



# Economic Impact of an Aging Population

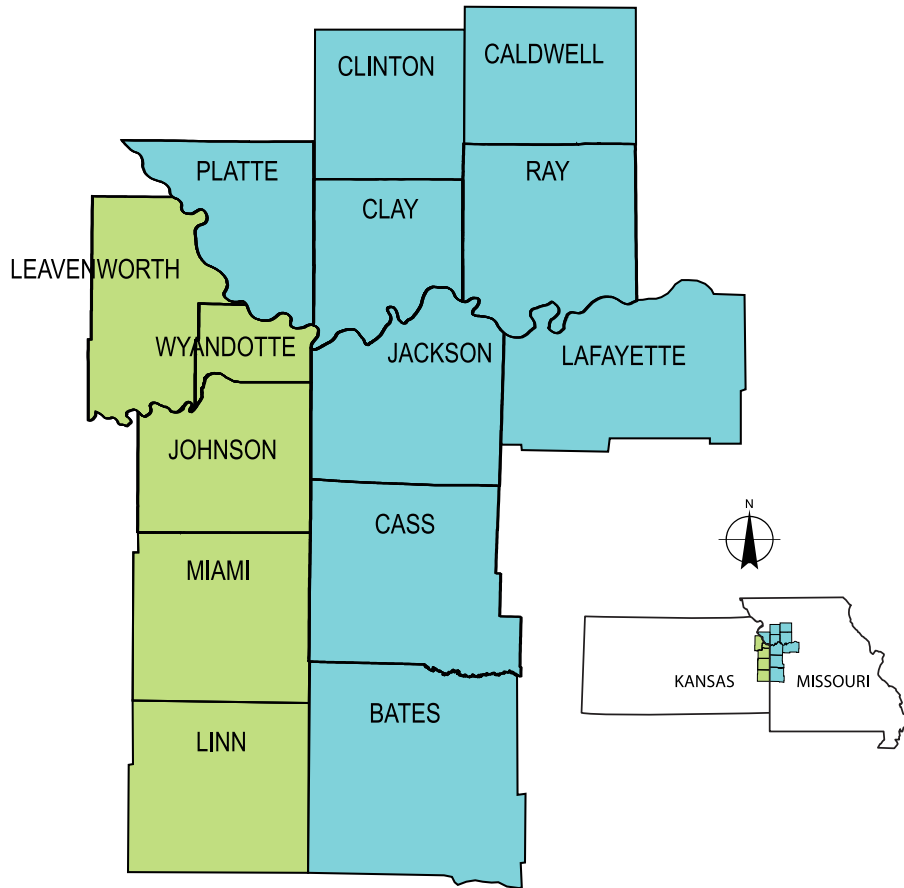
*in the Kansas City Region*

Spring 2015

The number of older adults in the Greater Kansas area is expected to increase by 233,000 between 2010 and 2030, and the older adult workforce will nearly double. *How will these changes affect our regional economy?*

**This report discusses the changing demographics of our region and ways to take advantage of the opportunities these changes create.**





Unless otherwise stated, the area used for the statistical analyses in this report is the Kansas City Metro Statistical Area, as shown in the map above.

Prepared for KC Communities for All Ages  
by the Mid-America Regional Council Research Services Department



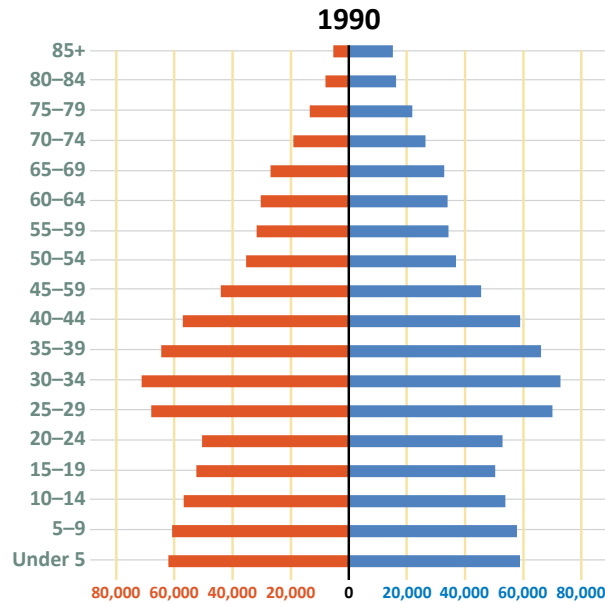
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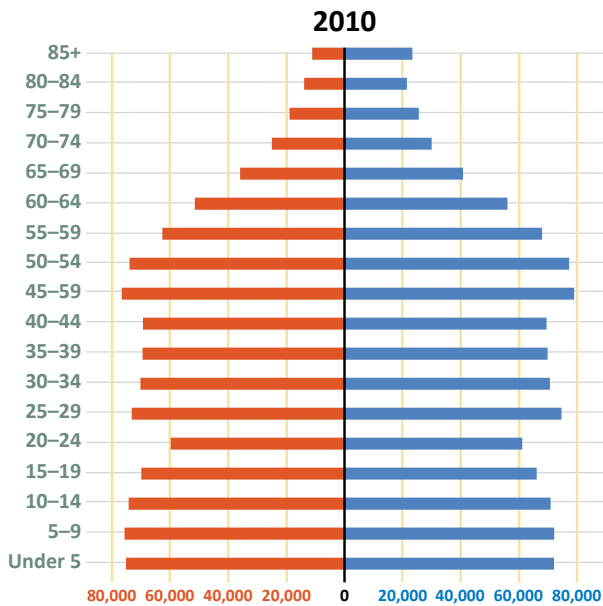
# Demographic shift

## Population change by age and gender comparison, 1990–2030

The post-World War II baby boomer generation started turning 65 in 2011. The older adult population had already been increasing its economic contribution for decades. As a result of the boomer generation, this change is speeding up dramatically.

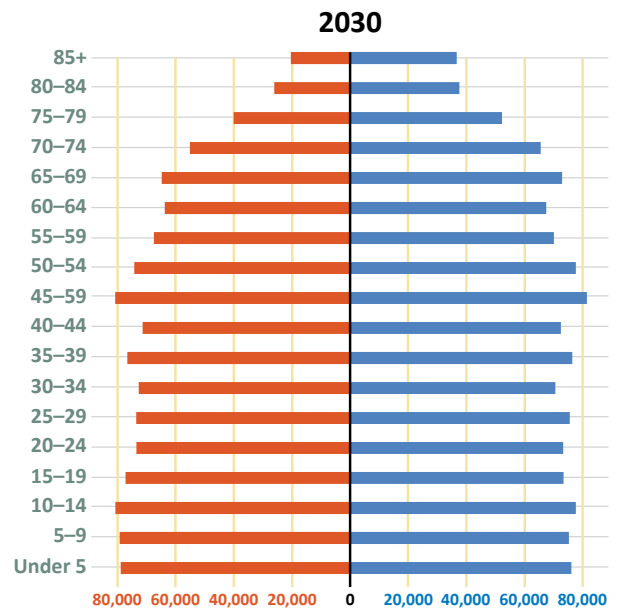


The baby boom generation created an obvious bulge in the “age pyramid.”



