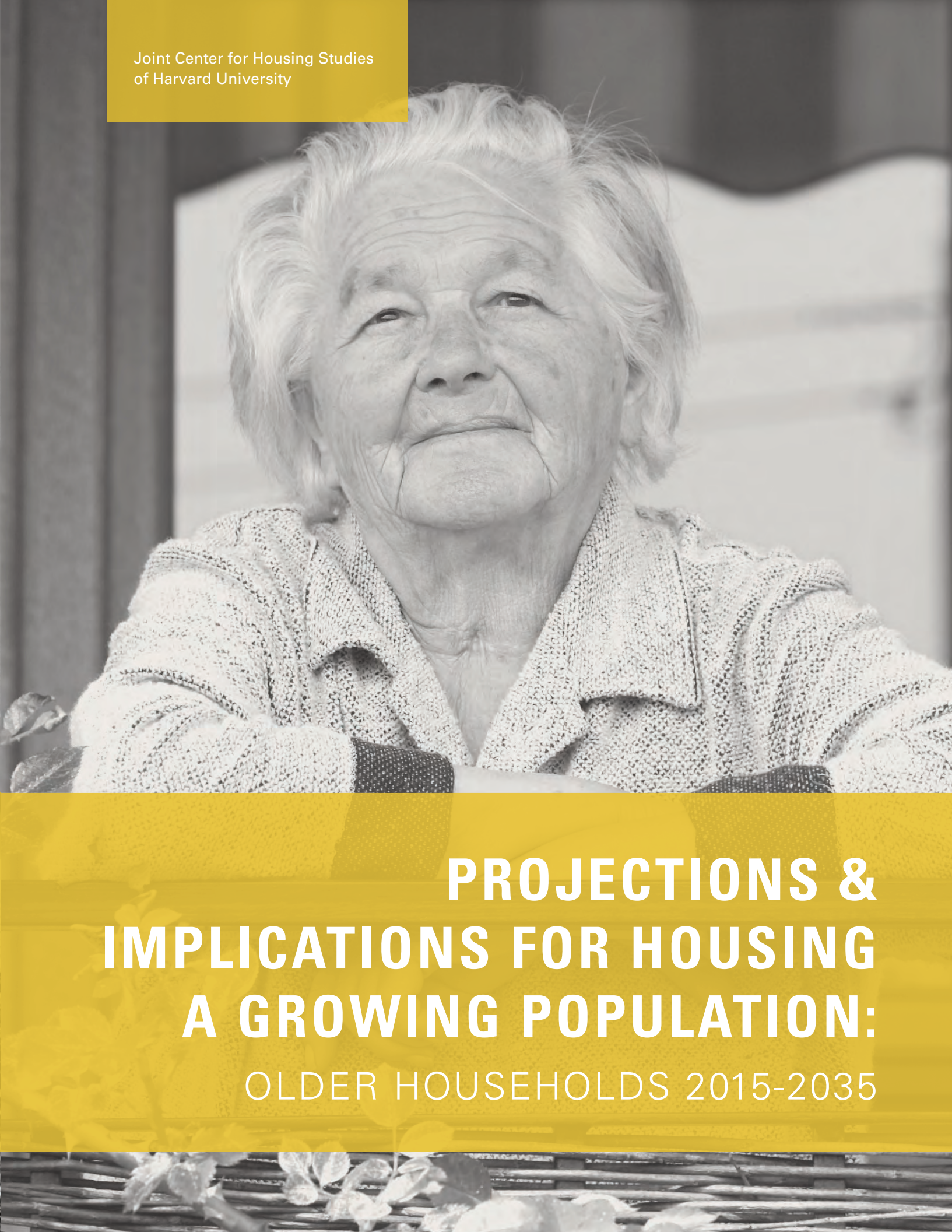


Joint Center for Housing Studies
of Harvard University



**PROJECTIONS &
IMPLICATIONS FOR HOUSING
A GROWING POPULATION:
OLDER HOUSEHOLDS 2015-2035**



CONTENTS

EXECUTIVE SUMMARY	4
1. PROJECTIONS OF OLDER POPULATION AND HOUSEHOLDS	14
2. TENURE & HOUSING CIRCUMSTANCES OF OLDER ADULTS.....	22
3. DISABILITIES AMONG OLDER ADULTS	36
4. THE FINANCIAL SITUATIONS OF OLDER ADULTS	50
5. IMPLICATIONS FOR HOUSING	64
APPENDICES	70
NOTES	80
SOURCES	89



EXECUTIVE SUMMARY

Over the next twenty years, the population aged 65 and over is expected to grow from 48 million to 79 million. Meanwhile, the number of households headed by someone in that age group will increase by 66 percent to almost 50 million—with the result that by 2035, an astounding one out of three American households will be headed by someone aged 65 or older.

Older adults' homes and living situations are keys to their quality of life and capacity to live independently. The expansion of the older population will increase the need for affordable, accessible housing that is well-connected to services well beyond what current supply can meet. In addition, the home is an increasingly important setting for the delivery of long-term care, a trend likely to grow over the next two decades as millions more seek to remain in their current dwellings while coping with disabilities and health challenges.

Over the next two decades, many older households will have the financial means to secure housing and supportive services suited to their needs as they age. The focus for these households should be on making informed choices about potential living situations and locations, investments in home modifications, and care—before physical or financial needs become pressing.

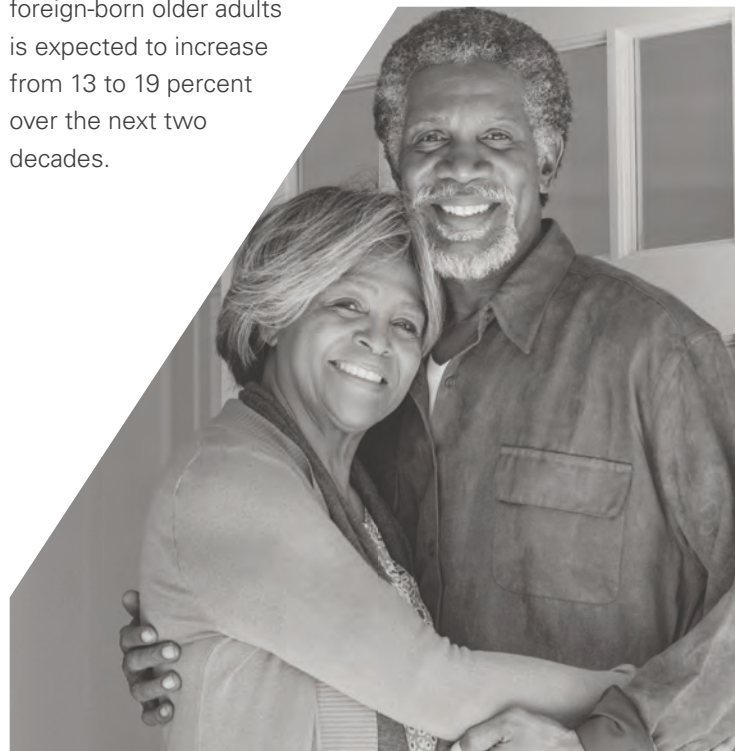
Yet over the same period, millions of low-income older households will struggle to pay for appropriate housing and necessary supportive services. For these households, basic housing costs will drain resources needed to pay for home modifications or in-home services, and may force reductions in spending on critical needs like food and healthcare.

The nation is now at the beginning of a twenty-plus-year surge in the older population, and is thus at a critical point for putting in place the affordable housing options, accessibility features, and in-home care services that will be needed over the next two decades. Transportation and technologies to ensure people can remain engaged in their communities and access supportive services are also needed. While many older adults indicate that they prefer to age in their current residences, a wider array of housing types can offer safer, more affordable, and lower-maintenance homes within existing communities, improving housing situations without uprooting older adults from the places they have called home for years or even decades.

GROWTH IN THE OLDER POPULATION WILL ACCELERATE IN THE NEXT 20 YEARS

The next two decades will bring substantial growth in the number of older adults (defined here as those aged 65 or over). With the leading edge of the large baby boom generation (born 1946-1964) now passing age 70, the US Census projects the 65-and-over population will increase by more than 30 million people by 2035 to reach 79 million, with more than half that growth occurring in the next decade. The 80-and-over population alone will double between 2015 and 2035 from 12 million to 24 million, with 70 percent of that growth occurring from 2025-2035, the decade during which the leading edge of the baby boomers passes age 80. Overall, this growth will shift the age distribution of the US population so that by 2035, one in five people in the US will be aged 65 and over, up from one in seven today.

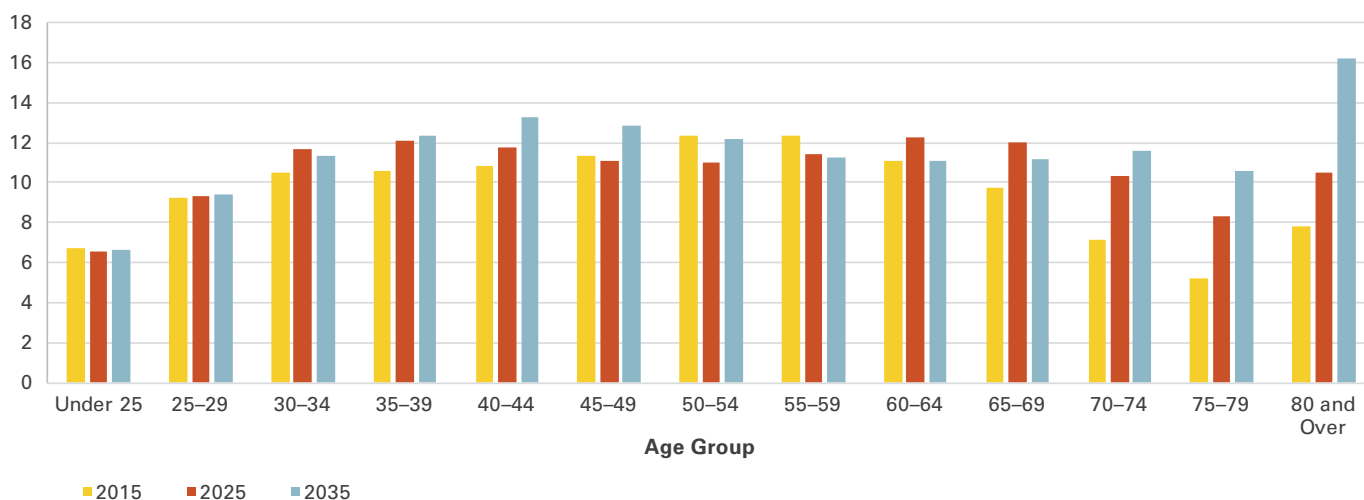
The older population will become more racially and ethnically diverse, though significant shifts will not happen until today's more diverse Generation X and millennials reach retirement age. Still, by 2035, the non-Hispanic white share of the older population will fall from 78 to 69 percent, with rising shares of non-Hispanic black, Hispanic, Asian, and other races filling out the remaining 31 percent. The share of foreign-born older adults is expected to increase from 13 to 19 percent over the next two decades.



**BY 2035, AN ASTOUNDING
1 OUT OF 3 AMERICAN
HOUSEHOLDS WILL BE HEADED
BY SOMEONE AGED 65 OR OLDER.**

Figure ES1: The Number of Households over Age 65 is Projected to Expand Substantially by 2035

Projected Households (Millions)



Source: 2016 JCHS Household Projections.

NUMBERS OF OLDER HOUSEHOLDS WILL SOAR

The Joint Center projects that this population growth will translate into an increase of nearly 20 million older households, from 29.9 million in 2015 to 49.6 million by 2035. While today older households represent one quarter of all the nation’s households, by 2035 they will account for one-third (**Figure ES1**). Households aged 80 and over will increase at a higher rate than older households in general, more than doubling from 7.8 to 16.2 million by 2035, when they will represent 11 percent of all US households. Most of the growth in the oldest households will occur between 2025 and 2035.

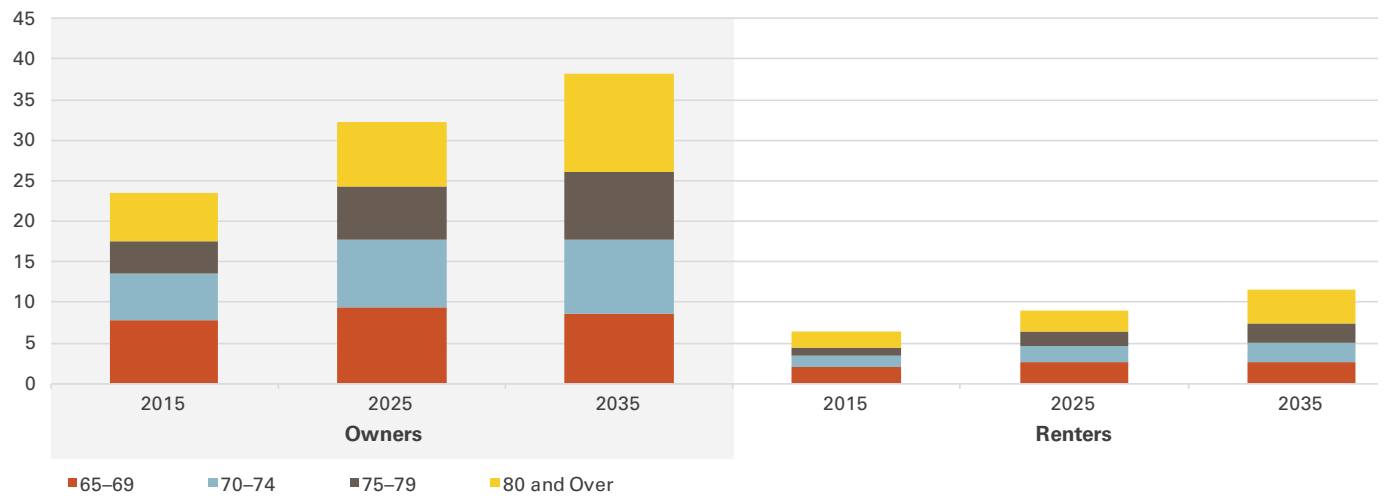
In 2015, 42 percent of older households were comprised of a single person and 45 percent were married couples, with the remainder made up of households in which other relatives or roommates resided. Going forward, single-person and married households will remain the most significant household types. Given increases in longevity, there will be more married couples at older ages, though lower marriage rates among those currently in middle age

will provide a countervailing trend favoring increased numbers of single-person households. In the end, the Joint Center projects that single-person households will grow slightly more quickly among older adults to total roughly 22 million households in 2035, barely outnumbering the 21 million projected married-couple households age 65 and over.

Single-person households become more prevalent with age. By 2035, there will be 9.3 million one-person households aged 80 or over, representing 57 percent of households in that age group. Living alone can present particular challenges at older ages, as single-person households have lower incomes and higher rates of disabilities, and must seek supports and care from outside the home rather than from a spouse or other live-in family. These households are more likely to pay for care than their married counterparts, despite more limited resources.

Figure ES2: Households Aged 80 and over Will Drive Growth among Older Households from 2025-2035

Projected Older Households by Age Group (Millions)



Source: 2016 JCHS Household and Tenure Projections.

HOMEOWNERSHIP WILL CONTINUE AS THE PRIMARY FORM OF TENURE, THOUGH THE SHARE OF OLDER RENTERS WILL GROW

Most older adults are homeowners. Indeed, the homeownership rate reaches 81 percent for those in their early 70s, far higher than the current national rate of 64 percent for all ages. Going forward, the Joint Center projects that the number of owner households headed by a person aged 65 or over will soar from 24 million in 2015 to 32 million by 2025, and then to 38 million by 2035, an overall increase of 62 percent (**Figure ES2**). Homeowner households headed by someone aged 80 and over will experience particularly steep growth, more than doubling from nearly 6 to over 12 million within the next twenty years.

Renting remains a critical tenure option, both for those who cannot afford to own as well as those who choose to rent for lifestyle reasons. The share of older renter households rises for those in their late 70s and after as people seek

more accessible and/or lower-maintenance housing. Going forward, the sheer growth in the older population will mean the number of renter households will expand from 6 to more than 11 million households over the next two decades. Overall, the share of renters will increase slightly, from 21 percent of older households in 2015 to 23 percent in 2035.

LIVING WITH FAMILY & IN NURSING HOMES WILL REMAIN IMPORTANT OPTIONS

Not all older adults reside in their own households. Currently, nearly 8 percent of the population aged 65-79 live in the homes of relatives, primarily children, with this share rising to nearly 14 percent for those 80 and over. Rates of living in a relative’s home are higher for all minorities compared with non-Hispanic whites, particularly for Hispanic and Asian families; rates are also higher when older adults in the household are foreign-born. Going forward, as the population becomes more diverse, multigenerational households—where three or more generations are present—may become more prevalent.

An additional 3.2 percent of older adults reside in group quarters, mostly nursing homes, with most of this population again concentrated among the oldest ages. The usage of nursing homes has declined in the past twenty years as assisted living and in-home care options have increased; indeed, the numbers in nursing facilities have actually declined even as the older population has grown. Further declines may occur if trends in reduced morbidity continue and options to remain in the community increase. However, given the rapid growth in the older population, there would have to be continued declines in nursing home use equal to what occurred between 1990 and 2015 just to keep the number of nursing home residents similar to today. If the rate of decline amounts to only half of this previous period there will be a need to accommodate up to 640,000 additional residents by 2035. Much will depend on the expansion and viability of care options in the home as well as trends in health.

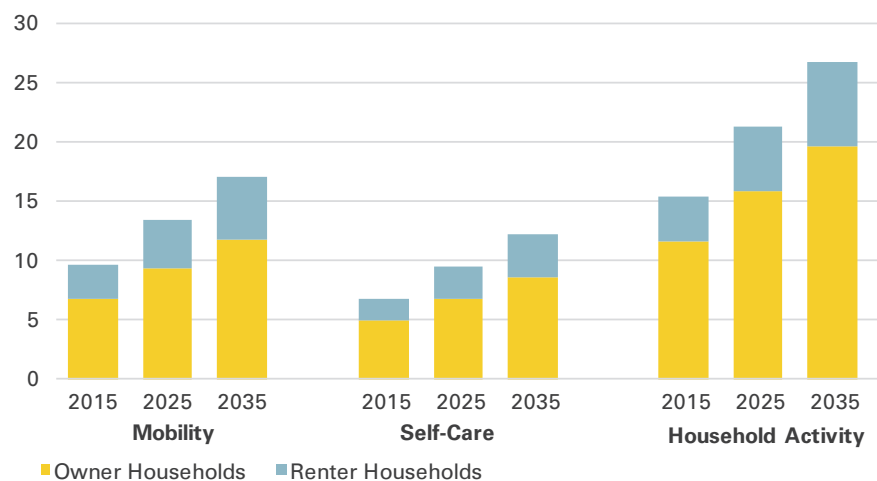
A GROWING OLDER POPULATION MEANS MORE HOUSEHOLDS WITH DISABILITIES

With age, declines in physical and cognitive functioning lead to greater incidence of disabilities related to mobility, self-care, and household activities. Those with lower incomes, minorities, renters, single-person households, and women are particularly likely to experience disabilities, though with age, incidence of all three types of disability rises for all incomes, races/ethnicities, tenures, household types, and genders.

By 2035, the number of older households with a disability will increase by 76 percent to reach 31.2 million (Figure ES3). By that time, 17 million older households will include someone with a mobility disability, 12 million with a self-care disability, and 27 million with a household activity disability. (The high rate of household activity disabilities is attributable in great part to difficulty with housework and with driving a car.) With disabilities beginning to climb more steeply in the late 70s, roughly half the anticipated increase of 13.4 million older households with disabilities will occur by 2025, with the remainder in the 2025-2035 decade.

Figure ES3: The Number of Households with a Disability Will Increase Substantially by 2035

Projected Households Aged 65 and over with a Disability (Millions)



Notes: Mobility disability is defined as difficulty walking, getting in and out of bed, and climbing one flight of stairs; self-care disability as difficulty eating, dressing, toileting, and bathing; and household activity disability as difficulty with meal preparation, food shopping, using the telephone, taking medication, money management, housework, and driving.

Source: JCHS tabulations of University of Michigan, 2014 Health and Retirement Survey and 2016 JCHS Household and Tenure Projections.

**BY 2035, THE NUMBER OF
OLDER HOUSEHOLDS WITH A
DISABILITY WILL INCREASE
BY 76% TO REACH
31.2 MILLION.**

THE NUMBER OF OLDER ADULTS WITH DEMENTIA WILL RISE, EVEN IF INCIDENCE CONTINUES TO FALL

Like physical disabilities, the incidence of cognitive impairment is highest among the oldest age groups. Today, nearly half of the estimated 4.1 million older adults with dementia are aged 85 or older.

Evidence from several major surveys indicates that dementia prevalence among older Americans has fallen steadily over the past several decades. However, even if rates continue to decline, the magnitude of expected growth in the 65-and-over population will likely push the number of older adults with dementia substantially higher by 2035. The Joint Center's projections estimate that if dementia rates continue to decline at half the rate they have from 2000-2012, by 2035 the number of adults aged 65 and older with dementia may reach 6 million, with another 13.9 million having some form of cognitive impairment that does not meet the criteria for dementia (CIND). If today's rates hold constant, the number of older adults with dementia may climb even higher to 7.6 million, and the number with CIND to 15.5 million.

DEMAND FOR ACCESSIBLE HOUSING WILL INCREASE

Housing design features that increase accessibility can allow those with mobility disabilities much more independence in the home, while assistive devices and technologies are increasingly able to improve safety and

make it easier to conduct household activities. Universal design elements such as zero-step entrances into the home, single-floor living, and wide halls and doorways that can accommodate a wheelchair are particularly important, as are electrical controls reachable from a wheelchair and lever-style handles on faucets and doors.

However, only 1 percent of the current housing stock offers all five of these features. Housing units in large, multifamily buildings are most likely to provide accessibility features, so it is perhaps not surprising that when renting ticks up in the late 70s, more older adult movers choose this form of dwelling than any other. Less than 4 percent of single-family homes, the most common form of housing for older adults, and only 3.5 percent of housing units overall, offer three of the most critical accessibility features mentioned here (single-floor living, extra-wide hallways and doors, and zero-step entrances). However, mobile homes and small multifamily structures with fewer than 5 units are the least accessible dwelling types of all.

By 2035, 17 million older adult households will have at least one person with a mobility disability, for whom stairs, narrow corridors and doorways, and traditional bathroom layouts will pose challenges to safety and independence. Over 5 million of these will be renter households. Renters are more likely than owners to have mobility disabilities, but also have less control over modifying their units. Financing that assists or incentivizes landlords to support universal design features in remodels and in new construction will be critical to expanding the supply of accessible housing and ensuring that older renters are safely housed.

While 12.2 million households are projected to have self-care disabilities by 2035 and as a result could end up needing home modifications, nearly 10 percent of all older homeowner households have less than \$50,000 in total assets, a share that rises to 39 percent when considering only non-housing assets. Home modifications run the gamut of cost, from hundreds of dollars for the installation of grab bars to tens of thousands or more for additions to a home to make single-floor living possible. A sizeable share of older adults may therefore need financial assistance to modify their homes. In addition to tax credits and public loans and grants for home modifications, policies to ensure that new stock is built with higher standards of accessibility for future occupants will help.

THE HOME WILL INCREASINGLY BE A SITE OF LONG-TERM CARE

Researchers have estimated that nearly 70 percent of older adults will need some form of long-term care in later life, the majority provided in the home but including some time in a skilled nursing facility.^{ES1} Though in the future the locus of more intensive care may shift more toward the home, the home is already a vital site of long-term care delivery. Indeed, adults with difficulty bathing, dressing, and other self-care tasks are most often assisted by family members, and therefore the preponderance of care is unpaid. However, trends indicate that in the future, fewer family caregivers will be available to fulfill older adults' needs, given rising need and declines in the number of children among the baby boom generation.^{ES2} Paid care will therefore become a more necessary option in the next two decades.

However, though long-term care in the home is typically less expensive than care in group quarters, many in-home solutions are beyond the reach of even moderate- and middle-income homeowners as well as most renters. Paying for just two months of a home health aide or assisted living would exhaust the savings of a typical older renter (whose median assets are \$6,150). With non-housing assets of \$103,200, the median older owner could afford over 2 years of a home health aide or assisted living care without dipping into home equity. Yet more than 9 million older homeowners have less than \$50,000 in non-housing assets. Clearly, costs will pose challenges for many who will need to secure paid help to remain in their homes.

Public investment and private sector efforts to expand access to affordable in-home supportive services will be critical going forward. Promising pilot and small-scale programs exist, such as changes to government health insurance programs to cover the cost of in-home care, home modifications, or supportive services to remain in the community. The challenge going forward will be to bring successful demonstrations to scale. Housing-plus service models provide another important option for low-income renters seeking supportive services as well as social programs while maintaining private housing units.

NUMBERS OF LOW-INCOME OLDER ADULTS WILL GROW

Trends in income, debt, wealth, and labor force participation indicate some challenges ahead for older adults. Labor force participation among older adults is increasing, but mostly for the more highly educated and higher-income earners. Meanwhile, the decline in defined benefit retirement plans will put pressure on retirees' incomes. In the future, more women will be eligible for Social Security, but the Social Security Administration's MINT (Modeling Incomes in the Near Term) model projects the share of all older adults having the means to maintain their pre-retirement lifestyle after they retire falling from 43 percent today to 39 percent in 2035. These trends together suggest a future widening in income distributions among older adults.

In addition, the sheer growth in the older population will result in a greater number of low-income older adults. While roughly 15 million older adults earned less than 80 percent of their area median incomes in 2015, by 2035 this group will reach 27 million. The number of older renters earning 50 percent or less of their area median incomes, the threshold at which those aged 62 or over are generally eligible for federal rental assistance, will grow to 7.6 million. Currently, only 36 percent of those who qualify receive benefits (roughly 1.4 out of 4 million households), suggesting that even if subsidies could be expanded to serve the same percentage of those eligible in 2035, there would still be a gap of 4.9 million left to find housing on the open market.

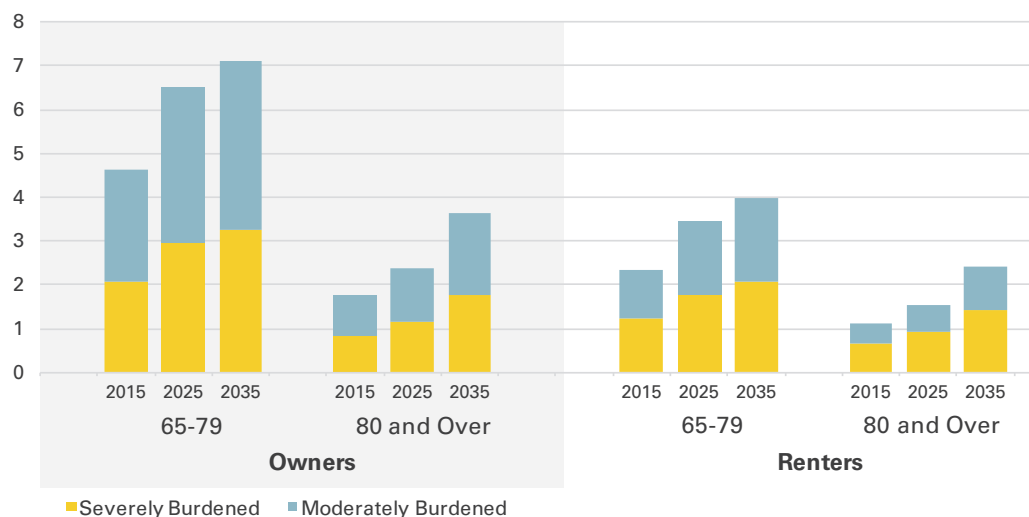
Trends in debt, particularly mortgage debt, are also key to financial security. An increasing share of older households have been carrying mortgage debt into retirement. In 2013, 38 percent of those aged 65 and older had mortgage debt on their primary residences, compared to 22 percent in 1995; in the same period, the amount of debt carried by these households rose (in real terms) from \$27,300 to \$73,000.

ES1. Kemper, Komisar, and Alecxih, "Long-Term Care over an Uncertain Future."

ES2. Redfoot, Feinberg, and Houser, "The Aging of the Baby Boom and the Growing Care Gap."

Figure ES4: The Number of Cost-Burdened Households Aged 80 and over Will Rapidly Increase from 2025-2035

Projected Cost-Burdened Households by Age Group (Millions)



Notes: Moderately / severely cost burdened is defined as paying 30–50% / over 50% of income on housing.

Source: JCHS tabulations of 2014 American Community Survey data and 2016 JCHS Household and Tenure Projections.

RIISING COST BURDENS WILL AFFECT BOTH OWNERS & RENTERS

The chance of facing a housing cost burden—defined as paying more than 30 percent of income on housing costs—rises with age, primarily because incomes decline in retirement. Applying the rates at which cost burdens occur today by race/ethnicity, age, household type, and tenure to the Joint Center’s household projections reveals a sharp future increase in older adults likely to face housing cost burdens (**Figure ES4**). Renters, who have lower incomes, are especially vulnerable: nearly 6.4 million will live in housing they cannot afford by 2035.

However, older homeowners are more numerous than renters, and nearly 11 million are projected to face cost burdens by 2035. Furthermore, this projection may be conservative if the trend toward higher shares of homeowners carrying mortgage debt into their retirement years continues. At the oldest ages, owners with mortgages are as likely as renters to face housing cost burdens.

The incidence of households paying more than half their income in housing costs is particularly alarming, projected to reach 8.6 million by 2035. For both owners and renters, the numbers of severely cost-burdened households 80 and over will more than double.

ISOLATION IS A CONCERN ACROSS METRO REGIONS & BEYOND

A final challenge relates to the location of housing as it affects older adults’ social engagement with their communities and their access to medical and other services. Technologies such as online shopping and banking and telehealth may offer easier access to services, but may also heighten the risk of isolation by keeping older adults more often at home. Driverless cars and other automobile safety technologies, on the other hand, have the potential to help people leave their homes more easily, though in the short term this technology will likely be available only to those with significant financial resources and not to low-income older households. In the meantime, better alternatives to driving are needed, particularly in rural areas, such as dedicated buses, vans, and paratransit.

A broader array of housing choices may help as well. In some suburban and rural locations, creating more housing options in villages or town centers would provide alternatives to single-family homes for those seeking to remain in their communities.

ACTIONS TAKEN NOW CAN HELP ADDRESS THE HOUSING NEEDS OF TOMORROW'S OLDER ADULTS

In a number of surveys, older adults have expressed a strong desire to live as long as possible in their communities with as much independence as is feasible. To make these wishes reality, the nation needs more housing options for older adults, home accessibility features to support the millions projected to have mobility-related disabilities, and affordable units and financial supports for those with minimal resources in their retirement years. Trends toward providing long-term care in the home are in sync with preferences for aging in the community, but fulfilling the rapidly expanding need will require innovative partnerships between health care and housing.

- **Increase accessible housing.** The growth in the number of older households with mobility disabilities offers significant opportunities for the private market to provide new and modified accessible housing, as well as technologies that can enhance safety in the home. The public sector has a role in providing tax credits and other financial incentives to help homeowners and landlords pay for modifications, as well as through ordinances that encourage the inclusion of accessibility features (or at a minimum, construction that can make future modifications more straightforward).
- **Assist older owners with housing cost burdens.** States and localities may offer property tax relief for those of qualifying incomes and ages. Utility costs might be lessened through the installation of higher-efficiency heating and cooling systems, solar panels, and weatherization programs, with tax incentives and grants helping owners to make the initial investment when costs are otherwise prohibitive. For those with mortgages they cannot afford but who still have substantial home equity, reverse mortgages may make it more financially feasible to age in place. Perhaps the most important form of assistance will be educational programs aimed at teaching adults in pre-retirement years how to avoid cost burdens in retirement, either by prioritizing the reduction of mortgage debt during their working years or by moving to more affordable housing at an earlier age.

