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The State of Retirees

How Longer Lives Have Changed Retirement

Matt Fellowes, CEO Lincoln Plews, Research Assistant

Current retirees are healthier, wealthier, and living longer than any previous generation. But little is known about how and where they are using that additional vigor, money, and time. To find out, we compiled retirees' health, financial, time-use, political, and geographic data from the Federal Reserve Board, the U.S. Bureau of Labor Statistics, the Census Bureau, Internal Revenue Service, University of Michigan, Centers for Disease Control, NOAA, and RAND, finding:

The average life expectancy of 60-year-olds has increased by 58 percent since 1900, or by almost nine years. In addition to longer lives, 62 percent of retirees are without physical or cognitive limitations, an increase of over 25 percent since 1963, the first year these data were recorded. And average wealth among retirees increased by over 100 percent since 1989, now amounting to \$752,000 in total wealth. Similarly, the share of retirees who are millionaires has more than doubled since 1989, now accounting for one out of every six retirees.

Longer, healthier lives have increased physical activity among retirees, but the largest change in activity is a near doubling of the amount of time retirees watch TV over the past 40 years, now adding up to almost three hours every day for the average retiree. In fact, for every 10 minutes of time added onto the life of a retiring 60-year-old, the share of time spent in front of a TV increased by about one minute, compared to about a 20-second increase in the amount of time spent on physical activities.

As health and wealth have increased, cost of living priorities have given way to quality of life considerations. In particular, retirees are increasingly staying put and living in more expensive suburbs near urban areas instead of less expensive rural areas. Similarly, there is no relationship between the popularity of a state among retirees and the state's weather, tax burdens, crime rate, or density of educational institutions.

With record levels of wealth, financial insecurity among retirees has broadly declined. For instance, the percentage of retirees living on the minimum wage or less dropped in half over the past 30 years, now accounting for about one out of every eight retirees. Similarly, the share of retirees living below the poverty line decreased by more than 10 percent during that same time period.

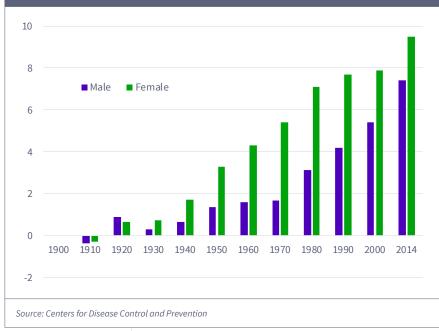
Among retirees, surging wealth has also not affected income inequality, which remains unchanged from 30 years ago. We do find that the surge in wealth has contributed to a 42 percent increase in wealth inequality among this older group of Americans, but that is solely due to the growing difference in investment wealth among retirees rather than the differences in value of housing and other non-financial assets.

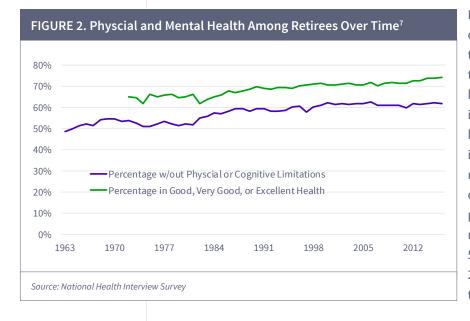
Collectively, retirees have never had it better, with more health, wealth, and time to enjoy life without the constraints of work. As they increasingly choose to stay implanted in the urbanized communities they knew during their working years, retirees are placing value on quality of life considerations rather than just basic sustenance concerns. With these more basic issues addressed for a growing share of retirees, they are poised as a group to reimagine retirement with fewer constraints. Although that additional vigor and wealth has initially been consumed largely with more hours in front of a TV, this group has tremendous civic potential that could be unlocked through creative market or public policy leadership, including potentially volunteer incentives or a new tax-incentivized bond fund that aggregates the \$14T in financial assets held by U.S. retirees to address the broad educational, transportation, and building infrastructure needs facing the U.S.

Introduction

American retirees are living longer, healthier, and wealthier lives than at any other point in human history. As one sign of increased longevity, the average life expectancy of 60-year-olds is now 83, a nine-year increase since 1900.¹ Further, life extension is picking up speed, as science and technology innovations become progressively more effective.² Between 1910 and 1960, for instance, the life expectancy of 60-year-olds increased by about three years, or 20 percent. But during the next 50 years, life had extended another 32 percent, or by almost another six years. If that life extension rate continues to accelerate at that pace, the average 60-year-old would be expected to live until 95 by 2070 – and more than one-third would be expected to reach over 100 years old.³

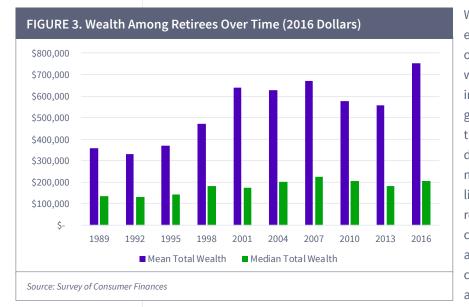
FIGURE 1. Number of Years Added to the Life of the Average 60 Year Old Since 1900, by Gender





Retirees are not just living longer, though: they are also living more years in good health.⁴ The percentage of retirees aged 60 years or older without any physical or cognitive limitations increased from 49 percent in 1963 (the first year of the National Health InterviewSurvey) to nearly 62 percent by 2016.⁵ Similarly, almost three out of every four retirees now report no difficulty walking at least one-quarter mile and that they are in good or excellent health. Even more report no difficulty with memory. As with the rest of the population, the percentage of retirees who are overweight or obese has also been steadily increasing, which has increased the incidence of diabetes.⁶ But it has so far not stunted the consistent growth over time in the percentage of healthy retirees. Instead, retirees who are unhealthy seem to be getting more unhealthy, due largely to the fact that more people are living to increasingly older ages.