By 2010, the boomer bulge had moved up the pyramid, with the younger millennial generation not significantly smaller.

By 2030, metropolitan Kansas City will be more a region of all ages — where all age groups are represented relatively equally.

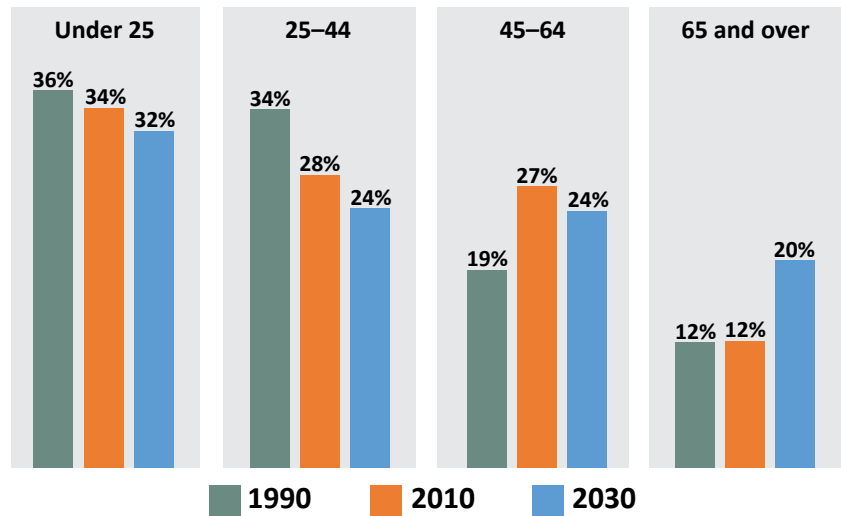


Source: Mid-America Regional Council Research Services Department

Male Female

In 2010, older adults — defined as the population 65 years of age and older — were 12 percent of the Kansas City region’s population, a percentage unchanged since 1990. But the aging of the baby boom generation means the older adult share of the region’s population is expected to increase to 20 percent by 2030. As a result, the population 65 and older will approximately double between 2010 and 2030, bringing their total to nearly one-half million.

### Population share by broad age group

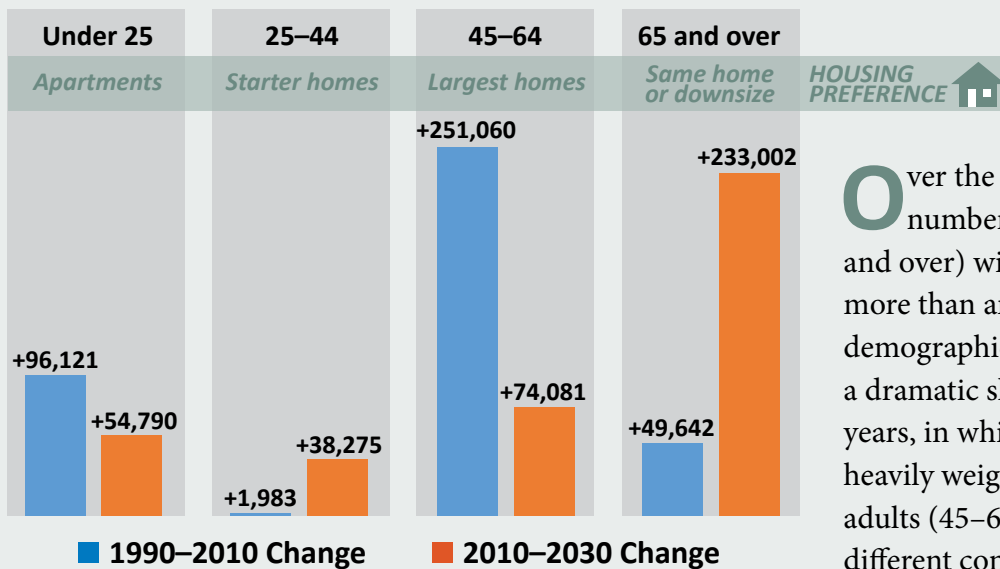


Source: Mid-America Regional Council Research Services Department

Conversely, the younger adult share of the population will decline from 28 percent to 24 percent, while the middle-aged adult share will decline from 27 percent to 24 percent between 2010 and 2030. Because the region’s overall population is expected to grow by approximately 600,000, however, these age groups are still projected to increase in numbers despite their declining share.

**Older adults account for 12 percent of the region’s population today. This will grow to 20 percent by 2030.**

### Population change by broad age group



Source: Mid-America Regional Council Research Services Department

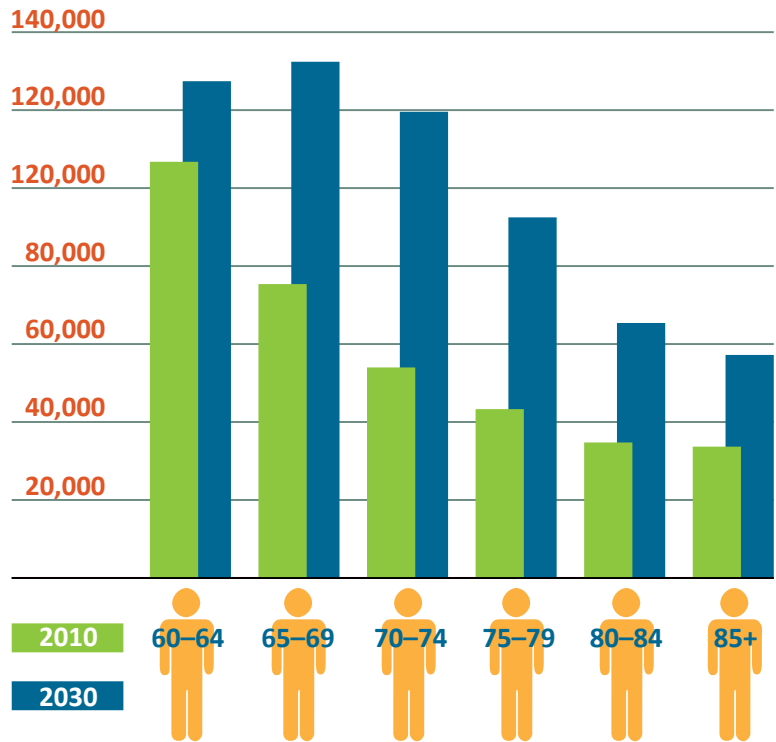
**These age groups exhibit different consumption preferences, especially in the housing market.**

Over the next two decades, the number of older adults (65 and over) will increase three times more than any other age group. This demographic growth pattern marks a dramatic shift from the prior 20 years, in which the population was heavily weighted toward middle-aged adults (45-64). These two groups have different consumption preferences, driven by differences in household size and presence of children in the home. A significant portion of the current boom in apartment construction appears to be in response to this demographic shift.