- **Increase subsidies to older renters.** While renters comprise a smaller group than owners, they face higher risk of housing cost burdens due to lower incomes. Federal housing assistance to low-income older renters comes mainly in the form of public housing, unit-based assistance, housing choice vouchers, and Section 202 units that provide housing with supportive services to those aged 62 and over. Yet since housing assistance is not an entitlement, not all those who qualify receive it. With the number of older low-income renters who qualify for federal rental assistance set to soar, increased funding will be needed to sustain even the one-third share of those eligible who currently receive assistance, still leaving 4.9 million unserved by 2035.
- **Strengthen ties between health care and housing.** More intensive and frequent care may be needed for the 12.2 million households aged 65 and over projected to have disabilities related to self-care by 2035; the same is true for those with multiple or more severe household activity limitations. Given the high cost of paid daily care in the home, continuing innovation in its funding and delivery is needed.
- **Increase public awareness.** Awareness and education campaigns will also be critical in encouraging older adults to consider their potential housing needs earlier in life. For example, home modifications can be less expensive if combined with other renovations, and those moving in their pre- or early retirement years might consider the accessibility of potential new homes. At the same time, increasing awareness of the imminent growth of the older population, and thus of their housing and care needs, can encourage people of all ages to engage with public officials to make needed investments and policy changes.



- **Expand housing options.** Increased engagement of older adults can also be leveraged to encourage new housing options. Though mobility rates for older adults are low, applying today's rate of annual moves by tenure, race, and 5-year age bands to Joint Center household projections yields over 825,000 older households moving into owned homes and 1.6 million older households moving into rented homes in 2035. While many of these moves will be to existing housing, there will be sufficient demand for new housing as well. Locating new, accessible housing in town centers will allow older residents to live within walking distance of services in their existing communities, though such housing will likely require zoning changes in many locations.

Much responsibility for meeting the housing needs of older adults will rest on the shoulders of individuals, who must consider the optimal housing situation given their financial situations, current and desired locations, and health. While most prefer to age in place, doing so still requires forethought about costs, the suitability of the home, and its accessibility to services; aging in place also involves adjustments to the home and to services received as health, financial, and household and family circumstances evolve. While these individual choices will be crucial, collective efforts in both the public and private sectors will be required to broaden the array of choices possible, especially for those older adults with few resources.



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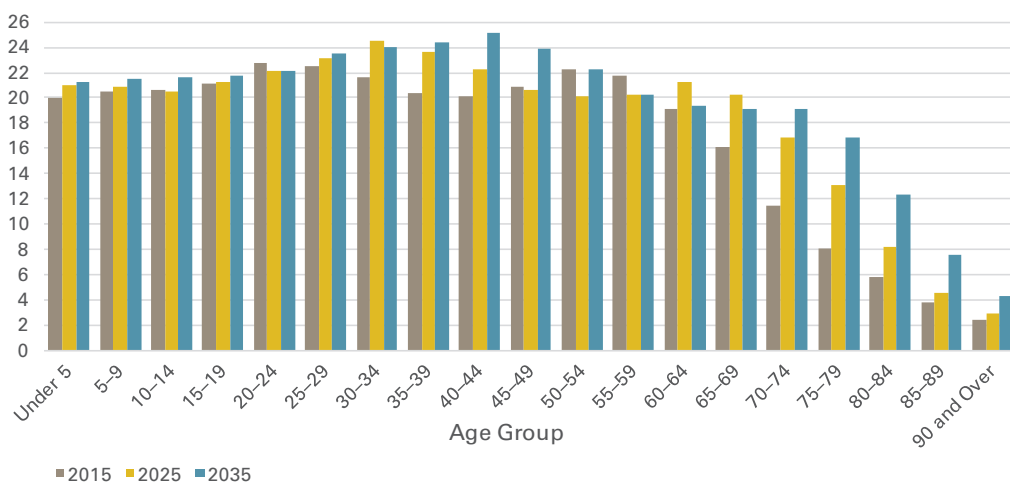
PROJECTIONS OF OLDER POPULATION AND HOUSEHOLDS

With the leading edge of the baby boomer generation now past age 70, the next two decades will see the number of people aged 70 and over increase by 28 million—a growth rate of 90 percent. In that same time period, the population aged 80 and over will more than double, as will the number of households headed by someone in that age group. By 2035, more than one in five people in the US will be aged 65 and older, and members of this group will head one in three households.

Since not all older adults reside in their own households, numbers living with their children or in group quarters will surge as well. Though we project slight shifts in the shares of each type of household and non-household situation, the sheer growth in the number of older people and households will have a far greater overall effect on housing demand than changes in the distribution of household types.

Figure 1.1: The Population over Age 65 is Projected to Expand Substantially over the Next Two Decades

Projected Population (Millions)



Source: US Census Bureau, 2014 Population Projections.

POPULATION PROJECTIONS

With the first wave of baby boomers entering their retirement years, the older population is projected to expand substantially over the next several decades (**Figure 1.1**). The population aged 65 and older is expected to grow by 66 percent through 2035, an increase of more than 31.4 million. Given that the entire adult population is projected to grow by 49 million during this twenty-year period, the disproportionate rise in the cohort aged 65 and older will shift that group's share of the population from 15 percent to 21 percent.

For the 80-and-over age group, the rate of population growth will be even sharper. This age group is projected to increase from 12.1 million in 2015 to 15.7 million in 2025; after that, boomers begin to pass age 80 en masse, and by 2035 the number of people aged 80 and over will reach 24.2 million. This growth is significant, since it is in the 80 and after that people become more vulnerable to health, financial, and social challenges that are closely tied to their housing and living situations.

Alongside the aging of the population, increasing racial and ethnic diversity will fundamentally reshape the US population in coming decades. According to the Census Bureau, the aging of younger, more diverse groups will mean that from 2015 to 2035, the share of population aged 65 and over that is non-Hispanic white will drop from 79.5 percent to 71.3 percent, with 11.6 percent of the older population in 2035 non-Hispanic black, 10.5 percent Hispanic, and 6.6 percent Asian/Other.

Additionally, while the foreign-born share of the population aged 65 and over is just over 13 percent today, with immigration expected to continue at an accelerated pace, approximately 19 percent of older adults are expected to be foreign-born by 2035.

The recent uptick in immigration, combined with the aging of today's younger, more diverse generations will considerably shift the demographic composition of older age groups over the next few decades. Because the living situation preferences of older adults vary among racial/ethnic and nativity groups, these impending changes will have important implications for the housing needs of the future elderly population.

Over the longer term, the older population will continue to grow in future decades even after the surge from the baby boom is over. Indeed, though Generation X (born 1965-1984) began as a smaller cohort than its boomer predecessors, population projections show the effects of immigration and lower mortality rates will continue to bolster this generation's ranks relative to boomers at older ages. Growth in the older population will slow in the 2040s, but only until about 2050, when millennials will begin to become seniors and cause a renewed surge. As a result, the substantial increase in the 80-and-over population started by the baby boom will be sustained by the generations to follow.

JCHS HOUSEHOLD PROJECTION METHODOLOGY

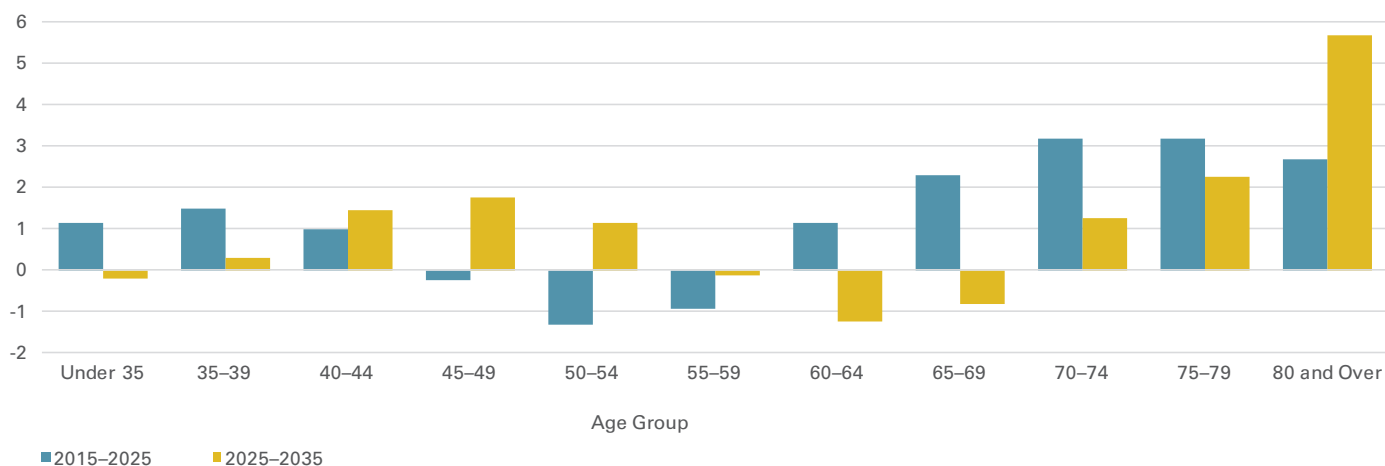
The projected growth in the older population over the next two decades will significantly expand the number and share of US households headed by older adults. To estimate the magnitude of this growth as well as potential shifts in the shares of different types of older households, we employ the Joint Center's newly produced 2016 household projections.

The JCHS 2016 household projections provide estimates of the number of households from 2015-2035.¹ Household counts are available by 5-year householder age groups covering ages 15-19 through age 80 and over. Projections have also been developed separately for four race and ethnicity categories (non-Hispanic white, non-Hispanic black, non-Hispanic Asian and other racial groups, and Hispanics) and for five household types (single persons, married couples without children, married couples with children, unmarried households with children, and other households).

The JCHS household projections have two major inputs: 1) the Census Bureau's 2014 population projections, and 2) a set of headship rates, which are applied to the population projections to convert population into households. A headship rate is the share of people in a specific demographic group that head an independent household. For example, among non-Hispanic white individuals aged 80 and over, at last count in 2015 there were 9.8 million people according to the Census Bureau's

Figure 1.2: Projections Call for Significant Growth in the Number of Older Adult Households from 2015-2035

Projected Household Growth (Millions)



Source: 2016 JCHS Household Projections.

Population Estimates Program representing 6.5 million households according to the Current Population Survey’s Annual Social and Economic Supplement, so the headship rate for this group is 66 percent. Headship rates increase with age (as the share of single-person households rises) and vary by race and ethnicity, reflecting different cultural and other tendencies that affect the rate at which people live independently or with others. In JCHS’s projections, a unique headship rate is projected for each 5-year age group within each race and ethnicity category.

Although headship rates have been generally stable for most age groups over the past twenty years, the headship rates of older households have seen some movement, with rates for those aged 65-69, 70-74, and 75-79 slowly trending downward for most race/ethnic groups. This decline in headship rates stems from a higher share of married-couple households and fewer single persons, changes which together result in fewer households per older person today than in years past, a result of gains in health and declines in mortality that are reducing the share of widows and widowers. In contrast, for those aged 80 and over, there has been an increase in headship rates, as nursing home residence has declined and the share of single-person households has risen. Both trends are consistent with

gains in health and the prevalence of at-home health care, which enable greater housing independence at older ages. To capture these trends, JCHS projections assume that headship rates will change from 2015-2025 at the same rate as they have from 1996-2015, and then will remain constant until 2035.

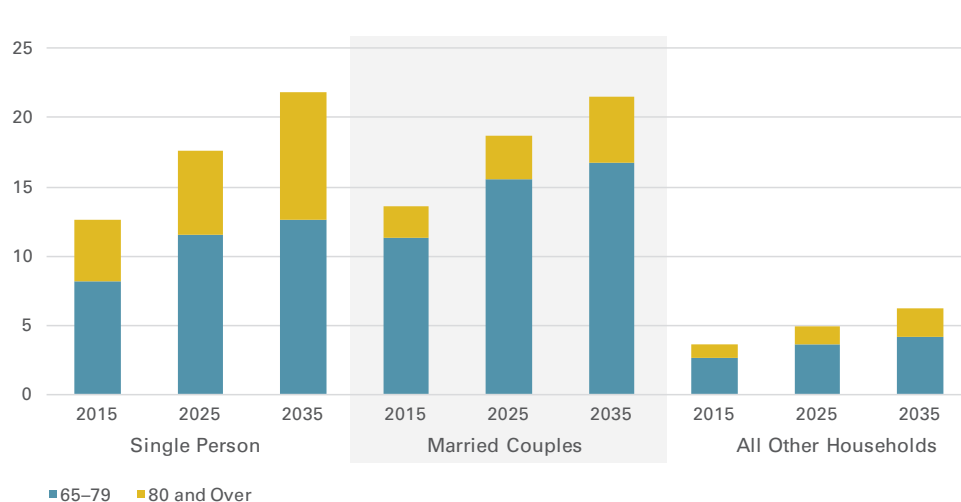
PROJECTIONS OF OLDER HOUSEHOLDS

The JCHS household projections show significant growth in the number of older adult households over the next two decades. From 2015 to 2035, the number of households headed by a person aged 65 or over will increase by roughly 19.7 million, bringing the total number of households in this age group from 29.9 million in 2015 to 41.2 million in 2025 and to 49.6 million by 2035. At that point, one in three US households will be headed by someone 65 or older.

Over the 2015-2025 period, the most rapid growth, an increase of 51 percent, will occur among households aged 70-79 as the vanguard of the baby boom crosses age 70. Ten years later, from 2025-2035, the most rapid growth, an increase of 54 percent, will occur among the 80-and-

Figure 1.3: Single-Person Households Will Drive Household Growth Among Older Age Groups through 2035

Projected Households by Age and Type (Millions)



Note: All other households are those with two or more related or unrelated adults.

Source: 2016 JCHS Household Projections.

over households (Figure 1.2). Indeed, the 5.7 million increase in households aged 80 and over in 2025-2035 will be equivalent to half the overall growth in US households during that time period. In all, the next 20 years will see the number of households headed by a person aged 70 and over grow by 90 percent, while the number headed by a person 80 or older will more than double, from 7.8 million in 2015 to 16.2 million in 2035.

Most households headed by a person aged 65 and over are either single-person or married/partnered couples. For households aged 65-79, 87 percent fall in these categories, with 37 percent single-person households and 50 percent married couples. For the 80-and-over age group, these two types also make up 87 percent of all households, but their proportions are reversed: 57 percent of households are single-person, while 30 percent are married couples.

Going forward, JCHS projections call for the numbers of both single-person and married couple households headed by someone aged 65 or over to more than double by 2035. Countervailing trends will help keep the increases in both types of households relatively similar in scope. Increasing longevity—particularly for men—will likely boost marriage

rates among the oldest age groups by decreasing the prevalence of widowhood; however, this trend will be offset by rising divorce rates and higher shares of never-married individuals among younger cohorts.² As a result, we expect that 47 percent of the increase in older adult households in 2015-2035 will be among single-person households and 39 percent will be among married couples (Figure 1.3). The remaining 14 percent will come from other household types where an older adult is the household head, including households headed by unmarried partners, siblings or other relatives living together, or roommates.

In terms of race and ethnicity, non-Hispanic whites will continue to constitute a majority of older adult households through the next two decades. However, given that younger generations are more racially and ethnically diverse, the minority share of older adult households will in turn increase over time. Among the 65-and-over age group, minority households will make up 45 percent of growth through 2025 and 64 percent of growth in the 2025-2035 period, increasing the minority share of households aged 65 and over from 21 percent of all households in 2015 to 29 percent of all households in 2035.

ADDITIONAL HOUSING DEMAND OUTSIDE OF OLDER ADULT HOUSEHOLDS

As noted above, the population growth expected among older adults will significantly increase the number of older households given that most either head their own households or are spouses/partners to a household head.³ However, not all older adults live independently in their own households; some reside in the homes of others, most often with their adult children, but also with other relatives or roommates. Still others live outside of households altogether in group quarters such as nursing homes.⁴ Altogether, 96.8 percent of the population aged 65 and over, totaling 44.7 million people, dwelled in households in 2014—either in their own homes or the homes of others—while an additional 1.5 million people lived in group quarters, 1.2 million of whom were in nursing homes.

GROUP QUARTERS

The likelihood of living in group quarters increases with age, rising significantly after age 80. As a result, the population in group quarters is highly skewed toward people in the oldest

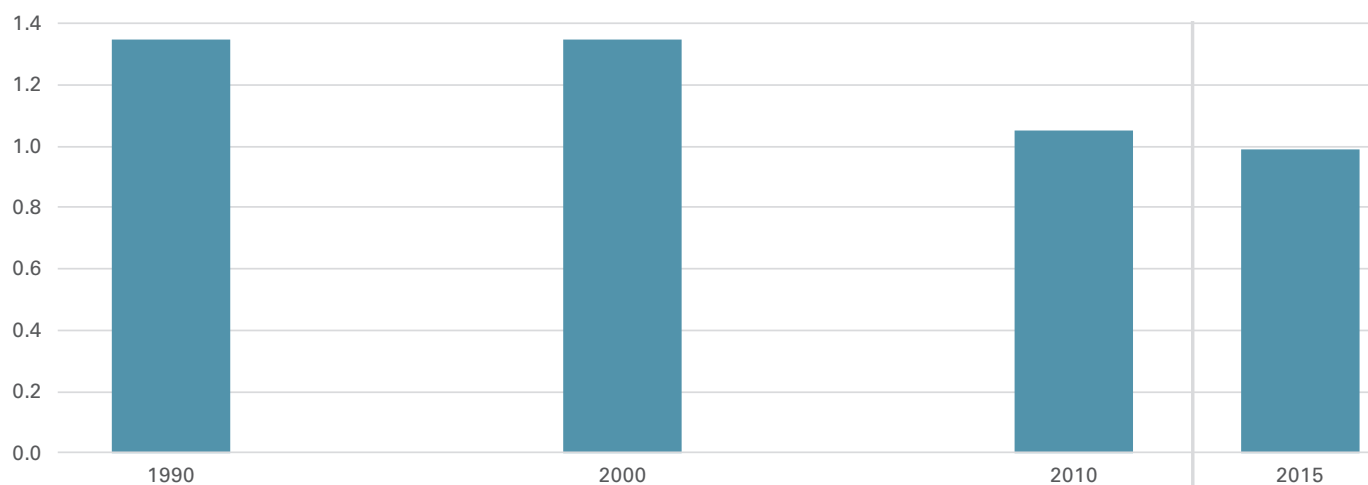
age groups. In 2014, 1.4 percent of those aged 65-74 lived in group quarters, compared to 2.5 percent of those 75-79 and 7.7 percent of those aged 80 and over.

It is difficult to predict whether today's rates of group quarters usage will remain the same, particularly in regard to nursing homes. Nursing home usage has been declining over the past two decades as alternatives for home care increase. In 1990, nursing home residents accounted for 10.2 percent of the population aged 75 and older, but by 2015 this share had dropped to 4.9 percent. Moreover, despite population growth of over 7.1 million in the 75-and-over population from 1990 to 2015, Census Bureau data show the number of nursing home residents in this age group declining over the same period, from 1.3 million per year in 1990 to just under 1 million per year in 2015 (**Figure 1.4**).⁵ These declines in nursing home use are underscored by decreasing nursing home occupancy rates amidst falling numbers of nursing home facilities: even as the number of nursing homes declined from 19,100 in 1985 to 15,600 in 2014, nursing home occupancy rates dropped from 92 percent to 81 percent over the same period.⁶

Skilled nursing facilities remain a critical resource for post-operative and end-of-life care, and will likely remain so into the foreseeable future. For many of our nation's frailest older adults, nursing homes offer a level of professional care beyond

Figure 1.4: The Number of Nursing Home Residents Continues to Fall, Even as Population Has Increased

Population Aged 75 and over Living in Nursing Homes (Millions)



Source: JCHS tabulations of US Census Bureau, Decennial Census and American Community Survey 1-Year Estimates.



what family members can provide. As of 2014, half of nursing home residents had dementia, and almost all (96 percent) needed assistance in physical functioning with at least one activity related to self-care (including moving from place to place, bathing, dressing, feeding oneself, personal hygiene, and toileting).⁷ Further, most nursing home residents are single (82 percent), and fully 45 percent are widowed, and would not have a spouse or partner who could provide assistance with daily living in the home.

Future demand for group quarters depends heavily on trends in health and morbidity and the viability of increasing the provision of long-term care in the home. We therefore present three scenarios for future demand for group quarters among people aged 65 and over. The first scenario assumes that rates of residence in group quarters, as measured by the 2015 American Community Survey, will hold constant for each minority and age group in the coming years. On this assumption, growth in the older adult population will increase demand for group quarters, with the greatest increases to occur after 2025 when boomers begin turning 80 years old. Under this scenario, demographic change alone would generate 500,000 additional group quarters residents aged 65 and older in 2015-2025, which is a 33 percent rate of growth. In the

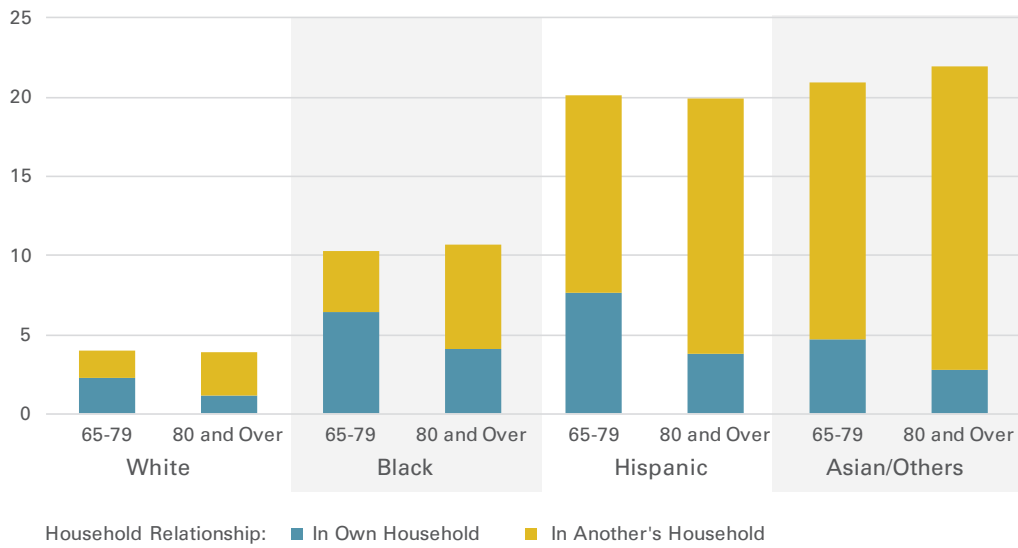
following 10 years from 2025-2035, accelerating growth in the 80-and-over population would add 770,000 group quarters residents. In all, holding rates of group quarters use constant, growth in the adult population as projected by the US Census Bureau would increase the group quarters population by nearly 1.3 million, or 84 percent, in the twenty years between 2015 and 2035.

The second scenario assumes that rates of residence in group quarters will continue to decline for each minority and age group as they have in recent years, though less steeply in the future than in the past. Assuming that rates of decline for 2015-2035 will be half of those for 1990-2015, future growth in group quarters residence among people 65 and older would still be significant: the number would rise by nearly 280,000 people in the 2015-2025 period and then by an additional 360,000 in 2025-2035, for a total 20-year increase of 640,000 in 2015-2035.

Finally, the third scenario assumes that rates of living in group quarters decline from 2015-2035 at the same rate as they did in 1990-2015. On this assumption, the number of people aged 65 and over living in nursing care would remain essentially flat over the next 20 years, rising by just 61,000 in 2015-2025 before falling by 50,000 in 2025-2035.

Figure 1.5: Multigenerational Living among Older Adults Differs by Age and Race

Share of Population Living in Multigenerational Households by Age and Race/Ethnicity (Percent)



Notes: Whites, blacks, and Asian/others are non-Hispanic, Hispanics may be of any race.

Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates.



GROWTH IN OLDER ADULTS LIVING IN OTHERS' HOUSEHOLDS

A certain share of the growing older adult population will live in households headed by younger adults and therefore would not be captured in our projections of older-adult households. The likelihood of living in the home of a child, another relative, or non-relative increases with age. In 2014, among those aged 65-79, 5 percent lived in the home of a child and another 4 percent with another relative or other householder of no relation. For those aged 80 and over, 12 percent lived in the home of a child, while 3 percent lived in the household of some other individual.

MULTIGENERATIONAL HOUSEHOLDS

A special case of living with family is the multigenerational household, where three or more generations are present, with the head of the household a member of any generation. Rates of multigenerational living vary greatly by age, race, ethnicity, and nativity. In 2014, one in five Hispanic adults and non-Hispanic Asian adults aged 65 and over lived in multigenerational households, compared with one in ten non-Hispanic black adults and one in 25 non-Hispanic whites of the same age (**Figure 1.5**). In addition, while only 5 percent of all native-born older adults aged 65 or older lived in multigenerational households in 2014, fully 20 percent of foreign-born older adults of the same age lived in a home that included at least two other generations. Differences by nativity hold within races and ethnicities as well, as the foreign-born of all races are more likely to live with their children's families at older ages than those of the same race/ethnicity who are native born. With the minority and the foreign-born shares of the population expected to expand in coming years, and assuming cultural norms around multigenerational households hold constant, this form of living may become increasingly common.

SUMMARY

In the next 20 years, the expansion of the population over aged 65 will generate growth in the number of older adult households. JCHS projections estimate the number of households aged 65 and over will rise by nearly 20 million from 2015-2035. Growth among the oldest households will be especially rapid. The number of households aged 80 and over will more than double by 2035, with most of this growth occurring between 2025 and 2035. By 2035, one in every ten households will be age 80 or older.

Although a large majority of the expected growth in the older adult population will be contained within older households, nursing homes will remain an important residential option, even if trends toward increased provision of care in the home continue. But given that nursing homes are used mostly by those in the oldest age groups, growth in demand will likely ramp up after 2025 when the baby boom begins to reach age 80. Growth in the older adult population has implications for the households of younger adults as well, as a non-trivial share of older adults will live in the households of their children.

The living situations and types of homes chosen by this growing number of older households will have repercussions for housing demand and for communities. The next chapter examines the tenure, housing types, location, and mobility of older adult households, as well as the increasing array of housing options available to meet older adults' needs.

**THE NUMBER OF HOUSEHOLDS
AGED 80 AND OVER WILL
MORE THAN DOUBLE
BY 2035.**

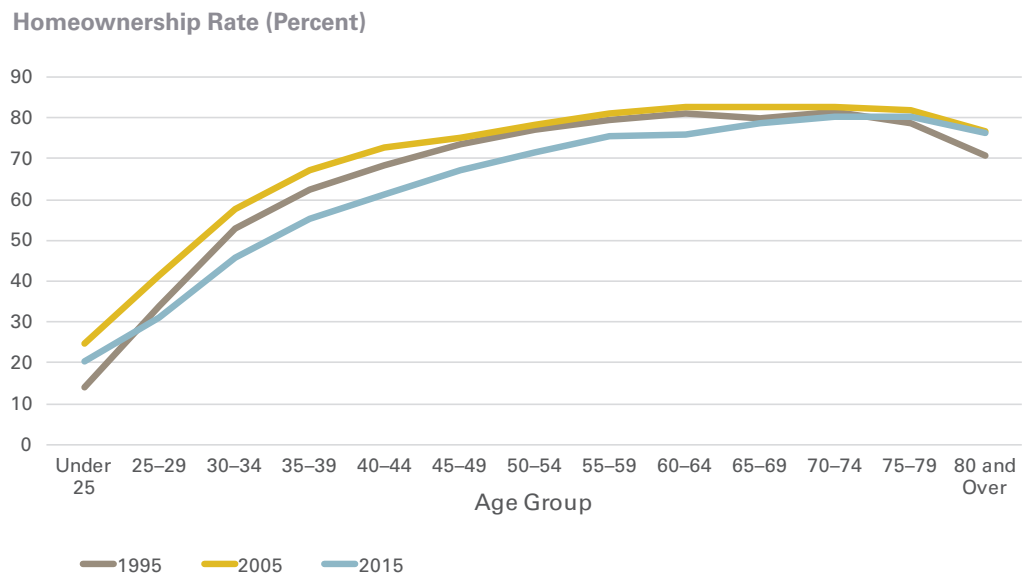
2.

TENURE & HOUSING CIRCUMSTANCES OF OLDER ADULTS

Housing tenure—whether one owns or rents—is associated with the type and location of housing, both of which have implications for accessibility within the home, potential for service delivery to the home, and risk of isolation. This chapter takes up all of these issues.

The Joint Center projects that by 2035, there will be an additional 14.6 million older owner and 5.1 million older renter households. The oldest owners and renters (aged 80 and over) will see particularly significant growth, with the pace of expansion accelerating between 2025 and 2035. At present, only a relatively small percentage of owner-occupied and rental units are fully accessible to those with disabilities; future demand both for modifications to existing housing that enable older adults to age in their homes and for accessible new units is likely to increase significantly.

Figure 2.1: Homeownership Rates Are Highest Among Older Age Groups, Particularly Post-Recession



Source: JCHS tabulations of US Census Bureau, Current Population Surveys.

Most older adults prefer to remain in their current communities, and recent data on the mobility of those 65 and over shows that many have lived in their current home for decades. But avoiding isolation will be a challenge for those aging in low-density, non-walkable locations as well as for the frail elderly who have difficulty leaving their homes. New housing communities targeted to older adults, described at the conclusion of this chapter, are helping to build social connection among residents while also providing services and supports. Moving forward, it will be critical for older adults to be able to access supports in their home and neighborhoods, and engage with their community, whether they live in age-restricted housing or not.

CURRENT AND PROJECTED TENURE OF OLDER HOUSEHOLDS

Among older adults, housing tenure is strongly associated with financial and physical well-being. On average, older homeowner households have more wealth, higher incomes, and fewer disabilities than their renter counterparts, and since they control their own space, owners may find it easier to make physical modifications that facilitate aging in place. For their part, renters have fewer financial resources on average, but they also have fewer maintenance responsibilities, which can be both physically and financially draining.

