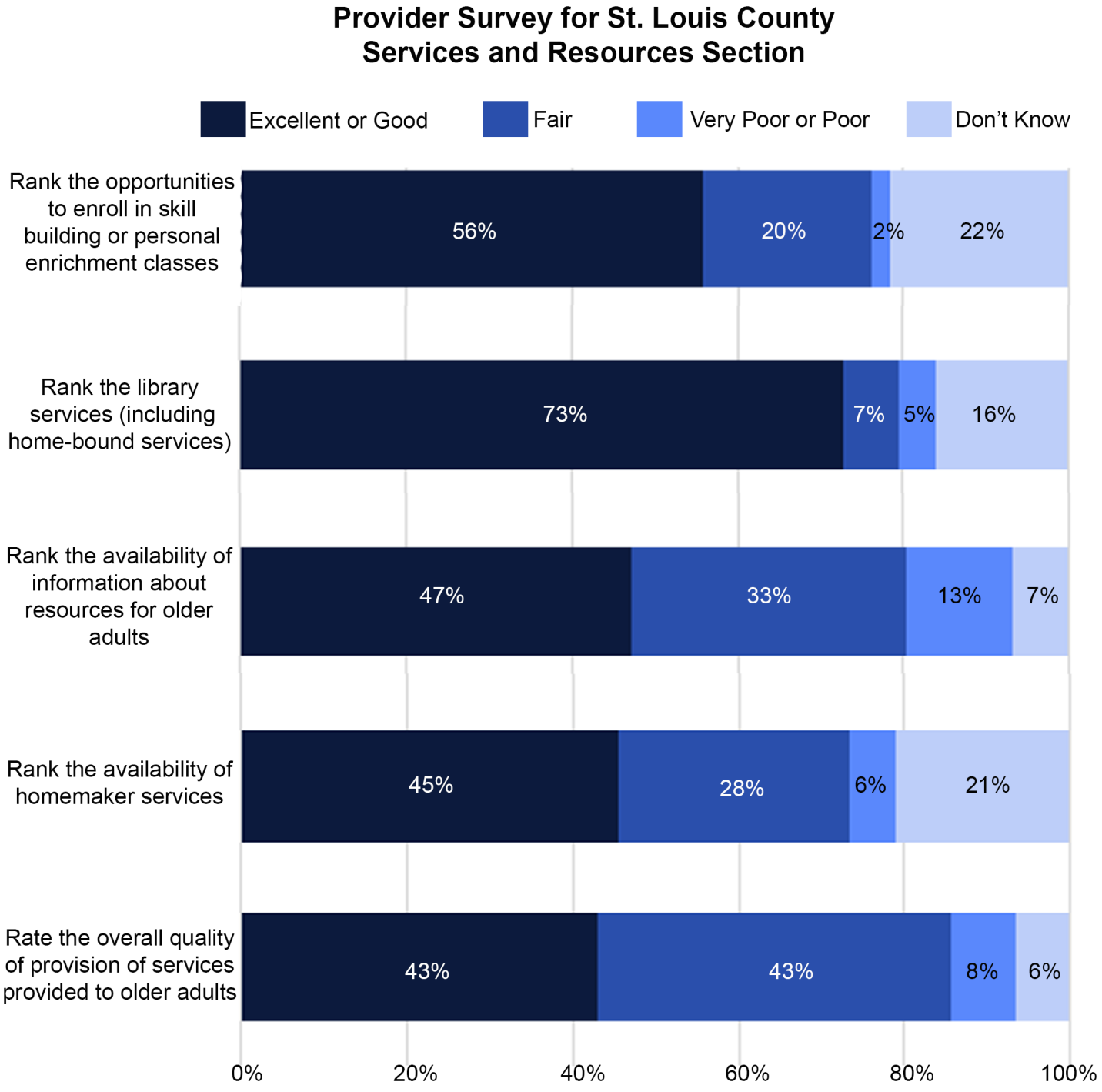


Vehicle Availability for Elder Households (age 55 and older)