Perhaps the biggest improvement in the quality of life for retirees in recent decades, though, is the large and broad surge in their wealth.⁸ Just in the past 30 years, average wealth among retirees has increased by over 100 percent, now amounting to \$752,000.⁹ Most of that surge in wealth has occurred in financial accounts, which means it can be relatively more easily converted into retirement income, if needed. This wealth increase was also broadly experienced among the population of retirees. As one sign of that, the median wealth increase during this period was 53 percent, indicating that half of the retirees in 2016 had that much more in wealth compared to the typical retiree in 1989.¹⁰



With this extra money, time, and fitness, U.S. retirees have never had it so good. A growing number of them have the capital, health, and time to live with peace of mind and freedom that was only imaginable for past generations. But how has that growing autonomy changed the way retirees live their lives? Are they spending time in retirement differently? How about the way they manage their money, which must pay for increasingly longer lives? Similarly, with more wealth and health, do retirees congregate in the stereotyped warm, lowcost, rural areas of the country to conserve money and ease mobility? Or are they opting to stay put close to family or areas of the country with more activities and diversity?

To answer these questions, we compiled health, financial, time-use, political, and geographic data on retirees from the Federal Reserve Board, the U.S. Bureau of Labor Statistics, the Census Bureau, Internal Revenue Service, University of Michigan Centers for Disease Control, Cornell University, and RAND for as many years as the data were available. The data represent a broad cross section of government and academic survey data collected about the U.S. population over time, making it possible to identify trends across different generations of retirees. Wherever possible, we focused on people who self-identify as retired in the surveys. In cases where that information is not available, we instead looked at trends associated with households of different age levels, focusing on older households.

We found that longer lives have indeed increased physical activity among retirees compared to previous generations. But the single largest increase in the amount of time allocated during a typical day is the number of hours retirees spending watching TV. In fact, for every minute retirees added to the amount of time they spend every day on physical activities between 1975 and 2012, they increased their time sitting in front of a TV by two minutes. In total, the average retiree now spends almost three hours in front of the TV every day, compared to less than one hour on physical activities.

We also found that as retirees have become increasingly healthier and wealthier, they are staying put, choosing instead to live in urbanized communities close to amenities they have known as workers. In fact, there is no relationship between where retirees live and the state's tax rate, crime rate, or weather. In addition, even though the cost of living is more expensive for growing shares of retirees who remain in high-cost areas of the country, the propensity of serious consumer finance challenges among retirees has also declined. For instance, the percentage of retirees living on the minimum wage or less dropped in half, now accounting for about 1 out of every eight retirees.

Put together, these trends indicate that retirees are healthier and wealthier than any previous generation. Although there are some new, emerging threats on the horizon, such as the surge in sedentary time in front of a TV, retirees as a group have broad freedom to enjoy their retirement years in good health and with increasing amounts of time and wealth. For policymakers, these data indicate that attention needs to be given to unlocking the tremendous civic potential of retirees through new incentives and policy. With more wealth, years, and vigor than past generations, retirees represent one of the best opportunities available to address the needs of the nation.

Methodology

This paper relied on a broad set of government and private data to assess how the lives of U.S. retirees have changed over time. A summary of each data set used is below.

First, we relied on the Federal Reserve's Survey of Consumer Finances (SCF), which is a nationally representative survey of 6,254 American families. It has been published triennially since 1983 and collects detailed information on the income, holdings, and general financial lives of each surveyed household. Since the survey went through significant methodological changes in 1989 and has remained relatively consistent since then, our use of these data focused on the years between 1989 and 2016. However, we supplemented data, where available, from the 1960 Survey of Consumer Finances, conducted and maintained by the University of Michigan's Inter-University Consortium for Political and Social Research. These surveys are no longer maintained by the Federal Reserve but contain some variables with comparable counterparts in the more recent versions of the survey.

Second, we used the U.S. Department of Commerce's Current Population Survey (CPS), which is sponsored by the U.S. Census Bureau and the Bureau of Labor Statistics. The CPS is a monthly cross-sectional survey of 60,000 U.S. households, focused on the employment status of the civilian, noninstitutionalized population. However, it also covers a broad range of additional topics, including demographics, health, and migration. The CPS has been conducted since 1940, but we only look at annual data from 1962, given uneven data availability for earlier years.

Third, we analyzed the National Health Interview Survey (NHIS), administered by the National Center for Health Statistics and sponsored by the Centers for Disease Control and Prevention (CDC). It is an annual cross-sectional survey of 87,500 adults in the United States and focuses on the general health of American citizens, but also collects substantial demographic and socioeconomic data to allow for health-related comparisons across social groups. The survey has been conducted continuously since 1957, with significant updates every 10 to 15 years. Its last major update came in 1997, when substantial changes were made to the wording of some questions. We used every year of data that has been recorded. For our life expectancy estimates, we relied on the CDC's life tables, which are based on a combination of population estimates from the 2010 decennial census and 2014 age-specific death and population counts for Medicare beneficiaries age 66 to 99.

Fourth, we considered the American National Election Studies (ANES), conducted by the University of Michigan, which is a cross-sectional survey of eligible voters in the United States, conducted during every presidential election year (and roughly 75 percent of midterm-elections years) since 1948. In this analysis we used the cumulative time series file, which contains variables collected in three or more ANES studies and includes recodes to harmonize variables over time. The sample size of the study has varied over the life of the survey, ranging from 662 in 1948 to 5,914 in 2012. It is important to note that the wording of some questions has changed significantly over time, as has the order of questions, which may have impacted the results of the survey. For this reason, we used these data as supplements to other civic data with more consistent measures over time.

Fifth, we relied on a compilation of different time use surveys compiled by the University of Oxford's Centre for Time Use Research. The individual surveys used include: the Multinational Comparative Time Budget Research Project (1965-66), Americans' Use of Time: Time Use in Economic and Social Accounts (1975), Americans' Use of Time Project (1985), the National Time-Diary Study (1994-95), the Family Interaction, Social Capital, and Trends in Time Use Study and National Survey of Parents (1998-2001), and the American Time Use Survey (2003-12). The sample sizes range from 1,199 to 12,443. All surveys included a nationally representative sample of U.S. adults.

Sixth, we used a number of additional surveys as supplemental material, including historical tax rate data from the Federation of Tax Administrators: weather and climate data from the National Oceanic and Atmospheric Administration; data on criminal activity from the FBI's Uniform Crime Reporting database; and data on colleges and universities from the U.S. Department of Education.