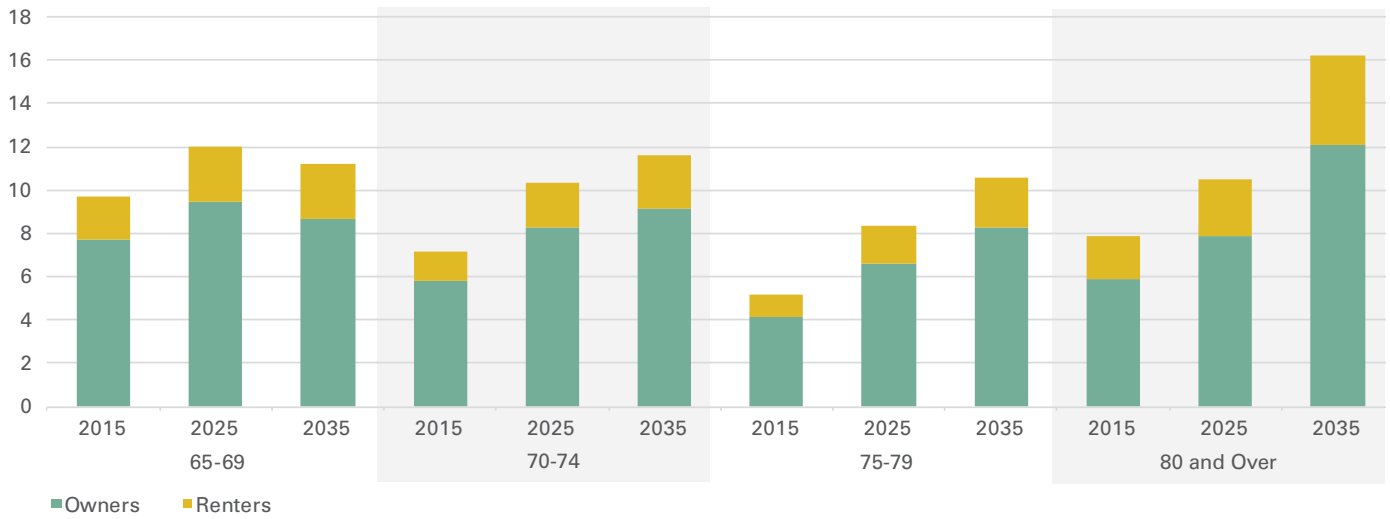
Historically, older adults have had the highest homeownership rates of any age group, with the mid-60s and 70s representing the peak age for US homeownership. Between 1995 and 2015, the homeownership rate (measured quarterly) for all households aged 65 and over averaged 80 percent—roughly 13 percentage points higher than the US average for all age groups in that same period. However, despite high homeownership rates among older adults, renting is a critical option for households who cannot afford to own or who choose it for lifestyle reasons. Once older households enter their 80s, homeownership rates begin to dip and rentership rates rise slightly as some households seek lower-maintenance dwelling options that may also offer greater accessibility, services, and amenities.

Analysis of homeownership rates from 1995 to 2015 shows that the oldest age groups emerged from the Great Recession with smaller percentage losses to homeownership than any other age group. For those 75 and over, the homeownership rate actually rose overall over the past two decades, despite the intervening recession. In contrast, age groups from age 25 through 70 all had lower ownership rates in 2015 than in 1995 (**Figure 2.1**). Among the older population, pre-retirees (those 50-64) experienced more recession-induced variance than older groups in terms of lost wealth and stagnating wages, and they suffered a five percentage point reduction in homeownership. While some of these owners will recover financially and even return to owning as they enter retirement, it is doubtful that all will do so, suggesting that ownership rates for those in their 70s and 80s will likely be lower in twenty years than they are today.



Figure 2.2: Numbers of the Oldest Owner and Renter Households Will Soar from 2025-2035

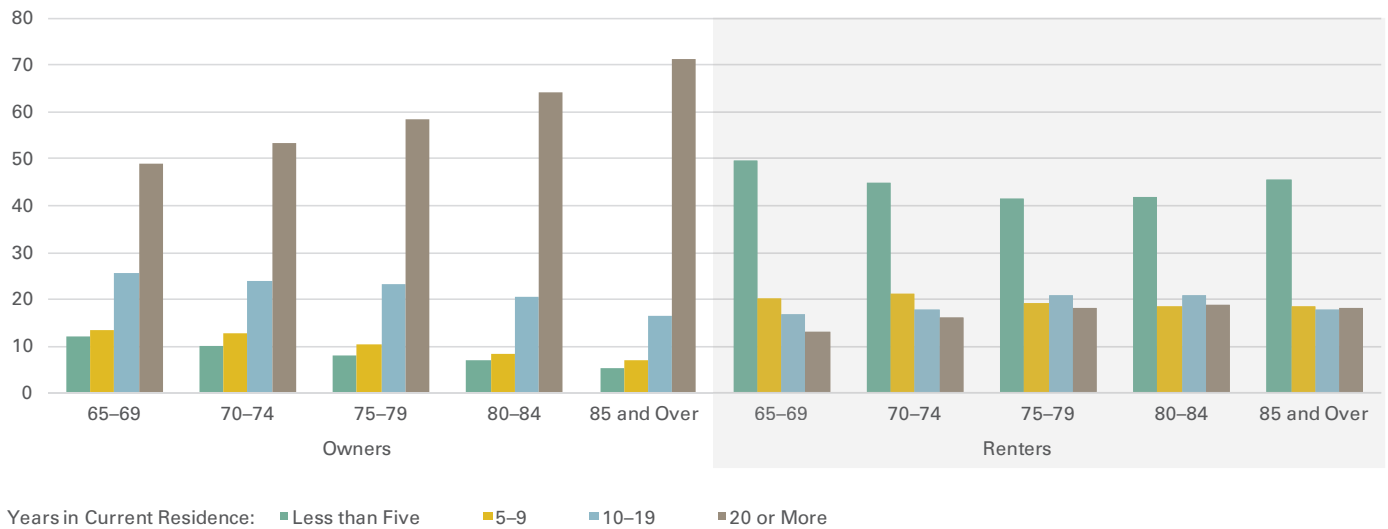
Projected Households by Tenure and Age (Millions)



Source: 2016 JCHS Household and Tenure Projections.

Figure 2.3: Older Renters Move More Often than Older Owners

Share of Households by Years in Current Residence (Percent)



Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates.

Indeed, because the long-term effects of the Great Recession on tenure are still unclear, projecting ownership and rentership rates going forward is particularly difficult. To explore possible trajectories, JCHS developed three alternative scenarios to project the shares and numbers who will own and rent in the years 2025 and 2035.¹ The base scenario applies constant homeownership rates at their 2015 levels across age, race/ethnicity, and family type categories. The two alternative scenarios then describe the implications of lower and higher homeownership trajectories: the slow scenario allows the homeownership rate to decline until 2020 before stabilizing, and the high scenario returns the homeownership rate to pre-Great Recession homeownership rates. We then apply these scenarios to the projections of older households presented in Chapter 1.

Since most shifts in homeownership rates have occurred among younger age groups, applying these three scenarios to the household projections produced little variation among the 2035 tenure outcomes for older adults aged 65 and over. For this reason, we use the base scenario, which projects that the homeownership rate among households aged 65 and over will decline slightly from 78.5 percent in 2015 to 76.7 percent in 2035. The base scenario assumes that some, but not all, of the owners aged 50-64 who were more affected by the recession will make their way back to homeownership.

JCHS estimates that the numbers of older owners and renters will both grow substantially, with the relative increase somewhat higher for renters than for owners. The number of owner households aged 65 and older will increase by 62 percent by 2035, with the addition of 8.6 million households by 2025, and another 6 million between 2025 and 2035. The number of renter households of the same age will rise by 80 percent, an increase of 2.7 million households by 2025, followed by the addition of 2.4 million more households between 2025 and 2035.

The largest relative growth will occur among the oldest age groups (aged 80 and over), where the numbers of owner and renter households will each more than double over the next two decades, with particularly rapid expansion during the second half of the period (2025-2035) (**Figure 2.2**). Today, there are a total of 7.8 million households aged 80 and over, of whom 5.9 million are owners, and 1.9 million are renters. Within a decade, the number of households

aged 80 and over will rise to 10.5 million households, including 7.9 million owners and 2.6 million renters. By 2035, the addition of another 5.7 million households will bring the total number of households aged 80 and older to 16.2 million, comprising 12.1 million owners and 4.1 million renters.

As noted later in the report, many owners and renters in their 80s and above will face challenges associated with their housing. Low-income renters will have limited resources to spend on rent and long-term care or supports that may be necessary to remain in their home, and, because they have less control than owners over their space, may have difficulty making physical modifications to accommodate disabilities. At the same time, while a majority of homeowners will have sufficient financial resources to age in their homes, there will still be substantial growth in the number of owners who need financial support or the care and structural modification needed to stay in their homes.

MOBILITY OF OLDER ADULTS

High homeownership rates among older households are accompanied by low mobility rates (the rates at which households move within a certain period of time). In 2014, 8 percent of households headed by a person aged 65 or older had moved into their current home within the last two years, compared with 25 percent of those younger than age 65. Similarly, almost half (48 percent) of all households aged 65 and older have been in their current residence for two decades or more, compared with just 13 percent of households under age 65.

Low mobility rates and long tenure among the 65-and-over population as a whole are primarily driven by owners; the smaller population of older renters changes homes more frequently. In 2014, only 2.3 percent of owners aged 65 and older had moved within the past year, compared with 15.1 percent of renters of the same age. If the move-in window is expanded to 5 years, the mobility rate of older owners is 9 percent, while that of older renters is 46 percent (**Figure 2.3**). However, as noted earlier, an important age-related housing shift occurs as households reach their late 70s and early 80s: at this stage of life there is an uptick in rentership as well as in the number of people moving in with their children or entering nursing homes.

Older households' overall lower mobility rates are complemented by survey evidence that the majority prefer to remain in their current homes and communities.² A 2016 Freddie Mac study found that 40 percent of owners aged 55 or over would prefer to stay in their current residence rather than move at least one more time. The share who said they actually expect to move is 27 percent, while 40 percent responded that they did not know if and when they might move next, and 33 percent reported they do not plan to move again.

Yet even if current mobility trends hold constant in coming decades, growth in the number of older households will substantially increase the number of households aged 65 and older moving each year. In 2014, 1.4 million households aged 65 and older had moved within the past year—1.1 million households aged 65-79, and 372,000 households aged 80 and older. If today's mobility rates hold constant, JCHS projections estimate that aging of the population will increase the number of older households who move each year to nearly 2.5 million by 2035.

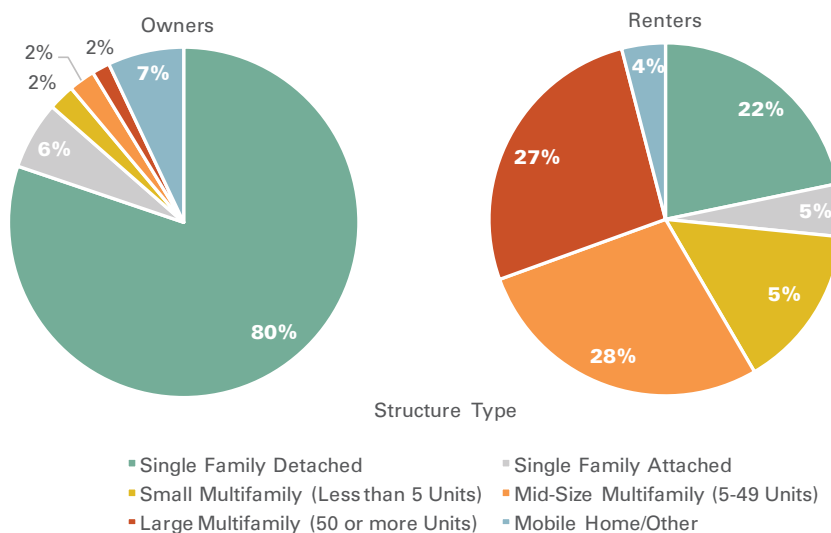
It is difficult to predict whether tomorrow's population will exhibit the mobility rates of today's older adults. Their preference for aging in place, as underscored by surveys conducted by AARP and others, may indicate steady mobility rates going forward. But an increasing range of options for aging in the community—options that may bring lower-cost, more accessible, or more centrally located housing onto the market—may lead to increasing mobility among tomorrow's older households.

STRUCTURE TYPE, QUALITY, AND ACCESSIBILITY

Structure type and tenure status can have important implications for safety and accessibility. They are also relevant to residents' opportunities to modify their homes: while home modification may be constrained by costs and even, in the case of home additions, by local zoning, owners at least retain direct control over physical changes to their homes, whereas renters often do not.

Figure 2.4: Most Older Households Live as Homeowners in Single-Family Homes

Distribution of Housing Units of Older Adults by Structure Type (Percent)



Note: Older-adult households are those headed by a person aged 65 or over.

Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-year estimates.

STRUCTURE TYPE

Seven out of 10 older households aged 65 and over, mostly owners but also some renters, live in single-family homes (Figure 2.4). A smaller share of older households, mostly renters, live in multifamily buildings; of these households, 35 percent reside in large buildings with 50 or more units. An additional 6 percent of all households aged 65 and over live in mobile homes, including RVs, trailers, boats, vans, and similar structures.

While the share of older households aged 65 and over living in multifamily buildings is relatively small—just 20 percent, or 5.7 million households—the majority of this group live in mid- to large-sized multifamily buildings of 20 or more units, with fully 35 percent living in very large structures with 50 or more units. The likelihood of living in large multifamily buildings rises with age. Of the 2 million households aged 80 and over who live in multifamily buildings, nearly half (46 percent) live in buildings with at least 50 units. In fact, among households who move to a new residence in later life, the oldest age groups are most likely to choose large multifamily buildings (Figure 2.5). Among “recent mover”

older households who reported moving into their home within the past 12 months, 39 percent of those aged 80 and over moved into multifamily buildings with 50 or more units, compared with 14 percent of those aged 65-79, and 8 percent of those aged 50-64. Almost all recent-mover households aged 80 and over who moved into large multifamily buildings moved in as renters.

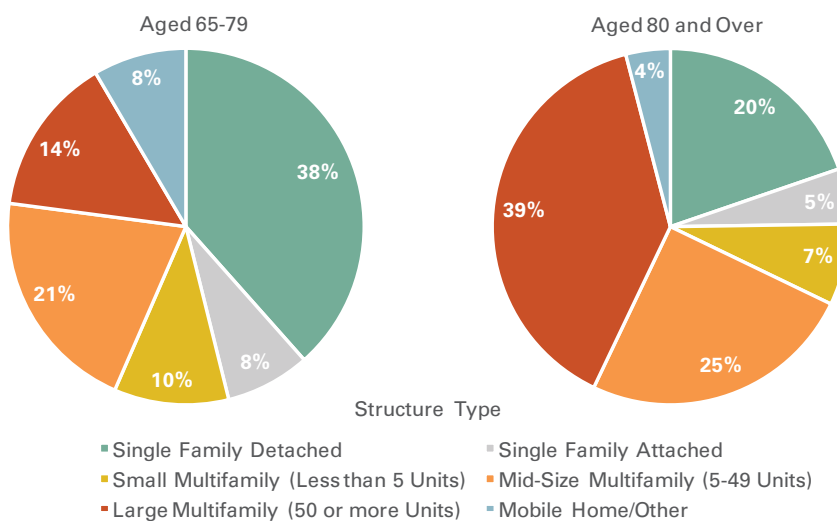
Going forward, while single-family and large multifamily structures will remain important, the expansion of other housing types, such as smaller multifamily options in suburban centers or the expansion of housing with service models, might offer older movers wider choice.

ADEQUACY OF THE HOME

Most US homes are in physically adequate condition (as defined by the US Census Bureau in the American Housing Survey). But even though the share of households aged 65 and older living in inadequate homes was a low 3.7 percent at last count in 2013, this still represents approximately 1 million older households living in homes with moderate or severe physical problems.

Figure 2.5: Oldest Adults Most Often Move Into Large Multi-Family Buildings

Distribution of Housing Units of Recent Movers by Structure Type (Percent)



Note: Recent movers are those who moved in the past year.

Source: JCHS tabulations of 2014 American Community Survey 1-year estimates.

In addition to overall housing inadequacy, specific physical housing issues (such as problems with heating, leaks, and electricity) affect millions of older households each year. In 2013, 1.4 million households aged 65 and older reported being uncomfortably cold for a period of 24 hours or more, with 22 percent reporting that heating equipment breakdowns had contributed to the problem and 9 percent citing the cost of heating as the cause. That same year, approximately 1.8 million households aged 65 and older reported experiencing exterior leakage in the roof, basement, walls, or closed windows and doors during the past year, and 1.1 million reported interior leakage from broken water heaters, backed up pipes or fixtures, or other sources.

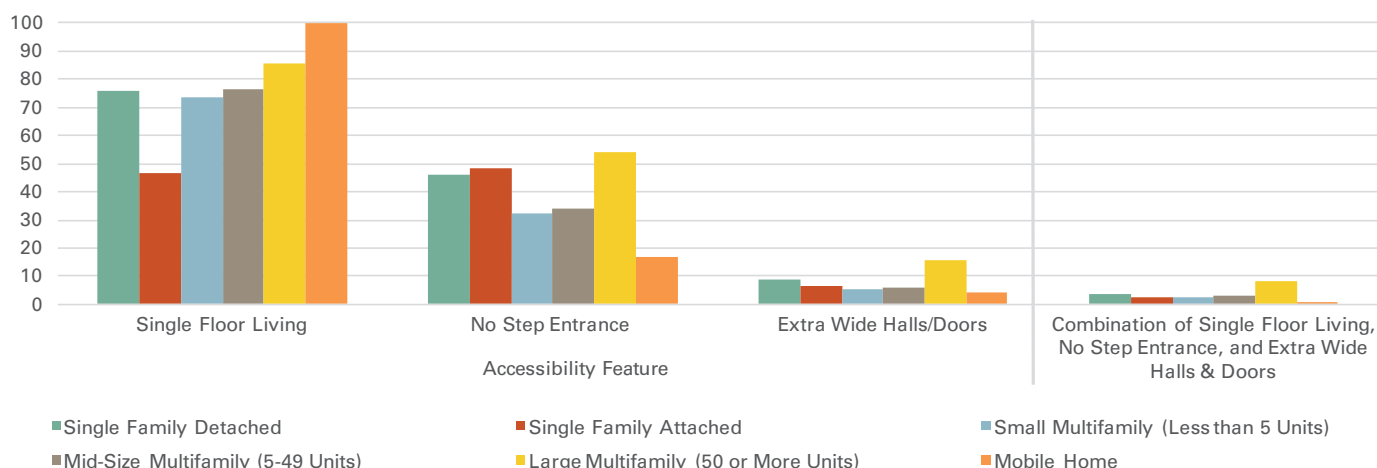
Low-income older households and renters are considerably more likely to live in inadequate conditions than higher-income households and owners. In 2013,

7.9 percent of older households with incomes below the poverty line lived in inadequate homes, compared with 2.9 percent of those with incomes above the poverty line. That same year, 8.1 percent of renters aged 65 and older reported moderate or severe physical housing problems, compared with 2.7 percent of owners of the same age. In large part, the higher likelihood for older renters to live in inadequate housing stems from the fact that renters most often live in multifamily buildings, which are more likely to have adequacy issues than are single-family homes. In 2013, physical housing problems were reported by 7.7 percent of households aged 65 and older living in multifamily buildings, as well as by 10.5 percent of those living in buildings of 50 or more units, compared with 2.9 percent of older single-family residents, and 3.2 percent of older mobile home residents.



Figure 2.6: Units in Large Multifamily Buildings Are Most Likely to Have Accessibility Features

Share of Housing Units by Structure Type (Percent)



Source: JCHS tabulations of HUD, 2011 American Housing Survey.

ACCESSIBILITY OF THE HOME

While inadequacy affects a relatively small share of older adults, accessibility—the ease of use and movement through the home—presents substantial challenges for many older households, particularly for those who are frail or have disabilities.³ Though some basic accessibility features—such as single-floor living and zero-step entrances—are relatively common in homes across the US, other features, including extra-wide hallways and doors to accommodate wheelchairs and walkers, exist in only a small share of homes. The level of accessibility typically varies according to building type: units in large multifamily buildings are more likely to include accessibility features than are smaller multifamily buildings and single-family homes (Figure 2.6).

The oldest households, particularly those who have moved in recently, are more likely to live in accessible homes than their younger counterparts. The share of

households living in a home equipped with three particularly critical accessibility features—zero-step entrances, single-floor living, and extra-wide hallways and doors—rises from 5.5 percent among households aged 65-79 to 8.2 percent among those aged 80 and older). For older households who moved into their current home recently, these figures are significantly higher: 9.6 percent of such households aged 65-79, and 24 percent of such households aged 80 and over. This connection between older age and home accessibility may result in part from older households modifying their current homes to facilitate aging in place, as well as from households aged 80 and above selecting more accessible housing upon moving. As previously noted, higher shares of the oldest households move into rental units in large multifamily buildings, which are most likely to include accessibility features.

Going forward, the inclusion of accessibility features in new housing (or at least construction allowing such features to be easily added) will be important to accommodate the growing older population that will have disabilities, as will

be explored in detail in Chapter 4. Since expense can be a barrier, a growing number of municipalities and states are offering tax incentives and loan and grant programs to help residents cover the cost of modifications. At the federal level, H. R. 5254, the Senior Accessible Housing Act, proposes a personal tax credit of up to \$30,000 for those aged 60 and over who modify their residences to enhance “their ability to remain living safely, independently, and comfortably” in their homes.

State and local governments are also crafting “visitability ordinances” requiring that new housing be built with certain basic accessibility features, such as no-step entry, a bathroom on the first floor, and reinforced walls that can support grab bars. These ordinances vary significantly from place to place, some covering only single-family units built with public subsidies but others extending more broadly to new housing of any type. For some time, provisions of the Fair Housing Act and of the Americans with Disabilities Act have supported certain accessibility features in multifamily buildings, though these provisions stop short of ensuring

that the interiors of all units are fully accessible. Further, the Fair Housing Act’s requirements that new multifamily housing be designed and built to allow access for persons with disabilities applies only to structures that include four or more units, exempting smaller multifamily structures from its accessibility mandates.⁴

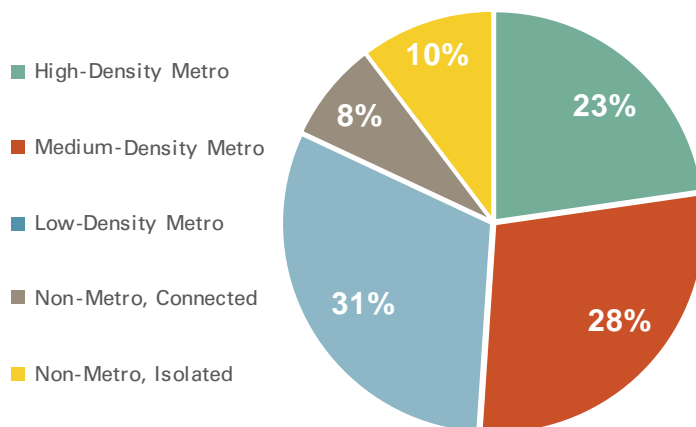
GEOGRAPHIC LOCATION AND ISOLATION

Because housing accessibility features can mitigate age-related functional disabilities inside the home, they are one important influence on how successfully a household can age in place. Equally important are connections to services, public amenities, and community outside the walls of the home.

Today, nearly half (49 percent) of the 65-and-over population is aging in low-density areas of metropolitan regions or in non-metro, rural locations (Figure 2.7).

Figure 2.7: Nearly Half of Older Adults are Aging in Low-Density or Rural Areas

Distribution of Households Aged 65 and Older by Area Type (Percent)



Notes: Areas are defined as census tracts. High-density metro areas have at least 2028 housing units per square mile; medium-density metro areas have between 644 and 2028 housing units per square mile; and low-density metro areas have less than 644 housing units per square mile. Connected and isolated non-metro areas are defined using USDA Rural-Urban Commuting Area codes.

Source: JCHS tabulations of 2010-2014 American Community Survey 5-Year Estimates and USDA Rural-Urban Commuting Area codes.

Nearly one-third (31 percent) of the current population aged 65 and over live in metro areas with fewer than 644 housing units per square mile (equivalent to 1 housing unit per acre), and 18 percent live in non-metro areas. The transportation planning literature maintains that moderate residential densities, in the range of 7-15 dwellings per acre, can support “moderately convenient transit service” such as buses, rapid transit, and taxis.⁵ While some lower-density metro areas can, and indeed do, support transit service, low-density areas—particularly those not proximate to urban centers—are in general less likely to have transit infrastructure in place than higher-density areas. Half of today’s retirees are therefore aging in areas unlikely to provide reliable public transit, leaving many dependent upon automobiles for transportation.

However, older households tend to give up driving as they age. According to the last nationally representative count by the National Household Transportation Survey in 2009, 93 percent of adults aged 50-64 identify themselves as drivers; among the oldest age group (85 and older), on the other

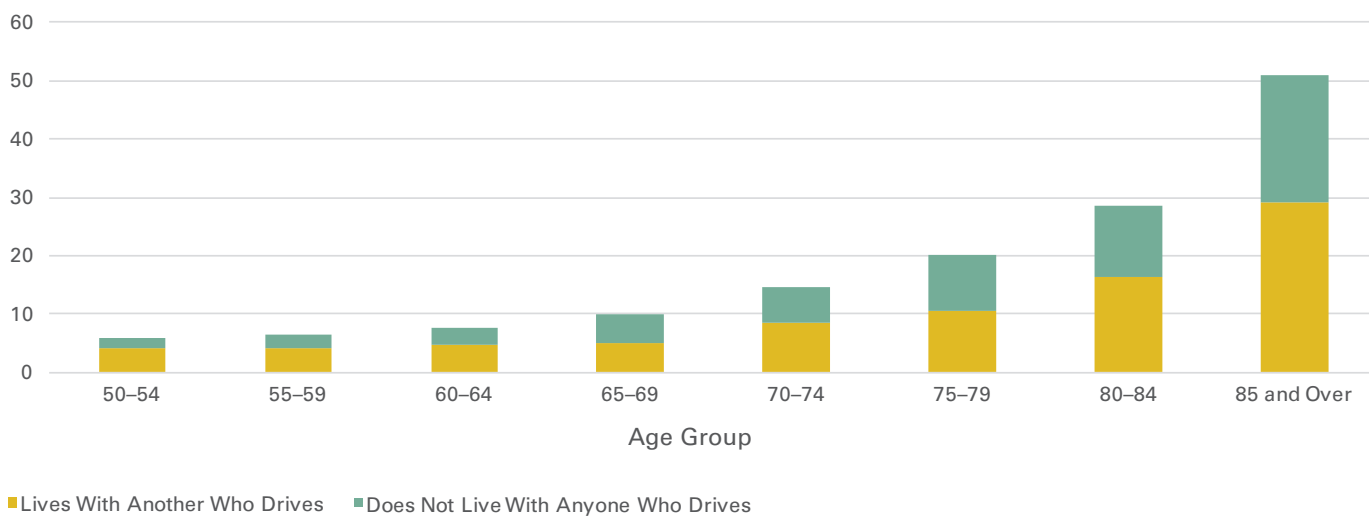
hand, more people identify as non-drivers than as drivers (Figure 2.8). Furthermore, 22 percent of those aged 85 and over neither drive nor live with someone else who does; such adults, if they live in low-density areas or for other reasons lack access to transportation, face an increased risk of isolation.

Just over half (51 percent) of older adults live in dense urban areas more likely to be walkable or offer reliable public transit. However, for members of this group with disabling medical conditions, even walking or taking transit may not be feasible. According to the 2009 National Household Transportation Survey, 12 percent of adults aged 50-64 report having difficulty traveling outside the home as a result of a medical condition, compared with 20 percent of adults aged 65-79 and 41 percent of those aged 80 and over.

Others near to transit may not use it because of lack of accessibility, perceptions of safety, or expense. Even the timetables and destinations of public transit may not suit the needs of older adults who are not commuting to work. Indeed, only a small minority of older adults report using

Figure 2.8: Fewer People Drive in Older Ages, Increasing the Likelihood of Isolation and Dependence on Others

Share of the Population that Does Not Drive an Automobile (Percent)



Source: JCHS tabulations of 2009 National Household Transportation Survey data.

**BETWEEN 2009 AND 2015,
4% (OR 217,000)
OF ALL NEW SINGLE-FAMILY AND
MULTIFAMILY HOUSING UNITS
COMPLETED WERE IN AGE-
RESTRICTED DEVELOPMENTS.**

transit on a regular basis, and this share declines with advancing age. At last count in 2009, just 13 percent of adults aged 80 and older reported having used public transit in the past month, compared with 17 percent of adults aged 65-79, and 23 percent of those aged 50-64. In younger and middle-aged groups, non-drivers tend to have much higher transit use than drivers; in the oldest age groups, by contrast, transit use rates converge for drivers and non-drivers as overall use declines with age. As it is, therefore, public transit may not be a feasible or sufficient option for the oldest adults, even for those living in well-served, dense urban areas.

Given the sharp declines in income that accompany advancing age, which Chapter 4 will describe in detail, it is not surprising that older adults identify cost as their most important transportation problem. In 2009, 35 percent of adults aged 65 and older reported the price of travel as their top transportation issue. Going forward, the increased numbers of older households across metropolitan areas and beyond may strengthen the market for transportation, particularly van and paratransit services, dedicated to their needs.

HOUSING DESIGNED FOR OLDER ADULTS

While most older adults live in traditional age-mixed owner-occupied or rental housing, there is a growing market for housing tailored specifically to those in their 50s, 60s, and above. “Active-adult” communities, which typically require that at least one member of each household is above a specific age, offer a sense of community as well as amenities like golf, swimming pools, and clubhouses. There is also a growing spectrum of age-restricted housing options offering services and supports, including household assistance, meals, transportation, and personal care that allow older adults to live independently for longer. At the far end of the spectrum are assisted living facilities, which offer a full range of supportive services and at least two meals a day, and nursing homes, which offer 24-hour skilled nursing care in addition to other supports. While the future mix of senior housing is uncertain, and much will depend upon older households’ preferences, market forces, and public policy, it is likely that the breadth of senior living options will continue to expand as the increasingly diverse population ages and demands more options for high-quality, age-friendly housing.

AGE-RESTRICTED HOUSING

Between 2001 and 2009, the American Housing Survey collected data on “age-restricted” communities, defined as senior citizen communities that require at least one member of each household to be 55 years or older. In 2009, of the 45.7 million households that included at least one person aged 55 or older, 3.1 million were part of an age-restricted community. Over the period 2001-2009, the number of age-restricted units increased by 885,000 nationwide, and the share of households with at least one member aged 55 and older that were part of an age-restricted community increased from 5.6 percent to 6.7 percent.

Census New Residential Construction data began tracking the age-restriction status of new units in 2009, and helps fill in trends in age-restricted housing in recent years. Between 2009 and 2015, 4 percent (or 217,000) of all

new single-family and multifamily housing units completed were in age-restricted developments. Taken together, these figures for 2001-2009 and for 2009-2015 indicate that age-restricted developments are a growing source of housing for older adults.

INDEPENDENT APARTMENTS, HOUSING WITH SERVICES, AND RESIDENTIAL CARE FACILITIES

A relatively small but rapidly growing number of the community-dwelling older population live in senior-only apartments or in housing that provides services and supports, ranging from basic conveniences like transportation, to assistance with household management, to help with personal care. Independent living facilities (sometimes referred to as “housing plus services”) generally offer a few meals a week in a community dining room, daily transportation services, and daily social activities, but do not offer assistance with activities for daily living (though they may assist residents in obtaining that help). In contrast to independent living facilities, assisted living facilities do offer support with activities of daily living such as dressing and bathing, as well as household help (e.g., laundry, housecleaning) and at least two meals daily.⁶ Both for- and nonprofit entities have developed these options.

The 2014 National Study of Long-Term Care Providers offers a national count of “residential care facilities” that provide a level of support typically associated with assisted living facilities, with at least two meals per day and assistance with personal care. This survey defines “residential care facilities” as including assisted living residences, board and care homes, congregate care, enriched housing programs, homes for the aged, personal care homes, and shared housing establishments.⁷ In 2014, the survey reported 835,200 people living in residential care facilities across the United States, 93 percent of whom were aged 65 and older. Data from the 2010 National Survey of Residential Care Facilities—the predecessor to the National Study of Long-Term Care Providers—shows that there were 733,300 residential care community residents, of whom 89 percent were aged 65 or older.⁸ The number of people living in



residential care facilities thus increased by more than 100,000 from 2010-2014. The oldest age groups, who report the highest rates of difficulty with daily activities, are most likely to live in residential care communities. In 2014, the majority of residential care community residents were 85 or older (53 percent), with another 30 percent aged 75-84. Residential care community residents are also most likely to be non-Hispanic white (84 percent) and female (70 percent).