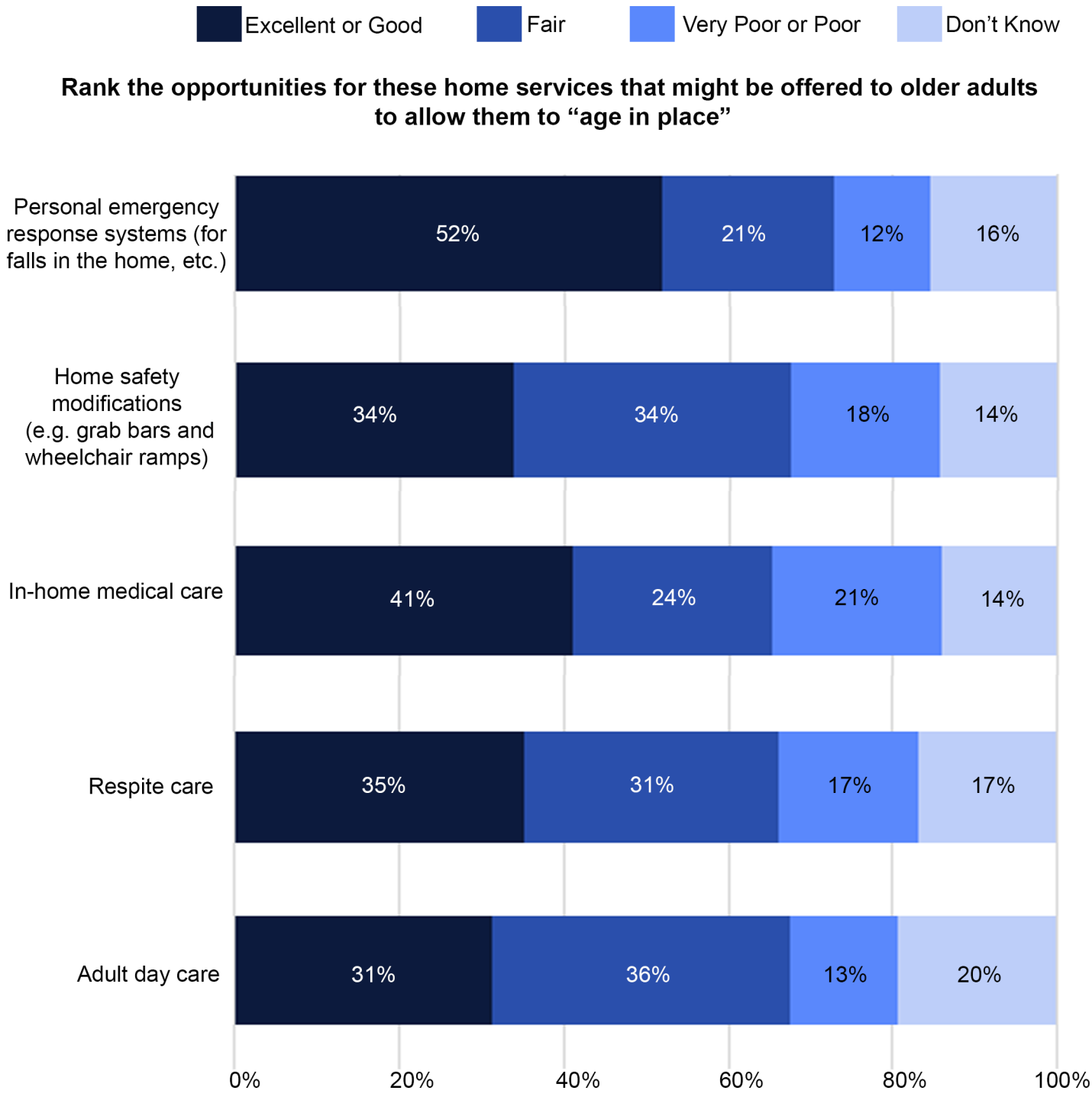


Vehicle Availability for Elder Households								
	Age of Head of Household							
	All Households 55+ years		55-64 years		65-74 years		75+ years	
	# HHs	% HHs	# HHs	% HHs	# HHs	% HHs	# HHs	% HHs
Missouri	982,310	91%	439,162	94%	294,099	94%	249,049	83%
St. Louis County	177,754	91%	79,652	95%	49,667	95%	48,435	78%
St. Louis City	48,494	72%	23,691	78%	13,185	72%	11,618	63%
St. Charles County	54,002	94%	25,964	99%	15,659	97%	12,379	80%