In combination, this demographic shift implies more than half — 58 percent — of the region’s entire population growth between 2010 and 2030 will be because of increases in the older adult population.

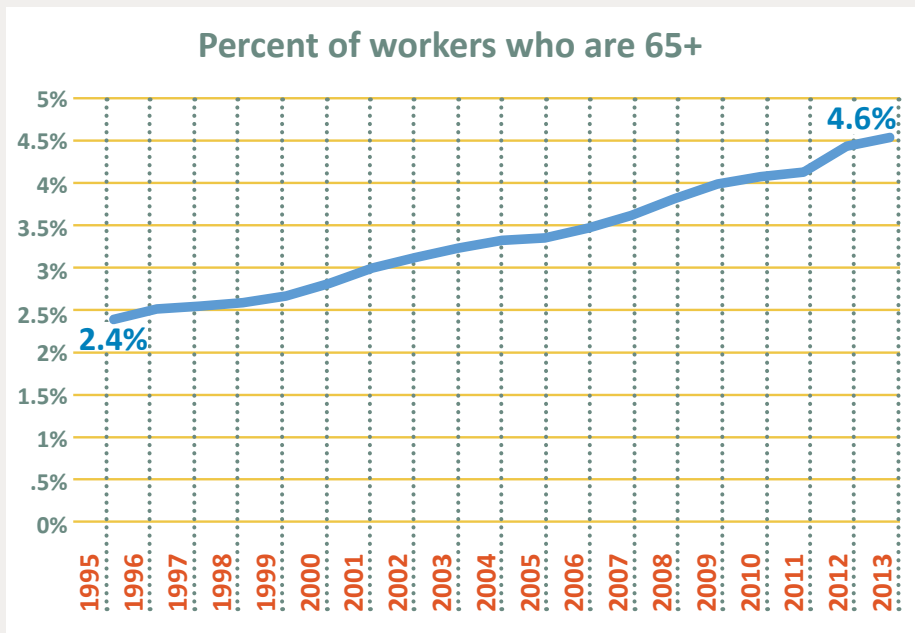
**As the population ages, 58 percent of metropolitan Kansas City’s population growth over the next two decades will come from older adults.**

### Projected population change among older adults 2010–2030



Source: Mid-America Regional Council Research Services Department

## Workforce



Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators (QWI)

The older adult population is not simply growing in number, but in economic contribution as well. They are working longer, with their share of the workforce nearly doubling since 1995, from 2.4 percent to 4.6 percent.

**Older adults’ share of the workforce has nearly doubled since 1995.**

## Percent of workforce that is 65+ by industry

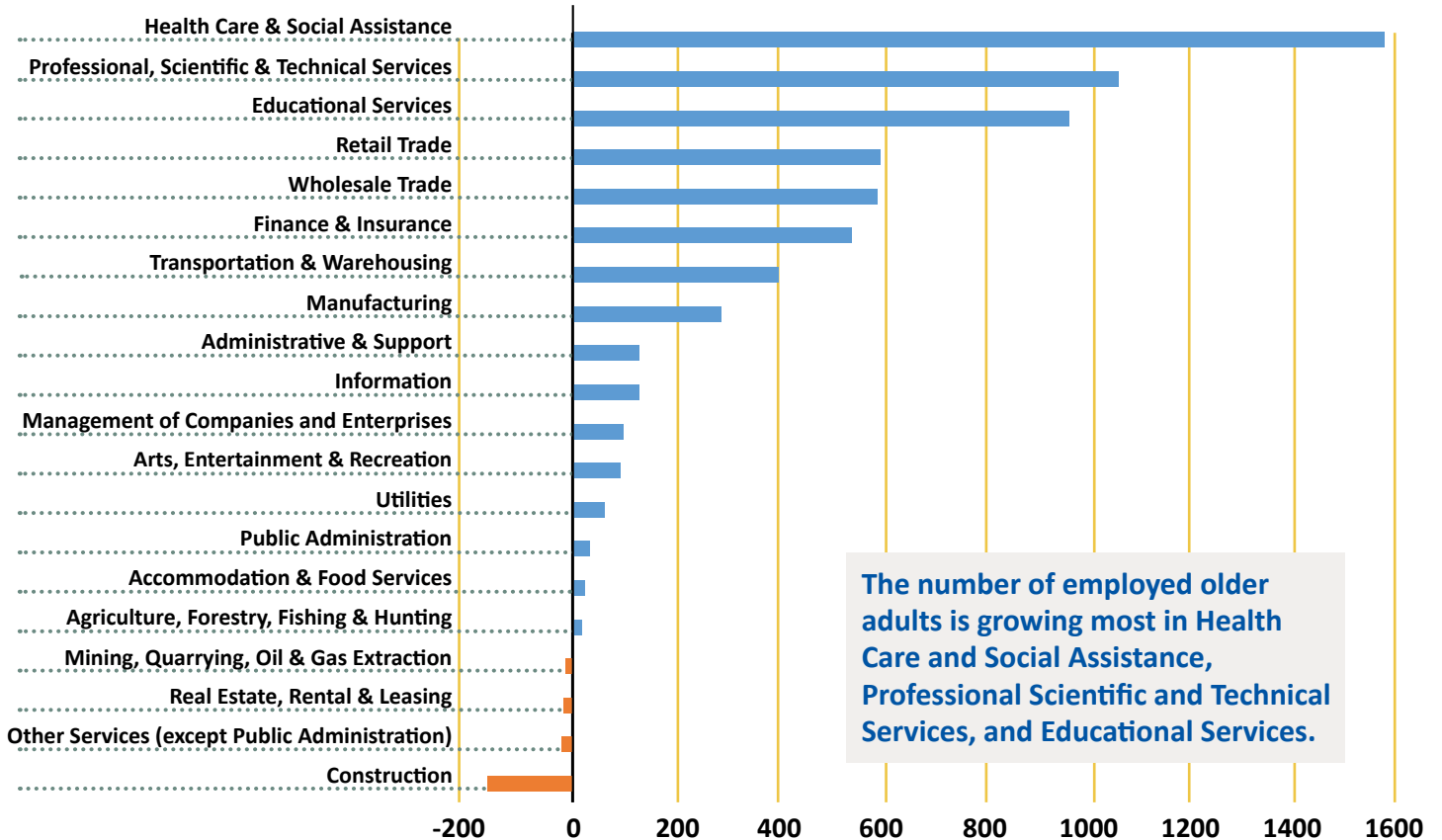
Industry	Percent of 65+ workers
Agriculture, Forestry, Fishing & Hunting	10.0%
Real Estate, Rental & Leasing	7.2%
Educational Services	6.2%
Other Services (except Public Admin.)	6.0%
Transportation and Warehousing	6.5%
Retail Trade	5.5%
Wholesale Trade	5.1%
Arts, Entertainment & Recreation	5.0%
<b>ALL INDUSTRIES</b>	<b>4.6%</b>
Health Care & Social Assistance	4.5%
Admin., Waste & Remediation Services	4.5%
Public Administration	4.2%
Professional, Scientific & Technical Services	4.1%
Manufacturing	4.0%
Mining, Quarrying, Oil and Gas Extraction	3.9%
Management of Companies & Enterprises	3.8%
Finance & Insurance	3.7%
Accommodation & Food Services	3.7%
Information	3.2%
Construction	3.1%
Utilities	3.0%

Working older adults' jobs are concentrated in agriculture, real estate, education and other services.

Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators (QWI)

## Employment

### Change in 65+ employment by industry since 2008



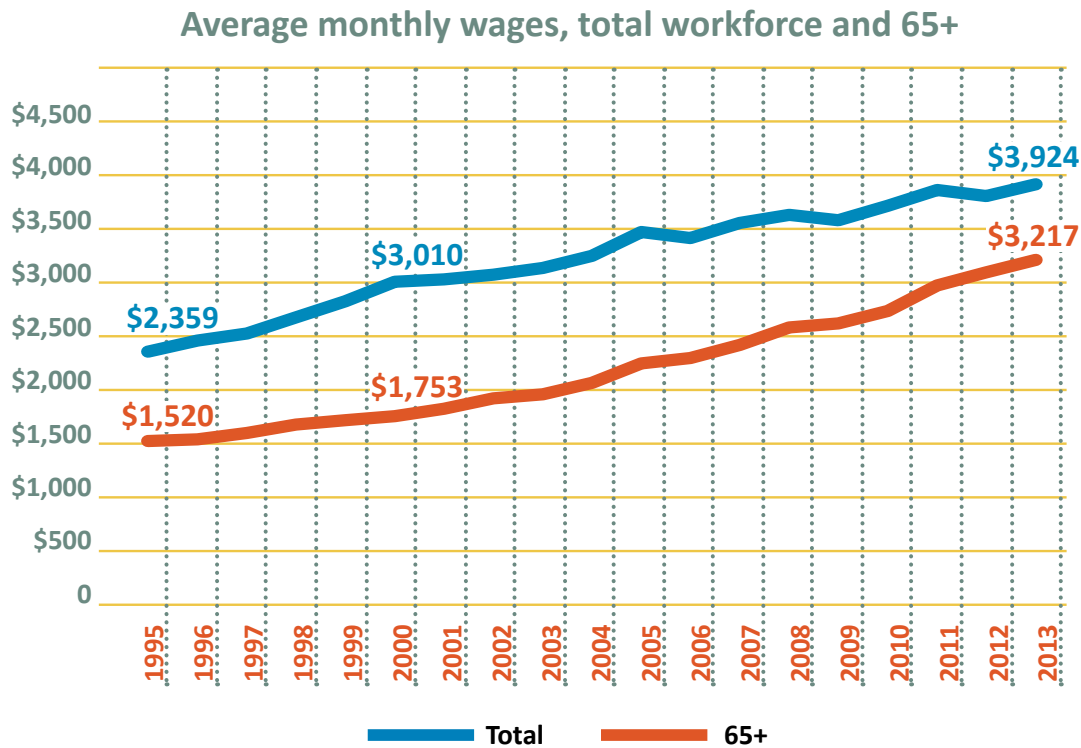
The number of employed older adults is growing most in Health Care and Social Assistance, Professional Scientific and Technical Services, and Educational Services.

Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators (QWI)

## Earnings

In 2000, the average worker in the region earned \$1,257 more per month than the average older adult. Since then, the earnings gap has narrowed by 44 percent, declining to \$707 in 2013.

As the older adult share of the workforce has grown, the wage gap between older adults and other employees has narrowed, especially since 2000.

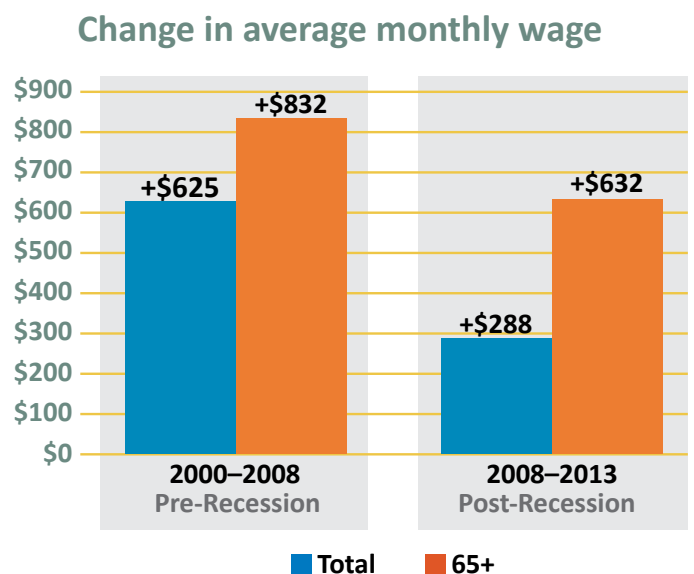


Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators (QWI)

Though wage growth slowed for all age groups since the onset of the Great Recession, older adults have been affected less. Wages for the average worker are currently growing at half the rate they did before the recession hit, while the monthly wages for older adults are growing at three-quarters their pre-recession rate.

Since 2000, monthly wages for older adults have grown more than average.

That growth has been more resilient in the aftermath of the Great Recession.



Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators (QWI)



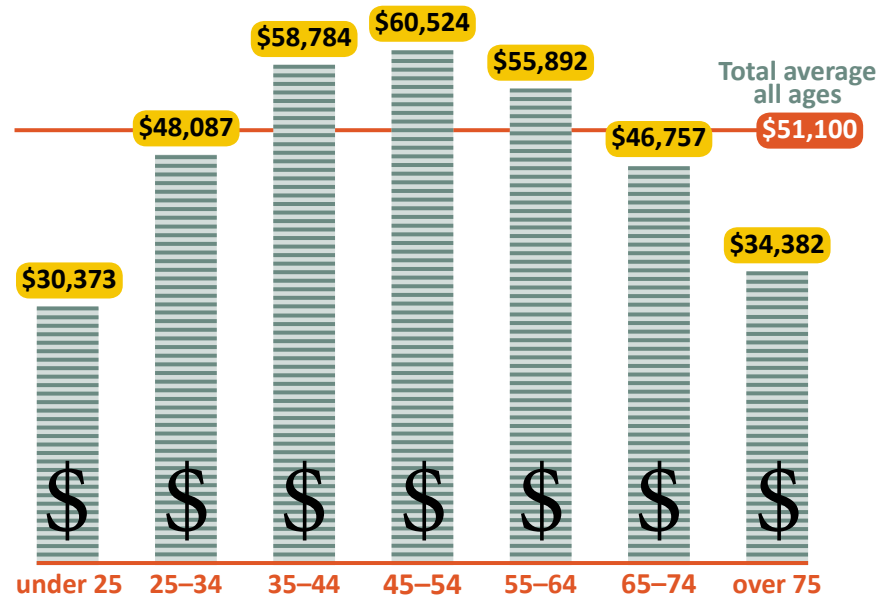
## Spending

Older adult wages may be lower than other age groups, but their spending is still roughly equal to that of younger households. In addition to wages, older adults spend retirement savings and income from Social Security.