To allow residents to remain in place as their needs evolve, some communities offer multiple levels of care, such as independent living, assisted living, and skilled nursing care; these “continuing care retirement communities” represent a small minority (6 percent in 2010) of all residential care communities. However, similar opportunities are afforded by a relatively larger share (24 percent) of residential care communities that offer a single level of care but are co-located on the same grounds as housing offering a different level of care, such as a nursing or rehabilitation facility.

SUMMARY

Given high homeownership rates among older adults, the next two decades will bring substantial growth in the number of older homeowner households. By 2035, the total number of owner households aged 65 and over will total 38 million. But numbers of older renters will grow too, at an even steeper rate than that of owners, expanding 80 percent to a total of 11.5 million households by 2035.

As noted above, a high share of older adults live in owned, single-family homes, and prevailing attitudes favor aging in place; indeed, low mobility rates indicate that many people are aging in place. Yet on the whole, these homes are currently ill-equipped to accommodate the soaring numbers of older people with disabilities (to be discussed in Chapter 3). There is opportunity for the private sector to provide aging-in-place modifications as well as to construct new housing using the principles of universal design

(i.e., housing accessible to all regardless of age, ability, disability, or size). Housing built according to these principles can be a solid investment that ultimately serves a wide range of the population. Financing these investments is another challenge, however, particularly for lower- and moderate-income owners, as will be discussed in Chapter 4. For tenants who lack control over their space, the challenges of aging in place can be even greater than for owners.

Accessibility outside the home is also critical for aging in the community. Without the ability to get out into the community to shop, access needed services, or visit friends and family, aging in one’s home can be isolating. Both transportation and technology can offer opportunities for connection, and are discussed in the final chapter of this report. In addition, housing options closer to services and community are also important.

Indeed, housing designed for older adults can offer some of these amenities. Such communities are a growing segment, one in which demand seems to be keeping up with the increasing supply of units. Housing units with services will also be needed in greater numbers, particularly for lower-income households. Financial resources, to be discussed in Chapter 4, will play an important role in enabling older households to age in their communities, whether in mixed-age or age-restricted housing.



3.

DISABILITIES AMONG OLDER ADULTS

Health and disability are closely tied to older households' housing needs. Physical and cognitive functioning tend to decline with advancing age, increasing the incidence of disabilities related to walking and movement (mobility), self-care, and ability to run a household, all of which may limit older adults' capacities to live independently in the community.

To better understand the housing and care needs of the older population through 2035, this chapter examines current disability rates, trends in health that may alter these rates in the future, and projections of the number and type of future households in which one or more members is likely to have a disability. To understand the capacity of older adults to meet their own housing and care needs, the following chapter then analyzes the financial well-being of our aging population.

HEALTH, DISABILITY, AND HOUSING NEEDS

"Health" is a multi-dimensional concept: the World Health Organization defines it as a state of complete physical, mental, and social well-being, and not merely as the absence of disease or infirmity. For our purposes, we are interested in how health, or its absence, affects housing needs. We therefore examine health insofar as it affects people's capacity to perform daily self-care and household tasks independently, for such tasks are intimately connected to movement about the home as well as to potential needs for assistance and care.

Difficulty performing a basic daily activity independently is understood as a functional limitation, or disability, in that activity area.¹ "Activities of daily living" (ADLs) are self-care tasks that include bathing, dressing, toileting, transferring (e.g. in and out of bed), and eating.² Within the home, ADLs may be partially addressed through accessible housing: difficulty bathing and toileting, for example, may be eased by the installation of walk-in showers, grab bars, and raised toilet seats. However, individuals with ADL disabilities often also need the help of caregivers.

“Instrumental activities of daily living” (IADLs) are independent living skills related to a person’s ability to cope with his/her environment, and include tasks such as shopping, cooking, housekeeping, use of transportation, managing money, managing medication, and telephone use.³ Many disabilities related to IADLs stem from physical frailty: for example, doing laundry and general housework may require more energy or strength than a person has. But other tasks, such as paying bills, preparing food, and managing medications, may be more related to cognitive health. Disability status is frequently assessed using ADL and IADL measures in combination, and can stem from physical as well as cognitive impairment.

In this report we also examine limitations in mobility, including difficulties in walking, climbing stairs, and transferring (e.g. in and out of bed). Some mobility limitations can be addressed through the use of assistive technology, such as wheelchairs or walkers. Mobility limitations might also be addressed through physical modifications to the home. For example, a single-floor living arrangement can eliminate the challenge of climbing stairs. Appliances placed at lower levels can save users from having to lift their arms above shoulder-height. And those using assistive devices such as wheelchairs or walkers may benefit from wider hallways and doorways to facilitate movement throughout a house.

DISABILITY IN CURRENT OLDER ADULTS

In order to understand the housing implications of disability in the older population, we utilize the 2014 Health and Retirement Study (HRS), a longitudinal data set sponsored by the National Institute on Aging. HRS is unique among other disability surveys in that it provides detailed information on health and disability for all members of the primary respondent’s household, allowing us to analyze disability and housing implications for individuals as well as for the household as a whole. This analysis can help us to gauge the number of older households affected by disability, their characteristics (including tenure and household type), and the scope of the need for household modifications and supports in the home

To operationalize mobility-related disabilities, ADLs, and IADLs we selected specific tasks identified in the literature on disability that are measured by HRS and sorted them into three categories: mobility disabilities, self-care disabilities, and household activity disabilities (Chart 3.1). For our purposes, mobility disabilities include difficulties walking, getting in and out of bed (transferring), and climbing stairs. Transferring is technically defined as an ADL in the literature, and neither walking nor climbing stairs are traditionally considered ADLs or IADLs, but we have constructed this category of mobility-related challenges to study older adults’ abilities to move about their homes.⁴ Self-care disabilities include difficulty eating, dressing, toileting, and bathing independently, all of which are defined as ADLs in the literature. Limitations related to household activities include need for assistance preparing meals, shopping, managing money, doing housework, driving, using the phone, and taking medication, all of which are defined as IADLs in the literature.

Chart 3.1	
Disability related to:	Difficulty with
Mobility	<ul style="list-style-type: none"> • Walking • Transferring in and out of Bed • Climbing Stairs
Self-care	<ul style="list-style-type: none"> • Eating • Dressing • Toileting • Bathing
Household activity	<ul style="list-style-type: none"> • Meal Preparation • Food Shopping • Using Telephone • Taking Medication • Money Management • Housework • Driving

An extensive literature on ADL and IADL limitations, which has emerged since the two measures were established in the 1960s and 1970s, shows that the prevalence of disability rises sharply with advancing age. Income, educational attainment, race and ethnicity, and marital status have also been correlated with disability risk among older adults. Disability rates are highest among those with low incomes or limited educational attainment, among Hispanics and non-Hispanic blacks, and among the unmarried.⁵

These findings are borne out in our analysis of HRS data. Fully 41 percent of older adults aged 65-79 have at least one self-care, household activity, or mobility disability as identified in Chart 3.1, but for those 80 and over, this share rises to nearly 71 percent. Household activity disability is the most common disability (**Figure 3.1**). This is a broad category, and high rates are driven in particular by reported difficulties with housework and driving, both of which are substantially higher in older age groups.

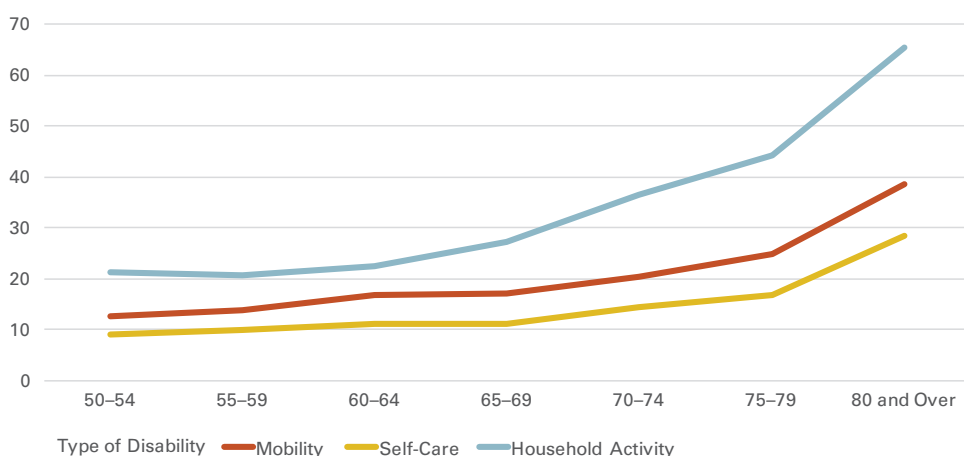
CURRENT HOUSEHOLDS WITH DISABILITIES

In considering the implications of disability for the housing situations of older adults, incidence at the household level is more relevant than incidence at the individual level. For example, if only one member of a married couple household has a mobility disability, the housing unit will need to accommodate that individual even though the other spouse does not need the same accommodation.

Disability rates are higher for minority households across all three types of disability. Among older households, Hispanic households have the highest rates of mobility disability at 48 percent, followed by 41 percent of non-Hispanic Asian/other households. Household activity disability rates are highest in Hispanic households (62 percent), closely followed by non-Hispanic black households at 60 percent. Similarly, self-care disability rates are higher among minorities than among non-Hispanic white households: 31 percent of non-Hispanic black households and 35 percent of Hispanic households aged 65 and over have a self-care disability, compared with 21 percent of non-Hispanic white households of the same age.

Figure 3.1: Disability Prevalence Increases with Age

Share of Population with Disabilities by Age Group (Percent)



Notes: Mobility disability is defined as difficulty walking, getting in and out of bed, and climbing one flight of stairs; self-care disability as difficulty eating, dressing, toileting, and bathing; and household activity disability as difficulty with meal preparation, food shopping, using the telephone, taking medication, money management, housework, and driving.

Source: JCHS tabulations of University of Michigan, 2014 Health and Retirement Survey.

By tenure, renter households aged 65 and older are far more likely than owner households of the same age to have a disability, though the gap narrows at more advanced ages. Overall, 60 percent of renter households headed by a person aged 65 and older include at least one member with a household activity disability, 45 percent have a mobility disability, and 30 percent have a self-care disability. In comparison, 50 percent of owner households headed by a person aged 65 and older have a household activity disability, 29 percent have a mobility disability, and 21 percent have a self-care disability. The higher prevalence of disability among older renters is of great significance because renters often have neither the financial resources nor the legal authority to suitably modify their homes. Limited financial resources also make it difficult to obtain care in the home.

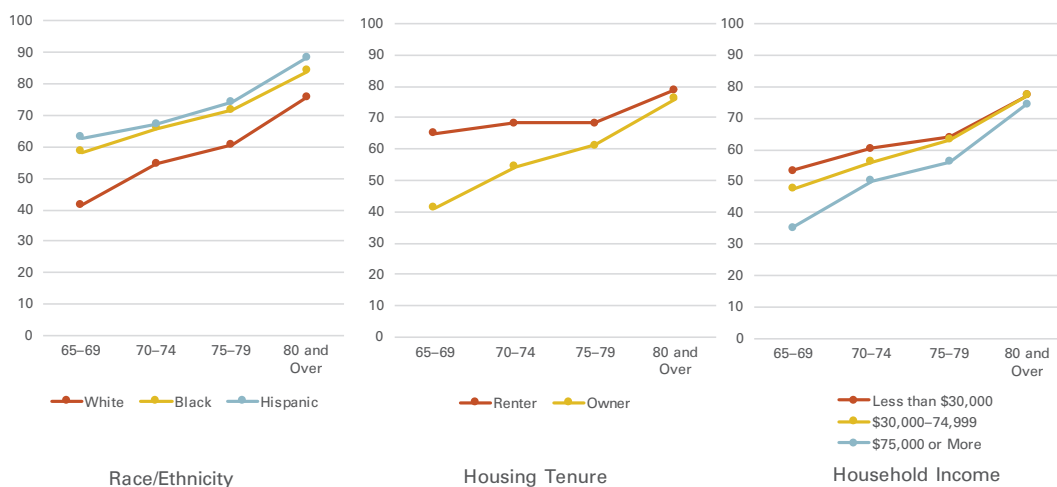
Disability rates among older households follow similar patterns to those among the older population and increase with age regardless of race/ethnicity, tenure,

or income (Figure 3.2). For households aged 65-79, 45 percent have household activity limitations, 28 percent have mobility limitations, and 20 percent have self-care limitations. Among households aged 80 and over, these rates are higher, at 71 percent, 45 percent, and 34 percent respectively. Still, the larger size of the 65-79 householder age group means there are more households with disabilities among the “younger old” group: nearly 12 million households in the 65-79 age group have at least one disability, compared to nearly 6.1 million households aged 80 and over.

These rates translate into a total of 15.3 million households aged 65 and older with household activity limitations, 9.6 million with mobility limitations, and 7 million with self-care limitations. Many households fall into two or even all three of these disability categories. In total, nearly 18 million households aged 65 and over have at least one person with at least one disability.

Figure 3.2: Disabilities are Increasingly Common with Age, Regardless of Race/Ethnicity, Tenure, or Income

Share of Households Aged 65 and over with Disabilities (Percent)



Notes: Whites and blacks are non-Hispanic. Hispanics may be of any race. Race/ethnicity figure excludes Asian and other households due to insufficient data.

Source: JCHS tabulations of University of Michigan, 2014 Health and Retirement Survey.



HOUSEHOLDS WITH INCIDENCE OF DEMENTIA

While dementia can cause all three types of disabilities mentioned above, it is discussed separately here because it often requires different types of interventions, from specific design elements to specialized care. Estimates of current dementia prevalence vary: recent analysis of Health and Retirement Study data indicates that 8.8 percent of adults aged 65 and over have dementia, and another 18.8 percent have some lower level of functional impairment that does not meet the criteria for dementia (referred to as “CIND,” or cognitive impairment, no dementia).⁶ In comparison, analysis of data from two other oft-cited nationally representative studies—the Aging, Demographics, and Memory Study (ADAMS), and the National Health and Aging Trends Study (NHATS)—yield slightly different estimates. Analysis of ADAMS data indicates that 13.9 percent of people aged 71 and older in the US have dementia, with another 22 percent classified as having CIND.⁷ Meanwhile, estimates of dementia prevalence based on NHATS data suggest that 14.8 percent of adults aged 71 and older have “probable” dementia, while another 12.8 percent has “possible” dementia.⁸ Among older adults aged 65 and older, analysis of NHATS data indicates that 11.2 percent have probable dementia, while 10.6 percent have possible dementia.

Each of these estimates shows the prevalence of dementia rising sharply with age. Analysis of HRS data, for instance, puts the share of older adults with dementia at 3.2 percent for 65-74 year-olds, at 9.9 percent for 75-84 year-olds, and at 29.3 percent for those aged 85 and older.⁹ Similarly, the share with CIND also rises with age, increasing from 14 percent among the 65-74 age group, to 22.6 percent for those aged 75-84, and up to 29.9 percent among adults aged 85 and over.

Applying these shares to the Census Bureau’s 2015 Current Population Estimates translates to a 65-and-over population with dementia of 4.1 million today, with an additional 8.9 million with CIND. The oldest age group (85 and older) represents fully 45 percent, or 1.8 million, of this current older population with dementia.

HELP FOR THOSE WITH DISABILITIES: SUPPORTS AND SERVICES IN THE HOME

As noted at the outset of this chapter, older adults living with disabilities can often benefit from care in the home. Indeed, a 2005 study has estimated that nearly 70 percent of adults will need some form of long-term care in later life.¹⁰ At the time, this study projected the average total duration of long-term care use for older adults who turned 65 in 2005 to be 3 years. The study further estimated that 1.9 years of this care would be spent at home, with approximately 0.5 years of formal (paid) care and 1.4 years of informal care (e.g. from a spouse or partner, family member, or friend), and the remaining 1.1 years spent in long-term care facilities, most of which would be spent in nursing home care (0.8 years), with 0.3 years spent in assisted living facilities. However, long-term care use varies across demographic and socioeconomic groups. Reflecting differences in disability rates across demographic groups, the oldest age groups, women, and unmarried people are most likely to use some form of long-term care before death.¹¹ Additionally, lower-income older adults are more likely to need longer periods of assistance than those who are financially better-off.¹² It is also unclear how trends toward the increased provision of long-term care in the home may alter these 2005 estimates for where care is most likely to be delivered.

Analysis of 2014 HRS data indicates that among all older households aged 65 and over with functional limitations, 54 percent received some form of help. The vast majority of this was unpaid/informal help, most of which came from family caregivers. Only 8.2 percent who reported receiving assistance got it from formal, paid sources. Consistent with these findings, in 2009, AARP estimated that family caregivers provided \$450 billion worth of unpaid care, almost four times Medicaid long-term services and supports spending, and nearly seven times what people paid privately (assuming an hourly rate of \$11.16).¹³

When both formal and informal care received by older households are accounted for, there is still a sizeable gap between households needing help and those actually receiving it.¹⁴

Forty-five percent of households aged 65 and older have some form of disability but receive no help of any kind—a total of 8.1 million households in 2014. Going forward, fewer family caregivers will be available to provide care to older adults, given both rising need and declines in the number of children among the baby boom generation.¹⁵

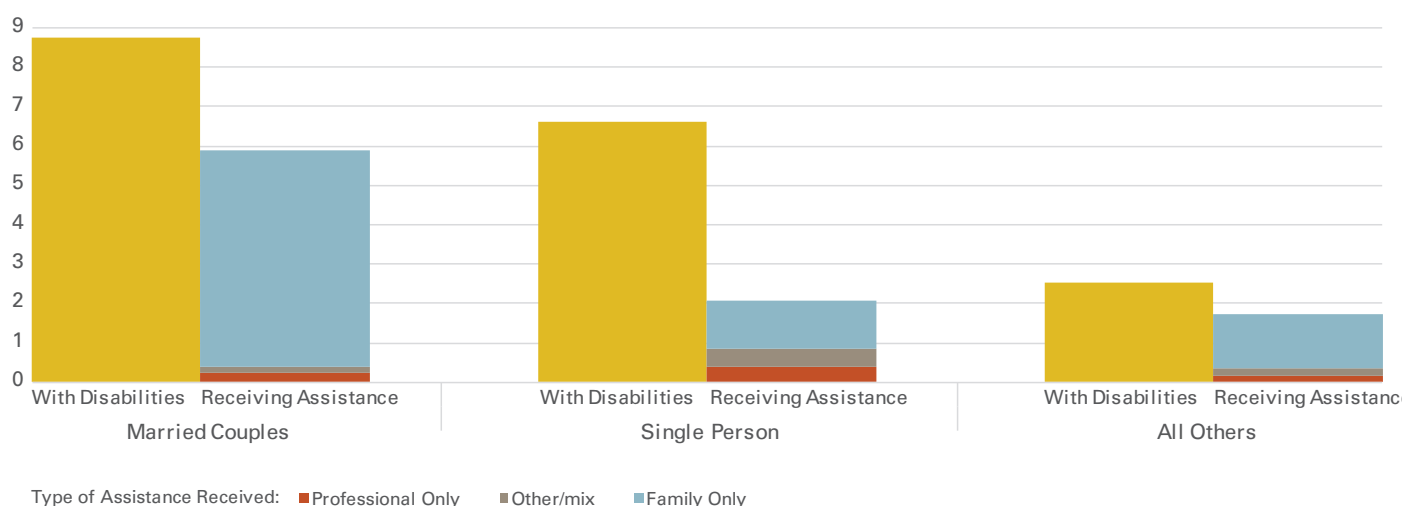
Furthermore, this overall picture masks sizeable differences between the help situations of married couples and single-person households. Among married couple households with any disability, 67 percent reported receiving some form of assistance (which can include help from a spouse), compared with just 32 percent of single-person households (Figure 3.3). In addition to being less likely to receive help, disabled single-person households are far more likely than married couples to pay for the help they receive. While just 4 percent of married couple households with disabilities receiving help obtained it from a paid source, 18 percent of single-person households with disabilities who received help paid for it.

TRENDS IN THE NUMBERS OF HOUSEHOLDS WITH DISABILITIES

Demographic and health trends will shape the disability rates of future older households. Since incidence of disability rises with age, the overall aging of the population will increase both the share and number of older adults with disabilities, particularly in the 80-and-over group. Rising rates of educational attainment suggest lower disability rates, but uncertain trends in income, to be discussed in the next chapter, may lead in the other direction, since those with lower incomes have higher disability rates. Finally, given that the likelihood of disability is higher among Hispanic and black households, as noted above, the increasing diversity of the older population will likely lead to higher numbers with mobility, self-care, and household activity disabilities.

Figure 3.3: Single Person Households with Disabilities Are Most Likely to Lack Help

Households Aged 65 and over by Household Type (Millions)



Source: JCHS tabulations of University of Michigan, 2014 Health and Retirement Survey.



In addition to demographic trends, health trends are shaping disability rates. Recent increases in average lifespan may be particularly consequential, given that the oldest age groups have the highest disability rates. Between 1980 and 2014, life expectancy at age 65 increased from 16.4 years to 19.3 years.¹⁶ Men have experienced larger increases in life expectancy than have women. For men, life expectancy at age 65 increased from 14.1 years in 1980 to 18.0 in 2014, while female life expectancy at age 65 increased from 18.3 to 20.5 years over the same period.

There is substantial debate about whether lengthening lifespans are resulting in more years of healthy, disability-free life, or whether these additional years are simply drawing out the period of impairment during the last years of life. Some researchers argue that a “compression of morbidity”—a reduction in the average period during which an individual suffers from disability—is indeed occurring.¹⁷ However, others believe that the period of disabled life is expanding, and still others find that the evidence is mixed,

with some demographic groups benefiting less or not at all from compression of morbidity—specifically the minorities, poor, and less well-educated.¹⁸ Furthermore, a 2016 study indicates gender differences in compression of morbidity, finding that while older men have experienced decreasing disability, postponement of disability to older ages, and increased percentage of remaining life spent active in addition to increases in longevity, older women have seen comparatively smaller postponements in disability, an upward trend in moderate disability, a stagnation of active life as a percentage of life expectancy, and smaller increases in longevity.¹⁹

Recent trends in several specific health conditions may also influence disability rates among the future older population. Rising rates of diabetes and obesity are of particular concern, but arthritis and chronic conditions such as cardiovascular disease and lung disease are also among the most significant contributors to disability for older adults.²⁰ Trends in these disability-related diseases and conditions, and their potential effects on disability among the future older population, are discussed below.

- **Obesity.** Obesity can exacerbate age-related declines in physical function.²¹ Obesity rates have risen substantially in recent decades, and will likely have important implications for the overall health and functional capacity of the future elderly population.²² Researchers warn that if obesity rates continue to rise, ADL disability rates will increase for the 50-69 age group by 1 percent per year more than if there were no further weight gain, an increase that may offset overall trends toward decreasing old-age disability.²³ While some recent studies have indicated that acceleration in the increase of obesity rates may now be leveling off after rising throughout the past several decades, researchers still anticipate overall increases in obesity in coming years: one study forecasts a 33 percent increase in obesity prevalence from 2012 to 2030.²⁴

Studies find that obesity is an important cause of frailty in older persons, which is associated with limitations performing basic ADLs and IADLs.²⁵ In particular, obesity is closely tied to mobility limitations in older adults: obesity contributes to the risk of knee osteoarthritis, which can lead to difficulty walking and overall decreases in mobility.²⁶ Although obesity is associated with increased difficulties in all the basic ADLs except eating, the effect is strongest for mobility-related ADLs, including transferring from a bed to a chair and dressing, as well as activities related to walking. Obesity is also linked with many other medical conditions that become more prevalent with age and themselves lead to disability, including hypertension, diabetes, and cardiovascular disease.²⁸

EVIDENCE SUGGESTS THAT LATE 20TH CENTURY GAINS IN OVERALL HEALTH AMONG THE OLDER POPULATION ARE NOW MODERATING.

- **Diabetes.** Old age is associated with higher diabetes prevalence. As of 2014, the CDC reports that 25.9 percent of the population aged 65 and over has diabetes, compared with 16.2 percent of the population aged 45-64.²⁹ The aging of the overall population is therefore a significant driver of the diabetes epidemic. Older persons with diabetes have higher rates of coexisting illnesses (like hypertension, coronary heart disease, and stroke), premature death, and physical and cognitive impairment (including risk of decreased physical activity, increased risk of falls, and heightened rates of dementia).³⁰

Diabetes prevalence is expected to increase significantly through 2050. A study published in 2006 projected that between 2005 and 2050, the number of older adults with diabetes would increase by 220 percent among those aged 65-74 years, and by 449 percent among those aged 75 and over.³¹ Given that CDC-reported rates of diagnosed diabetes among the population aged 65 and older have risen further since 2006—increasing between 2004 and 2014 from 18.5 percent to 21.5 percent for the 65-74 age group, and from 16 percent to 19.2 percent for the 75 and over age group—these projections may well underestimate the magnitude of future increases.

- **Arthritis.** Arthritis is one of the most common causes of disability among American adults.³² Analysis of data from the 2009 National Health Interview Survey indicates that 40 percent of adults with arthritis report that at least 1 of 9 important daily functional activities are “very difficult” or that they “cannot do” them.³³ For example, almost 8 million adults who reported an arthritis-attributable activity limitation also reported severe limitation in their ability to stoop, bend, or kneel. Further, 6 million reported not being able to walk a quarter of a mile.

Obesity is closely connected to arthritis risk: obese adults have far higher prevalence of arthritis (28.9 percent) than normal/underweight adults (16.3 percent), and are also far more likely to have arthritis activity limitations.³⁴ National Health Interview Survey data from 2009 indicates that 44.8 percent of arthritic obese adults have arthritis-attributable activity limitations, compared with 38.2 percent of arthritic normal/underweight adults.

Projections indicate that by 2040, 1 in 4 US adults (78.4 million) aged 18 and over will have doctor-diagnosed arthritis, and 1 in 9 (34.6 million) will have an arthritis-attributable activity limitation. The largest increases are projected among those 65 and older.³⁵ The Centers for Disease Control and Prevention cautions that if obesity rates continue to rise, the number of adults with arthritis-attributable activity limitations may grow even beyond these projections.³⁶

- **Dementia.** Dementia is one of the major causes of disability and dependency among older people worldwide. Alzheimer’s disease is the most common cause of dementia, responsible for an estimated 60 to 80 percent of dementia cases.³⁷ Researchers agree that the risk of dementia among older Americans has been declining during the past several decades. A 2016 study using HRS data to analyze trends in dementia prevalence between 2000-2012 found that rates declined by more than 20 percent over that period.³⁸ Evidence from the Framingham Heart Study indicates that from 1975 to the present, there has been a 20 percent decrease in dementia incidence each decade.³⁹ An analysis of Health and Retirement Study data found that in 1993, 12 percent of surveyed adults 70 years of age or older had cognitive impairment, compared with nearly 9 percent in 2002.⁴⁰ Similarly, analysis of National Long-Term Care Survey data found that between 1982 and 1999, severe cognitive impairment among people aged 65 and over declined from 5.7 percent to 2.9 percent.⁴¹ However, although overall dementia prevalence is declining, research has found that the specific risk of Alzheimer’s disease held largely constant between 1997 and 2008, with no significant declines.⁴²

Several studies have investigated the relationship between higher educational attainment and dementia prevalence, with some hypothesizing that education helps build a “cognitive reserve” that acts as a buffer against cognitive decline.⁴³ Recent analyses, however, have found no or only small links between education and cognitive decline, leaving the effects of recent increases in educational attainment an open question.⁴⁴

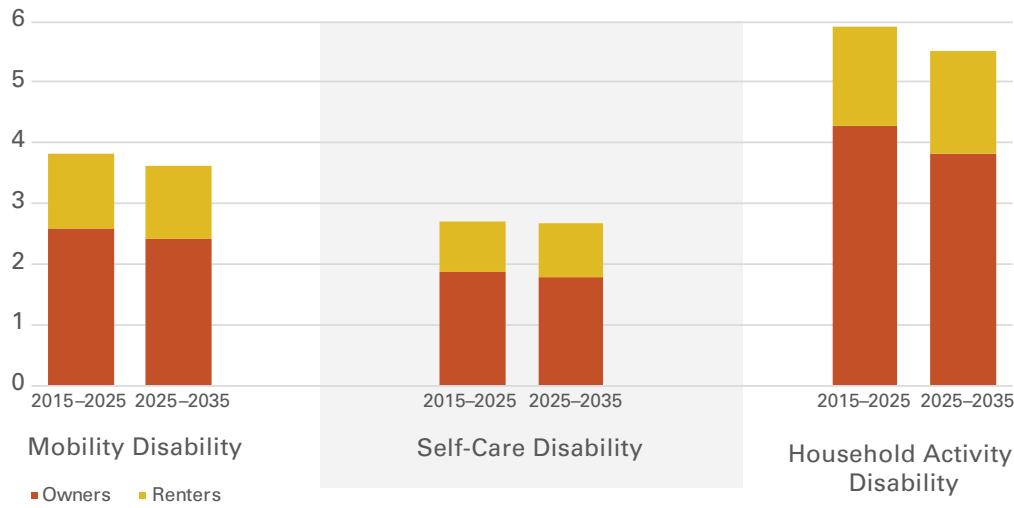
Researchers point out that even though dementia risk is declining, the combined effects of longer lives and the dramatic bulge of baby boomers reaching old age will lead to larger numbers of Americans with dementia.⁴⁵ Additionally, increases among the middle aged in obesity and diabetes rates—two important risk factors for dementia—may dampen recent declines in dementia prevalence.⁴⁶ Other studies have linked loneliness to increased risk of dementia. A study published in 2007 found that elderly people who report being lonely were twice as likely to have dementia as those who were not lonely.⁴⁷ Given the large numbers of older people living alone, and the overwhelming preference to age in place (which for many is in disconnected suburban and rural areas), the living situations and spatial distribution of the elderly population across the US may increase the risk of dementia among the future elderly population.

Though the literature describing health trends and disability among older adults is complicated, evidence suggests that late 20th century gains in overall health among the older population are now moderating.⁴⁸ While the 1980s and 1990s saw declines in disability, these downward trends appear to have leveled off in the first decade of the 21st century.⁴⁹ One study found, for example, a relative leveling off in declines in late-life activity limitation from 2000-2010.⁵⁰ Another study published in 2014 that analyzed National Health Interview Survey data found that while the 65-and-over age group has experienced decreases in all limitations except physical functions, the 40-64 age group has experienced increases in all limitations except trouble hearing. Although findings vary by survey depending on the measure of limitation used, sub-period, and age group, the overall takeaway is that there have been no major recent changes in disability rates among the elderly.⁵¹

Given these uncertainties, in projecting numbers of future households with disabilities, we hold current rates of disability constant by five-year age band, race, and household type, and we apply these rates to the household projections discussed in Chapter 1. The analysis shows a tremendous future increase in the number of older households with a disability, owing largely to the expected increase in households headed by older individuals and, to a much lesser extent, to the growth in particular demographic groups more likely to be affected by disability.