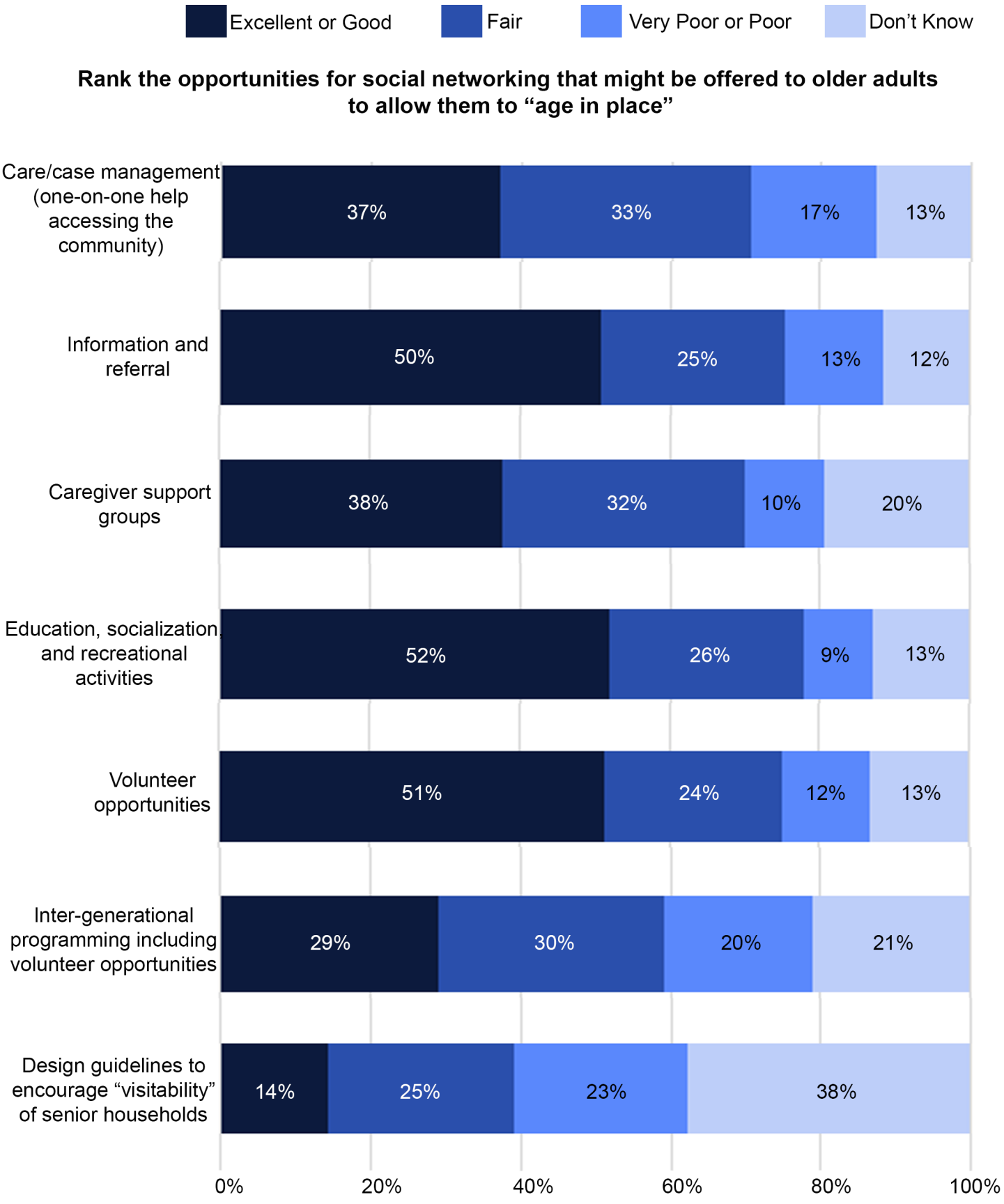
Appendix 5:
Services and Resources



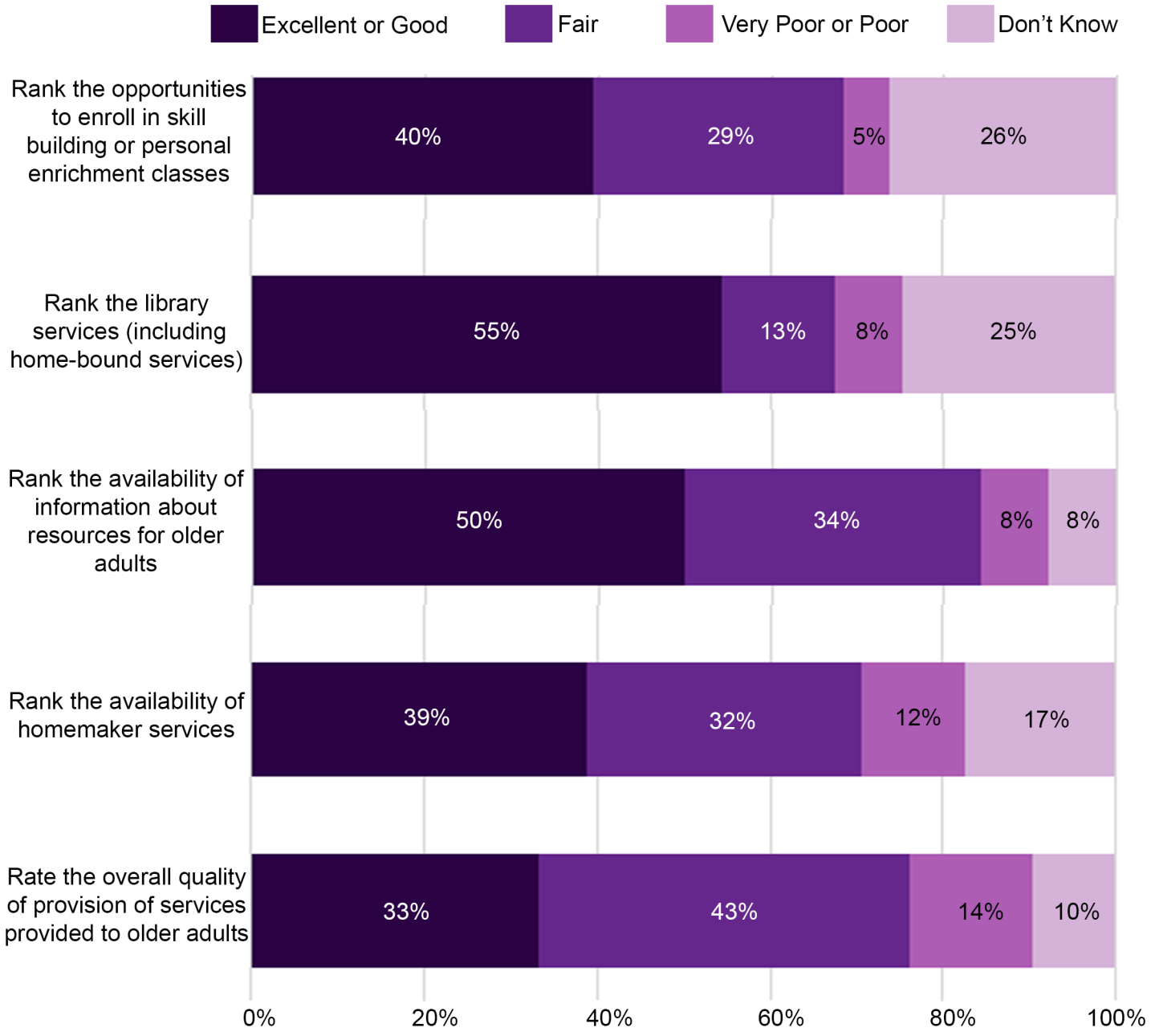
Provider Survey for St. Louis County
Services and Resources Section