In the U.S., households with heads aged 75 years and older spend about 13 percent more than those headed by individuals under the age of 25.

Households headed by individuals 65 to 74 years of age spend about 3 percent less than the average household headed by individuals between 25 and 34 years of age.

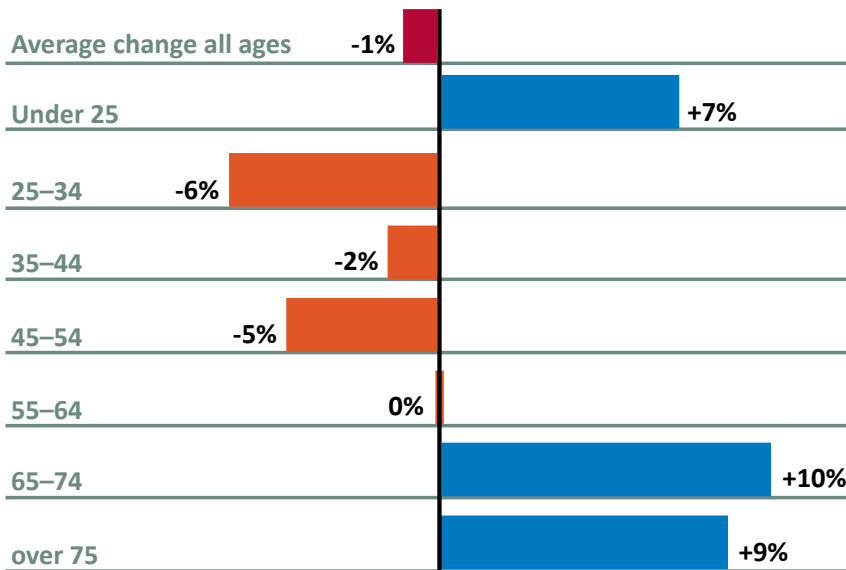
### Average U.S. annual expenditures by age group, 2013



Source: Bureau of Labor Statistics Consumer Expenditure Survey (CEX)

**Older households spend about as much as younger households, on average.**

### Real change in average U.S. household expenditure by age group, 2001–2013



Source: Bureau of Labor Statistics Consumer Expenditure Survey (CEX)

**Older adults have seen the fastest increase in average expenditures over the last decade.**

In the U.S., the average real, inflation-adjusted expenditures of elderly households — those headed by individuals aged 65 and over — increased between 9 and 10 percent between 2003 and 2013, on average. The real expenditures of the youngest households — those headed by individuals under the age of 25 — also increased over the period, though at a slower 7 percent rate. Households in other age groups either saw no growth in average expenditures over the last decade, or they saw a decline.

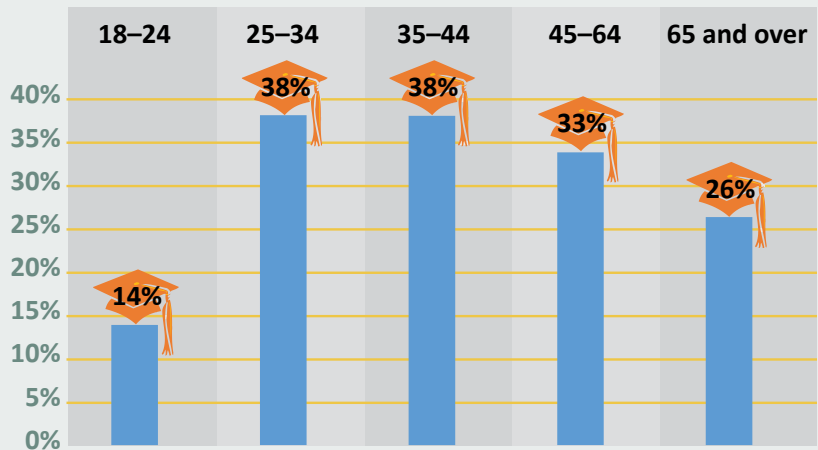


## Education

Older adults are a valuable resource to the region, not only for their financial capital, but for their human capital, as typically each succeeding generation of older adults is better educated than the last.

**With each generation we create greater human capital.**

Percent with a bachelor's degree or above, 2013



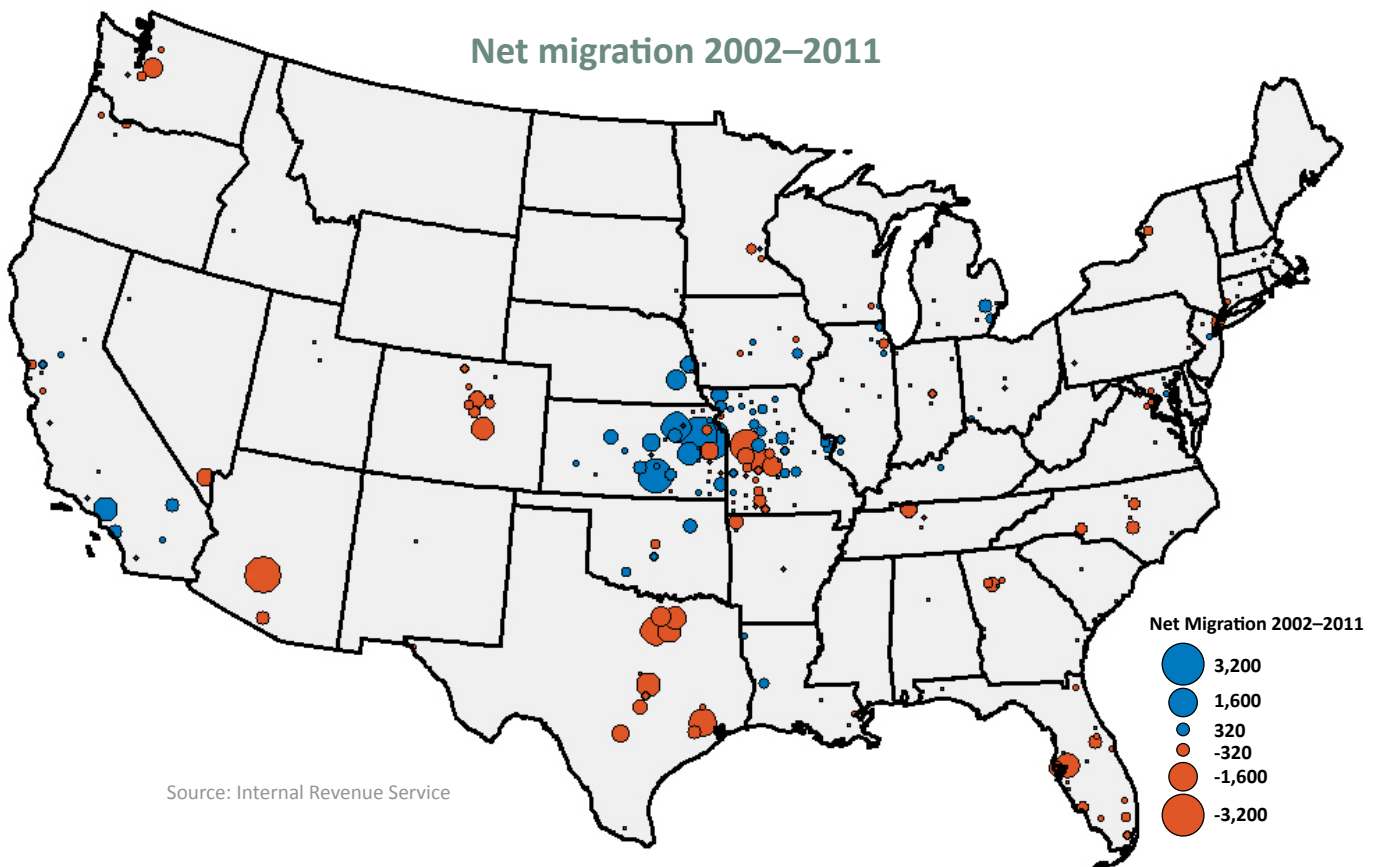
Source: U.S. Census Bureau, American Community Survey