Figure 3.4: The Number of Households with a Disability Will Increase Substantially by 2035

Growth in Households Aged 65 and over with Disabilities by Tenure (Millions)

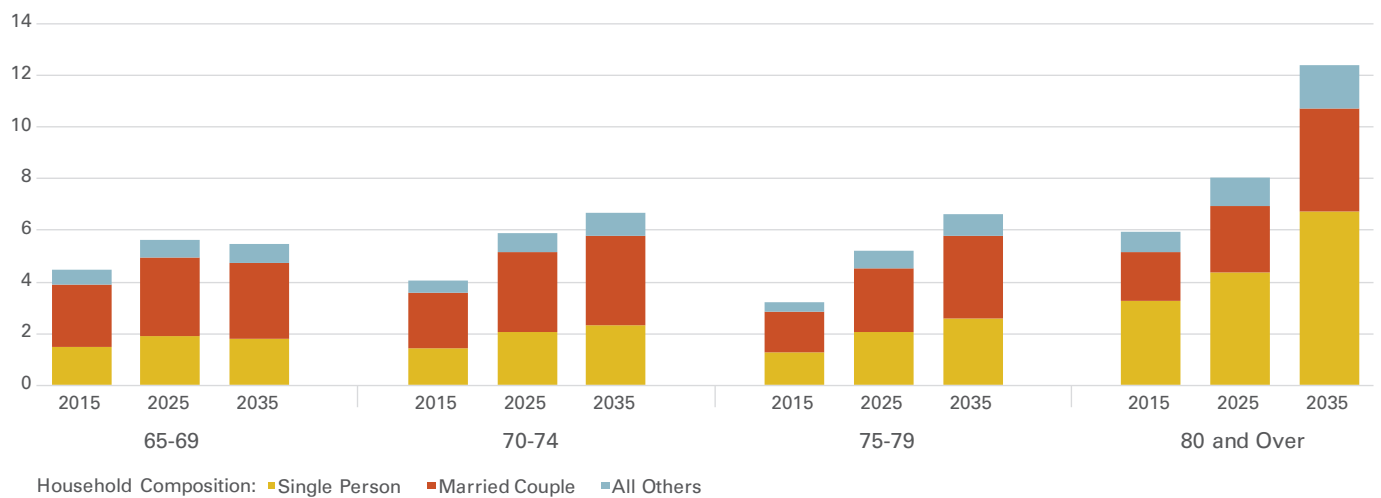


Notes: Mobility disability is defined as difficulty walking, getting in and out of bed, and climbing one flight of stairs; self-care disability as difficulty eating, dressing, toileting, and bathing; and household activity disability as difficulty with meal preparation, food shopping, using the telephone, taking medication, money management, housework, and driving.

Source: JCHS tabulations of University of Michigan, 2014 Health and Retirement Survey and JCHS 2016 Household and Tenure Projections.

Figure 3.5: Single Person Households Aged 80 and over Will Drive Growth in Disabled Older Households

Projected Households with Disabilities by Age Group (Millions)



Source: JCHS tabulations of University of Michigan 2014 Health and Retirement Survey and 2016 JCHS Household and Tenure Projections.

PROJECTED HOUSEHOLDS WITH DISABILITIES

The growth in the numbers of the “oldest old” in coming decades will lead to significant increases in the numbers of older adults with disabilities.

JCHS projections estimate that by 2025, the number of households aged 65 and older with a mobility disability will increase to nearly 13.4 million (an increase of 3.8 million compared to 2014); by 2035, this figure will reach 17.1 million (an increase of 7.4 million).

By the year 2025, the number of households aged 65 and older with a self-care disability is projected to increase by 2.7 million to a total of 9.5 million, and then to nearly 12.2 million in 2035. The number of households with a household activity-related disability will grow by 5.9 million to a total of 21 million households in 2025, and by another 5.5 million to a total of nearly 27 million households in 2035 (**Figure 3.4**).

Although renters represent a relatively small minority among older households—a trend that will likely hold over the next several decades, according to JCHS projections—older renters’ higher disability rates mean that they will contribute substantially to the overall growth in disabled households through 2035. Renter households will account for 24 percent of overall growth in households 65 and over through 2025, and for 26 percent of overall growth from 2025 to 2035. However, in each decade, renters will drive at least 30 percent of growth in the number of older households with each type of disability.

JCHS projections estimate that by 2025, 4 million renters and 9.3 million owner households are likely to include at least one person with a mobility disability. By 2035, among the 11.5 million renter households and 38.1 million owner households headed by an adult aged 65 and over, there will be 5.3 million renter households and 11.8 million owner households with mobility limitations, for a total of 17.1 million households that may be helped by physical modifications to the home ⁵²

By 2025, households with a household activity disability are projected to increase to nearly 16 million owners and over 5 million renters, and by 2035 to almost 19.7 million owners and 7 million renters. Households with a self-care disability will increase by 2025 to almost 6.8 million owner households and nearly 2.7 million renters, and by 2035 to 8.6 million owners and 3.6 million renters. Households with either of these types of disability will likely benefit from care or support in the home.

Rapid growth among the oldest age groups in coming decades will mean that the number of disabled households aged 80 and older will double for each disability type (mobility, household activity, and self-care). By 2035, a projected 5.3 million households aged 80 and older will have self-care limitations, 7.2 million will have mobility limitations, and 11.4 million will have household activity limitations. The population aged 80 and over not only tends to have the highest disability rates and highest need for long-term care services, but is also more likely to be widowed and without a partner to provide assistance with daily activities, which increases the need for care from sources outside the home.

The extraordinary projected growth in the 80-and-over population, who often live alone as single-person households, will drive growth in the number of disabled older households in coming decades. By 2025, the number of disabled single-person households aged 80 and over will increase by 1.1 million, and then by another 2.3 million by the year 2035. Married couple households aged 80 and over with a disability will see a smaller increase in the first period, increasing by 0.6 million by 2025, and then by another 1.3 million by 2035. This means that by 2035, the number of single-person households with a disability will more than double, while the number of disabled married-couple households will rise by around 50 percent (**Figure 3.5**).

By 2035, 11.4 million single-person households and a further 11.7 married-couple households will have household activity limitations. Mobility limitations will affect 7.6 million single-person households and 6.9 million married couple households, and self-care limitations will impact 5.3 million single-person households and 5.1 million married couple households. The number of disabled single-person households in the oldest age groups (aged 80 and older) will undergo particularly substantial growth, rising by over 100 percent within each disability category. By 2035, in the 80 and older age group, there will be 3.9 single-person households with mobility limitations, 2.8 million with self-care limitations, and 6.2 million with household activity limitations.

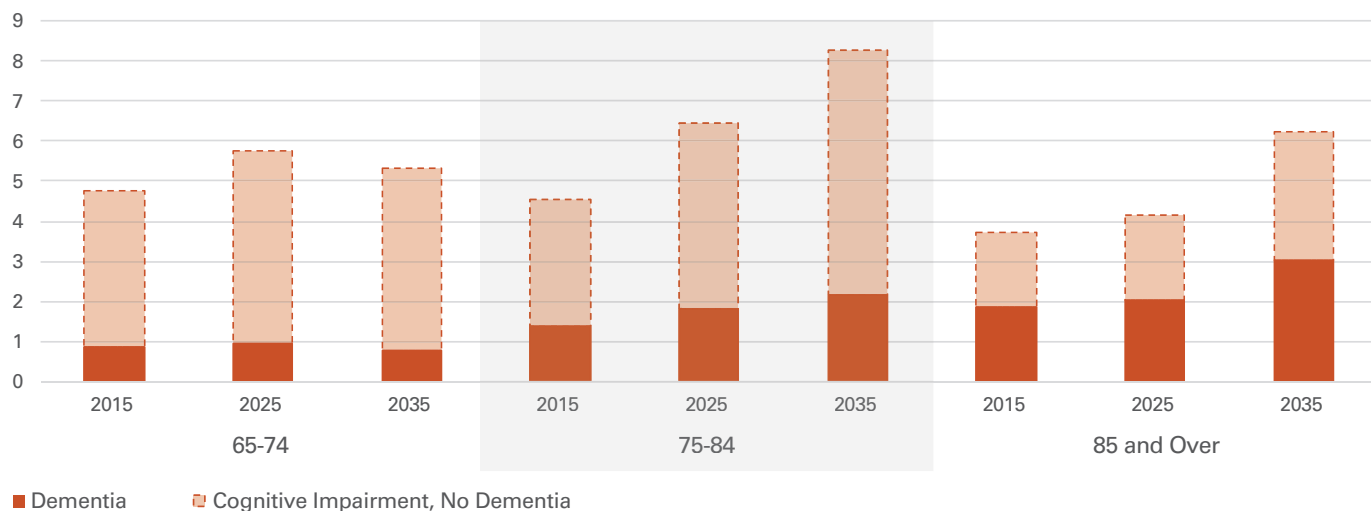
PROJECTED RATES OF DEMENTIA

Dementia has particular implications for housing and care, including housing design, and so we present projections for the population with dementia separately here.

As noted above, a recent study used HRS data to analyze trends in dementia prevalence between 2000-2012, and found that rates declined by more than 20 percent over that period.⁵³ The magnitude of this decline echoes that found by other studies, such as the Framingham Heart Study, which indicates there has been a 20 percent decrease in dementia incidence each decade from 1975 to the present.⁵⁴ With this evidence in mind, in projecting the future number of older adults with dementia, we assume that the recent declines in dementia rates will continue in coming years. However, to be conservative in our projections, we reduce the expected rate of decline for each age group between 2015-2025 and 2025-2035 to half that seen among HRS respondents between 2000-2012.⁵⁵

Figure 3.6: Population Aging Will Drive the Number of Older Adults with Dementia Far Higher

Projected Population with Dementia by Age Group (Millions)



Source: JCHS tabulations of Johns Hopkins University, 2012 National Health and Aging Trends and US Census Bureau, 2014 Population Projections.

Using this methodology, JCHS projections yield a 2025 estimate of 4.8 million adults aged 65 and older with dementia, and another 11.6 million with CIND (cognitive impairment, no dementia). By 2035, the number of adults aged 65 and older with dementia may reach 6 million, with an additional 13.9 million having CIND.

We can break down this projection further according to older (aged 65-84) and oldest (aged 85 and over) adults.⁵⁶ Among 65-84 year olds, the number with dementia will grow to 2.9 million by 2035, and the number with CIND will grow to 10.7 million. Among the oldest age group, aged 85 and older, growth will be relatively higher, with the number of dementia cases rising from 1.8 million to 3 million, and the number with CIND increasing from 1.9 to 3.2 million (**Figure 3.6**).

These projections assume that the declines in dementia prevalence among the older population seen in recent decades will continue in coming years. However, if declines were to halt completely, these numbers would grow by several million more. Applying today's age-specific dementia rates to the projected older population in 2025 would result in 5.5 million adults aged 65 and older with dementia and 12.3 million with CIND that year. By 2035, holding today's dementia rates constant yields 7.6 million adults aged 65 and over with dementia and 15.5 million with CIND.

As these two scenarios illustrate, the older population's tremendous expansion over the next two decades will likely push the number of older adults with dementia substantially higher whether or not trends toward declining dementia prevalence continue.

The burden of cognitive impairment on individuals, their families, and caregivers is enormous. It was estimated that the monetary cost of dementia in 2010 was between \$157 billion and \$215 billion. The increase in the number of older adults with dementia over the next two decades will therefore clearly have substantial financial implications. Additionally, increased numbers with dementia may also increase demand for housing design features intended to

help dementia patients navigate their home environments. A review of the literature indicates that these features could include bright contrasting colors and lights, as well as design elements that maximize a person's orientation and safety.⁵⁸ Additionally, because dementia is linked to physical functional limitations, the rise in the number of older adults with dementia may also increase demand for home modifications related to mobility, self-care, and household activity limitations.⁵⁹

SUMMARY

Because disability rates rise with age and because the older population will grow at such an enormous rate over the next two decades, the number of older households with disabilities will rise dramatically. This increase will have major implications for housing: the housing stock will need to be modified to accommodate the greater numbers living with disabilities, and there will be increased demand for formal and informal care delivered in the home. Though technology and greater emphasis on care in the home rather than in group quarters are enabling older adults to live longer in their own homes even with serious disabilities, many will be better served in specialized housing within the community, such as housing with services or assisted living, that offers in-house supports and care.

As the next chapter discusses, however, housing costs alone are already out of reach for many, including those with moderate and middle incomes. For many households, the further costs of home modifications and services are a stretch too far. At best, such households will have to rely on friends and family for care; at worst, to the detriment of their health and safety, they will be unable to get the help they require, or will have to remain in housing unsuited to their physical and cognitive needs.

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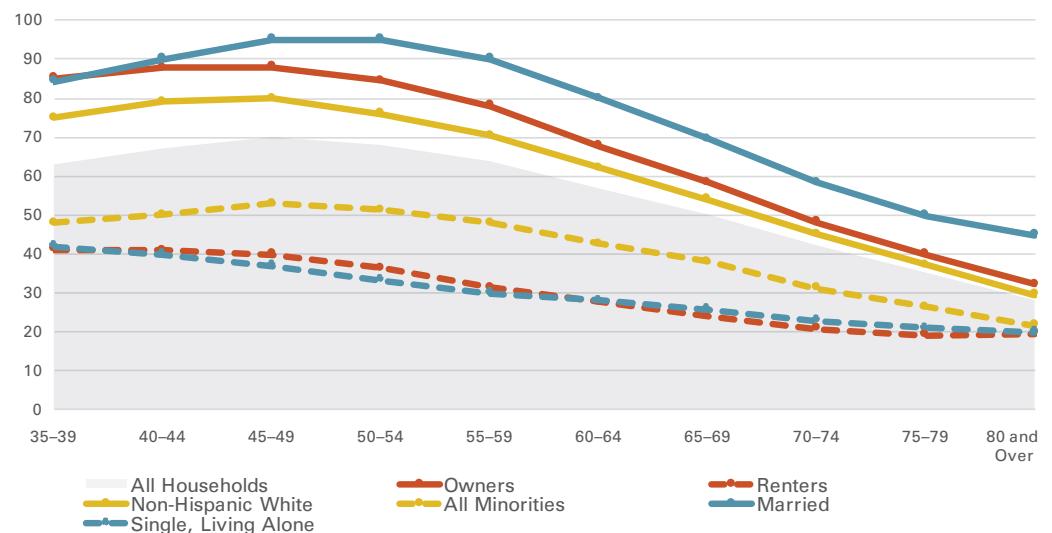
THE FINANCIAL SITUATIONS OF OLDER ADULTS

Since housing is typically the single largest item in the household budget, housing affordability has important repercussions for overall well-being. For homeowners, housing can also be—if equity is sufficient—an important source of wealth, one that can be tapped to pay for home modifications needed to age in place. And when households reach the stage where they need additional services and care to continue to live independently, their ability to pay for such services will depend significantly on their housing situations and costs.

Not surprisingly, older adults' financial resources vary widely. While many are financially secure, able to cover the costs of housing, other necessities, and long-term care if needed, significant numbers of low-, moderate-, and middle-income households live in unaffordable housing and lack assets to cover the costs of home modifications or in-home supports. Going forward, if current income and wealth distributions hold, population and household growth among older ages will mean millions more older owners and renters in precarious financial situations. Furthermore, today's pre-retirees may face heightened financial challenges as they cross into later life because of the blow many were dealt by the Great Recession (including unemployment or early retirement, loss of savings, and declines in home equity) and impending shortfalls in Medicaid and Social Security. Compared to previous generations, higher shares of these older adults are carrying debt into retirement, and smaller shares hold traditional pensions.

Figure 4.1: Median Income Declines with Age For Nearly Every Segment of the Older Population

Median Household Income by Age of Householder (Thousands of dollars)



Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates.

FINANCES OF CURRENT OLDER ADULTS

Older adults' financial situations are a function of their income, wealth, costs, and debts, with housing costs a major piece of the household budget. Owners typically have higher incomes and greater wealth than renters, who are more likely to be unaffordably housed. However, members of both groups face housing challenges, and, as discussed later in this chapter, a number of trends will put pressure on the financial security of older renters and owners alike.

INCOME OF OLDER ADULTS

Older adults typically have lower incomes than the population as a whole.¹ In 2014, the median income for households headed by a person age 65 and older was \$38,900, compared to \$59,500 for households headed by an adult between the ages of 18 and 64. More than half (51 percent) of households aged 65 and older are low-income (with incomes below 80 percent of the area median), compared with 38 percent of households aged 18-64.

In later life, a sizeable income gap persists between owners and renters, as well as between households headed by non-Hispanic whites and Asians on the one hand, and non-Hispanic blacks and Hispanics on the other. The typical owner aged 65 and older took in \$45,000 of income in 2014, while the typical renter aged 65 and older took in less than half that amount (\$21,000). That same year, median household income for white households aged 65 and older was \$40,900; for non-Hispanic Asian and other households, it was \$40,000. In contrast, the typical black household aged 65 and older took in \$28,400, and the typical Hispanic household of the same age took in just \$28,000.

Incomes fall for nearly every segment of the population when households cross into retirement and replace working incomes with pensions and/or Social Security (**Figure 4.1**). Median incomes for each age group then continue to fall with age, likely the result of more and more people retiring through older age and losing second incomes as spouses and partners pass away. In 2014, median household income for households headed by a pre-retirement aged person

(50-64) was \$63,000. For those 65-79, median income was 30 percent lower, at \$43,500; and for the oldest households (headed by a person aged 80 or over), median household income fell to \$28,300. Similarly, while 34 percent of households aged 50-64 are considered low-income (with annual household median income at or below 80 percent of the area median), the low-income share rises to 47 percent among adults aged 65-79, and to fully 65 percent among older adults in the 80-and-over age range.

These sizeable differences illustrate how closely age, household type, and tenure are related to income: in general, minorities, renters, and single-person households are most likely to be low-income—though because incomes decline with age for all groups, income gaps among groups do narrow appreciably for those aged 80 and over. As earlier chapters have described, the future older population will be relatively older and more diverse; these changes may have important implications for the financial stability of the older population as a whole in coming decades.

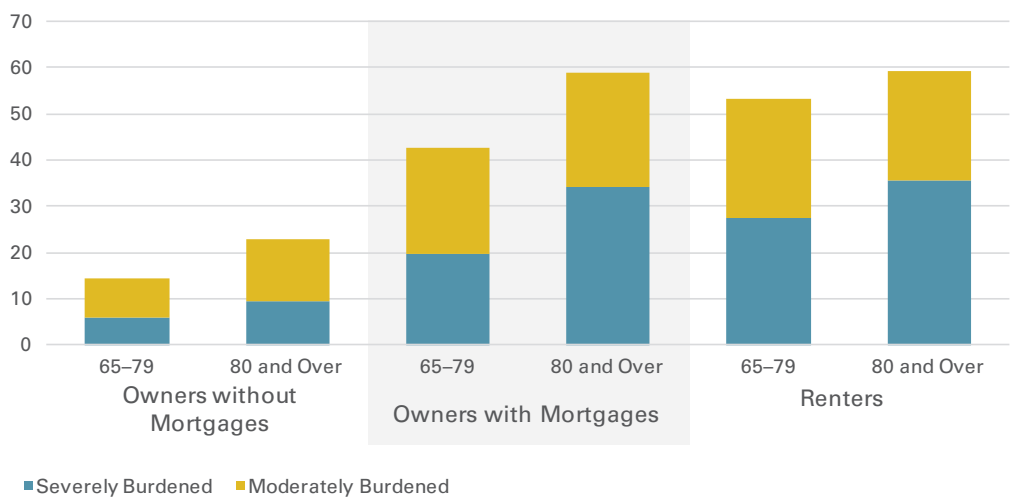
HOUSING COST BURDENS

In 2014, fully 78 percent of households headed by a person aged 65 and older owned their homes, while the remaining 22 percent were renters. Among owners, the share with mortgages declines with age. Nearly two-thirds (64 percent) of homeowners over age 65 possessed their homes without a mortgage, compared with 25 percent of homeowners under 65. Monthly housing costs vary widely by tenure and mortgage status: in 2014, median monthly costs for homes owned outright by a person aged 65 or older were \$450; for renters, \$770; and for owners with mortgages, \$1,262.²

Largely reflecting these significant differences in costs, the shares of older households that are housing cost-burdened, paying more than 30 percent of gross income toward housing costs, are closely linked to tenure type and presence of a mortgage. Owners aged 65 and over who own their homes outright are least likely to be housing cost-burdened (17 percent), while more than half (55 percent) of renters of the same age bear housing cost burdens. Meanwhile, 45 percent of older owners with mortgages face cost burdens.

Figure 4.2: Cost Burdens are Lowest among Owners without Mortgages

Share of Households by Age Group (Percent)



Notes: Moderately / severely cost burdened is defined as paying 30–50% / over 50% of income on housing.

Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates.



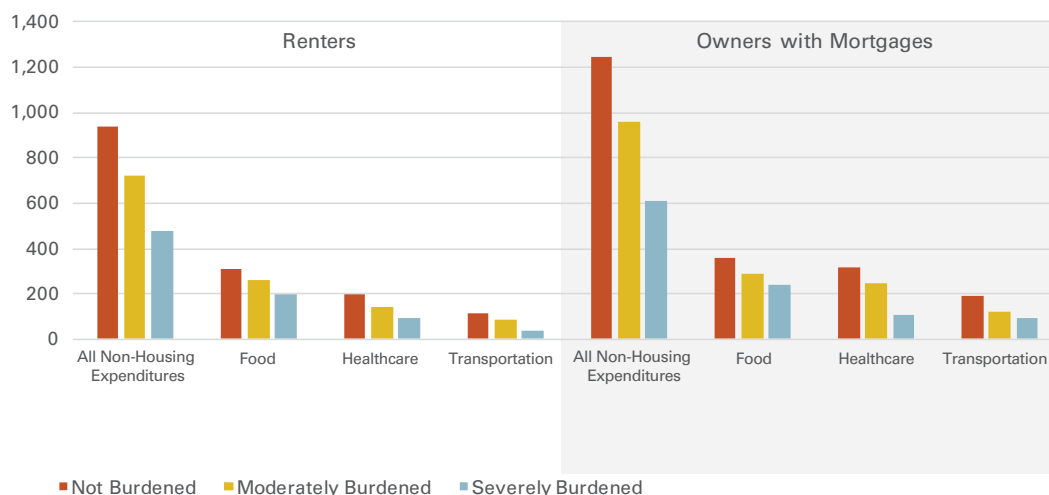
Housing cost burdens vary by age as well, and are highest among all tenures for the oldest age groups (**Figure 4.2**). In 2014, 32 percent of 65-79 year-olds were cost-burdened, including 15 percent who were severely burdened, paying more than 50 percent of income toward housing costs. In comparison, among households aged 80 and older, the share of cost-burdened households rises to 37 percent, with fully 20 percent, or one in five households, severely burdened.

Housing cost burdens also differ by race and ethnicity. Non-Hispanic whites aged 65 or older are far less likely than their non-Hispanic black, non-Hispanic Asian, and Hispanic peers to be burdened by housing costs. In 2014, 31 percent of non-Hispanic white households aged 65 and over were cost burdened, compared with 46 percent of non-Hispanic black, 44 percent of Hispanic, and 38 percent of non-Hispanic Asian and all other minority households of the same age.

The rising cost burdens that accompany advancing age shrink the amount of income left over after paying for housing to cover daily expenses and supportive services. Even though expenditures also decrease as age advances, these declines are overcome by declining incomes. In 2015,

Figure 4.3: Housing Cost Burdens Force Low-Income Older Households to Cut Spending on other Basic Necessities

Average Monthly Expenditures for Low-Income Households Aged 65 and over (Dollars)



Notes: Moderately / severely cost burdened is defined as paying 30–50% / over 50% of income on housing. Low-income households are in the bottom quartile of all households ranked by total spending.

Source: JCHS tabulations of US Bureau of Labor Statistics, 2014 Consumer Expenditure Survey.

the Consumer Expenditure Survey reported the average pre-tax income for households headed by a person aged 65-74 to be \$54,100, and average total annual expenditures to be \$49,500.³ For the 75 and older group, average income fell to \$36,400, while total annual expenditures averaged \$38,100—lower than for the 65-74 age group but not by enough to offset parallel income declines, demonstrating how older households must often look to non-income financial reserves to finance daily expenses.

A detailed look at expenditures on selected necessities further elucidates the extent to which falling incomes and rising housing cost burdens hurt the ability of the oldest households to afford even basic costs of daily life. Households in the 65-74 age range spend an average of \$8,900 on housing (and an additional \$3,800 on utilities), \$6,200 on food, \$8,000 on transportation, and \$5,700 on healthcare per year.⁴ For the 75 and over group, the rise in the share of single-person households among older age groups as spouses pass away contributes to lowered costs on nearly everything except healthcare, with an average of \$8,000 spent on housing (and an additional \$3,300 on utilities), \$4,600 on food, \$5,200 on transportation, and \$5,800 on healthcare. For households aged 75 and older,

average expenditures on even these basic necessities sum to roughly \$27,000 per year, leaving the average household of this oldest and most disabled group with just \$9,400 in pre-tax income to put toward all other costs.

With housing costs the largest discrete piece of older households' total expenditures, housing cost burdens can put considerable pressure on households' budgets. Analysis of Consumer Expenditure data reveals the extent to which housing cost burdens force older households, particularly those with low incomes, to cut back on other basic necessities (**Figure 4.3**). Among renters aged 65 and over in the bottom income quartile, severely cost-burdened households reduce spending on transportation by 67 percent, on food by 37 percent, and on healthcare by 51 percent compared with their unburdened peers. Similarly, among owners with mortgages aged 65 and over in the bottom income quartile, severely cost-burdened households reduce transportation spending by 49 percent, food spending by 34 percent, and healthcare spending by 67 percent compared to those without housing cost burdens.

Figure 4.4: Even Excluding Home Equity, Older Owners Have Substantially More Wealth than Renters

Median Wealth of Households Aged 65 and over (Dollars)

	Renters	Owners		
	Net Wealth	Net Wealth	Home Equity	Non-Housing Net Wealth
All Households	\$6,150	\$258,600	\$125,000	\$103,180
Race/Ethnicity				
Non-Hispanic White	\$12,000	\$293,300	\$135,000	\$139,470
All Minorities	\$1,600	\$115,450	\$85,000	\$16,370
Income				
Less than \$15,000	\$1,300	\$87,920	\$78,000	\$8,240
\$15,000-29,999	\$3,580	\$155,500	\$100,000	\$33,200
\$30,000-44,999	\$90,700	\$200,000	\$98,000	\$77,660
\$45,000-74,999	\$70,000	\$273,600	\$120,000	\$162,840
\$75,000 or More	\$370,500	\$1,115,110	\$250,000	\$859,550

Notes: Medians are calculated independently, so home equity and non-housing wealth values will not sum to net wealth.

Source: JCHS tabulations of US Federal Reserve Board, 2013 Survey of Consumer Finances.

WEALTH

Since income is often insufficient to fully cover the costs of housing, daily expenses, and supportive services in later life, accrued wealth becomes an increasingly important source of additional financial support as households age. However, while some households have enough wealth to bolster fixed retirement incomes sufficiently, many others—particularly renters, minorities, and low-income households—have very limited financial reserves.

Among all households aged 65 and over, one in four (26 percent) holds \$500,000 or more in net wealth, and an additional one in three (33 percent) holds between \$150,000 and \$500,000. At the other end of the spectrum, one in eleven (9 percent) households aged 65 and over are extremely low-wealth, with less than \$5,000 in total. The wealth gap between non-Hispanic whites and minority communities is also substantial: among households headed by non-Hispanic whites aged 65 and over, median net wealth in 2013 was \$260,700, almost quadruple that of minority-headed households of the same age (\$68,000).

The typical older owner household has far more wealth than the typical older renter household—42 times more, in fact (**Figure 4.4**). In 2013, the median net worth of owners aged 65 and older was \$258,600, while that of renters aged 65 and older was \$6,150. Nearly half (47 percent) of older renters have less than \$5,000 in total wealth, compared with just one percent of older owners. Excluding home equity, which is less easily liquefied than many other forms of wealth, the share of owners with less than \$5,000 in net wealth rises to 10 percent. As this difference indicates, home equity is a key source of wealth for older owners: half of all owners aged 65 and over held at least 50 percent of their total net wealth in the form of home equity in 2013. Among older homeowners of color, home equity is particularly important: in 2013, 69 percent of owners of color aged 65 and older held at least half their net wealth in home equity, with 57 percent of these households holding at least three-quarters of their net wealth in home equity.

Housing wealth can provide a valuable safety net for older households who have exhausted other financial reserves, through second mortgages, reverse mortgages, or home sales. However, survey evidence indicates the use of home equity to finance retirement is seldom an explicit plan. In a 2004 Health and Retirement Study module on

retirement planning, respondents aged 50 and over were asked about the likelihood they would sell their homes to finance retirement. The majority of respondents (70 percent) reported a minimal to zero percent chance of selling their homes to finance retirement.⁵ Home equity thus appears to be a less accessible sort of financial reserve than non-housing wealth, and one that many would prefer to avoid utilizing.

INCOME AND WEALTH IN COMBINATION

Given the differences in wealth described above, large disparities exist between the total financial reserves of owners and renters. Even excluding owners' home equity, the typical older renter household has substantially lower income and wealth than the typical older owner. Fully 67 percent of renters aged 65 and older bring in less than \$30,000 per year and hold under \$50,000 in net wealth, compared with 23 percent of owners of the same age. The number of renters with very low financial reserves is more than double the number with middle-to-high financial reserves: one-quarter (24 percent) of all renters aged 65 and older hold less than \$5,000 in non-housing net wealth and have an annual income under \$15,000 per year, while just 11 percent of older renters bring in at least \$30,000 in income and hold at least \$150,000 in non-housing net wealth.

Older owners, on the other hand, are far less likely to be at risk of financial insecurity in later life, even without cashing in the valuable safety net of home equity. Only 3 percent of owners aged 65 and older are very low-income and very low-wealth, with incomes less than \$15,000 and non-housing net wealth less than \$5,000. Meanwhile, 38 percent of owners aged 65 and older bring in more than \$30,000 and hold at least \$150,000 in non-housing net wealth, with 16 percent bringing in more than \$75,000 per year and also holding at least \$500,000 in non-housing net wealth.

THE COSTS OF CARE

Covering the costs of paid support and care in the home is a major challenge for many older adults, particularly for the groups most likely to need it. Medicare does not cover most long-term service and support expenses, while Medicaid typically covers long-term care in nursing homes for people who meet income and other eligibility requirements, though the rise of state Medicaid Home and Community Based Waivers allow for in-home care under some conditions and in some locations.⁶ Only a very small share of the elderly population has long-term care insurance: recent analysis of HRS data by the Urban Institute indicates that only 11 percent of community-dwelling adults aged 65 and older had long-term care insurance in 2014.⁷ Consequently, most older adults who receive formal long-term care pay out-of-pocket.⁸



THE TYPICAL OLDER
OWNER HOUSEHOLD HAS
42 TIMES MORE
WEALTH THAN THE TYPICAL
OLDER RENTER HOUSEHOLD.