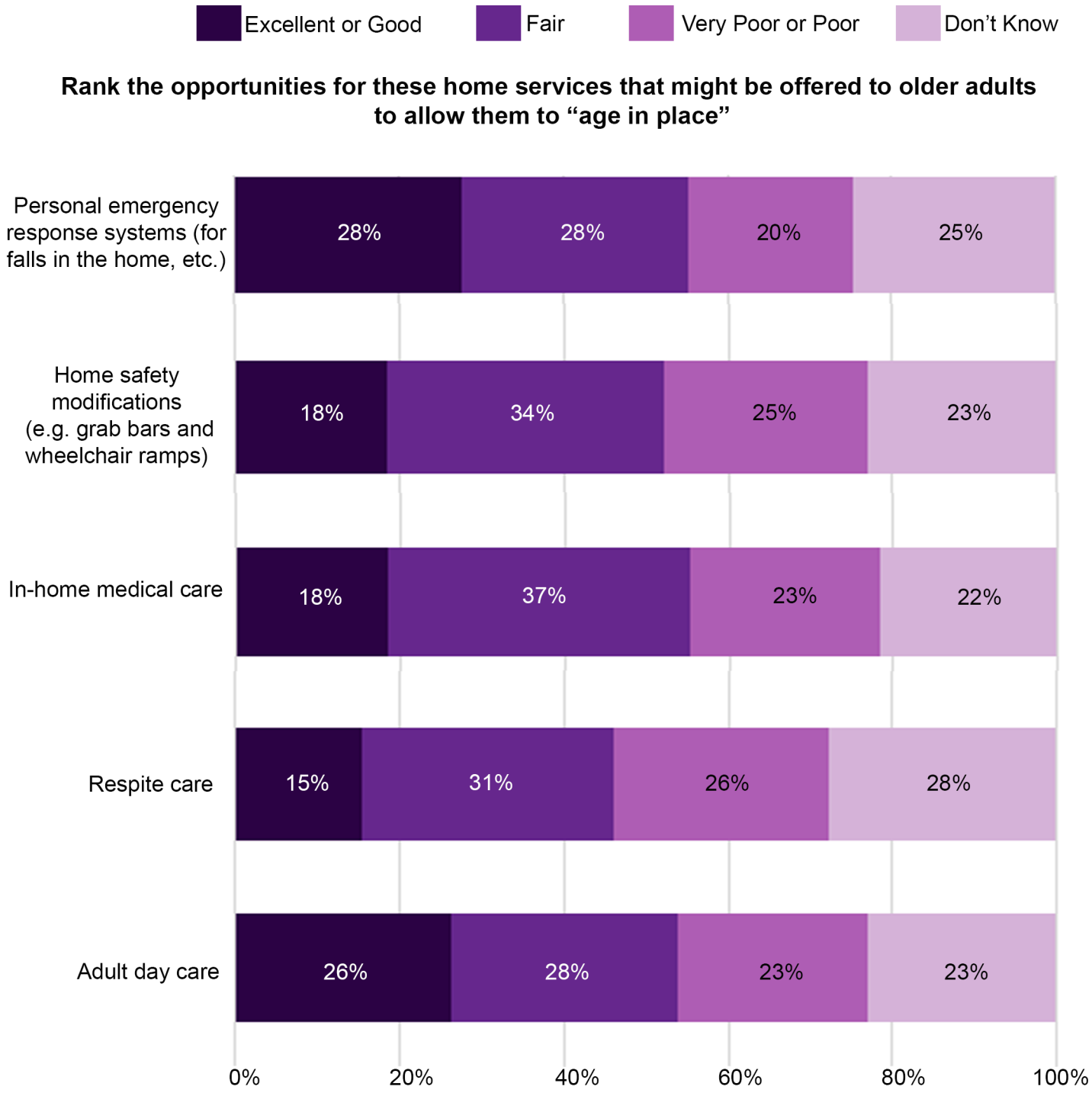
Provider Survey for St. Louis County
Services and Resources Section



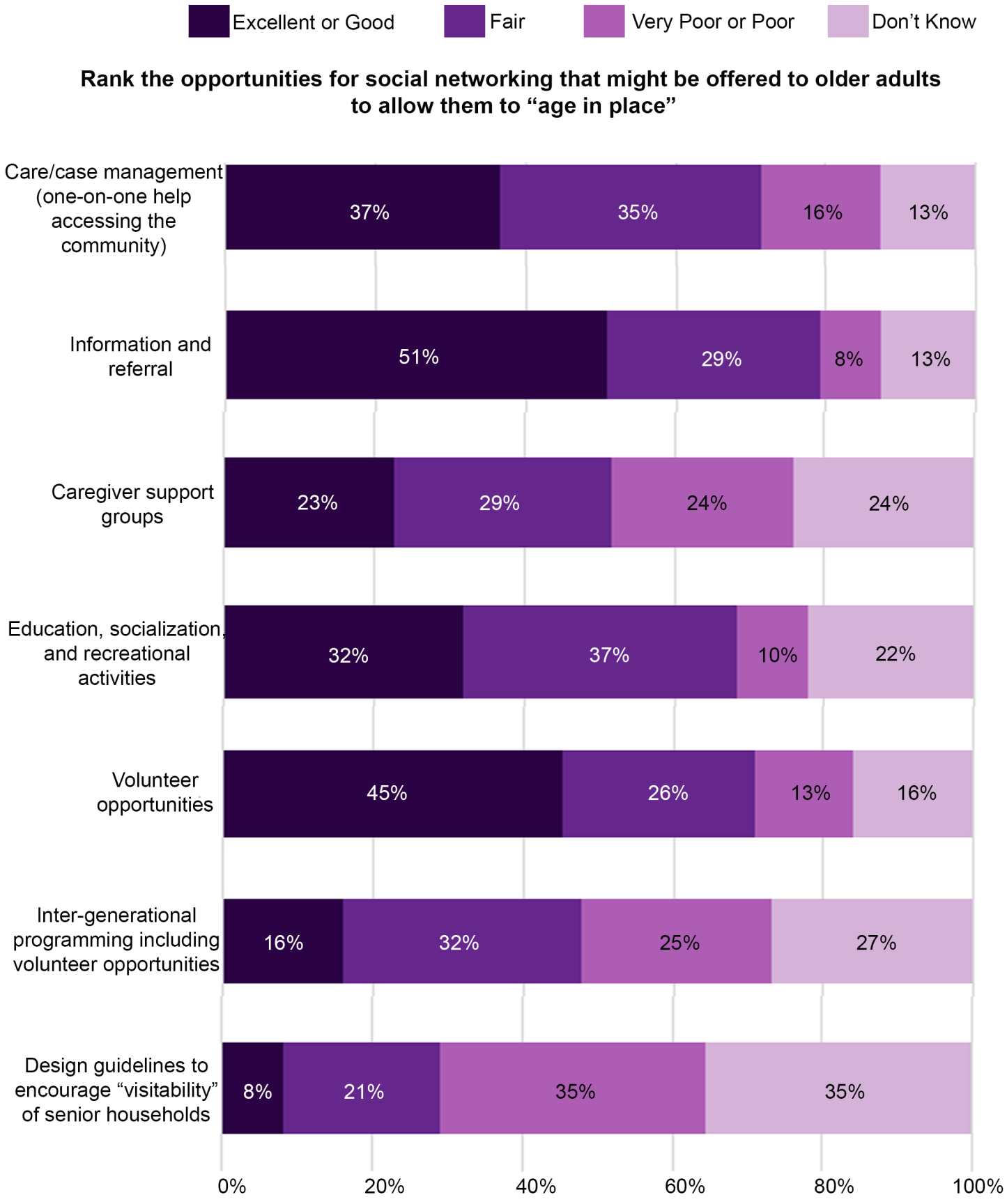
Provider Survey for St. Louis City
Services and Resources Section