Finally, in all but one case, we chose to define "retiree" as a person age 60+ and not in the labor force. In sections where comparisons were made to the working population, "working" was defined as anyone in the labor force, regardless of age (again, in all but one case). The only exception was the SCF, for which a self-identified retiree variable was available to differentiate between working and retired. For data sets that contained household-level data, we categorized households as "retired" or "working" based on the status of the head of household in that survey.

Findings

Longer, healthier lives increased physical activity among retirees, but the largest change in activity is a near doubling of the amount of time watching TV, now adding up to almost three hours every day for the average retiree. In fact, for every 10 minutes of time added onto the life of a retiring 60-year-old, the share of time spent awake and in front of a TV every day among retirees increased by about one minute, compared to about a 20-second increase in the amount of time spent on exercise, outdoor activities, or sports.

To evaluate how time use has evolved over time among retirees, we assessed the University of Oxford's American Heritage Time Use Study, which is a collection of nationally representative surveys of how U.S. households spend their time. We looked at every year the data was available (from 1975 through 2012), since we are interested in tracking these trends as health has improved and wealth has grown over time. The survey asks questions about specific activities, making it possible to get into detail about how time allocation has changed over our reference period.

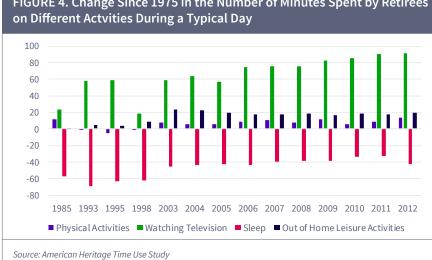


FIGURE 4. Change Since 1975 in the Number of Minutes Spent by Retirees

We first considered how time allocation has changed over this period across all of the major categories tracked by the time use survey. It shows that retirees have spent progressively less time sleeping, eating, working, and reading as their years of life have extended. In fact, today's retirees spend nearly two hours less on these activities in a typical day, compared to retirees 40 years ago. The time spent sleeping decreased by the largest amount, falling from an average of 9.5 hours in 1975 to less than nine every night. The next largest reduction was the amount of time spent eating, which fell from about 1.5 hours every day, on average, to just over an hour every day.



In place of those stationary activities, retirees have spent progressively more time on physical activities. Out-of-home leisure activities, like time spent exercising outside or with friends, increased by nearly 20 minutes between 1975 and 2012. Other types of physical activities have increased by 13 minutes during that time period. Activities outside of the house also ticked up. For instance, time spent volunteering during a typical day increased by about five minutes. However, religious activities were one of the only activities outside of the home to see a decrease during this period, consistent with a broader trend among all U.S. adults.¹¹

But the largest change in time spent by this healthier and wealthier generation of retirees has been the amount of time spent in front of the television.¹² In particular, between 1975 and 2012, the time spent watching the big set increased by over 1.5 hours, from an average of three hours to 4.5 hours. That adds up to about 30 percent of the average retiree's hours during a day when they are awake, or 20 percent of the entire day. To put this in perspective, for every 10 minutes of time added onto the life of a retiring 60-year-old, the share of time spent awake and in front of a TV every day increased by about one minute, compared to about a 20-second increase in the amount of time spent on exercise, outdoor activities, or sports.

This trend is observed, too, in industry data that records information about the television viewing habits of different consumer segments. For example, the average age of viewers of all major sports increased between 2006 and 2016, according to Magna Global, a marketing agency.¹³ Viewers of NASCAR aged the most during this period, increasing from an average age of 49 in 2006 to 58 by 2016. But golf and tennis viewers are the oldest, at 64 and 61, respectively. Similar trends are evident in television news viewership data. Pew Research Center reported in 2016, for instance, that over 55 percent of households older than 65 watch local news and cable news, like Fox or CNBC.¹⁴ And marketing firms have reported that entertainment programs are increasingly being targeted to households that are 50 years and older.¹⁵

Research has found that viewership habits shape attitudes, for instance, about race, crime, and safety.¹⁶ Since news programming is often sensationalized on these issues to capture the attention of viewers, it could lead to misperceptions that create unnecessary stress for retirees.¹⁷ Those outcomes are reflected in other research that found that increasing amounts of television viewership increased concerns about personal safety, as well as health and financial security. It also created a generally lower morale compared to people who do not watch as much television.¹⁸ Similarly, research has found that the effects of television vary by the programming people are tuning into. For example, one multi-country study found that public broadcast news (like PBS) increased political knowledge, while cable news actually reduced knowledge that people have about actual events.¹⁹

Other research has found that increased hours in front of the TV can create a number of health problems. For instance, a meta-analysis of eight academic studies found that significant time in front of the TV was associated with increased risk of Type 2 diabetes and cardiovascular diseases.²⁰ A larger study of 24 academic studies found that increased sedentary activity among older households was associated with an increased risk of all-cause mortality.²¹ Other research found that increased inactivity was associated with harmful health outcomes regardless of the amount of time also spent on physical activity during the day.²²

We next considered how these trends vary by income level among retirees. For this analysis, we considered the share of retirees having incomes higher than 75 percent of other retirees (high income), less than

75 percent of retirees (low income), or are in between these two groups (middle income). We found that while high income and highly educated retirees watch less TV and are more active than lower income and less educated retirees, they have also experienced as a group the largest time management changes over time. In particular, the average low-income retiree in 2012, the most recent year that data is available for, spent nearly five hours in front of a TV every day, compared to about 3.5 hours in 1975, an increase of 43 percent over this nearly 40-year period. That is a large increase, but the increase among high-income households is almost twice as large, growing by 78 percent during this same time period. As a group, these higher income households spend over an hour less in front of the TV compared to lower income households, but the differences between the two groups sharply converged over time.