Figure 4.5: Most Older Owners Can Afford Long-Term Care, While Most Older Renters Cannot

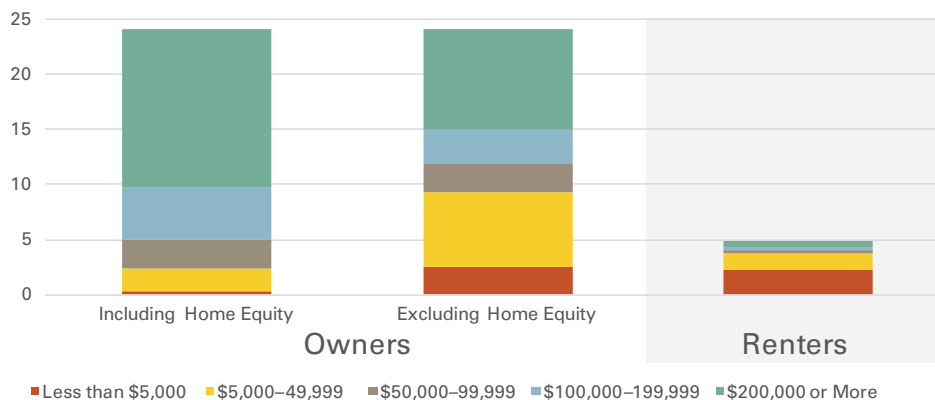
Care Category	Median Monthly Cost (Dollars)	Number of Months Before Median 65 & Over Household Spends Down Wealth		
		Renters	Owners	
			Including Home Equity	Excluding Home Equity
Homemaker Services	3,623	2	71	28
Home Health Aide	3,813	2	68	27
Adult Day Health Care	1,408	4	184	73
Assisted Living Facility	3,500	2	74	29
Nursing Home Care	6,448	1	40	16

Notes: Annual homemaker, adult day health care, and home health aide costs assume 5 days of care per week, 52 weeks per year. Nursing home care costs are for a semi-private room, and represent daily costs multiplied by 365. Annual assisted living costs represent the cost of one month of care multiplied by 12.

Source: JCHS tabulations of US Federal Reserve Board, 2013 Survey of Consumer Finances and 2014 Genworth Cost of Care Survey.

Figure 4.6: Most Older Households, Though Few Renters, Have Enough Wealth to Afford Average Long-Term Care Costs

Households Aged 65 and over by Total Net Wealth (Millions)



Notes: The average cost of long-term care for one person aged 65 through end of life is projected to be approximately \$100,000. Calculations are based on 2014 Genworth Cost of Care Survey data and long-term care needs projections from Kemper, P., Komisar, H.L. and Alexih, L., 2005. Long-term care over an uncertain future: what can current retirees expect?. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 42(4), pp.335-350.

Source: JCHS tabulations of US Federal Reserve Board, 2013 Survey of Consumer Finances.

Yet the costs of long-term care are unreachably high for many older households, particularly those who are already cost-burdened. According to the Genworth Cost of Care Survey, the median cost of a year of full-time in-home assistance from a home health aide in 2016 is \$46,300. Adult day health care is the least expensive form of long-term care, but at full-time still costs \$17,700 per year. Median national costs for facility-level care range from \$43,500 for an assisted living facility up to \$92,400 for a private room in a nursing home. In comparison, median household income for all households aged 65 and older was just \$38,900 in 2014, and dropped to \$28,300 for households aged 80 and over.

Those lacking adequate income to cover long-term care in addition to other costs of living may look to wealth reserves to pay for supportive services. For most older owners, wealth is sufficient to pay for at least several years of any kind of long-term care. The “typical” older owner household, or those holding the median amount of wealth for all households aged 65 and over, can afford to pay for more than two years of care from a homemaker, home health aide, or in an assisted living facility even without tapping into home equity, or can also pay for 6 years of adult day health care or 16 months of nursing home care. Tapping home equity would allow the typical older owner to pay for 6 years of homemaker services, help from a home health aide, or residence in an assisted living facility; three years of nursing home care; or 15 years of adult day health care. In contrast, however, most older renters have enough wealth to pay for only a month or two of care (Figure 4.5). Dedicating all their wealth to the costs of long-term care would allow the typical renter aged 65 and over to afford 2 months of care from a homemaker, home health aide, or assisted living facility, 4 months of adult day health care, and just one month of nursing home care.

As the preceding chapter describes, researchers have found that on average, older individuals can expect to need 3 years of long-term care from age 65 through the end of life.⁹ In 2005, it was estimated that approximately 60 percent of this care could be expected to be received at home, most from informal (unpaid) helpers,

and 40 percent could be expected to take place in long term care facilities such as nursing homes and assisted living facilities.¹⁰ Applying the costs of long-term care (as derived from the Genworth Cost of Care Survey) to these estimates indicates that the average individual would need approximately \$100,000 in financial reserves to afford the costs of long-term care during later life. Assuming most forms of care can cover multiple members of a household, most older owners today will have sufficient wealth to afford the average expected costs of care (Figure 4.6). Even without tapping home equity, just over half (51 percent) of owners aged 65 and older have enough wealth to pay for the average expected amount of long-term care if they dedicated the entirety of their wealth to this purpose. Including home equity, 79 percent of older owners will be able to afford care (though as noted earlier, few wish or plan to tap their home equity for such costs, and again, this would deplete all assets). In striking contrast, just 16 percent of renters aged 65 and older have enough wealth to pay for the average expected amount of long-term care before depleting all assets. On the plus side, because owning is far more common than renting among older age groups, most older households overall will have enough wealth to be able to pay for long-term care. Still, this leaves 4.1 million older renters today lacking enough wealth to pay for the average expected costs of care in later life—a number that can be expected to grow substantially as the older population soars over the next two decades.

LONG-TERM TRENDS IN OLDER ADULTS’ FINANCIAL RESOURCES

A number of trends may reshape the financial realities faced by older households in coming decades. These include an increase in prevalence and median amount of housing debt carried by older households, rising median income and labor force participation rates in later life, declines in employer-provided traditional pension plans, the recent recession’s erosion of net worth for households on the verge of retirement today, and expected shortfalls in Medicare and Social Security within the next 20 years.

INCREASED MORTGAGE DEBT

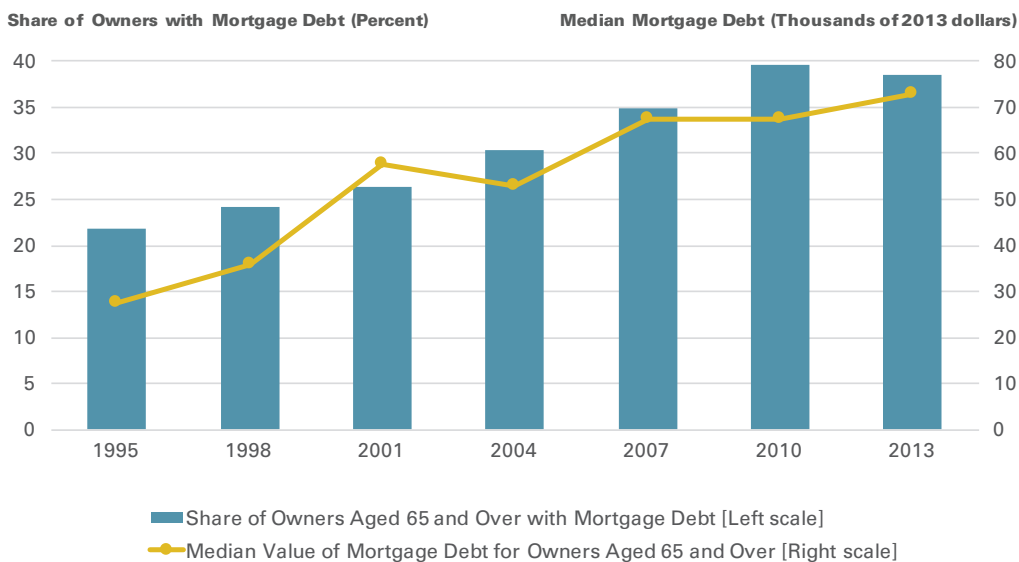
In recent decades, a higher share of older households have been carrying mortgage debt into retirement. While in 1995, 22 percent of owners aged 65 and older had mortgage debt on their primary residences, by 2013 this share had grown to 38 percent. The amount of debt these households are carrying has steadily increased as well over the past two decades, with the median value of that debt rising from \$27,300 to \$73,000 in real terms (Figure 4.7).

Today's pre-retirees (currently aged 50-64) have seen similar increases in mortgage debt incidence and value in recent years. However, this group also took a more substantial hit in the recent recession than the 65-and-over population. The recession resulted in a nearly five-percentage-point decline in homeownership among this pre-retiree age group since 2008, which in lowering aggregate housing wealth contributed to the decline of real median net worth for this age group back below 1995 levels. The 65-and-over group did not escape the effects of the recession, but fared far better than younger groups, with a one-percentage-point drop in homeownership and far more moderate damage to net worth. Tremendous uncertainty remains about whether today's near-retirement aged households will be able to rebuild depleted wealth reserves in coming years.

SAVINGS TRENDS

Savings and debt patterns among pre-retirees also have troubling implications for the financial stability of future cohorts of older households. Analysis of data from the Financial Industry Regulatory Authority (FINRA) Investor Education Foundation's 2012 National Financial Capability Survey (NFCS) indicates that future cohorts of older Americans may be financially strained in their retirement years due to lack of savings and high shares with debt burdens.¹¹ A recent study from the George Washington University School of Business examined the responses of 5,000 pre-retirees between the ages of 51 and 61, finding that 60 percent have at least one source of long-term debt and 26 percent have more than one source. Thirty percent lack any form of retirement account; fully 43 percent said that they had too much debt; 36 percent of respondents reported that they probably or certainly could not come up with \$2,000 if an unexpected need arose within the next month; and only 40 percent reported having set aside sufficient funds to cover three months of expenses in the event of an unexpected shock. Less than half (45 percent) reported spending less than they are earning. The ability to cover expenses in the event of an unexpected economic shock is lower among low-income, minority, and unmarried respondents.

Figure 4.7: More Older Households are Carrying Higher Amounts of Mortgage Debt into Retirement



Notes: Mortgage debt is debt on a primary residence. The share with mortgage debt is among all older owners. Median value of mortgage debt is among owners with mortgage debt only and in constant 2013 dollars adjusted for inflation using the CPI-U-RS.

Source: JCHS tabulations of US Federal Reserve Board, 2013 Survey of Consumer Finances.

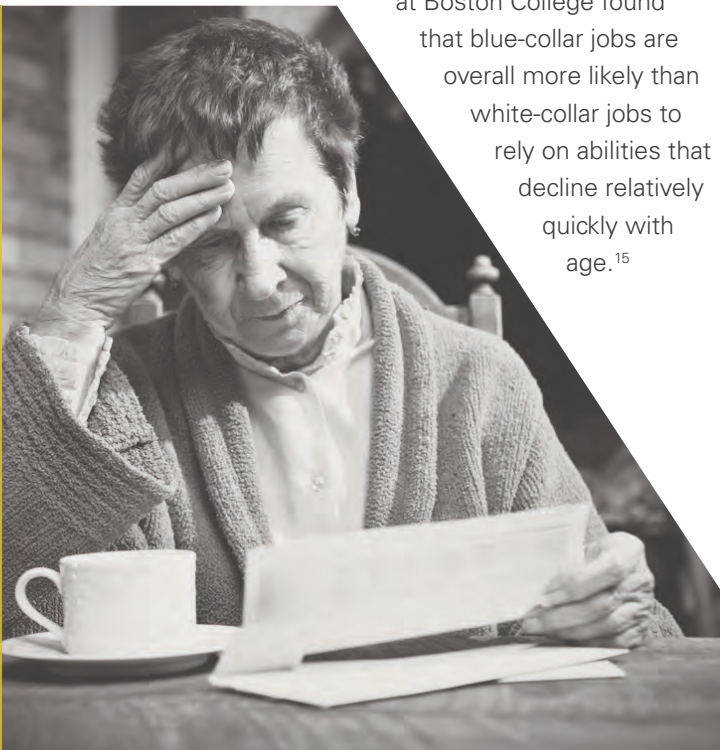


INCOME TRENDS

The incomes of adults aged 65 and older have been rising since the beginning of the 21st century, while incomes for households aged 50-64 have stagnated. In large part, income increases for the 65-and-over group are due to greater numbers continuing to work after traditional retirement age, either extending full-time work life, or pursuing gradual retirement or even returning to work in later life.¹² Reflecting this trend, labor force participation rates for those aged 65-74 increased from 17.2 percent in 1994 to 26.2 percent in 2014. For those aged 75 and over, labor force participation rates jumped from 5.4 percent to 8 percent. The Bureau of Labor Statistics' Employment Projections Program has projected labor force participation rates among older Americans through 2024, and reports that rates will likely continue to rise at least through that year.¹³

Using CPS and HRS data, a Brookings Institute report found that the trend toward higher labor force participation among older adults is more pronounced for high-income workers and those in less physically demanding jobs.¹⁴ Similarly, a brief from the Center

for Retirement Research at Boston College found that blue-collar jobs are overall more likely than white-collar jobs to rely on abilities that decline relatively quickly with age.¹⁵



Consequently, while these trends toward later retirement will likely result in higher overall earnings among older households in coming decades, income gains may be concentrated among higher income earners.

Another critical trend affecting incomes of older adults is the declining prevalence of traditional, defined-benefit pension plans. Nearly half (49 percent) of today's 65-and-older households have a traditional defined-benefit pension plan. However, the share of households entering retirement with defined-benefit plans has steadily declined over the past two decades, and today, less than a third (29 percent) of households on the verge of retirement (aged 50-64) have defined-benefit plans, raising concerns as to whether future retirees will have the level and stability of income as their predecessors.¹⁶

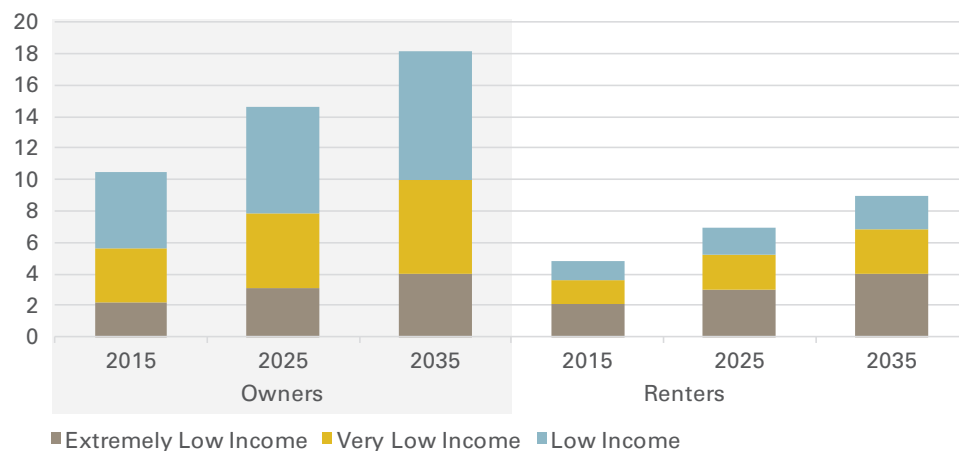
Finally, impending shortfalls in Medicare and Social Security may also present critical challenges to the financial stability of future retirees. Analysis of the most recent Trustees Report shows that the Medicare Part A (hospital insurance) trust fund will be exhausted in 2030, and that Medicare Parts B and D will require a substantial increase in participant premiums and taxes to finance current benefits.¹⁷ Similarly, analysis of Social Security Administration data indicates that Social Security can pay full benefits only through 2033.¹⁸ Social Security cuts would be particularly detrimental to lower-income older Americans, for whom Social Security comprises a much larger portion of post-retirement income.¹⁹

PROJECTIONS OF LOW-INCOME AND COST-BURDENED OLDER ADULTS

With the surge in older adult population, we anticipate a proportional increase in the number of lower-income older adults, resulting in a near doubling of low-income renters and owners, many of whom will face housing cost burdens.

Figure 4.8: There Will Be Millions More Low-Income Older Households by 2035

Projected Low-Income Households Aged 65 and over (Millions)



Notes: Extremely low income is defined as up to 30 percent of area median; very low income is more than 30 up to 50 percent of area median; and low income is more than 50 up to 80 percent of area median.

Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates and 2016 JCHS Household and Tenure Projections.

LOW-INCOME POPULATION

Taking into account many of the trends described above, the Social Security Administration’s MINT (Modeling Incomes in the Near Term) model projects income for future generations of older Americans. MINT projections estimates that the share of retirees who will lack sufficient income at age 67 to maintain their preretirement living standards—generally defined as 75-85 percent of preretirement income—will increase in coming decades.²⁰ In particular, the projections find that 39 percent of the “leading boomers,” born between 1946 and 1955, will have inadequate retirement income at age 67 to maintain preretirement living standards.²¹ This share is projected to increase to 41 percent among “trailing boomers” (born 1956-1965), and to 43 percent among Generation X members (born 1966-1975). In comparison, 35 percent of today’s 80-90 year olds had too little income at age 67 to maintain their preretirement standards of living. For well-off older households, lowering standards of living to fit within limited retirement incomes may not be problematic, but lower-income households may have few, if any, non-essential expenses they can cut to reduce their costs of living.

Recent trends also find increasing rates of retirees holding mortgages, though the 2010-2013 period saw some slight moderation in this trend. Bearing these and other trends in income, savings, and debt in mind, we have chosen to estimate the prevalence of housing cost burdens among older households in 2035 assuming that current cost burden rates by age, race/ethnicity and tenure remain unchanged. This may be conservative given uncertainties around income and debt.

With these assumptions, by 2035 JCHS projects that there will be an additional 11.8 million households aged 65 or older with income less than 80 percent of area median income (**Figure 4.8**). According to JCHS projections, the number of low-income owners and renters aged 65 and over will each grow substantially over the next two decades, to 18.2 million and 9 million, respectively. Of the total projected 27.2 million low-income older households, 10.6 million—nearly 40 percent—will be aged 80 or older.

This growth in the number of low-income households and those aged 80 and over will dramatically increase the number of older renters eligible for housing assistance (those with income under 50 percent of area median

income). According to the US Department of Housing and Urban Development's most recent Worst Case Needs report to Congress, only one-third of older renters aged 62 and over who are eligible for housing assistance actually receive it. With population aging expected to nearly double the number of eligible older renters by 2035 to 7.6 million, housing assistance programs will be under increased pressure in coming years. To simply maintain current rates of assistance in 2035, federal programs would need to expand to serve an additional 1.3 million low-income renters aged 62 and older, still leaving 4.9 million older adults to find housing they can afford on the open market (Figure 4.9).

PROJECTED COST BURDENS

As noted above, 9.3 million older households aged 65 and older are housing cost-burdened as of 2014, paying at least 30 percent of their income toward housing. If current cost burden rates by age, race/ethnicity, and tenure hold constant, by 2035, projected growth in the number of older adult households alone will push the number of cost-burdened older households to 17.1 million. JCHS projections estimate that 8.5 million of these future cost-burdened households will be severely burdened, with housing costs exceeding 50 percent of their income. Single-person households will face the highest rates of cost burdens (Figure 4.10).

Renters are far more likely than owners to pay high shares of their income toward housing. JCHS projections estimate that in 2035, renters will comprise 23 percent of all households aged 65 and older, but 37 percent of all cost-burdened households and 41 percent of all severely cost-burdened households in this age group. Overall, the number of cost-burdened renter households aged 65 and older will rise by 2.9 million over the next two decades, while the number of cost-burdened older owners will increase by 4.4 million households, bringing the total number of cost-burdened older renters aged 65 and older to 6.4 million and the total number of cost-burdened older owners to 10.7 million households by 2035.

Population aging and increasing longevity will lead to a particularly large expansion of the number of cost-burdened households aged 80 and over in the coming decades, but particularly after 2025 when the baby boom begins to age into this group. In all, the number of cost-burdened households aged 80 and older will more than double from 2015 to 2035, increasing by 3.2 million households. By 2035, a total of 3.6 million owners and 2.4 million renters aged 80 and over will face housing cost burdens. Because incomes are lowest among this oldest age group, cost burdens make it particularly difficult for these older adults to afford supportive services and care, and yet this is the group with the highest disability rates and greatest likelihood of needing assistance. This doubling in the number of cost-burdened households from the oldest age group over the next two decades will therefore represent a critical housing, healthcare, and economic challenge.

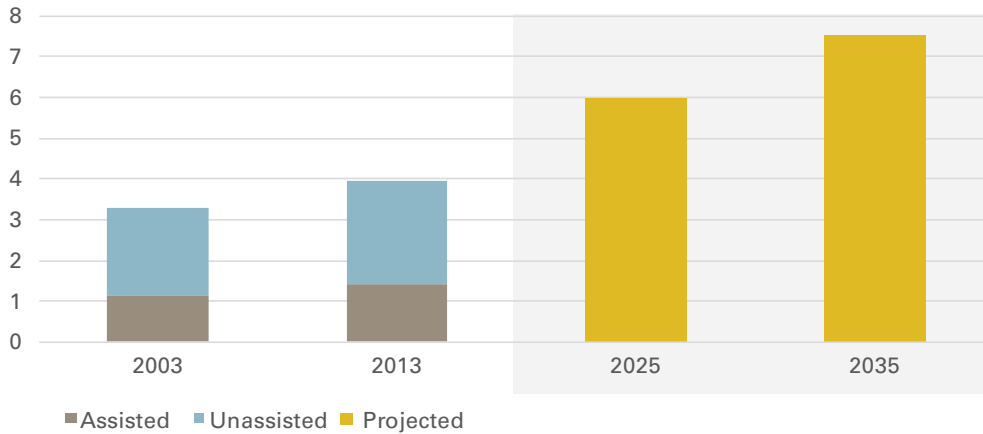
Although the number of cost-burdened households aged 65-79 will grow at a slightly lower rate than the 80-and-over group, the larger size of this group will generate 4.1 million additional cost-burdened households by 2035, including 2.7 million owners and 1.8 million renters; of these 4.1 million, 2 million will be severely cost-burdened. By 2035, a total of 7.1 million owners and 4 million renters aged 65-79 will be housing cost-burdened, for a total of 11.1 million—up from 6.6 million households today.

SUMMARY

In two decades, millions of older adults will likely lack the resources to secure suitable housing: in our quite possibly conservative estimate, nearly 17.1 million households will face housing cost burdens in 2035, an increase of more than 7 million from today. Over 8.5 million of these households will face severe cost burdens, spending more than 50 percent of gross income on housing costs; such households will have little left over for necessities, including the supports and care that could enable them to remain in their homes. While even moderate- and middle-income owners are likely to face cost burdens, renters will be especially vulnerable to cost burdens, and by 2035, over 7.6 million renters may be eligible for housing subsidies. Fulfilling their needs could require substantial increases in federal funding from current levels.

Figure 4.9: The Number of Older Renters Eligible for Housing Assistance is Projected to Nearly Double by 2035

Very Low-Income Renter Households Aged 62 and over (Millions)

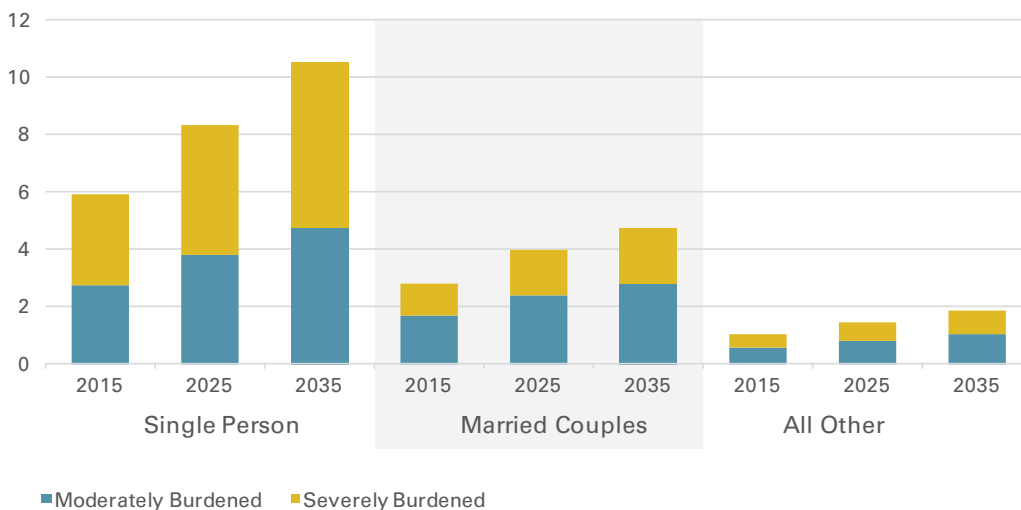


Notes: Households eligible for assistance have very low incomes (at or below 50 percent of area median). HUD assisted and unassisted households represent renters with very or extremely low incomes aged 62 and over. To approximate the number of very low-income households aged 62 and over in 2025 and 2035, JCHS estimates take the average of the projected number of very and extremely low-income renter households age 65 and over and aged 60 and over.

Source: JCHS tabulations of US Department of Housing and Urban Development Worst Case Needs Reports to Congress, and 2016 JCHS Household and Tenure Projections.

Figure 4.10: Single-Person Households Will Drive Growth in Older Cost-Burdened Households through 2035

Projected Cost-Burdened Households Aged 65 and over by Type (Millions)



Notes: Moderately/severely cost-burdened households pay 30–50%/more than 50% of income for housing. All other households includes those with two or more related or unrelated adults.

Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates and 2016 JCHS Household and Tenure Projections.

5.

IMPLICATIONS FOR HOUSING

By 2035 there will be nearly 50 million households aged 65 and above, an increase of nearly 20 million households in two decades. This growth will fundamentally reshape the scale and scope of housing need in communities across the US, presenting both opportunities and challenges for the public and private sector, and for older adults themselves.

INVESTMENT IN HOUSING

The growth in the number of older households offers significant opportunities for the private sector to provide the new and modified housing this group will need by 2035. While a large share of older adults intend to age in place, their existing housing is often not well suited to accommodate their needs. By 2035, the already pressing need for home modifications and technology that can enhance safety and allow for greater independence in the home will grow substantially.

Given the scale of household growth, new housing will be needed as well. Though the share of older adults who move each year is low, applying today's rate of annual moves by tenure, race, and 5-year age bands to JCHS household projections yields over 825,000 older households moving into owned homes and 1.6 million moving into rented homes each year as of 2035. These movers do not all share the same preferences—some may be looking to downsize to homes that are easier to maintain and less expensive; however, some will be looking for more space. Indeed, a recent Demand Institute survey shows that 42 percent of respondents aged 50-69 who intend to move in the future will look for smaller homes, while another 32 percent seek to upsize.

Preferences to be near family and friends are clearer: the Demand Institute finds that likely movers place priority on proximity to family and friends, and most expect they will not move far from their current neighborhood.¹ Meanwhile, AARP's 2014 survey of Housing and Community Preferences of the 45+ Population found that being near family/friends ranked as the most important community characteristic.² Given this priority on remaining near family and friends, and given that less than a quarter of older adults live in high-density areas, demand is likely to increase

for new housing options located within existing suburbs and rural communities. Locating new, accessible housing in town centers or villages will allow older residents to live within walking distance of services and more fully engage with their existing communities.

The Demand Institute's survey finds that only one in five likely movers desire to move to senior-related housing or active-adult communities. Yet even if 2.5 million older households move per year in 2035, demand for various forms of age-restricted housing could reach 500,000 units per year. Meanwhile, nursing facilities will remain an important option, though trends in health and increasing options for care in the home make need for additional beds in skilled nursing facilities difficult to predict.

To encourage private investment in new housing, local governments may need to adjust zoning laws to allow the types of housing older adults will seek, particularly in suburbs zoned primarily for detached single-family homes. Accessible apartments located in downtown centers and cohousing situations can allow people to remain in their communities with greater convenience and sense of community; accessory dwelling units—attached or detached units located on the same grounds as another home—are another important housing option for older adults. Educating citizens about housing models for aging in their community may help spark changes to local regulations that support greater innovation.



AFFORDABILITY CHALLENGES

Housing affordability is a critical concern for millions of Americans even before retirement, but since incomes fall after retirement, rates of housing cost burdens are higher at older ages. Housing cost-burdened households will have fewer resources left over for necessities including food, transportation, and healthcare, as well as for the assistance and supports needed for them to age in their homes. Indeed, some older adults may move in with children or roommates in order to cut housing costs. Looking ahead to 2035, nearly 17.1 million older households will face housing cost burdens, an increase of more than 7 million from today.

Since roughly four in five households aged 65 and over own their homes, many more older homeowners will be cost-burdened than their renter counterparts. Homeowners with mortgages are over two-and-a-half times more likely to face burdens than those who own their homes outright. Trends dating to the early 1990s show higher shares of older owners entering retirement with mortgages, with the value of that debt rising as well. This trend bears watching, as even a small growth in debt combined with the sheer numbers entering older age groups will mean a significant increase in older owners vulnerable to housing cost burdens.

There are a variety of ways to offer cost-burdened owners relief from high housing costs, though the scale of need going forward suggests these should likely be expanded or used as models for new programs. States and localities may offer property tax relief for those of qualifying incomes and ages. Utility costs might be lessened through the installation of higher efficiency heating and cooling systems, solar panels, and weatherization programs, with tax incentives and grants helping owners to make the initial investment when costs are otherwise prohibitive. For those with mortgages they cannot afford but who still have substantial equity in their homes, reverse mortgages may make aging in place a more financially feasible option. Perhaps the most important form of assistance will be educational programs aimed at teaching adults in pre-retirement years how to avoid cost burdens in retirement, either by prioritizing the reduction of mortgage debt during their working years or by moving to more affordable housing at an earlier age.

Although maintenance costs are not factored into calculations of housing cost burdens, they can pose significant challenges to owners of modest wealth; the replacement of a major system (e.g. heating) might have to be paid for out of savings also needed to fund long-term care. Home equity lines of credit may allow some owners to make needed major repairs, while low-cost loans or grants for home repair can also help.

Meanwhile, renters comprise a smaller group than owners but face higher risk of housing cost burdens due to lower incomes. Federal housing assistance to low-income older owners comes mainly in the form of public housing, unit-based assistance, housing choice vouchers, and Section 202 units that provide housing with supportive services to those aged 62 and over. Yet since housing assistance is not an entitlement, it is not available to all who qualify. As of 2013, HUD reported that 1.4 million, or only 36 percent, of the 4 million very low-income households aged 62 and over received subsidies; the rest must find a affordable housing on the open market, which can mean housing cost burdens, cutting back on other necessities, doubling up, or occupying substandard housing.

Assuming income distributions remain the same as today, JCHS projections estimate that 7.6 million older adults with incomes below 50 percent of the area median would qualify for federal rental subsidies in 2035. Just continuing to serve one-third of this number would require subsidies for another 1.3 million households, and would still leave 4.9 million eligible older households without assistance. Addressing this shortfall, and avoiding the dire effects of unaffordability on millions of older households, will be a major public policy challenge. Incentives for landlords to make money-saving improvements in both the assisted and private stock, such as through investments in energy efficiency, could help reduce housing costs. Lower-cost non-traditional rental housing, such as accessory dwelling units or micro-units that offer shared common spaces at lower costs than traditional apartments, might also help fill gaps

Aside from more subsidies for older renters, building new affordable housing, including housing with services, could help serve the growing number of older cost-burdened and very low-income renters. A significant past source of funds was HUD's Section 202 program, but this no longer provides capital grants to fund new units. New construction through the Low-Income Housing Tax Credit Program can be targeted toward older adults, but at best could make only a small dent in the need for affordable housing.