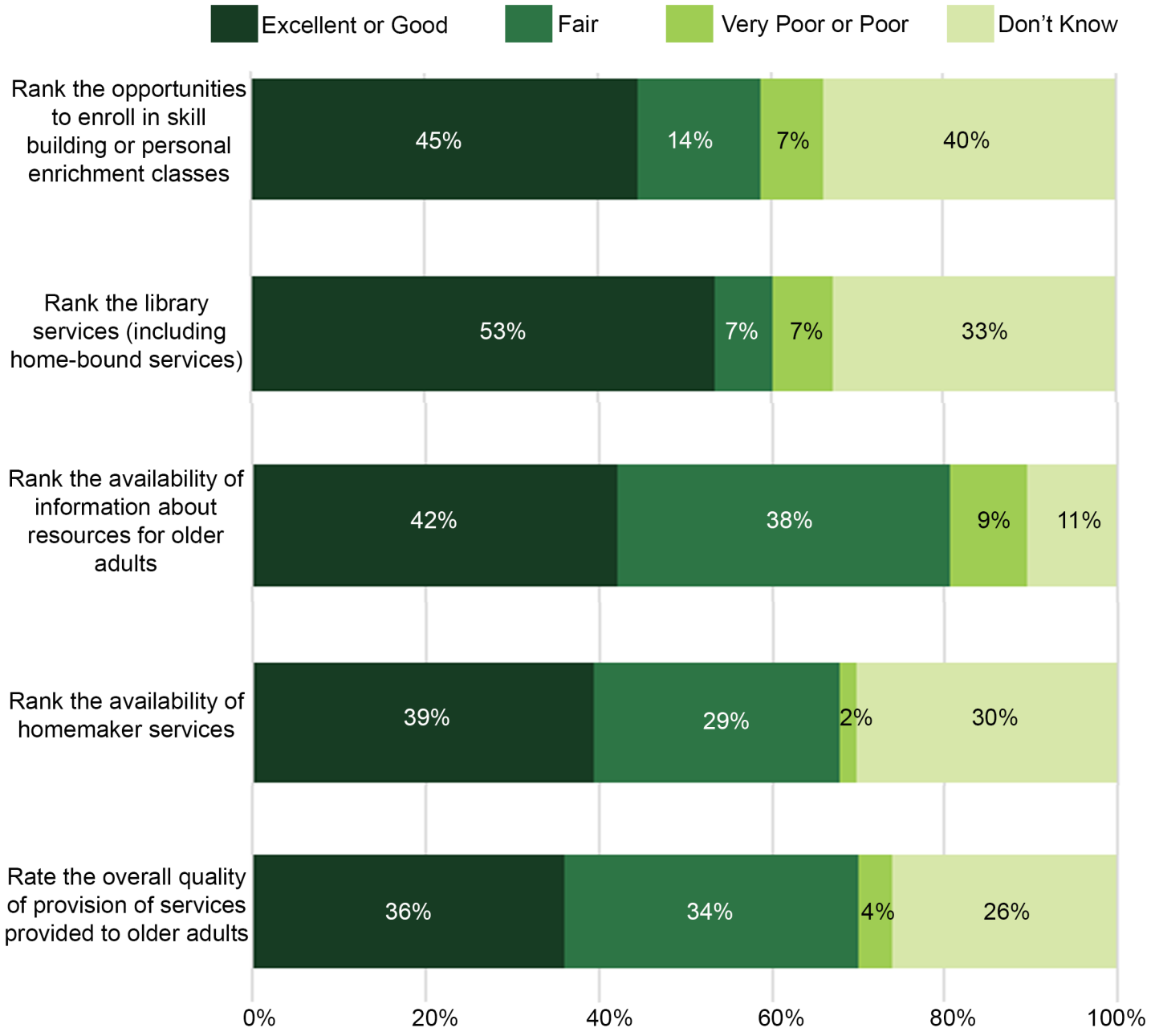
Provider Survey for St. Louis City
Services and Resources Section