		Low Income	Middle Income	High Income
Television	1975	204	253	126
	2012	292	264	224
	Change	43%	4%	78%
Sleep	1975	589	580	541
	2012	542	533	519
	Change	-8%	-8%	-4%
Physical Activities	1975	34	41	38
	2012	38	58	67
	Change	12%	41%	77%

FIGURE 5. Number of Minutes Spent by Retirees on Actvities During a Typical Day, by Activity and Income Group

Source: American Heritage Time Use Study

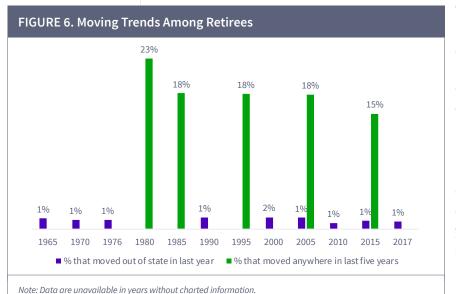
The opposite trend emerges if we consider the changed allocations over time to physical activities. In particular, in 1975, low-income and high-income retirees both were physically active about the same amount of time during the day – 34 and 38 minutes, respectively. But by 2012, those two segments had diverged. Lower income households increased their time spent on physical activity by about 12 percent, compared to a 77 percent increase among higher income households, which adds up to over an hour per day, on average. These data indicate that while lower and higher income households combine those stationary moments with more physical activities during the day as well.

In summary, the growing health and wealth of retirees has led to an increase in physically oriented activities, including exercise. But the largest increase in time was the number of hours spent in front of a television, now accounting for nearly 20 percent of the average retiree's day. That increase happened for all income and educational groups, although the bulk of the increase has occurred among higher income households, which saw their average TV time increase by over 1.5 hours during the past 40 years. These changes to time management can stunt the potential of longevity gains among retirees, since increased sedentary activity is associated with an increased risk of all-cause mortality, regardless of the amount of time also spent on physical activity during the day.

Importantly, these trends may also somewhat reflect the fact that the distribution of retirees has pushed the distribution of surveyed older Americans to an increasingly larger number of retirees who are immobile and spend more time on sedentary activities. While retirees have become healthier as a group, they have swelled as a population and there are more people living into their 90s and even 100s than ever before. This older group of retirees will somewhat move these trends over time as well, although it is likely only at the margins, since the population of younger retirees has also grown in recent decades.

As health and wealth has increased, cheap cost of living priorities have given way to quality of life considerations. Retirees are increasingly staying put and living in more expensive suburbs near urban areas instead of less expensive rural areas. Similarly, there is no relationship between the popularity of a state among retirees and the state's weather, tax burdens, or crime rate.

To evaluate how the distribution of retirees across the U.S. has changed over time, and how those choices are affected by state features, we assessed data from the Census Bureau's Current Population Survey (CPS), the Federation of Tax Administrators, NOAA, the FBI, and the U.S. Department of Education. Using these data, we evaluated how the distribution of retirees has varied over time and the relationship of that distribution to state differences.



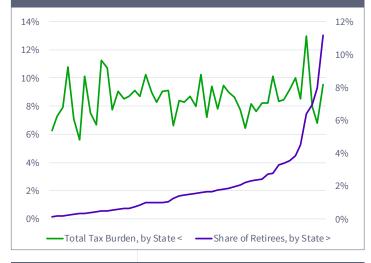
We found that retirees are increasingly staying put rather than moving to warm, low tax areas of the country.²³ In particular, the share of retirees reporting they have moved in the past five years has fallen from a high of 23 percent in 1980, when these data were first recorded, to a new low of just 15 percent in 2015, the most recent data available. Perhaps more tellingly, even when retirees do move, they are most likely to move within the same county. In fact, only about one percent reported that they moved out of their current state in the most recent study year. This follows a more general population trend: since 1965, the share of the U.S. population moving between states each year has fallen by over 50 percent, now accounting for just under two percent of all U.S. households.

Retirees are staying put for reasons other than the fact that they may already live in areas of the country that fulfill stereotypes of ideal locations for them. In fact, there is no relationship between the popularity of states among retirees and the state's weather, tax burdens, or crime rate. For instance, the five states that have the largest populations of retirees (California, Florida, Texas, New York, and Pennsylvania) have annual rainfall rates that are some of the highest in the country (e.g., Florida sees more annual rainfall than 45 other states) and include two states with below average temperatures (e.g., New York is colder than 74 percent of other states). But, it also includes some of the driest and warmest areas of the country (e.g., California has less rain than 40 other states and is warmer than 38 states). Those five states also have a wide variance in tax burden, ranging from a low of Florida, which taxes an average of 6.79 percent of gross income, to a high of New York, which at 12.94 percent is the single highest state tax burden in the country. And while Florida is one of the most popular locations for retirees, it also has one of the highest crime rates in the country. Pennsylvania, on the other hand, is one of the safest states and is also one of the most popular locations for retirees today.

Another way to visualize this finding is by rank-ordering states by the percentage point increase or decrease in the share of U.S. retirees living in each state between 1967 and 2017. As an example, California had the largest net gain of retirees during this time period, increasing the share from about seven percent in 1967 to over 11 percent of retirees by 2017. This relatively high-tax, higher crime rate, but good-weather, state is strikingly different from the state that experienced the second largest increase in

Source: Current Population Survey

FIGURE 7. Relationship Between State Tax Burden and Share of Retirees



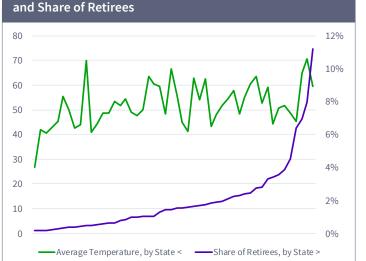


FIGURE 9. Relationship Between State Weather and Share of Retirees



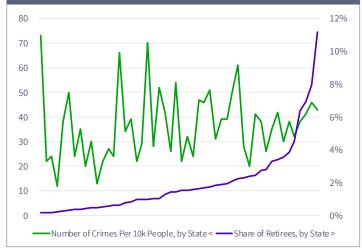
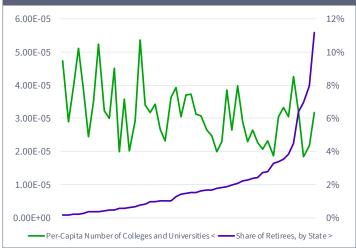


FIGURE 10. Relationship Between State Density of Educational Institutions and Share of Retirees



Sources: Current Population Survey, Federation of Tax Administrators, NOAA, FBI, and U.S. Department of Education

retirees during this time period: Florida. With a growth rate of retirees nearly equal to California, Florida has one of the lowest tax burdens in the country and is one of the rainiest as well. Both places, though, have relatively higher crime rates.