## Migration patterns

The region is a net loser of population to much of the sunbelt, as well as retirement locations such as Missouri's Lake of the Ozarks region. The map below shows the net migration — in and out of the region — with older adults making up a portion of the migrating population, as seen on p. 10.

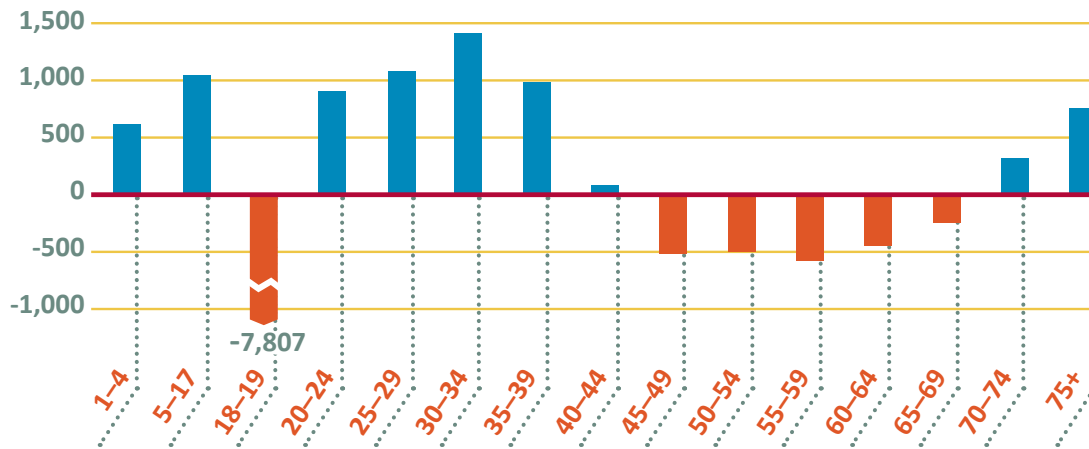
**The region is losing population to the sunbelt and other retirement locations.**

Net migration 2002–2011



Source: Internal Revenue Service

## Average annual net domestic migration by age, 2007–2013



Source: U.S. Census Bureau, American Community Survey

The region seems to be attracting older seniors, especially from other areas of Kansas and Missouri, but is losing the younger seniors and those nearing retirement age. From 2007 to 2013, the region

suffered an average net loss of 400 people 45 years of age and older per year. The region's net in-migration of 1,100 older seniors each year was offset by the net out-migration of 1,500 persons 45–69 years of age.

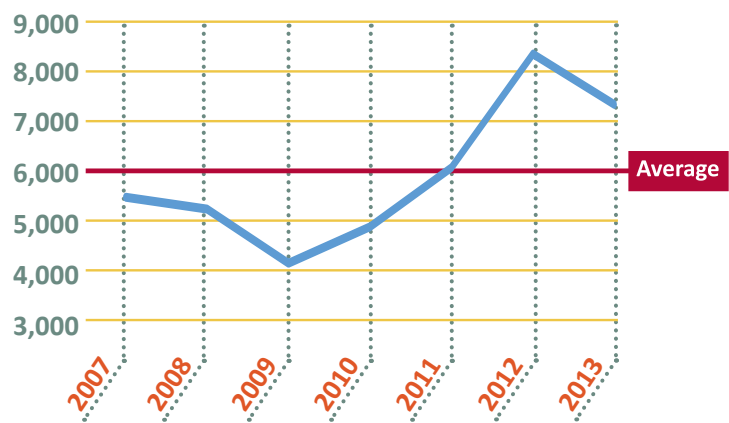
The region is currently attracting more younger adults and children than older adults.

The net figures above tell only part of the story. Between 2007 and 2013, thousands of older adults left the region.

The out-migration ranged from 4,000 in 2009 when the Great Recession curtailed geographic mobility, to a high of 8,000 in 2012.

As a result, gross out-migration — the total leaving the region — averaged 6,000 older adults per year over the period, with current levels generally about 2,000 higher than during the worst part of the recession.

## Gross outmigration of the older adult population, 2007–2013



Source: U.S. Census Bureau, American Community Survey

More older adults are moving out of the region since the Great Recession.

## The case for retaining our region's 65+ population

A region that makes a concerted effort to provide the facilities and services needed by an older population may do a better job of retaining those who would otherwise decide to leave. While the impact may not seem especially large, the retention of even a few hundred more people each year can, over time, yield a significant economic benefit to the region. The following exercise estimates the size of that benefit.

1. To gauge the potential impact of policies and investments by local governments to make their communities more accessible and attractive to an aging population, we assume for purposes of this analysis that such efforts could reduce the current average annual gross out-migration of older adults every year by 10 percent. Given an annual average gross out-migration of 6,000 per year between 2007 and 2013, such a reduction would result in retaining an additional 600 adults aged 65 years and over each year.
2. We input this additional population into MARC's economic model of the Kansas City metropolitan area developed by Regional Economic Models, Inc. (REMI). (See Appendix A on p. 15 for the REMI model description of how the economic impact was estimated.)
3. Using the policy variables in the REMI model, we are able to simulate the impact of retaining an additional 600 individuals ages 65 and over each year from 2013 through 2023. Using data on the average income of older adults, as well as the pattern of consumer expenditures by age, the REMI model estimates the increased demand this larger population would provide for output across all industries. It further estimates how much of that demand would result in purchases from local businesses as opposed to businesses elsewhere in the U.S. or the rest of the world — because only local purchases stimulate the regional economy. Finally, it uses data on input-output relationships across industries to estimate the impact of the initial purchases on supplier industries and their workers, the suppliers of the supplier industries, and so on. This process runs until a new equilibrium is reached.