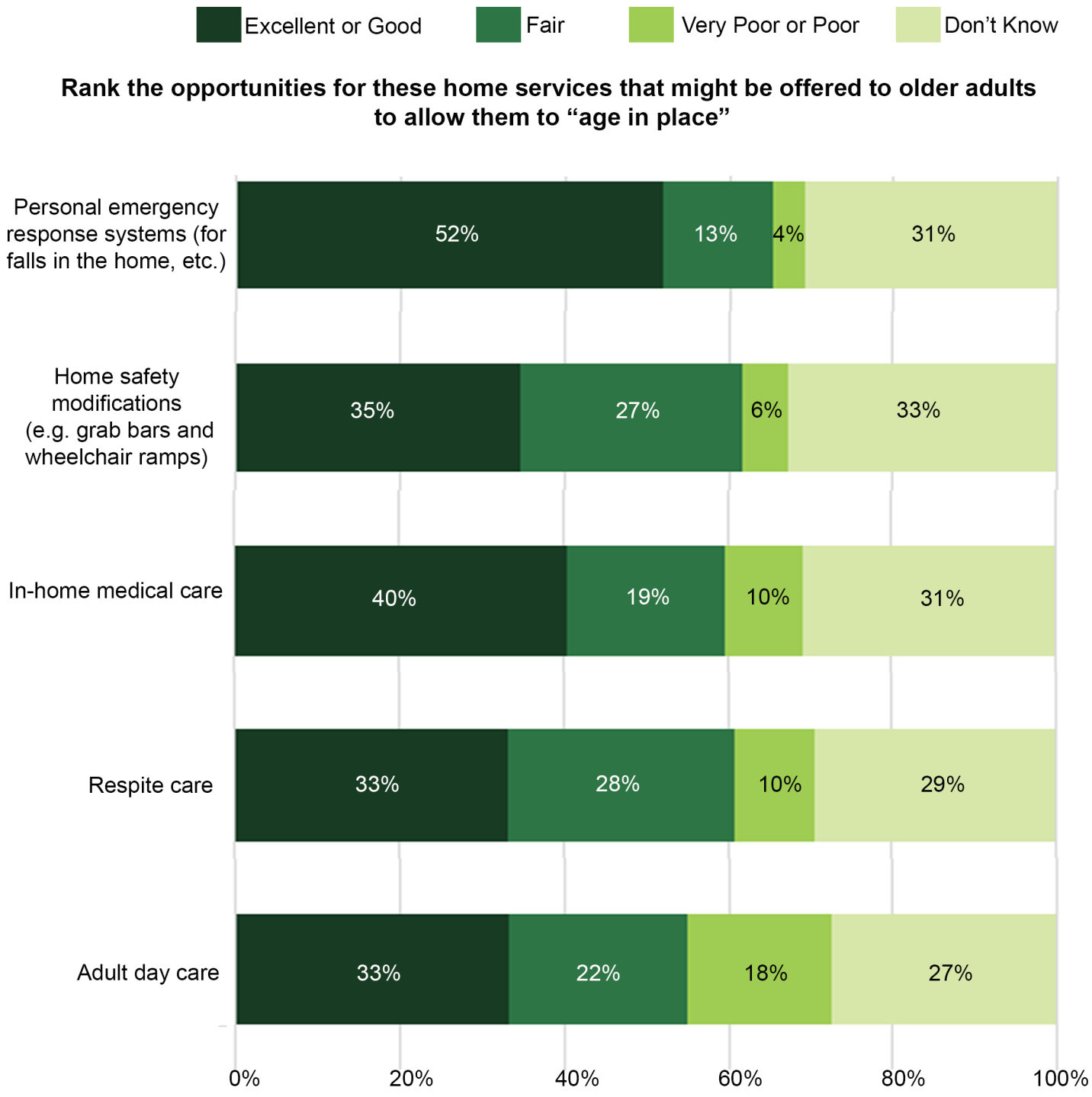
Provider Survey for St. Louis City
Services and Resources Section