This finding is evident, too, if we consider the density of retirees instead of the distribution. On the high end, West Virginia, Florida, Maine, Montana, and Pennsylvania have the highest share of retirees as a percentage of the state population: over 17 percent in each state. On the other end, Utah, Alaska, Texas, North Dakota, and Georgia have the least number of retirees relative to their overall state populations. Maine is one of the safest states in the country, whereas Florida is one of the most dangerous. Similarly, Maine has the fourth highest tax burden in the country, whereas Florida has one of the lowest. And Florida is one of the wettest states, whereas Maine is about average.

If taxes, crime, and weather cannot explain where retirees choose to live their healthier and wealthier lives, what can? One indication of the new preferences among retirees is found in the data on the urbanization of the retiree population over time.²⁴ The percentage of retirees living in rural areas fell by 200 percent between 1900 and 2017, now accounting for less than one out of every five retirees. Instead, older Americans are increasingly living in the suburbs of major cities such as Los Angeles and Phoenix or in the city centers of less dense cities, like San Antonio and San Diego. For instance, the share of retirees living in the suburbs of cities increased by nearly 40 percent over the past 40 years, now accounting for nearly 1 out of every 2 retirees. By contrast, the overall share of the working population that lives in suburbs grew by just 8 percent during this time period. Those trends indicate that suburbs are increasingly getting older and comprising retired households.

The urbanized retired population is likely choosing to stay near friends, family, and the cultural attractions, like sporting teams and theaters, that they have come to know well. Since they have more vitality and wealth compared to previous generations, they probably also feel they can take advantage of the amenities that are in greater supply in cities, like volunteer, entertainment, and exercise activities, even if it comes at a higher cost than they might pay in other areas of the country.

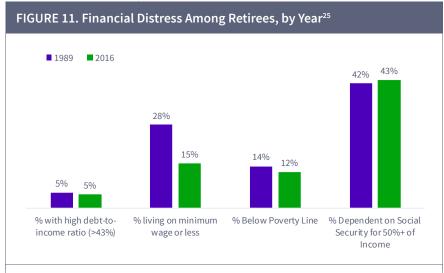
Finally, we considered how these trends vary by the income levels of retirees. Higher income households may be more able to afford to move to stereotypically ideal retirement locations with warm temperatures and low crime rates; lower income households, on the other hand, may be more compelled to move to less expensive areas of the country. In fact, both groups are much less likely to move in retirement than past generations. Specifically, the percentage of high-income retirees who have moved in the past year fell by 70 percent between 1964 and 2017, now accounting for fewer than one percent of all high-income retirees. That is about the same percentage of low-income retirees who also report moving in the year before the most recent survey in 2017. If we extend the analysis to include any retirees reporting they moved in the past five years, we see a similar trend. High-income retirees are 39 percent less likely to move, compared to the generation of retirees 40 years ago; low-income retires are 23 percent less likely to move. Although lower income retirees are modestly more likely to have moved than those with higher incomes, it is still a minority of these households, accounting for less than one out of every five. In addition, most of the households that do move are staying within the same county or state.

In summary, as retirees have become progressively healthier and wealthier they are increasingly choosing to live in more expensive, culturally vibrant, urban areas of the country and eschewing in growing numbers the lower cost, more remote rural areas. As a group, they do not seem to base their retirement decision on cost of living, weather, or crime rates. None of these variables were significantly associated with either the distribution or density of retirees. Instead, staying put and quality of life is increasingly important to retirees as their vitality and bank accounts have increased in value over time.

With record levels of wealth, financial insecurity among retirees has broadly declined. For instance, the percentage of retirees living on the minimum wage or less dropped in half over the past 30 years, now accounting for about one out of every eight retirees. Similarly, the share of retirees living below the poverty line decreased by more than 10 percent during that same period.

We next evaluated how the financial security of retirees has changed over time. For this, we used the Federal Reserve Board's triennial Survey of Consumer Finances. We used the oldest data available for the beginning of our trend analysis, which varies between the 1960s and 1980s, depending on the metric being examined.

We first examined the percentage of retirees having high debt to income ratios using the Consumer Financial Protection Bureau's measure, which is the share of retirees spending more than 43 percent of their monthly income on household debt payments. That specific number is the cutoff for mortgage borrowers to obtain a Qualified Mortgage, or a type of mortgage that is usually associated with better terms, since lenders are protected under federal regulation and can more easily sell the mortgage in the secondary market. By this measure, there has been no change in the percentage of retirees managing high debt to income obligations: the average retired household spent about five percent of its income in both 1989 and 2016 servicing debt, even though the mean debt being managed by retirees has increased by over 350 percent during that same time period and more retirees manage debt. Income gains have offset those debt gains. In addition, the debt levels are still relatively low and predominately mortgage debt, which can be serviced over long periods of time.



In particular, of the \$42,000 that the average retiree is currently carrying in debt, nearly \$30,000 of that is mortgage debt. That is due to a broadening of the share of retirees managing debt in retirement, which has grown from 14 percent of retirees in 1989 to 25 percent nearly 30 years later in 2016. It also is the result of a broad increase in the value of mortgage debt, as households manage the growth of home values outstripping income group, particularly for low- and moderate-income households. Nonetheless, it is a somewhat surprising finding given the data in the previous section that indicated both working and retired households are moving much less frequently than past generations. In addition, the home owner-

Source: Survey of Consumer Finances and Current Population Survey

ship rate among retirees has been nearly fixed at 72 percent for the past 30 years. Together, these data suggest that retirees are not necessarily buying homes at greater rates during their lifetimes, but they do seem to be using more debt in those transactions or are more likely to take equity out of their homes through equity loans compared to previous generations.

Credit card use has also grown broadly, but more as a cash management tool than a lifestyle-enhancing product. In particular, since 1989, the share of retirees with credit card debt grew from 18 percent to 33 percent. But the average balance among all retirees is just \$1,504, or four percent of the average income among retirees. That number may be lower than what is optimal, if retirees are instead withdrawing money from investment accounts to fund spending volatility due to unexpected expenses, which grow in frequency as households age.²⁶

Another segment of retirees that we evaluated are those making low, relative incomes. For this analysis, we relied on two measures of relative income: the share of retirees living with an annual income equal to or less than the minimum wage and the share living with incomes below the official poverty line. These trend lines over time give us perspective into the share of retirees potentially facing severe financial insecurity.