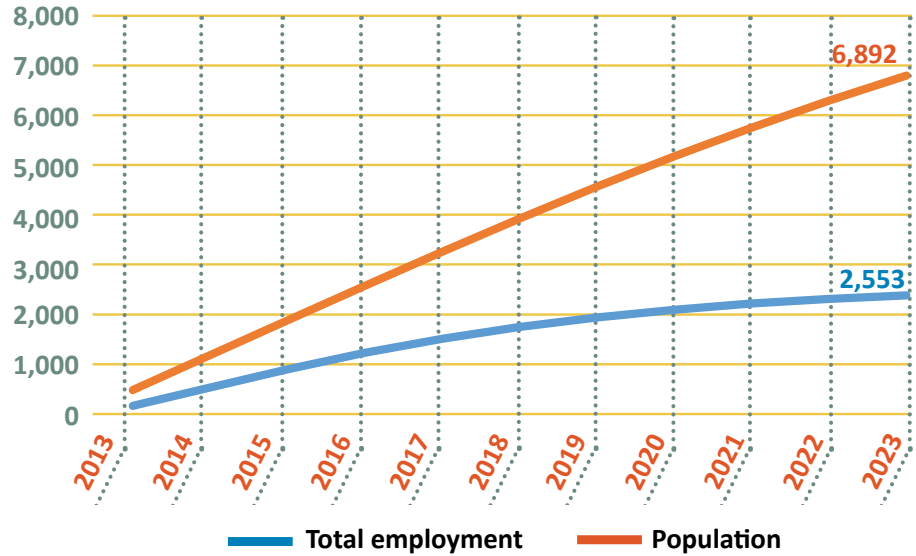
### Estimating economic impact: assumptions and methodology



- Older adult-friendly policies and investments could influence 10 percent of those currently leaving the region to instead remain here.
- The impact of an additional 600 older adults on the economy is simulated using a Regional Economic Model (REMI).
- REMI estimates the increased income and expenditures that would result locally, and translates those into expected job gains.

Retaining more older adults produces a cumulative effect on the region's economy, resulting in a region with nearly 7,000 more people and 2,600 more jobs, if the increased retention of 600 older adults per year continues for 10 years.

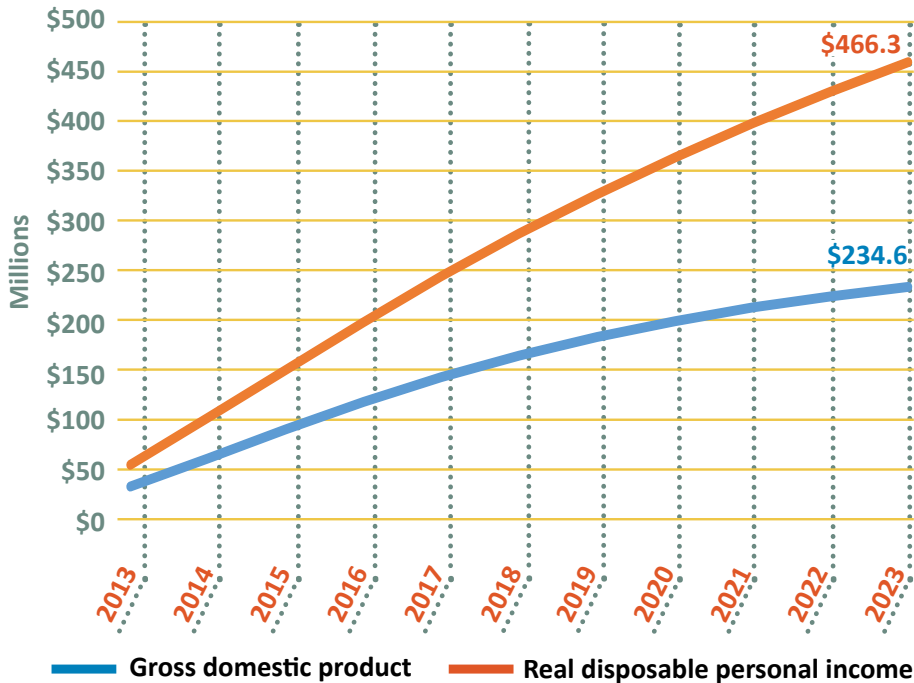
### Projected increase in total population and employment



Source: Regional Economic Models, Inc. (REMI)

As jobs increase, so does the value of goods and services produced by the regional economy — its economic output or gross domestic product. Income rises faster than output, since older adults bring with them retirement income for which they don't have to work at local firms. In addition, some of their income is spent on goods and services not produced locally, and so doesn't impact local economic growth.