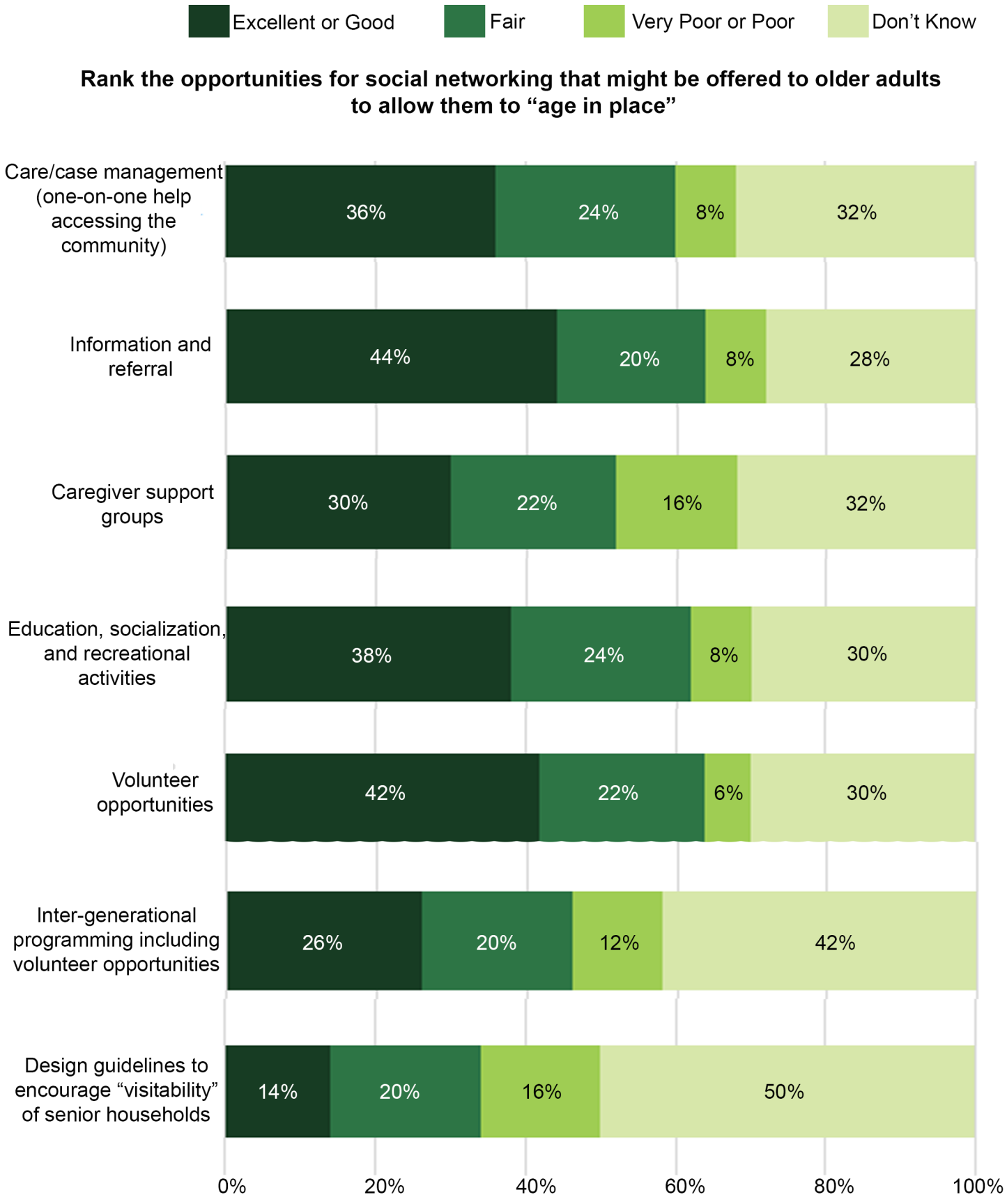
Provider Survey for St. Charles County
Services and Resources Section



Provider Survey for St. Charles County
Services and Resources Section



Provider Survey for St. Charles County
Services and Resources Section



Dental Clinic Survey Respondents (from low cost, sliding-fee dental clinics)

Betty Jean Kerr People's Health Centers (FQHC)

Locations:
Florissant, St. Louis City, Maplewood

Dental Care Services:
Emergency treatments, comprehensive exams, cleanings, x-rays, fillings, and extractions
Walk-ins accepted, but not preferred
Approximately 3-month waitlist

Clients:
50% adult clients, estimated approximately 30% seniors

Cost/Insurance:
The clinic provides a sliding scale, but there is generally a $50 charge per scheduled appointment or $85 for an emergency appointment. The sliding scale is income dependent. For the sliding scale, clients need proof of income & identification. They do have a promissory note that they ask clients to sign if they have a true emergency and they cannot make the payment. They are then asked to make payments on the note. They try not to turn people away because of inability to pay, and do the best they can to work with them. Most dental insurances are accepted.

Contact:
Dr. Karen Richardson, Dental Director krichardson@phcenters.com

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Cass Dental

Location:
6310 Cass Avenue
St. Louis, MO 63113
(314) 531-5000

Dental Care Services:
Fillings, x-rays, dentures, partials, extractions, root canals, and cleanings

Clients:
Cass Dental is a walk-in clinic, so anyone is accepted. There is typically a line at the door in the morning, and they are treated on a first come, first serve basis.

Cost/Insurance:
Cass Dental accepts cash or Medicaid for those under 21. The clinic offers reduced rates.

Contact:
Dr. Jan Rogers 314.531.5000

Crider Health Center (FQHC)

www.cridercenter.com

1. What is the number of seniors (age 60 +) served annually (or last fiscal year) in St. Charles, St. Louis County and St. Louis City? We served 71 adults over the age of 60 who live in St. Charles County. Our target population for dental at this time is children with Medicaid, pregnant women, and adults in pain.
2. What is the annual cost to provide dental services to seniors (or adults if you don't have the data broken out)? This will help us understand the cost to provide services. It is very difficult to calculate an annual cost due to the wide variety of needs they have – some just need an extraction or 2 while others need full dentures – the best average we can come up with is about $2,000
3. What services, preventative and reactive, do you provide to seniors? We provide a full array of preventative and restorative dental services to this age group – so anything from an exam and cleaning, fillings, crowns, bridge work, dentures, etc.
4. What percent of adults served are seniors in St. Charles, St. Louis City and St. Louis County? 11.5% of adults seen in dental are 60+ (all from St. Charles County).
5. How many seniors (or adults if you don't have the data broken out) are on the waiting list in St. Charles, St. Louis City and St. Louis County on average? We do not keep a waiting list, but do have a certain number of appointments per day for adults, and they fill up fast
6. What is the average wait time for an appointment?

Location of Dental Clinic: St. Charles County

Cost/Insurance: Most insurance plans accepted, and an income-based sliding scale is available

Contact: Nancy Gongaware, VP of Outpatient Services ngongaware@cridercenter.org; 636-332-8305

Myrtle Hilliard Davis Comprehensive Health Centers (FQHC)

http://www.mhdchc.org/

Locations:
Comp 1
Homer G. Phillips
Florence Hill

Dental Care Services:
Myrtle Hilliard Davis provides a full scope of general dental services, including cleanings, exams, x-rays, fillings, extractions and limited oral surgery, and dentures. The clinic accepts walk-ins for true emergencies, but patients need to make an appointment for a cleaning.

Clients:
There are no geographic restrictions on clients.

Cost/Insurance:
The clinics take clients regardless of their ability/inability to pay, and work with them via a sliding scale. They do not turn anyone away.