We find that the poverty rate among retirees has declined over the past 30 years, but the sharpest reduction has been in the share of retirees living below a minimum wage income. In particular, the poverty rate fell about five percentage points between 1989 and 2016, now including about one out of every 10 retirees. In contrast, the share of households living at or below the minimum wage in 1989 was approximately 28 percent of retirees, or more than one out of every four. By 2016, however, that rate had fallen by nearly 90 percent, including just 15 percent of retirees--or within five percentage points of the working population. These data indicate that both moderate and severe income distress has fallen among retirees as the average household wealth of this population has more than doubled over the past 30 years. In addition, the incidence of financial distress among retirees is closing in on the overall working population, even while retirees, by definition, are not working and earning a paycheck. Here, too, then, we see that the overall state of U.S. retirees has remarkably improved relative to past generations.

The final financial stress indicator that we considered is related to the reliance among retirees on Social Security, the public pension program targeted at this segment. As this reliance increases, financial insecurity should also grow, since Social Security is designed as a minimal financial support mechanism for retirees. However, we find that reliance among retirees on these benefits is largely unchanged over the past 30 years. In particular, Social Security income represented about 43 percent of annual income for the average retirees in 1989 and had increased to 45 percent by 2016. That change is so small that it could be attributable to sampling error across the two surveys. Given that, we considered the percentage of retirees who depend on Social Security for 50 percent or more of their annual income. Here, too, we found that the change over time was minimal, increasing from 42 to 43 percent over this same 30-year period--a difference that could also be attributable to sampling error.

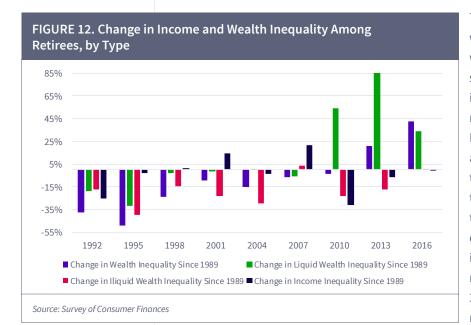
These data indicate that the financial health of retirees has improved alongside the large wealth gains among this population over time. Both poverty and the incidence of low incomes have fallen among retirees, for instance. While the propensity of these financial challenges are still more prevalent compared to working populations, average costs of living are also quite a bit lower, indicating that these measures may be less reliable for signaling severe financial distress for this population segment. This is not to suggest that financial challenges do not remain for retirees or that wealth gains have been universal. As one sign of that, the share of retirees highly dependent on Social Security Income is still high, at nearly one out of every two retirees. Nonetheless, these data indicate that retirees are generally more financially healthy compared to past generations.

A 100 percent increase in the average wealth of retirees over the past 30 years has not affected income inequality, which remains unchanged during this time period. We do find that the surge in wealth among retirees has contributed to a 42 percent increase in wealth inequality among this older group of Americans, but that is solely due to the growing difference in investment wealth among retirees rather than a difference in the value of housing and other non-financial assets.

We next evaluated how the surge in wealth held among retirees has affected inequality among this population. For this analysis, we also relied on the Federal Reserve Board's triennial Survey of Consumer Finances. We began with an analysis of total, gross wealth, including all assets with monetary values held by households. To measure inequality among this population, we rank-ordered all households by the value of their wealth, then broke that sample into four quartiles, and calculated the mean value of assets held by the lowest (or first) quartile and the highest (or fourth) quartile. We then looked at the percentage difference between these two values and calculated the percentage change over time from 1989, which we used as a baseline. In this way, we could determine the breadth of wealth and income differences among retirees as a group, as well as evaluate how those measures have varied over the time period that wealth has surged. We applied this same methodology to consider differences across both financial and non-financial assets, as well as annual income among retirees.

We began with an assessment of changes over time in the gross wealth held by retirees, which does not account for any debt held by retirees, such as mortgage or auto loan debt. We found that the lowest wealth quartile of retirees in 1989 held mean assets worth about \$4,117 (in 2016 dollars), compared

to \$1,155,187 held by the highest wealth quartile. The spread between those two values increased by 42 percent between 1989 and 2016, with the lowest quartile mean increasing to \$5,901 and the highest wealth increasing to over \$2 million. This is consistent with overall wealth trends among all U.S. households. In general, as wealth increases, it will increase at a faster rate among wealthier households because of the larger compounding value of their money compared to less wealthy households.



This is evident when we consider what type of wealth, in particular, was the source of growing wealth inequality among retirees. During this same time period, the size of financial wealth inequality increased at a much higher rate than non-financial wealth differences among retirees. In particular, in 1989, the mean value of financial assets held by retirees in the least wealthy guartile was \$252, compared to \$460,701 held by the top quartile. By 2016, the least wealthy increased their financial asset holdings to \$531, but the top quartile had increased their average holdings in investment or savings accounts to over \$1.3 million. That different relative growth led to a 34 percent increase in wealth inequality among retirees during this nearly 30-year time frame. In

that same time span when wealth inequality was growing rapidly, however, there was nearly no change in the inequality of the non-financial wealth held by retirees, growing only one percent. These data underscore the impact that compounding, invested wealth can have over time on the financial security of households. Since so few low-wealth households invest, they are left increasingly behind as middleand high-wealth households see the value of their financial assets compound over time.

The importance of equity in household wealth trajectories over time is even more apparent when we look at the gap between wealthy and ultra-wealthy households over time. While the median millionaire increased their wealth between 1989 and 2016 by 12 percent, for instance, the top one-percent of millionaires increased their wealth 110 percent, or from \$14.9 million to \$31.3 million. That spreading gap between the wealthy and ultra-wealthy likely had to do with the growing concentration of household wealth in equities among the ultra-wealthy. During this same period, for instance, the median millionaire increased their equity positions from 27 percent of their financial account value to 55 percent. But, the ultra-wealthy, or the wealthiest one percent of millionaires, increased their concentration in equity holdings from 30 to 69 percent, giving them access to a much larger equity premium through this time period.