IMPLICATIONS FOR ACCESSIBLE HOUSING

The rise in disabilities that occurs with age presents another housing challenge for older adults, particularly because so many wish to age in their current locations. However, most US homes are poorly equipped to accommodate the extra space needed for walkers or wheelchairs, require stairs to a bath or bedroom, or have handles on doors and faucets difficult for those with arthritis. By 2035, 17 million older adult households will have at least one person with a mobility disability, for whom stairs, narrow corridors and doorways, and traditional bathroom layouts will pose challenges to safety and independence. As a result, there will be an increased need for modifications to the existing housing stock, and new stock will need to be built with higher standards of accessibility for future occupants.

Individuals may resist modifying their homes if they do not have disabilities, and many owners in particular may be ambivalent about investing in their current homes if they are not sure they will remain there into old age. However, given that disability rates rise strikingly in old age, planning ahead can make eventual changes easier. For example, adding accessibility features during a remodel, such as a walk-in shower or bathroom walls reinforced for the possible future installation of grab-bars, can save time and money later. Consumer, contractor, and architect education may help open up discussions about accessible housing earlier in people's lives. The National Association of Home Builders' Certified Aging-in-Place Specialist program, which teaches building industry professionals how to make their clients' homes more "visitable," is one existing example of such an educational program.³

The majority of older owners have sufficient savings and wealth that they will likely be able to tap into to pay for home modifications. Excluding home equity, slightly more than half of owners aged 65 and over have at least \$100,000 in financial reserves; including home equity, the share rises to 80 percent. However, almost 2 million older owners nationwide are in a precarious financial situation, with income less than \$15,000 per year and total non-housing wealth less than \$50,000. These older owners with very limited financial resources may be reluctant to tap what they do have for home modifications given other needs. To address these gaps, some of the same resources that might be used to pay for major repairs in the home, such as home equity lines of credit (HELOCs) or reverse mortgages, could be helpful to the qualified homeowner. For lower-income owners with disabilities, some states now allow Medicaid funds to be put toward home modification needed for them to remain in their homes. These Home and Community Based Waivers can be used for improvements and modifications such as wheelchair ramps, stair lifts, walk-in showers, and widening of doorways. Waivers, however, are not entitlements, and programs may have limited enrollments. The Veterans Administration also provides assistance to some veterans through grants to older owners with service-connected disabilities. At the state level, there are a variety of grants and low-interest loans available, and some local governments provide assistance to homeowners in the form of Community Development Block Grant and HOME funding.

Renters are more likely to have mobility disabilities than owners but have less control over modifying their units. Fair housing law allows tenants with disabilities to make changes inside their unit at their own expense, but under some circumstances permits landlords to require that the modifications be removed upon vacating.⁴ Programs to assist or incentivize property owners to install universal design features in remodels and in new construction will be important to ensure that older renters are safely housed.

Building on recent initiatives that seek to bridge health care and housing will be important to addressing the needs of tomorrow's older adults. CAPABLE (Community Aging in Place—Advancing Better Living for Elders), an innovative program housed at the Johns Hopkins School of Nursing and supported in part by the National Institutes of Health

and the Centers for Medicare and Medicaid, makes free, tailored home modifications to assist low-income older adults seeking to age in place. A preliminary evaluation found that 79 percent of participants had improved self-care and that, on average, the number of self-care tasks with which participants had difficulty was cut in half.⁵ Active in Baltimore, the program is now expanding into three Michigan cities (Detroit, Flint, and Saginaw) as part of a state Medicaid pilot program to help keep nursing home-eligible older adults in the community.

Policies can also help encourage the development of a more accessible housing stock by requiring universal design features in new construction. Many state and local governments have created “visitability” ordinances to incentivize or require universal design features in new homes, with the underlying principle that all homes should be not just habitable but also visitable by someone with a mobility disability. Visitability ordinances often apply only to new single-family construction built with public subsidies, but increasingly, requirements are extending more broadly; in Vermont, for example, the state’s accessibility law for residential construction applies to all new developer-built single- and multi-family homes.

SUPPORTS AND CARE IN THE HOME

Many aging in their home will require support with household activities; by 2035, nearly 27 million households aged 65 and over will have at least one person with limitations in running a household. In response, various organizations have developed to provide assistance to older independent households. The “village” concept, for example, provides services and referrals through membership associations of older people living independently. Boston’s Beacon Hill Village, the first of this model in the country, offers programs and services to over 400 members with an average age of 75. While villages are fee-based, other organizations aim to bring services to lower-income older adults in naturally occurring retirement communities (NORCs), places such as apartment buildings with large concentrations of older adults. NORC service organizations may provide a range of services from social outings to health clinics.

The 12 million households 65 and over who will have self-care disabilities in 2035 may need more intensive and frequent care, as will those with multiple or more severe household activity limitations. Given the high cost of paid daily care, there is a need for continuing innovation in the funding and delivery of care in the home. Multifamily housing for older adults that offers assistance with self-care (such as assisted living facilities) and increasing funding flexibility allowing insurance to cover long-term care in the home will all help. Another promising model is offered by a Medicare demonstration program, Support and Services at Home (SASH) in Vermont, which coordinates social service agencies, community health providers, and nonprofit housing organizations in support of older adults living at home.

LOCATION AND POTENTIAL FOR ISOLATION

A final challenge relates to the location of housing as it affects older adults’ social engagement with their communities and their access to medical and other services. Frail older adults who find it difficult or impossible to leave their homes by themselves are particularly at risk of isolation.

Technology offers potential solutions. The internet makes it possible to bank and shop from home, increasingly even for daily needs such as groceries. Technology in the home can remind older adults to take medicine as scheduled and alert family or doctors if a dosage is missed, while sensors can monitor those living alone for falls. Telehealth can facilitate communication between older adults and trained medical personnel.

All of this technology can help bring services and goods to the home, potentially improving safety, convenience, and quality of life. However, it may also heighten the risk of isolation by keeping older adults more often at home.

Driverless cars and other automobile safety technology, on the other hand, have the potential to help people leave their homes more easily, though in the short term this technology will likely be available only to those with significant financial resources and not to low-income older households. In the meantime, particularly in rural areas, older adults need better alternatives to driving, such as dedicated buses, vans, and paratransit.

MEETING THE CHALLENGES

Significant aging of the older population will occur over the next 20 years. Challenges related to finances will ramp up within the next decade as millions more older adults transition into retirement, as will challenges related to disabilities, the suitability of housing, and the need for long-term care. It is not too early to begin investing in solutions for all of these challenges.

Older adults with sufficient income and savings can help drive private sector investment in new housing options and modifications to existing homes. Tax and regulatory incentives can help unlock this potential. For example, local land use regulations can be eased to allow more innovative development of multifamily housing for older adults. Helping homeowners tap into home equity when other financial resources are not available, through either home equity loans or reverse mortgages, can also support individuals' investments in their existing homes. (This latter strategy, however, should involve a significant commitment to educating homeowners about the safest ways to tap home equity, given that it is the largest source of wealth for most owners and particularly for those with low incomes.)

While these investments in the housing stock can help older adults live more comfortably, safely, and independently, they have societal benefits, too, as aging in a safe and suitable home can reduce health care needs.

At the local level, new housing construction in town centers can enliven those areas and help older adults engage more in the community. And when built according to principles of universal design, the housing stock will be more flexible and suitable for all members of society, not just older adults.

Yet given that over 17 million may face housing cost burdens by 2035, ensuring that all older adults can afford an adequate home in an era that will see millions more with low incomes and high housing costs will require new policies and additional funding to help fund modifications to homes, subsidize rents of very low-income older adults, and enhance transportation and service delivery options. Securing public funding is a challenge, particularly given that the aging society will put increased pressure on Social Security, Medicare, and Medicaid entitlement programs. The most promising investments may therefore be in interventions that provide offset savings in healthcare, such

THERE ARE OPPORTUNITIES FOR TOMORROW'S OLDER ADULTS TO ENJOY A HIGHER QUALITY OF LIFE THAN THEIR PREDECESSORS, BUT WE MUST BEGIN TO ACT NOW IF ALL ARE TO SHARE IN THAT PROMISING FUTURE.

as programs like SASH, CAPABLE, and Medicaid Home and Community Based Waivers. Yet the development and funding of new programs by agencies that have traditionally operated in separate silos still pose significant challenges.

Going forward, public and private investments will play a tremendous role in the well-being of the older population, but much rests at the household level as well. While most prefer to age in place—whether in a current home or elsewhere in a non-institutional setting—this preference is best exercised with forethought about costs, the physical suitability of the home, and its accessibility to services. Safe and secure aging-in-place will also require households to make adjustments to the residential setting and supports and services received as they age and their health, financial, and household and family circumstances evolve.

There are opportunities for tomorrow's older adults to enjoy a higher quality of life than their predecessors by taking advantage of new housing forms, innovative interior features, advanced technology, and new healthcare delivery systems. Yet with financial challenges set to mount in the next decade and physical challenges ramping up after that as the baby boomer population moves into their 80s and beyond, we must begin to act now if that promising future is to be shared by all of America's older adults.

APPENDIX A-1

JCHS 2016 Household and Tenure Projections by Age, Race/Ethnicity and Household Type: 2015-2035

Year	Race/ Ethnicity	Age	All Households	Owners		
				Single Person	Married Couple	Others
2015						
White		50–64	25,474,241	4,359,435	13,416,531	2,687,451
		65–79	17,230,106	4,591,229	8,620,333	1,299,687
		80 and Over	6,523,812	2,721,186	1,807,022	565,074
Black		50–64	4,540,978	642,551	1,144,321	644,071
		65–79	2,229,675	538,691	581,434	251,117
		80 and Over	616,619	202,878	91,108	104,229
Hispanic		50–64	3,724,459	305,937	1,441,599	419,934
		65–79	1,547,831	233,403	589,618	169,701
		80 and Over	438,177	111,584	103,775	59,909
Asian/Other		50–64	2,068,710	186,847	1,006,724	209,065
		65–79	1,053,162	167,240	476,518	88,612
		80 and Over	257,339	58,997	68,681	31,958
2025						
White		50–64	22,300,718	3,981,091	11,756,579	2,193,662
		65–79	22,748,248	6,191,391	11,266,881	1,691,281
		80 and Over	8,415,659	3,529,756	2,315,117	720,528
Black		50–64	4,491,886	648,939	1,156,819	622,282
		65–79	3,511,823	830,989	924,362	415,398
		80 and Over	911,738	305,600	132,070	150,038
Hispanic		50–64	5,139,012	417,760	2,031,385	563,114
		65–79	2,583,324	386,733	991,518	281,938
		80 and Over	729,267	188,054	171,720	97,721
Asian/Other		50–64	2,770,345	283,487	1,319,036	260,026
		65–79	1,863,292	317,716	818,756	149,069
		80 and Over	456,084	113,497	109,642	55,590
2035						
White		50–64	20,008,839	3,579,212	10,368,819	2,053,219
		65–79	22,816,448	6,295,138	11,190,557	1,711,099
		80 and Over	12,532,478	5,220,965	3,481,500	1,082,976
Black		50–64	4,577,432	665,781	1,158,781	626,652
		65–79	4,187,347	1,013,487	1,090,315	496,278
		80 and Over	1,552,901	521,241	220,298	258,630
Hispanic		50–64	6,506,425	543,506	2,547,369	714,590
		65–79	3,962,022	586,095	1,526,777	439,824
		80 and Over	1,274,794	329,448	297,447	172,277
Asian/Other		50–64	3,415,948	362,264	1,602,742	323,743
		65–79	2,434,872	424,970	1,060,096	189,085
		80 and Over	828,473	210,103	193,468	101,170

Source: JCHS 2016 Household and Tenure Projections.

Renters				
Total	Single Person	Married Couple	Others	Total
20,463,416	2,582,925	1,399,938	1,027,961	5,010,824
14,511,249	1,709,455	650,266	359,135	2,718,857
5,093,283	1,096,306	220,804	113,419	1,430,529
2,430,944	1,088,569	444,231	577,234	2,110,034
1,371,242	527,964	121,227	209,243	858,433
398,214	153,767	17,290	47,348	218,405
2,167,470	484,453	341,254	731,282	1,556,989
992,722	262,908	126,246	165,955	555,109
275,268	100,866	10,029	52,014	162,909
1,402,636	188,276	337,124	140,674	666,074
732,370	131,205	132,386	57,201	320,792
159,635	60,708	30,056	6,940	97,705
17,931,332	2,323,775	1,208,760	836,850	4,369,385
19,149,554	2,275,190	854,036	469,469	3,598,694
6,565,400	1,422,061	283,241	144,957	1,850,259
2,428,040	1,081,201	436,859	545,786	2,063,846
2,170,749	809,888	187,561	343,624	1,341,074
587,708	231,623	25,203	67,204	324,030
3,012,259	658,657	846,452	621,644	2,126,753
1,660,189	435,235	293,897	194,002	923,135
457,496	169,991	51,651	50,129	271,772
1,862,549	285,828	447,826	174,143	907,796
1,285,542	246,174	234,471	97,106	577,751
278,729	116,790	48,440	12,124	177,355
16,001,249	2,130,818	1,085,398	791,373	4,007,589
19,196,794	2,286,701	855,277	477,676	3,619,654
9,785,442	2,103,413	425,883	217,740	2,747,036
2,451,214	1,122,769	445,461	557,988	2,126,218
2,600,080	975,447	211,220	400,600	1,587,267
1,000,169	395,064	42,022	115,646	552,732
3,805,464	854,770	1,060,816	785,375	2,700,961
2,552,696	658,310	449,315	301,700	1,409,326
799,171	297,803	89,496	88,324	475,623
2,288,750	365,270	544,322	217,606	1,127,198
1,674,150	326,164	309,417	125,141	760,723
504,740	216,199	85,390	22,144	323,733

APPENDIX A-2

Households with Disabilities (Thousands)						
Race/Ethnicity	Age	2015				Single Person
		Single Person	Married Couple	Others	Total	
Mobility Disability						
White	50-64	1,213	2,165	891	4,269	1,102
	65-79	1,676	2,152	457	4,285	2,252
	80 plus	1,533	947	323	2,803	1,988
Black	50-64	647	437	354	1,438	646
	65-79	320	291	165	776	493
	80 plus	173	46	79	299	261
Hispanic	50-64	281	572	334	1,187	383
	65-79	209	305	175	688	345
	80 plus	122	77	67	266	206
Asian/Others	50-64	139	284	92	515	211
	65-79	150	209	75	433	283
	80 plus	32	35	15	82	62
Total		6,495	7,522	3,025	17,042	8,232
Self-Care Disability						
White	50-64	923	1,731	491	3,145	838
	65-79	1,070	1,522	327	2,918	1,437
	80 plus	1,045	702	253	2,000	1,355
Black	50-64	459	329	217	1,005	459
	65-79	246	215	125	586	379
	80 plus	155	53	68	275	233
Hispanic	50-64	194	431	290	915	265
	65-79	154	211	117	482	255
	80 plus	81	67	49	197	137
Asian/Others	50-64	130	233	49	413	198
	65-79	67	153	57	277	127
	80 plus	43	22	7	72	83
Total		4,568	5,669	2,050	12,287	5,767
Household-Activity Disability						
White	50-64	1,636	3,752	1,131	6,519	1,486
	65-79	2,425	4,064	735	7,225	3,259
	80 plus	2,437	1,538	499	4,474	3,161
Black	50-64	719	653	416	1,788	719
	65-79	544	401	271	1,216	837
	80 plus	268	87	127	483	404
Hispanic	50-64	305	695	374	1,374	416
	65-79	248	404	208	860	410
	80 plus	153	101	105	358	257
Asian/Others	50-64	159	511	131	801	241
	65-79	136	368	58	563	258
	80 plus	96	65	22	183	185
Total		9,128	12,639	4,077	25,844	11,633

Notes: Households may have more than one type of disability. White, black, and Asian/other groups are non-Hispanic. Hispanics may be of any race.

Source: JCHS tabulations of University of Michigan 2014 Health and Retirement Survey and 2016 JCHS Household and Tenure Projections.

2025			2035			
Married Couple	Others	Total	Single Person	Married Couple	Others	Total
1,895	727	3,723	998	1,674	682	3,354
2,813	595	5,661	2,283	2,796	603	5,682
1,214	413	3,614	2,941	1,825	620	5,386
439	339	1,423	668	442	343	1,453
460	272	1,225	598	539	321	1,458
67	113	441	446	112	195	752
924	343	1,650	497	1,159	435	2,091
548	248	1,141	523	842	387	1,751
151	88	446	361	262	155	778
374	114	699	270	454	142	866
361	126	770	376	470	161	1,007
57	25	144	114	100	46	261
9,303	3,403	20,938	10,074	10,674	4,090	24,838
1,514	401	2,753	759	1,338	376	2,473
1,990	426	3,853	1,457	1,978	431	3,866
900	323	2,577	2,005	1,353	485	3,842
330	207	997	475	332	210	1,017
341	206	925	459	399	243	1,101
76	97	407	397	127	168	692
696	298	1,259	344	872	378	1,594
379	166	801	387	583	258	1,228
131	65	333	240	227	115	582
307	61	566	253	373	76	702
265	96	488	169	345	123	637
35	12	130	154	62	22	238
6,964	2,359	15,089	7,098	7,988	2,886	17,972
3,283	922	5,691	1,346	2,900	866	5,112
5,314	957	9,530	3,304	5,281	970	9,554
1,970	636	5,768	4,676	2,963	956	8,595
655	398	1,772	743	659	404	1,806
634	447	1,918	1,015	742	528	2,285
126	182	713	690	211	314	1,215
1,123	385	1,923	540	1,407	487	2,434
726	295	1,431	621	1,116	460	2,197
197	139	594	451	342	245	1,038
672	163	1,076	308	816	204	1,328
637	98	992	343	829	125	1,296
104	38	327	342	184	69	595
15,442	4,661	31,736	14,378	17,451	5,626	37,455



APPENDIX A-3

Number of Months Before Median 65 and over Household Spends Down Total Net Wealth

	Homemaker Services	Home Health Aide Services	Adult Day Health Care	Assisted Living Facility	Nursing Home Care
Median Monthly Cost	\$3,623	\$3,813	\$1,408	\$3,500	\$6,448
Owners (Including Housing Wealth)	71	68	184	74	40
<i>Race/Ethnicity</i>					
Non-Hispanic White	81	77	208	84	45
All Minority	32	30	82	33	18
<i>Income</i>					
Less than \$15,000	24	23	62	25	14
\$15,000-29,999	43	41	110	44	24
\$30,000-44,999	55	52	142	57	31
\$45,000-74,999	76	72	194	78	42
\$75,000 or More	308	292	792	319	173
Owners (Excluding Housing Wealth)	28	27	73	29	16
<i>Race/Ethnicity</i>					
Non-Hispanic White	38	37	99	40	22
All Minority	5	4	12	5	3
<i>Income</i>					
Less than \$15,000	2	2	6	2	1
\$15,000-29,999	9	9	24	9	5
\$30,000-44,999	21	20	55	22	12
\$45,000-74,999	45	43	116	47	25
\$75,000 or More	237	225	610	246	133
Renters	2	2	4	2	1
<i>Race/Ethnicity</i>					
Non-Hispanic White	3	3	9	3	2
All Minority	0	0	1	0	0
<i>Income</i>					
Less than \$15,000	0	0	1	0	0
\$15,000-29,999	1	1	3	1	1
\$30,000-44,999	25	24	64	26	14
\$45,000-74,999	19	18	50	20	11
\$75,000 or More	102	97	263	106	57

Notes: Including housing wealth, the median net wealth of owners aged 65 and over was \$258,600 in 2013. Excluding housing wealth, the median net wealth of owners aged 65 and over was \$103,200, while the median net wealth of renters of the same age was \$6,150. Annual homemaker, adult day health care, and home health aide costs assume 5 days of care per week, 52 weeks per year. Nursing home care costs are for a semi-private room, and represent daily costs multiplied by 365. Annual assisted living costs represent the cost of one month of care multiplied by 12.

Source: JCHS tabulations of US Federal Reserve Board, 2013 Survey of Consumer Finances and 2014 Genworth Cost of Care Survey.

APPENDIX A-4 | OWNERS

Housing Cost-Burdened Households (Thousands)								
Household Type	Race/Ethnicity	Age	2015				Total	Not Burdened
			Not Burdened	Moderately Burdened	Severely Burdened	Total		
OWNERS								
Single Person								
White		50-64	2,690	783	887	4,359	2,453	
		65-79	2,821	878	892	4,591	3,799	
		80 and Over	1,677	534	510	2,721	2,175	
Black		50-64	331	134	178	643	333	
		65-79	257	124	158	539	397	
		80 and Over	96	45	61	203	145	
Hispanic		50-64	155	63	88	306	211	
		65-79	114	51	68	233	189	
		80 and Over	53	24	35	112	89	
Asian/Others		50-64	97	37	53	187	147	
		65-79	95	30	42	167	182	
		80 and Over	34	10	16	59	65	
Total			8,419	2,713	2,988	14,120	10,185	
Married Couple								
White		50-64	11,392	1,303	721	13,417	9,973	
		65-79	7,132	951	538	8,620	9,319	
		80 and Over	1,509	180	118	1,807	1,934	
Black		50-64	868	173	104	1,144	876	
		65-79	427	97	57	581	680	
		80 and Over	68	14	9	91	99	
Hispanic		50-64	1,051	234	156	1,442	1,480	
		65-79	424	91	75	590	712	
		80 and Over	74	15	14	104	123	
Asian/Others		50-64	747	150	110	1,007	979	
		65-79	353	62	62	477	608	
		80 and Over	52	8	8	69	83	
Total			24,098	3,278	1,971	29,348	26,866	
All Other								
White		50-64	1,969	407	311	2,687	1,609	
		65-79	1,011	177	112	1,300	1,315	
		80 and Over	460	61	44	565	587	
Black		50-64	423	116	105	644	409	
		65-79	169	44	38	251	280	
		80 and Over	73	16	15	104	106	
Hispanic		50-64	276	76	69	420	369	
		65-79	117	26	26	170	195	
		80 and Over	46	8	6	60	74	
Asian/Others		50-64	136	39	34	209	170	
		65-79	61	15	13	89	102	
		80 and Over	25	4	3	32	44	
Total			4,766	988	776	6,531	5,260	

Notes: Moderately/severely cost-burdened households pay 30–50%/more than 50% of income for housing. All other households includes those with two or more related or unrelated adults. White, black, and Asian/other groups are non-Hispanic; Hispanics may be of any race.

2025			2035				
Moderately Burdened	Severely Burdened	Total	Not Burdened	Moderately Burdened	Severely Burdened	Total	
716	812	3,981	2,208	643	728	3,579	
1,186	1,206	6,191	3,859	1,208	1,228	6,295	
693	662	3,530	3,217	1,025	979	5,221	
136	180	649	343	139	184	666	
191	243	831	483	234	297	1,013	
68	93	306	247	116	158	521	
87	120	418	274	113	156	544	
85	113	387	286	129	171	586	
41	58	188	156	72	102	329	
56	80	283	188	72	102	362	
56	79	318	245	74	105	425	
18	30	113	120	34	56	210	
3,333	3,677	17,195	11,626	3,858	4,268	19,752	
1,144	640	11,757	8,803	1,008	557	10,369	
1,242	705	11,267	9,253	1,234	704	11,191	
230	152	2,315	2,908	346	228	3,482	
175	105	1,157	878	175	105	1,159	
153	91	924	804	178	109	1,090	
20	14	132	165	33	23	220	
329	222	2,031	1,856	412	279	2,547	
153	126	992	1,097	236	194	1,527	
26	23	172	213	44	40	297	
195	145	1,319	1,190	237	176	1,603	
106	105	819	788	137	135	1,060	
13	13	110	147	23	23	193	
3,787	2,341	32,994	28,100	4,064	2,574	34,738	
332	252	2,194	1,502	312	239	2,053	
230	147	1,691	1,330	232	149	1,711	
78	56	721	882	117	84	1,083	
112	101	622	411	113	102	627	
73	62	415	335	87	74	496	
23	22	150	182	39	37	259	
101	93	563	469	128	118	715	
43	44	282	305	67	68	440	
13	10	98	131	23	18	172	
48	42	260	211	60	53	324	
25	22	149	130	32	27	189	
6	6	56	80	11	10	101	
1,085	856	7,201	5,968	1,222	979	8,170	

Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates and 2016 JCHS Household and Tenure Projections.

APPENDIX A-4 | RENTERS

Housing Cost-Burdened Households (Thousands)								
Household Type	Race/Ethnicity	Age	2015				Total	Not Burdened
			Not Burdened	Moderately Burdened	Severely Burdened	Total		
RENTERS								
Single Person								
	White	50-64	1,269	571	743	2,583	1,135	
		65-79	735	457	517	1,709	974	
		80 and Over	400	251	446	1,096	519	
	Black	50-64	395	253	440	1,089	391	
		65-79	181	149	198	528	278	
		80 and Over	55	41	57	154	83	
	Hispanic	50-64	166	115	203	484	226	
		65-79	89	68	106	263	147	
		80 and Over	33	28	40	101	56	
	Asian/Others	50-64	79	38	71	188	120	
		65-79	52	34	45	131	97	
		80 and Over	24	15	21	61	47	
	Total		3,480	2,020	2,888	8,387	4,073	
Married Couple								
	White	50-64	994	238	168	1,400	855	
		65-79	430	139	82	650	562	
		80 and Over	126	50	45	221	161	
	Black	50-64	274	97	74	444	268	
		65-79	68	31	22	121	104	
		80 and Over	10	4	4	17	14	
	Hispanic	50-64	190	83	68	341	472	
		65-79	62	32	32	126	142	
		80 and Over	4	4	2	10	22	
	Asian/Others	50-64	192	72	74	337	255	
		65-79	65	34	34	132	115	
		80 and Over	15	7	7	30	25	
	Total		2,428	791	612	3,831	2,997	
All Other								
	White	50-64	585	233	210	1,028	475	
		65-79	212	87	60	359	279	
		80 and Over	75	21	18	113	95	
	Black	50-64	265	140	171	577	252	
		65-79	102	52	55	209	168	
		80 and Over	24	10	13	47	35	
	Hispanic	50-64	336	184	211	731	286	
		65-79	75	41	49	166	88	
		80 and Over	25	16	11	52	24	
	Asian/Others	50-64	68	33	40	141	84	
		65-79	33	14	11	57	55	
		80 and Over	4	2	2	7	7	
	Total		1,804	834	851	3,488	1,848	

Notes: Moderately/severely cost-burdened households pay 30–50%/more than 50% of income for housing. All other households includes those with two or more related or unrelated adults. White, black, and Asian/other groups are non-Hispanic; Hispanics may be of any race.

2025			2035			
Moderately Burdened	Severely Burdened	Total	Not Burdened	Moderately Burdened	Severely Burdened	Total
517	671	2,324	1,048	470	613	2,131
609	692	2,275	976	612	699	2,287
325	578	1,422	768	481	855	2,103
252	437	1,081	408	261	454	1,123
229	303	810	333	278	364	975
62	86	232	142	106	147	395
156	277	659	292	202	360	855
112	176	435	224	170	264	658
47	67	170	99	82	117	298
58	108	286	153	74	138	365
64	85	246	128	86	113	326
29	41	117	87	54	76	216
2,462	3,521	10,056	4,656	2,877	4,199	11,733
207	146	1,209	771	184	131	1,085
184	108	854	560	186	109	855
64	58	283	243	97	87	426
96	73	437	274	97	74	445
49	34	188	117	56	38	211
6	5	25	23	10	9	42
206	169	846	591	258	212	1,061
78	74	294	217	118	114	449
18	11	52	38	32	20	89
95	98	448	309	116	119	544
59	60	234	153	77	80	309
11	12	48	44	20	21	85
1,073	849	4,918	3,340	1,251	1,013	5,604
191	171	837	451	179	162	791
114	77	469	286	116	76	478
27	23	145	143	41	34	218
132	162	546	257	135	166	558
86	89	344	196	101	103	401
14	19	67	59	24	32	116
158	177	622	362	200	223	785
47	59	194	137	73	92	302
15	11	50	43	27	19	88
41	49	174	105	51	61	218
23	19	97	71	29	25	125
3	3	12	12	5	5	22
851	858	3,557	2,122	981	998	4,101

Source: JCHS tabulations of US Census Bureau, 2014 American Community Survey 1-Year Estimates and 2016 JCHS Household and Tenure Projections.

1. PROJECTIONS OF THE OLDER POPULATION & HOUSEHOLDS

1. McCue and Herbert, "Updated Household Projections, 2015-2035."
2. Since 1990, widowhood rates among those aged 80 and older have declined from 61 percent to 50 percent, while the married share of the population has grown from 29 to 37 percent. Meanwhile, the share of those who are divorced or separated has grown since 1990: in that year, the share of divorced or separated 65-79 year-olds was 7 percent, and among the population 80 and over, it was 4 percent, but by 2014, both shares had more than doubled, such that divorcees or separated couples accounted for 16 percent of the population aged 65-79 and 9 percent of the population aged 80 and older.
3. In married/partner households only one person is considered the head; for the purposes of Census surveys it is the spouse or partner who answers the survey questions. The other part of the couple is considered a member of that household but not head.
4. According to the Census Bureau, "Group Quarters (GQ) are places where people live or stay, in a group living arrangement, which are owned or managed by an entity or organization providing housing and/or services for the residents. Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, and workers' dormitories." (U.S. Census Bureau, "2015 American Community Survey/Puerto Rico Community Survey Group Quarters Definitions.") This category may capture some assisted living facilities. Census data does not specifically identify assisted living. Instead, survey personnel classify on a case-by-case basis whether a residential care facility is a group quarter or qualifies as living in the community.
5. Data are from the decennial census and the American Community Survey (ACS) and represent the number of nursing home residents at the point in time when each survey was taken. Since many nursing home stays are shorter than one year, the total number utilizing a nursing home in the course of a year is higher than the point-in-time estimates.
6. Houser, *Nursing Home Fact Sheet*; Harris-Kojetin, Sengupta, and Park-Lee, *Long-Term Care Providers and Services Users in the United States: Data from the National Study of Long-Term Care Providers, 2013–2014*.
7. Data derived from Harris-Kojetin, Sengupta, and Park-Lee.

2. TENURE & HOUSING CIRCUMSTANCES OF OLDER ADULTS

1. Spader, McCue, and Herbert, "Homeowner Households and the U.S. Homeownership Rate."
2. See for example Keenan, "Home and Community Preferences of the 45+ Population" and Barret, "Home and Community Preferences of the 45+ Population 2014."
3. While many definitions of frailty exist, according to a well-cited study by Fried et al., "[i]t is generally agreed that frailty is a state of high vulnerability for adverse health outcomes, including disability, dependence, falls, need for long-term care, and mortality." Fried et al., "Untangling Concepts of Disability, Frailty, and Comorbidity."
4. US Department of Justice, "A Guide to Disability Rights Laws."
5. Pushkarev and Zupan, *Public Transportation and Land Use Policy*.
6. The American Community Survey does not include a category for assisted living facilities: they may be counted as group quarters, if they look more like a nursing facility, or as private independent households. In our calculations above, it is likely that some of the 1.5 million in group quarters are residing in assisted living, with the remainder of those in assisted living showing up as independent single-person or coupled households.
7. The 2014 NSLTCP used the same definition of "residential care community" and the same approach to create the sampling frame that was used for the 2010 National Survey of Residential Care Facilities. In both surveys, "residential care facilities" include assisted living residences, board and care homes, congregate care, enriched housing programs, homes for the aged, personal care homes, and shared housing establishments. To be eligible for the studies, residential care facilities had to: be licensed, registered, listed, certified, or otherwise regulated by the state; have four or more licensed, certified, or registered beds; provide room and board with at least two meals a day and around-the-clock on-site supervision; help with personal care such as bathing and dressing or health-related services such as medication management; and serve a predominantly adult population. Facilities licensed to serve the severely mentally ill or the developmentally disabled populations exclusively, and facilities that do not have any current residents, were excluded. Nursing homes were also excluded unless they had a unit or wing meeting the above definition whose residents could be separately enumerated. For further details, see Moss, Harris-Kojetin, and Sengupta, *National Survey of Residential Care Facilities*.
8. Khatutsky et al., "Residential Care Communities and Their Residents in 2010: A National Portrait."