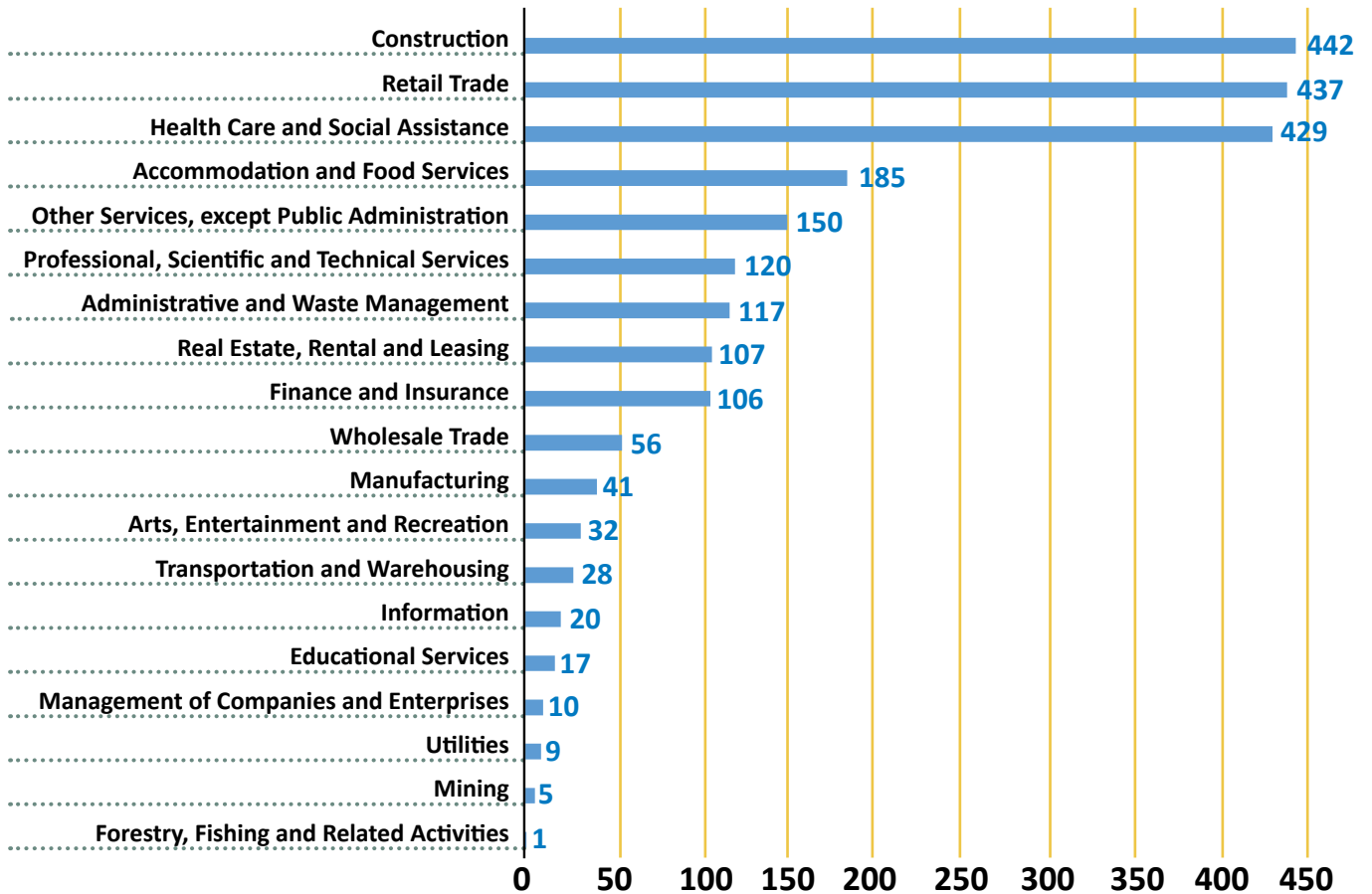
### Projected increase in gross domestic product and income



More people and jobs in the region raise annual incomes by nearly half a billion dollars, and the value of goods and services produced locally by nearly one-quarter billion dollars.

Source: Regional Economic Models, Inc. (REMI)

## Projected increase in employment by sector



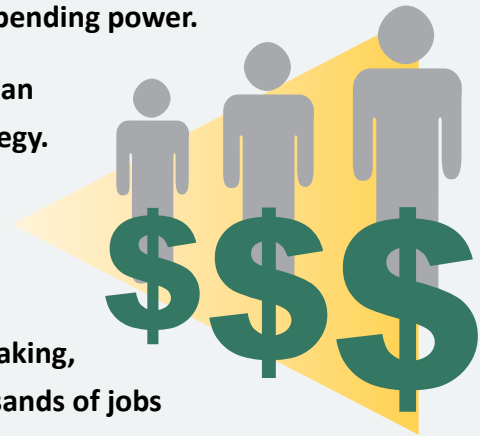
Source: Regional Economic Models, Inc. (REMI)

**Additional employment will be added mainly in the construction, retail and health care sectors of the economy.**

The income spent by older adults stimulates growth in many economic sectors. As expected, much of the growth is concentrated in the retail and health care industries. More surprising is that the region's construction industry is equally affected. Older adults spend about as much on housing as younger adults, and this and associated infrastructure investments result in a significant boost to construction employment from retaining additional older adults.

## Conclusions

- Older adults are increasingly important to the Kansas City area economy.
- This is the result of both growing numbers and growing spending power.
- Retaining older adults who might otherwise leave can be an important part of an overall economic development strategy.
- Strategies to make the region more attractive to older adults — such as providing age-friendly homes and public spaces, improving transportation options, including residents of all ages in activities and decision making, and offering a range of health services — could add thousands of jobs and millions of dollars to the region's economy, over time.
- We are increasingly a community OF all ages, so we need to invest to become a community FOR all ages.



KC Communities for All Ages provides information about how communities can become more age friendly at [www.KCCommunitiesForAllAges.org](http://www.KCCommunitiesForAllAges.org).

## Appendix A: How the REMI model estimates economic impact

Conceptually, an economic impact study conducts an experiment where the Kansas City economy grows first without any change to retirement migration, then with retaining an additional 600 older adults who would otherwise have been expected to leave the region. The difference is then the impact of the additional older adults. Of course, in real life, there is no way to conduct such an experiment. Instead, all economic impact studies must simulate it through the use of a computer model of the local economy. The validity of this kind of simulation depends largely on the quality of the economic model employed. The model used in this study is the Policy Insight model from Regional Economic Models, Inc. (REMI), some variation of which MARC has used for 25 years.

The REMI model is the current standard for regional economic models, forecasting and policy analysis, used by many states and metropolitan areas for both economic forecasting, budget forecasting and policy analysis. At its core, the REMI model uses the methodology of input-output models to capture how much an industry purchases from all other industries to produce a dollar's worth of output. As a result, the model is sensitive to the particular industrial structure of a region.

Regional economies are leaky, however. That is, when an industry in the Kansas City area needs a product from another industry, it may not be purchased from another Kansas City area business. Metropolitan areas, by their size and nature, are not economically self-contained. Money flows into and out of them depending on what goods and services they produce, and how well they produce them relative to the rest of the world.

When an industry has a demand for another industry's product, the proportion that is bought from local firms is called the regional purchase coefficient (RPC). The quality of a regional economic impact model depends significantly on the accuracy of RPC estimates. If they are too large, the model will produce economic impact estimates that are systematically too high, and vice versa. This is because the larger the RPC, the more money has a chance to recirculate within the Kansas City area's economy before leaking out, creating more spinoff jobs and income as a result. The REMI model's RPC estimates have proven themselves reliable over years of use. In part, this is because they are periodically re-estimated based on data from the Census of Transportation, which is released every five years.

Mathematically, the REMI model is a type of computable general equilibrium model. As such, it consists of over 2000 equations that describe the regional economy and that are solved simultaneously for each simulated year to ensure that market supply and demand in all industries and in the labor market remain balanced.

MARC has employed the REMI model since 1988 for both long-range (20-year) and short-range (six to eight quarters) forecasting of the Kansas City area economy and has found it to accurately reflect the region's economic performance.

To estimate the economic impact of retaining 600 older adults per year who would have otherwise left the region, MARC used the REMI model to first forecast how the Kansas City economy could be expected to grow over the 2013 to 2023 time period without any changes to its retirement migration. This creates a baseline forecast.

Next, MARC simulated retaining an additional 600 older adults per year by reducing the REMI baseline estimates of retirement migration by that amount. The increase in older population raises the income available to be spent in the region, generating extra jobs and economic output. The difference in income, jobs and output between the baseline and simulation forecasts represents the REMI model's estimate of the economic impact of the additional older adults. This impact then highlights the potential benefits of policies aimed at increasing the attractiveness of the region to older adults.





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