Surprisingly, during this same 30-year time period when wealth and inequality sharply grew among retirees, we found that income inequality did not change. In particular, households in the lowest income quartile in 1989 lived on an average of \$13,562 compared to about \$197,367 among the highest income quartile of retirees. Nearly 30 years later, however, the differences between the lowest and highest income retirees had not changed, even though wealth had surged by 100 percent and wealth differences had surged by over 30 percent. In particular, the lowest income quartile of retirees increased their mean income to \$17,188 in 1989, while the highest income group increased their income to \$248,135. That difference is large, but it is not nearly as large as it could be, given the surge in wealth held by the highest wealth quartile of retirees. These trends reinforce an interesting trend reported in our previous research that high-wealth retired households live more frugally than they need to.²⁷ However, the depth of this frugality may have actually increased over time, as the relative wealth of rich retirees has increased while their incomes have not. The reasons for this trend are difficult to establish. Research has found that, as they age, people become progressively more pessimistic about future stock market and economic performance, which might lead to cash conservation. That trend is perhaps further reinforced by the finding in this paper that TV viewing increases as we age, and has increased as a share of the average retiree's day over time. Programming over time has become increasingly sensationalized, and cable news, especially, is prone to focus on isolated negative stories.²⁸ But there are perhaps other drivers of this trend as well, such as growing concerns about paying for lengthening lives or health care.

Conclusion

This paper found that American retirees are living longer, healthier, and wealthier lives than at any other point in time. These trends are expected to continue or even accelerate in some cases, as life continues to extend at a quickening pace and wealth continues to compound in value, particularly investment wealth. We explored how the lives of retirees, having more vigor and prosperity than previous generations, have changed over time, finding that physical activity has indeed increased, but additional time in front of the TV is the largest change in time management as retirees have become healthier and wealthier as a group.

We found that this increasing vigor and abundance has changed where retirees choose to live out their years without work requirements. As constraints have fallen away, retirees have surprisingly decided in growing numbers to stay put, close to the increasingly urbanized communities of friends, family, and amenities they have known as workers. Even when retirees do decide to move in retirement, they are most likely to move within the same town or county, rather than out of state. Perhaps more surprisingly, there is no relationship between where retirees live and the state's tax rate, crime rate, or weather. Sustenance considerations have given way to quality of life preferences, shaped by the geographic proximity to high-amenity city centers, friends, and families.

By far the largest change over time among retirees, though, is their wealth, which surged by over 100 percent between 1989 and 2016. That was largely due to swelling investment and other financial account values, which accelerated much more rapidly than the value of non-financial assets, like homes and cars. In fact, the difference between the value of these assets held by wealthy and less wealthy retirees did not grow at different rates during this time, compared to sharply different appreciation rates in the value of investment and other financial accounts.

For policymakers, these data indicate that more needs to be done to build the financial asset wealth of lower wealth households, who are getting left farther behind in retirement as the brokerage and retirement accounts of middle- and high-wealth households continue to compound in value. Expanding access to tax benefits that incentivize savings is one vehicle that could accomplish this, perhaps by easing the ability of small businesses to sponsor retirement savings plans. Similarly, allowing retirement plan sponsors to focus on building both emergency and retirement savings in their ERISA plans would remove a chief driver of preretirement spending in retirement accounts, since the broad lack of emergency savings among workers is driving premature cash outs of retirement savings.

More generally, the data indicate that more attention should be given to unlocking the tremendous civic potential of retirees through new incentives and policy. With more wealth, education, and health than past generations, retirees represent one of the best opportunities available to address the needs of the country. Time spent volunteering, for instance, has hardly changed over the past 30 years, even though retirees as a group have never been more able to give back their time and resources. This group could be deployed in the nation's public schools as mentors or co-educators, for instance, to buttress the declining value of resources available to educate children. Even more ambitiously, the \$14T in financial asset wealth held by retirees could be pooled together in publicly backed and tax-incentivized bonds that could fund wide-scale investments in infrastructure improvements, such as bridges, ports, or highways. Similarly, tax regulations could better incentivize in-life giving to address some of the more endemic, domestic challenges facing the country, perhaps by creating broader tax benefits for benefactors or heirs if giving is targeted at a domestic priority, like education or infrastructure.

In summary, with more wealth and health than previous generations, and expectations that both trends will continue and even perhaps accelerate in the future, retirees have never had it better as a group. As they increasingly choose to stay in the urbanized communities they knew during their working years, retirees are putting increasing value on quality of life considerations above basic sustenance concerns. With these more basic issues addressed for a growing share of retirees, they are poised as a group to reimagine retirement as a new time in life to live with fewer constraints. Although that additional vigor and wealth has initially been consumed with more hours in front of a TV, this group has tremendous civic potential that could be unlocked through creative market or public policy leadership.