3. DISABILITIES AMONG OLDER ADULTS

1. Although some use the term “disability” to refer to complete loss of ability in a certain function, we use “functional limitation” and “disability” interchangeably in this report. The data source we utilize to analyze health-related data, the Health and Retirement Study, does not allow us to distinguish between complete inability to perform a task and difficulty performing a task.
2. Katz et al., “Studies of Illness in the Aged: The Index of ADL.”
3. Lawton and Brody, “Assessment of Older People.”
4. For a list of the set of classic ADLs, see Katz et al., “Studies of Illness in the Aged.”
5. He and Larsen, “Older Americans with a Disability: 2008–2012.”
6. Langa et al., “A Comparison of the Prevalence of Dementia in the United States in 2000 and 2012.”
7. Plassman et al., “Prevalence of Dementia in the United States.”
8. According to the National Health and Aging Trends Study’s definition, a person has “probable dementia” if told by a doctor that he/she has dementia or Alzheimer’s disease. “Possible dementia” means the sample person scored at least 1.5 standard deviations below the mean in one domain of the following three test areas: memory, orientation and executive functioning.
9. Langa et al., “Comparison of the Prevalence of Dementia in the United States in 2000 and 2012.”
10. Kemper, Komisar, and Alecxih, “Long-term Care over an Uncertain Future.”
11. Kemper, Komisar, and Alecxih; Thomeer, Mudrazija and Angel, “Relationship Status and Long-Term Care Facility Use in Later Life.”
12. ASPE Issue Brief, “Long-Term Services and Supports for Older Americans.”
13. Houser, Fox-Grage, and Ujvari. K., “Across the States.”
14. This gap may be overstated due to limitations in the available data. Not everyone who reports mobility limitations or difficulty in independently performing self-care or household activity tasks is disabled to the point of needing help. Further, given that disability describes an individual’s unique capacity to adequately navigate his or her environment, the same type of disability may result in need for assistance for some individuals but not for others. A single-floor home, for example, can reduce someone’s need for help with stairs. However, given that the HRS does not allow us to distinguish those who need help as a result of the severity of their disability and those who do not, respondents who report having a functional limitation but not receiving help with the limitation are considered part of the group needing but lacking sufficient assistance.

3. DISABILITIES AMONG OLDER ADULTS (CONT.)

15. Redfoot, Feinberg, and Houser, "The Aging of the Baby Boom and the Growing Care Gap."
16. National Center for Health Statistics, "Health, United States, 2015."
17. Cutler, Ghosh, and Landrum, *Evidence for Significant Compression of Morbidity in the Elderly US Population*; Cai and Lubitz, "Was there Compression of Disability for Older Americans from 1992 to 2003?"; Manton, Gu, and Lowrimore, "Cohort Changes in Active Life Expectancy in the US Elderly Population."
18. Crimmins and Beltrán-Sánchez, "Mortality and Morbidity Trends;" Holmes et al., "Aging Differently;" House, Lantz, and Herd, "Continuity and Change in the Social Stratification of Aging and Health over the Life Course."
19. Freedman, Wolf, and Spillman, "Disability-Free Life Expectancy Over 30 Years."
20. Landrum, Stewart, and Cutler, "Clinical Pathways to Disability." Cancer, though a major source of mortality, remains relatively minor in its contribution to disability. See Chernew et al., "Understanding the Improvement in Disability Free Life Expectancy in the US Elderly Population."
21. Villareal et al., "Obesity in Older Adults."
22. Kuczmarski et al., "Increasing Prevalence of Overweight Among US Adults;" Sturm, Ringel, and Andreyeva, "Increasing Obesity Rates and Disability Trends;" Flegal et al., "Overweight and Obesity in the United States."
23. Sturm, Ringel, and Andreyeva, "Increasing Obesity Rates and Disability Trends."
24. Finkelstein et al., "Obesity and Severe Obesity Forecasts through 2030;" Hedley et al., "Prevalence of Overweight and Obesity among US Children, Adolescents, and Adults;" Flegal et al., "Prevalence of Obesity and Trends in the Distribution of Body Mass Index among U.S. Adults;" Ogden et al., "Obesity Among Adults in the United States—No Change Since 2003–04."
25. Villareal et al., "Physical Frailty and Body Composition in Obese Elderly Men and Women;" Blaum et al., "The Association between Obesity and the Frailty Syndrome in Older Women;" Villareal et al., "Obesity in Older Adults."
26. Verbrugge and Ike, "Risk Factors for Disability among US Adults with Arthritis."
27. Himes, "Obesity, Disease, and Functional Limitation in Later Life."
28. Villareal et al., "Obesity in Older Adults;" Daviglius, Yan, et al., "Relation of Body Mass Index in Young Adulthood and Middle Age to Medicare Expenditures in Older Age."

3. DISABILITIES AMONG OLDER ADULTS (CONT.)

29. National Center for Chronic Disease Prevention and Health Promotion, "National Diabetes Statistics Report 2014."
30. For a review of studies providing evidence of these claims, see Kirkman et al., "Diabetes in Older Adults: Consensus Report." See also Lu, Lin, and Kuo, "Diabetes and the Risk of Multi-System Aging Phenotypes;" Biessells et al., "Risk of Dementia in Diabetes Mellitus;" Allen, Frier, and Strachan, "The Relationship between Type 2 Diabetes and Cognitive Dysfunction;" Kelsey, Browner, and Seeley, "Risk Factors for Fractures of the Distal Forearm and Proximal Humerus;" Morley, "The Elderly Type 2 Diabetic Patient: Special Considerations;" Schwartz, Sellmeyer, and Ensrud, "Older Women with Diabetes Have an Increased Risk of Fracture;" Cummings, Nevitt, and Browner, "Risk Factors for Hip Fracture in White Women;" Tinetti, Williams, and Mayewski, "Fall Risk Index for Elderly Patients Based on Number of Chronic Disabilities;" Robbins et al., "Predictors of Falls among Elderly People;" American Geriatrics Society et al., "Guideline for the Prevention of Falls in Older Persons."
31. Narayan et al., "Impact of Recent Increase in Incidence on Future Diabetes Burden US, 2005–2050."
32. Centers for Disease Control and Prevention, "Prevalence and Most Common Causes of Disability among Adults—United States."
33. Centers for Disease Control and Prevention, "Arthritis."
34. Centers for Disease Control and Prevention, "Arthritis."
35. Hootman et al., "Updated Projected Prevalence of Self-Reported Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation among US Adults."
36. Centers for Disease Control and Prevention, "Arthritis."
37. Alzheimer's Association, "2015 Alzheimer's Disease Facts and Figures."
38. Langa et al., "A Comparison of the Prevalence of Dementia in the United States in 2000 and 2012."
39. Satizabal et al., "Incidence of Dementia over Three Decades in the Framingham Heart Study."
40. Langa et al., "Trends in the Prevalence and Mortality of Cognitive Impairment in the United States."
41. Manton, Gu, and Ukraintseva, "Declining Prevalence of Dementia in the U.S. Elderly Population."

3. DISABILITIES AMONG OLDER ADULTS (CONT.)

42. Hebert et al. "Change in Risk of Alzheimer Disease over Time;" Satizabal et al., "Incidence of Dementia over Three Decades in the Framingham Heart Study."
43. Manton, Gu, and Ukraintseva, "Declining Prevalence of Dementia in the U.S. Elderly Population;" Langa et al., "Trends in the Prevalence and Mortality of Cognitive Impairment in the United States;" Stern, "Cognitive Reserve in Ageing and Alzheimer's Disease;" Roe et al., "Education and Alzheimer Disease without Dementia."
44. Dodge et al., "Cohort Effects in Age-Associated Cognitive Trajectories;" Gross et al., "Effects of Education and Race on Cognitive Decline;" Wilson et al., "Educational Attainment and Cognitive Decline in Old Age."
45. Alzheimer's Association, "2015 Alzheimer's Disease Facts and Figures;" Larson, Yaffe, and Langa, "New Insights into the Dementia Epidemic;" Satizabal et al., "Incidence of Dementia over Three Decades in the Framingham Heart Study;" Langa et al., "Trends in the Prevalence and Mortality of Cognitive Impairment in the United States;" Manton, Gu, and Ukraintseva, "Declining Prevalence of Dementia in the U.S. Elderly Population."
46. Larson, Yaffe, and Langa, "New Insights into the Dementia Epidemic."
47. Wilson et al., "Loneliness and Risk of Alzheimer Disease."
48. Feder and Komisar, "The Importance of Federal Financing to the Nation's Long-Term Care Safety Net;" Houser, Ujvari, and Fox-Grage, "Across the States 2012."
49. Langa et al., "A Comparison of the Prevalence of Dementia in the United States in 2000 and 2012."
50. Satizabal et al., "Incidence of Dementia over Three Decades in the Framingham Heart Study."
51. This methodology halves the rate of decline estimated for HRS respondents between 2000 and 2012 for the age groups 65-74, 75-84, and 85 and over. The projections then reduce 2012 dementia prevalence estimates by this halved rate, and apply the resulting rates to the estimated population in 2025. To produce rates for 2035, the same methodology is applied to 2025 estimated dementia rates.
52. These age groups differ from those used elsewhere in this report (65-79 and 80 and over) because of how HRS dementia rates were reported in Langa et al.'s "A Comparison of the Prevalence of Dementia in the United States in 2000 and 2012."
53. Hurd et al., "Monetary Costs of Dementia in the United States."
54. Day, Carreon, and Stump, "The Therapeutic Design of Environments for People with Dementia."

3. DISABILITIES AMONG OLDER ADULTS (CONT.)

55. Njegovan et al., “The Hierarchy of Functional Loss Associated with Cognitive Decline in Older Persons.”
56. These age groups differ from those used elsewhere in this report (65-79 and 80 and over) because of how HRS dementia rates were reported in Langa et al.’s “A Comparison of the Prevalence of Dementia in the United States in 2000 and 2012.”
57. Hurd et al., “Monetary Costs of Dementia in the United States.”
58. Day, Carreon, and Stump, “The Therapeutic Design of Environments for People with Dementia.”
59. Njegovan et al., “The Hierarchy of Functional Loss Associated with Cognitive Decline in Older Persons.”

4. THE FINANCIAL SITUATIONS OF OLDER ADULTS

1. In the American Community Survey, which is used for this analysis, “total income” is the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.
2. Rent or mortgage payments are not the sole source of housing costs—the American Community Survey includes utilities, taxes, insurance, and mobile home and condominium fees as additional components—but they do comprise the bulk of housing costs for those who do not own outright.
3. Note that these are average incomes, which in most cases will be lower than median incomes that we report elsewhere using American Community Survey data. The Consumer Expenditure Survey reports expenditure and income information for “consumer units,” which are defined as groups of individuals who live together and share in certain expenses. The terms “consumer unit,” “family,” and “household” are often used interchangeably for convenience, as we do here. However, the proper technical term for purposes of the Consumer Expenditure Survey is “consumer unit.”
4. “Housing” costs in the Consumer Expenditure Survey include expenditures on household operations and services (such as household equipment repairs and gardening services), personal services (such as adult day care), and other miscellaneous expenses. To keep housing costs consistent with those provided in the American Community Survey, which includes payments, taxes, insurance, and utilities, we report only the average costs of shelter and utilities from the Consumer Expenditure Survey.

4. THE FINANCIAL SITUATIONS OF OLDER ADULTS (CONT.)

5. As earlier sections of this report have described, older households with mortgages are far more likely to be housing cost-burdened than households who own their homes free and clear. Lusardi and Mitchell, "Baby Boomer Retirement Security."
6. U.S. Department of Health and Human Services, www.longtermcare.gov.
7. Johnson, "Who is Covered by Private Long-Term Care Insurance?"
8. Favreault and Dey, "Long-Term Services and Supports for Older Americans."
9. Kemper, Komisar, and Alexih, "Long-Term Care over an Uncertain Future."
10. With recent declines in nursing home use and shifts toward at-home care, this mix may change in coming years, and indeed may already have shifted since Kemper, Komisar, and Alexih published their study in 2005.
11. Lusardi and Scheresberg, "Americans' Troubling Financial Capabilities."
12. Tang and Goode, "Older Americans Employment and Retirement."
13. U.S. Department of Labor, "Civilian Labor Force Participation Rate."
14. Bosworth, Burtless, and Zhang, K., "Later Retirement, Inequality in Old Age, and the Growing Gap in Longevity between Rich and Poor."
15. However, the brief cautions that this generality does not apply to every white-collar worker and highlights certain white-collar occupations that rely on skills that decline early. Belbase, Sanzenbacher, and Gillis, How Do Job Skills that Decline with Age Affect White-Collar Workers?
16. Rhee, "The Retirement Savings Crisis."
17. Ellis, Munnell, and Eschtruth, "Falling Short: The Roots of the Coming US Retirement Crisis."
18. Ellis, Munnell, and Eschtruth.
19. Institute of Medicine, "Aging and the Macroeconomy."
20. Butrica, Smith, and Iams, "This is Not Your Parents' Retirement."
21. Butrica, Smith, and Iams.

5. IMPLICATIONS FOR HOUSING

1. The Demand Institute, “Baby Boomers and Their Homes: On Their Own Terms.”
2. Barret, *Home and Community Preferences of the 45+ Population 2014*; Keenan, *Home and Community Preferences of the 45+ Population*.
3. “Visitability” refers to universal design as it relates to housing, specifically. The nonprofit Concrete Change launched the concept of “visitability” in the late 1980s.
4. The Fair Housing Act also requires that buildings with four or more units constructed after 1991 include some accessibility features, but even so, units may not be fully accessible to all persons with disabilities, and many apartment rentals predate 1991.
5. Sarah L. Szanton, “Preliminary data from CAPABLE, a patient directed, team-based intervention to improve physical function and decrease nursing home utilization: the first 100 completers of a CMS Innovation Project.” Forthcoming in the *Journal of the American Geriatrics Society*.

SOURCES

- A** Allen, Kate V., Brian M. Frier, and Mark WJ Strachan. "The Relationship between Type 2 Diabetes and Cognitive Dysfunction: Longitudinal Studies and Their Methodological Limitations." *European Journal of Pharmacology* 490.1 (2004): 169-175.
- Alzheimer's, Association. "2015 Alzheimer's disease facts and figures." *Alzheimer's & Dementia: The Journal of the Alzheimer's Association* 11.3 (2015): 332.
- American Geriatrics Society, et al. "Guideline for the Prevention of Falls in Older Persons." *Journal of the American Geriatrics Society* 49.5 (2001): 664-672.
- B** Barret, Linda Home and Community Preferences of the 45+ Population 2014. AARP, 2014.
- Belbase, Anek, et al. How Do Job Skills that Decline with Age Affect White-Collar Workers? Center for Retirement Research at Boston College, No. 2016-6, 2016.
- Biessels, Geert Jan, et al. "Risk of Dementia in Diabetes Mellitus: A Systematic Review." *The Lancet Neurology* 5.1 (2006): 64-74.
- Blaum, Caroline S., et al. "The Association between Obesity and the Frailty Syndrome in Older Women: Women's Health and Aging Studies." *Journal of the American Geriatrics Society* 53.6 (2005): 927-934.
- Bosworth, Barry, Gary Burtless, and Kan Zhang. "Later Retirement, Inequality in Old Age, and the Growing Gap in Longevity between Rich and Poor." *Economic Studies* at Brookings, 2016.
- Butrica, Barbara A., Karen E. Smith, and Howard Iams. "This is Not Your Parents' Retirement: Comparing Retirement Income across Generations." *Social Security Bulletin* 72.1 (2012): 37-58.
- C** Cai, Liming, and James Lubitz. "Was there Compression of Disability for Older Americans from 1992 to 2003?" *Demography* 44.3 (2007): 479-495.
- Centers for Disease Control and Prevention. "Arthritis." ND. www.cdc.gov/arthritis/index.htm.
- Centers for Disease Control and Prevention. "National Diabetes Statistics Report: Estimates of Diabetes and its Burden in the United States, 2014." Atlanta, GA: US Department of Health and Human Services, 2014.
- Centers for Disease Control and Prevention. "Prevalence and Most Common Causes of Disability among Adults—United States, 2005." *MMWR: Morbidity and Mortality Weekly Report* 58.16 (2009): 421-426.
- Chernew, Michael, et al. Understanding the Improvement in Disability Free Life Expectancy In the US Elderly Population. No. w22306. National Bureau of Economic Research, 2016.

SOURCES

Crimmins, Eileen M., and Hiram Beltrán-Sánchez. "Mortality and Morbidity Trends: Is there Compression of Morbidity?" *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 66.1 (2011): 75-86.

Cummings, Steven R., et al. "Risk Factors for Hip Fracture in White Women." *New England Journal of Medicine* 332.12 (1995): 767-774.

Cutler, David M., Kaushik Ghosh, and Mary Beth Landrum. Evidence for Significant Compression of Morbidity in The Elderly US Population. No. w19268. National Bureau of Economic Research, 2013.

D Daviglus, Martha L., et al. "Relation of Body Mass Index in Young Adulthood and Middle Age to Medicare Expenditures in Older Age." *JAMA* 292.22 (2004): 2743-2749.

Day, Kristen, Daisy Carreon, and Cheryl Stump. "The Therapeutic Design of Environments for People with Dementia: A Review of the Empirical Research." *The Gerontologist* 40.4 (2000): 397-416.

Dodge, Hiroko H., et al. "Cohort effects in Age-Associated Cognitive Trajectories." *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 69.6 (2014): 687-694.

E Ellis, Charles, Alicia Munnell, and Andrew Eschtruth. "Falling Short: The Roots of the Coming US Retirement Crisis." *Challenge* 59.2 (2016): 126-147.

F Favreault, Melissa, and Judith Dey. "Long-Term Services and Supports for Older Americans: Risks and Financing." Washington, DC: US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Office of Disability, Aging, and Long-Term Care Policy, 2015.

Feder, Judy, and Harriet L. Komisar. "The Importance of Federal Financing to the Nation's Long-Term Care Safety Net." Georgetown University, 2012.

Finkelstein, Eric A., et al. "Obesity and Severe Obesity Forecasts through 2030." *American Journal of Preventive Medicine* 42.6 (2012): 563-570.

Flegal, Katherine M., et al. "Overweight and Obesity in the United States: Prevalence and Trends, 1960–1994." *International Journal of Obesity* 22.1 (1998): 39-47.

Flegal, Katherine M., et al. "Prevalence of Obesity and Trends in the Distribution of Body Mass Index among US Adults, 1999-2010." *JAMA* 307.5 (2012): 491-497.

SOURCES

Freedman, Vicki A., Douglas A. Wolf, and Brenda C. Spillman. "Disability-Free Life Expectancy Over 30 Years: A Growing Female Disadvantage in the US Population." *American Journal of Public Health* 106.6 (2016): 1079-1085.

Fried, Linda P., et al. "Untangling the Concepts of Disability, Frailty, and Comorbidity: Implications for Improved Targeting and Care." *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 59.3 (2004): M255-M263.

G GFK Public Affairs and Corporate Communications for Freddie Mac. *Americans 55+ Assess Current and Future Housing Options: Homeowners Data*. 2016.

Gross, Alden L., et al. "Effects of education and race on cognitive decline: An integrative study of generalizability versus study-specific results." *Psychology and Aging* 30.4 (2015): 863.

H Harris-Kojetin, Lauren, et al. "Long-Term Care Providers and Services Users in the United States: Data from the National Study of Long-Term Care Providers, 2013-2014." *Vital & Health Statistics. Series 3, Analytical and Epidemiological Studies*. US Dept. of Health and Human Services, Public Health Service, National Center for Health Statistics. 38 (2016): 1-118.

He, Wan, and Luke J. Larsen. "Older Americans with a Disability: 2008– 2012." *US Census Bureau, American Community Survey Reports*, Washington, DC: US Government Printing Office, 2014.

Hebert, L. E., et al. "Change in Risk of Alzheimer Disease over Time." *Neurology* 75.9 (2010): 786-791.

Hedley, Allison A., et al. "Prevalence of Overweight and Obesity among US Children, Adolescents, and Adults, 1999-2002." *JAMA* 291.23 (2004): 2847-2850.

Himes, Christine L. "Obesity, Disease, and Functional Limitation in Later Life." *Demography* 37.1 (2000): 73-82.

Holmes, Julia, et al. "Aging Differently: Physical Limitations among Adults Aged 50 Years and Over: United States, 2001–2007." *NCHS Data Brief* 20.1, 2009.

Hootman, Jennifer M., et al. "Updated Projected Prevalence of Self-Reported Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation among US Adults, 2015-2040." *Arthritis & Rheumatology*, 2016.

SOURCES

House, James S., Paula M. Lantz, and Pamela Herd. "Continuity and Change in the Social Stratification of Aging and Health Over the Life Course: Evidence from a Nationally Representative Longitudinal Study from 1986 to 2001/2002 (Americans' Changing Lives Study)." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 60. Special Issue 2 (2005): S15-S26.

Houser, Ari N. *Nursing Home Fact Sheet*. AARP Public Policy Institute, 2007.

Houser, Ari N., Wendy Fox-Grage, and Kathleen Ujvari. *Across the States: Profiles of Long-Term Services and Supports*. AARP Public Policy Institute, 2012.

Hurd, Michael D., et al. "Monetary Costs of Dementia in the United States." *New England Journal of Medicine* 368.14 (2013): 1326-1334.

I Institute of Medicine (US) Committee on the Long-Run Macroeconomic Effects of the Aging US Population. "Aging and the Macroeconomy: Long-Term Implications of an Older Population." 2012.

J Johnson, Richard W. "Who Is Covered by Private Long-Term Care Insurance?" Urban Institute, 2016.

K Katz, Sidney, et al. "Studies of Illness in the Aged: The Index of ADL: A Standardized Measure of Biological and Psychosocial Function." *JAMA* 185.12 (1963): 914-919.

Keenan, T. *Home and Community Preferences of the 45+ Population*. AARP, 2010.

Kelsey, Jennifer L., et al. "Risk Factors for Fractures of the Distal Forearm and Proximal Humerus." *American Journal of Epidemiology* 135.5 (1992): 477-489.

Kemper, Peter, Harriet L. Komisar, and Lisa Alexih. "Long-Term Care Over an Uncertain Future: What Can Current Retirees Expect?" *INQUIRY: The Journal of Health Care Organization, Provision, and Financing* 42.4 (2005): 335-350.

Khatutsky, Galina, et al. "Residential Care Communities and Their Residents in 2010: A National Portrait. DHHS Publication No. 2016-1041." Hyattsville, MD: National Center for Health Statistics (2016).

Kirkman, Sue M., et al. "Diabetes in Older Adults: A Consensus Report." *Journal of the American Geriatrics Society* 60.12 (2012): 2342-2356.

Kuczmarski, Robert J., et al. "Increasing Prevalence of Overweight among US Adults: The National Health and Nutrition Examination Surveys, 1960 to 1991." *JAMA* 272.3 (1994): 205-211.

SOURCES

- L** Landrum, Mary Beth, Kate A. Stewart, and David M. Cutler. "Clinical Pathways to Disability: Health at Older Ages: The Causes and Consequences of Declining Disability among the Elderly. University of Chicago Press, 2009. 151-187.
- Langa, Kenneth M. et al. "A Comparison of the Prevalence of Dementia in the United States in 2000 and 2012." *JAMA Internal Medicine* (2016).
- Langa, Kenneth M., et al. "Trends in the Prevalence and Mortality of Cognitive Impairment in the United States: Is there Evidence of a Compression of Cognitive Morbidity?" *Alzheimer's & Dementia* 4.2 (2008): 134-144.
- Larson, Eric B., Kristine Yaffe, and Kenneth M. Langa. "New Insights into the Dementia Epidemic." *New England Journal of Medicine* 369.24 (2013): 2275-2277.
- Lawton, M. P., and Elmne M. Brody. "Assessment of Older People: Self-Maintaining and Instrumental Activities of Daily Living." *Nursing Research* 19.3 (1970): 278.
- Lu, Feng-Ping, Kun-Pei Lin, and Hsu-Ko Kuo. "Diabetes and the Risk of Multi-System Aging Phenotypes: A Systematic Review and Meta-Analysis." *PloS one* 4.1 (2009): e4144.
- Lusardi, Annamaria, and Carlo de Bassa Scheresberg. "Americans' Troubling Financial Capabilities: A Profile of Pre-Retirees." *Public Policy & Aging Report* 26.1 (2016): 23-29.
- Lusardi, Annamaria, and Olivia S. Mitchell. "Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth." *Journal of Monetary Economics* 54.1 (2007): 205-224.
- M** Manton, K. C., X. L. Gu, and S. V. Ukraintseva. "Declining Prevalence of Dementia in the US Elderly Population." *Advances in Gerontology* 16 (2005).
- Manton, Kenneth G., XiLiang Gu, and Gene R. Lowrimore. "Cohort Changes in Active Life Expectancy in the US Elderly Population: Experience from the 1982–2004 National Long-Term Care Survey." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 63.5 (2008): S269-S281.
- McCue, Daniel and Christopher Herbert. "Updated Household Projections, 2015-2035: Methodology and Results." *Joint Center for Housing Studies Working Paper*, 2016.
- Morley, John E. "The Elderly Type 2 Diabetic Patient: Special Considerations." *Diabetic Medicine-Chichester* 15 (1998): S41-S46.
- Moss, Abigail J., et al. "Design and Operation of the 2010 National Survey of Residential Care Facilities." *Vital and Health Statistics. Ser. 1, Programs and Collection Procedures* 54 (2011): 1-131.

SOURCES

- N** Narayan, K.M. Venkat, et al. "Impact of Recent Increase in Incidence on Future Diabetes Burden US, 2005–2050." *Diabetes Care* 29.9 (2006): 2114-2116.
- National Center for Health Statistics US, "Health, United States, 2015: with Special Feature on Racial and Ethnic Health Disparities." 2016.
- Njegovan, Vesna, et al. "The Hierarchy of Functional Loss Associated with Cognitive Decline in Older Persons." *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 56.10 (2001): M638-M643.
- O** Ogden, C. L., et al. "Obesity among Adults in the United States—No Change Since 2003–2004. NCHS Data Brief No. 1, 2007." Hyattsville, MD: National Center for Health Statistics, 2010.
- P** Pushkarev, Boris, and Jeffrey M. Zupan. *Public Transportation and Land Use Policy*. Indiana University Press, 1977.
- R** Redfoot, Donald, Lynn Feinberg, and Ari Houser. "The Aging of the Baby Boom and the Growing Care Gap: A Look at Future Declines in the Availability of Family Caregivers." *Insight on the Issues* 85 (2013).
- Rhee, Nari. "The Retirement Savings Crisis." Washington DC: National Institute on Retirement Security, 2013.
- Robbins, Alan S., et al. "Predictors of Falls among Elderly People: Results of Two Population-Based Studies." *Archives of Internal Medicine* 149.7 (1989): 1628-1633.
- Roe, Catherine M., et al. "Education and Alzheimer disease without Dementia Support for the Cognitive Reserve Hypothesis." *Neurology* 68.3 (2007): 223-228.
- S** Satizabal, Claudia L., et al. "Incidence of Dementia over Three Decades in the Framingham Heart Study." *New England Journal of Medicine* 374.6 (2016): 523-532.
- Schwartz, Ann V., et al. "Older Women with Diabetes Have an Increased Risk of Fracture: A Prospective Study." *The Journal of Clinical Endocrinology & Metabolism* 86.1 (2001): 32-38.
- Spader, Jonathan, Daniel McCue, and Christopher Herbert. "Homeowner Households and the U.S. Homeownership Rate: Tenure Projections for 2015-2035." Joint Center for Housing Studies Working Paper, 2016.
- Stern, Yaakov. "Cognitive Reserve and Alzheimer Disease." *Alzheimer Disease & Associated Disorders* 20.2 (2006): 112-117.
- Stern, Yaakov. "Cognitive Reserve in Ageing and Alzheimer's Disease." *The Lancet Neurology* 11.11 (2012): 1006-1012.

SOURCES

Sturm, Roland, Jeanne S. Ringel, and Tatiana Andreyeva. "Increasing Obesity Rates and Disability Trends." *Health Affairs* 23.2 (2004): 199-205.

Szanton, Sarah L. et al., "Preliminary Data from Community Aging in Place, Advancing Better Living for Elders, a Patient-Directed, Team-Based Intervention to Improve Physical Function and Decrease Nursing Home Utilization: The First 100 Individuals to Complete a Centers for Medicare and Medicaid Services Innovation Project." *Journal of the Geriatrics Society* 63.2 (2015): 371-374.

T Tang, Fengyan, Eunhee Choi, and Rachel Goode. "Older Americans Employment and Retirement." *Ageing International* 38.1 (2013): 82-94.

The Demand Institute, "Baby Boomers and Their Homes: On Their Own Terms," 2014. <http://demandinstitute.org/baby-boomers-and-their-homes/>

Thomeer, Mieke Beth, Stipica Mudrazija, and Jacqueline L. Angel. "Relationship Status and Long-Term Care Facility Use in Later Life." *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 71.4 (2016): 711-723.

Tinetti, Mary E., T. Franklin Williams, and Raymond Mayewski. "Fall Risk Index for Elderly Patients Based on Number of Chronic Disabilities." *The American Journal of Medicine* 80.3 (1986): 429-434.

U U.S. Department of Health and Human Services, (2015). [LongTermCare.gov](http://longtermcare.gov/medicare-medicare-more/medicaid/medicaid-eligibility/). <http://longtermcare.gov/medicare-medicare-more/medicaid/medicaid-eligibility/>

U.S. Census Bureau. "2015 American Community Survey/Puerto Rico Community Survey Group Quarters Definitions." ND. https://www2.census.gov/programs-surveys/acs/tech_docs/group_definitions/2015GQ_Definitions.pdf.

U.S. Department of Labor, Bureau of Labor Statistics. "Civilian Labor Force Participation Rate by Age, Gender, Race, and Ethnicity." 2015. http://www.bls.gov/emp/ep_table_303.htm.

U.S. Department of Justice. *A Guide to Disability Rights Laws*. Civil Rights Division, 2009.

V Verbrugge, Lois M., Donna M. Gates, and Robert W. Ike. "Risk Factors for Disability among US Adults with Arthritis." *Journal of Clinical Epidemiology* 44.2 (1991): 167-182.

Villareal, Dennis T., et al. "Obesity in Older Adults: Technical Review and Position Statement of the American Society for Nutrition and NAASO, The Obesity Society." *Obesity Research* 13.11 (2005): 1849-1863.

Villareal, Dennis T., et al. "Physical Frailty and Body Composition in Obese Elderly Men and Women." *Obesity Research* 12.6 (2004): 913-920.

SOURCES

- W** Wilson, Robert S., et al. "Loneliness and Risk of Alzheimer disease." *Archives of General Psychiatry* 64.2 (2007) 234-240.
- Wilson, Robert. S., et al. "Educational Attainment and Cognitive Decline in Old Age." *Neurology* 72.5 (2009): 460-465.
- Wise, David A., and Richard Woodbury. "Introduction." *Insights in the Economics of Aging*. University of Chicago Press, 2016.





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