Contact:
Dr. Carol Henley, Chief Dental Officer 314.637.5820

Grace Hill Health Centers (FQHC)

http://www.gracehill.org/content/dental-services.php

Locations:
Grace Hill Water Tower
Grace Hill Soulard-Benton Health Center
Grace Hill Murphy-O'Fallon Health Center

Dental Care Services:
Grace Hill provides general dentistry. According to the website, cleanings, fluoride applications, sealants, periodontal therapy, x-rays, restorations, minor surgical procedures, oral screenings, dentures, and removable prosthetics are available. Exams, extractions and fillings are also provided. Patients needing more specialized services, such as orthodontics, complicated surgeries, limited endodontics or fixed prosthetics are referred to specialists. Limited transportation services are also provided to Grace Hill Health Center service area zip codes.

Clients need to make an appointment, and the organization is usually booked rather heavily

Clients:
Clients come from all over, and the clinics try to see them all. The three dental clinics are strategically located in the City of St. Louis; so many clients come from the surrounding areas.

Based on 2011-12 Report to Community:

- 22,261 visits to the dental clinic (Of the 162,824 total visits)
- Cared for 1,715 senior patients in FY2012 (46,897 unique patients total)
- Payee mix:

Uninsured.....55.6%
Medicaid 36.0%
Medicare.....4.8%
Private Insurance..... 3.6%

Cost/Insurance:
Grace Hill Health Centers charges a fee of $25/visit, and offers a sliding scale to those who require it. Also accepts Medicaid for those under 21.

Contact:
Yvonne Buhlinger, MSW, FCHCEM, VP of Community Health Services
yvonnebu@gracehill.org; (314) 814-8774 or (314) 814-8507

St. Louis County Center Health Services

Locations:
North Central Community Health Center (Pine Lawn)
South County Health Center (Sunset Hills)
Berkley

Dental Care Services:
Preventive care: fillings, limited extractions, cleaning/examinations. They do have a waiting list.

Clients:
Must be residents of St. Louis County, and must have proof of residency.

Cost/Insurance:
Sliding scale available.

Contact:
Dr. Nita Johnson, Chief of Dental Services Njohnson@stlouisco.com

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Missouri College Dental Clinic

Location:
Brentwood, MO

Dental Care Services:
Only preventive services are provided: prophy, scaling and root planning, radiographs, sealants, intra and extra oral exams. Dental exams are conducted by Missouri College dental students under the supervision of instructors and dentists (http://www.kmov.com/on-tv/news-link/Missouri-College-opens-free-dental-hygiene-clinic-to-serve-the-public-72904712.html).

Wait time for an appointment can take 1-4 months depending on the time of the year and student readiness

Clients:
The clinic is open to anyone. Clients come from everywhere. Many come from retirement communities.

Cost/Insurance:
The clinic provides all services free of charge.

Contact:
Trina Morgan, Program Chair, Dental Hygiene 314.768.7898; tmorgan@missouricollege.com

St. Louis Community College, Forest Park, Dental Hygiene Department — Dental Clinic

Location:
Forest Park Community College

Dental Care Services:
The Clinic provides preventive care including dental cleanings; dental exams provided by the clinic dentist, x-rays, sealants and fluoride treatments. Patients are seen by a practicing student hygienist. Time in the chair may depend on the skill level of the student. A dental cleaning may take one or more sessions, depending on whether the student is a first or second year. Student hygienists are supervised by instructors throughout the patient's visit. The clinic has 20 seats and can accommodate special needs patients. If there is an additional problem, as determined by the dentist during his/her examination, the client will be referred elsewhere for treatment of that problem. http://www.stlcc.edu/newsroom/2011/03/News14.html

Clients:
The clinic sees a large variety of clients in terms of age, from 3 years to 80 years. They come from throughout the St. Louis region. Most are between 20 and 60, and they also see some special needs patients.

Cost/Insurance:
The clinic charges reduced fees for services. For example, it costs $3 to register, $8 for an adult cleaning, $6 for a pediatric cleaning, no charge for diagnostic procedures, and modest charges for x-rays.

The clinic's nominal fees are even further reduced as follows:
- 50% discount for STLCC faculty, staff and students from any campus
- 25% discount for Medicare recipients over 65 years of age
- No charge for valid Medicaid card holders

Contact:
Kim Polk, Director of Dental Hygiene Program 314.644.9334; kpolk2@stlcc.edu

Wright Care Dentistry

Location:
St. Charles, MO 63303

1. What is the number of seniors (age 60 +) served annually (or last fiscal year) in St. Charles, St. Louis County and St. Louis City? n/a
2. What is the annual cost to provide dental services to seniors (or adults if you don't have the data broken out)? This will help us understand the cost to provide services. Wright Care Dentistry's annual cost per senior patient is $1260. This number is reflects 60 and older low income patients. Please keep in mind that over 70% have not visited a dentist in the past 12 months.
3. What services, preventative and reactive, do you provide to seniors? We provide exams, x-rays, cleanings, extractions, dentures, denture repair, restorations, gingevectomys, education
4. What percent of adults served are seniors in St. Charles, St. Louis City and St. Louis County? 84%
5. How many seniors (or adults if you don't have the data broken out) are on the waiting list in St. Charles, St. Louis City and St. Louis County on average? St. Charles – 16 ; St. Louis City – 41; St. Louis County - 33
6. What is the average wait time for an appointment? The average wait time for an appointment at Wright Care Dentistry is two weeks. We use to partner with St. Joseph Hospital's Senior Service Program and the average wait time was 4-6 months.

Contact:
Janeen Dednam-Wright and Todd Wright 636.447.2424; wrightcaredentistry@hotmail.com