Notes

- 1 Centers for Disease Control, National Center for Health Statistics.
- 2 Longevity gains are not evenly distributed among the population. See, for instance: Raj Chetty, Michael Stepner, and Sarah Abraham, "The Association Between Income and Life Expectancy in the United States, 2001-2014." *JAMA*, *315 (2016): 1750-1766. In addition, see the Centers for Disease Control and Prevention for numerous related data and studies.*
- 3 One of the best books the authors have read on this topic is Laura Carstensen, *A Long Bright Future (New York: Public Affairs, 2011).*
- 4 Centers for Disease Control, National Center for Health Statistics.
- 5 Research has found that self-rated health is generally a reliable predictor of actual health. See, for instance: Shunquan Wu, Rui Wang, Yanfang Zhao, Xiuqiang Ma, Meijing Wu, Xiaoyan Yan, and Jia He, "The Relationship Between Self-rated Health and Objective Health Status: A Population-based Study," *BMC Public Health (2013): 320.*
- 6 This is part of a broader trend among retirees. As lives extend, the incidence of chronic conditions increases in older retirees, since more people are living to the age when these conditions are most likely to occur. See, for instance: William W. Hung, Joseph S. Ross, Kenneth S. Boockvar, and Albert L. Siu, "Recent Trends in Chronic Disease, Impairment and Disability Among Older Adults in the United States." *BMC Geriatrics (2011): 47.*
- 7 In this case, the NHIS defines "limitation" as lacking the ability to carry out the normal activities of daily life.
- 8 For a more in-depth analysis of the change in financial wealth among Boomers, in particular, see: Edward N. Wolff, "The Retirement Wealth of the Baby Boom Generation," *Journal of Monetary Economics*, 54, no. 1 (2007): 1-40.
- 9 The data in this section is from the Federal Reserve Board's Survey of Consumer Finances, reviewed in the methodology section of this paper.
- 10 All financial numbers in this paper are in 2016 dollars, unless otherwise noted.
- 11 This trend has been broadly documented. See, for instance, the religious affiliation time series of questions and responses at Gallup, Inc.
- 12 This T.V. trend has been part of a general population trend. See, for instance, Ross C. Brownson, Tegan K. Boehmer, and Douglas A. Luke, "Declining Rates of Physical Activity in the United States: What Are the Contributors?" Annual Review of Public Health, 26 (2005): 421-443.
- 13 John Lombardo and David Broughton, "Going Gray: Sports TV Viewers Skew Older," Sports Business Journal (2017). The authors analyze Nielsen television viewership data of 24 sports between the years 2006 and 2016.
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- 15 Bill Carter and Tanzina Vegamay, "In Shift, Ads Try to Entice Over-55 Set," New York Times, May 13, 2011.
- 16 Sarah Eschholza, Brenda Sims Blackwell, Marc Gertz, and Ted Chiricos, "Race and Attitudes Toward the Police: Assessing the Effects of Watching "Reality" Police Programs," Journal of Criminal Justice 30, no. 4 (July–August 2002): 327-341.
- 17 Brinha Meiseberg, Jochen Lengers, and Thomas Ehrmann, "The Economics of Sensationalism: The Lack of Effect of Scandal-Reporting on Business Outcomes," Journal of Media Economics 29, no. 1 (2016).
- 18 Don R. Rahtz, M. Joseph Sirgy, and Rustan Kosenko, "Using Demographics and Psychographic Dimensions to Discriminate Between Mature Heavy and Light Television Users: An Exploratory Analysis," Proceedings of the Academy of Marketing Science (AMS) Annual Conference (1988): 2-7.

- 19 Jesper Strömbäck, "Learning Political News From Television Comparing Knowledge Effects of Watching Public Service and Commercial TV News" (Working Paper, presented to the ECREA 2015 Political Communication Conference).
- 20 Anders Grøntved, "Television Viewing and Risk of Type 2 Diabetes, Cardiovascular Disease, and All-Cause Mortality: A Meta-analysis," JAMA 305, no. 23 (2011): 2448-2455.
- 21 Leandro Fornias Machado de Rezende, Juan Pablo Rey-López, Victor Keihan Rodrigues Matsudo, and Olinda do Carmo Luiz, "Sedentary Behavior and Health Outcomes Among Older Adults: A Systematic Review," BMC Public Health 14 ((2014): 333.
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- 23 Another sign of this: the literature on aging in place has increased over time. See, for instance: Sarinnapha Vasunilashorn, Bernard A. Steinman, Phoebe S. Liebig, and Jon Pynoos, "Aging in Place: Evolution of a Research Topic Whose Time Has Come," Journal of Aging Research (2012): Article ID 120952.
- 24 Some international research has found that older adults living in cities have improved health outcomes compared to those living in non-urban areas. See, for instance: S.V. Subramanian, S. Nandy, M. Irving, D. Gordon, H. Lambert, and S.G. Dave, "The Mortality Divide in India: The Differential Contributions of Gender, Caste, and Standard of Living Across the Life Course," American Journal of Public Health 96 (May 2006): 818-825.
- 25 We've used the Current Population Survey's definition of the poverty line, which is set by the Census Bureau each year. For more information, see "How the U.S. Census Bureau Measures Poverty," U.S. Census Bureau, 2014.
- 26 Matt Fellowes, "Living Too Frugally? Economic Sentiment & Spending Among Older Americans," 2016, United Income Inc., Washington, DC.
- 27 Matt Fellowes, "Living Too Frugally? Economic Sentiment & Spending Among Older Americans," 2016, United Income Inc., Washington, DC.
- 28 See, for instance, Stuart Soroka and Stephen McAdams, "News, Politics, and Negativity," Political Communication 32 (2015): 1-22; Tai-Li Wang, "Presentation and Impact of Market-driven Journalism on Sensationalism in Global TV News," International Communication Gazette, 74, no. 8 (2012).

About the Authors

Matt Fellowes is the founder and CEO of United Income. Prior to founding United Income, Matt was the Chief Innovation Officer at Morningstar and the founder and CEO of HelloWallet, an award-winning financial guidance software company acquired by Morningstar Inc. in 2014. He currently sits on the Board of Directors of Fellowes Inc. and the Advisory Board of the Stanford Center on Longevity. A native of Chicago, he holds a PhD from the University of North Carolina at Chapel Hill, an MPP from Georgetown University, and a BA from St. Lawrence University.

Lincoln Plews is a Research Assistant at United Income. Previously, Lincoln worked as a field organizer for Hillary for America in Ohio and served as a fellow with Princeton in Asia in Shanghai, China. He has also interned with Sen. Joe Donnelly, Sen. Sherrod Brown, and Raymond James Financial. Lincoln holds a B.A. from The College of Wooster.

About United Income

United Income is a money management solution that extends the life and potential of money to compliment the innovations that have extended human life. Our unified system of money management reflects a deeply held belief that financial decisions are interconnected. New data and technology allow us to observe and understand these relationships in new ways. We translate that unique understanding into powerful and personalized money management for our members that brings their retirement dreams to life.

Our team brings decades of experience leading the finance and technology markets. We have written or overseen the laws governing the retirement and financial markets in places like the White House and Department of Treasury, helped to invent technologies that have changed the world at places like Amazon and Tesla, and won awards like the Webby for the best financial software website in the world. We are all at United Income to pursue the ambitious goal of understanding how the consumer finance world works as a unified system. This unique understanding of how the world works allows us to bring hope, meaning, simplicity, and empowerment to our members.