

Written Testimony of

**Dr. Christopher Herbert
Managing Director**

Harvard Joint Center for Housing Studies

Before the U.S. Senate Committee on Banking, Housing, and

Urban Affairs

“The State of Housing 2023”

February 9, 2023

Chairman Brown, Ranking Member Scott, Members of the Committee: Thank you for inviting me to testify at this hearing.

I am the Managing Director of the Joint Center for Housing Studies of Harvard University and a Lecturer in the Department of Urban Planning and Design at Harvard's Graduate School of Design. I am also a member of the Board of Directors of Freddie Mac. Through its research, education, and public outreach programs, the Joint Center for Housing Studies' mission is to advance understanding of housing issues and to help leaders in government, business, and the civic sectors make decisions that effectively address the needs of cities and communities. For more than three decades we have published the annual report *The State of the Nation's Housing* and I am very pleased to have the opportunity to share the work of our Center with the Committee today.

Introduction

Perhaps the most apt description of housing market trends over the last few years is that of a roller coaster ride; first marked by home prices and rents increasing at a dizzying pace in markets across the country in response to pandemic-enhanced demand against a backdrop of restricted supply, and now in the midst of a dramatic slide in response to the Federal Reserve's efforts to bring inflation under control. While the forces behind these trends are certainly out of the ordinary, they have illuminated and exacerbated housing challenges that are not new, but rather long in the making.

Arguably the nation's principal housing challenge is that of affordability. The share of renters facing housing cost burdens rose from the 2000s through the middle of last decade. While the years before the pandemic saw a modest recovery, the cost-burdened share of renters has now worsened substantially in the face of rising rents. While young adults and people of color were able to make up some lost ground in homeownership that followed the Great Recession, the combination of very high home prices and now much higher interest rates has priced most would-be owners out of the market.

A notable feature of the trends in housing affordability over the last two decades has been the spreading of these problems into the middle rungs of the income distribution. One key factor driving this trend has been a constrained supply of new homes, particularly modestly-priced homes and apartments which has contributed to the upward pressure on housing prices and rents. But the most severe affordability challenges continue to be concentrated among the nation's lowest-income households, who are outside of the reach of the private market under the best of circumstances.

But housing affordability is not the only housing challenge we face as a country. Housing policy has an important role to play in responding to the economic trajectories of neighborhoods,

including those experiencing a rising tide that may threaten to displace existing residents and those who are suffering from disinvestment and decline where housing investments can be an important part of a revitalization strategy. Housing policies and supports also need to be attuned to the rapidly aging population, which presents a unique set of housing concerns. Finally, a rapidly aging housing stock calls for increased investment to maintain the quality of modest homes, to reduce energy consumption to meet the nation's goals for carbon reduction, and to address the growing impact of severe weather events on homes.

In my testimony today I hope to highlight and illuminate these trends in today's housing market in the hopes of informing your consideration of ways to support more concerted efforts by the public, private, and non-profit sectors to address these challenges.

The Housing Market is Cooling Rapidly in the Face of Rising Interest Rates

As the economy shut down in response to the onset of the pandemic in March 2020 the housing market initially slowed sharply. But within a few months home prices began to rise rapidly as the increased importance of home for work, study, and living boosted housing demand sharply. By the end of 2020 home prices were increasing at nearly 10 percent nationally, greatly surpassing the pace from a year earlier (**Figure 1**). The rental market was slower to bounce back and ended 2020 with rents essentially flat relative to the year before. But 2021 saw demand in both markets skyrocket, pushing house prices up 20 percent by year's end and rents up nationally by more than 10 percent, both record levels for annual gains.

These trends reversed dramatically in 2022 in response to the Federal Reserve pushing up interest rates sharply to tame inflation. By the end of 2022 home price gains year-over-year were down to 8 percent, with monthly trends showing prices actually falling. Rents followed a similar pattern, up just 3 percent year-over-year, with trends indicating further slowdowns ahead. Still, given the dramatic increase in prices and rents in recent years, it would take far more substantial declines to make up for the outsized gains. While there is some variation across markets in these growth rates and declines, the trends were evident in all areas of the country driven by significant macro forces that were equally felt in historically fast and slow growing markets.

The slowdown in the housing market has also been evident in new housing starts, although mostly in the single-family segment. Prior to the pandemic, single-family construction was gradually trending up but remained well below the long-term historical average of 1 million homes annually (**Figure 2**). In response to the surge in demand during the pandemic, single-family starts swelled to 1.2 million homes, reaching the highest levels since the last housing boom. But last year's rise in mortgage rates substantially dampened demand and starts plunged some 30 percent, ending the year at a pace close to the pre-pandemic level of

around 900,000 new homes, once again below the long-term average.

Meanwhile, multifamily starts have remained remarkably stable through 2022 at a pace that is the highest since 1986. However, there are signs that rising interest rates are also being felt in this sector as multifamily building permits turned down over the last quarter of 2022 which suggests starts will head lower in 2023. However, there are also nearly 1 million multifamily units currently under construction, reflecting extended construction timelines, which suggests that the completion of new apartments will remain high through 2023.

Tight Housing Supply Remains an Ongoing Concern

In the years before the pandemic the supply of new homes was not keeping pace with what was needed to accommodate the growth in households, to replace older housing stock, and to meet demand for second and seasonal homes. Beginning in the 1970s, the addition of new homes through construction exceeded household growth by about 20 percent on average. But for much of the last decade new construction has barely kept pace with household growth, a streak that was unprecedented over the past half century (**Figure 3**). Freddie Mac estimates that nationally the shortfall in housing supply, as of 2020, amounted to 3.8 million units.¹

Then during the pandemic household growth spiked, reaching the highest levels in decades. Recent analysis by our Center has found that much of this increase in household formation is due to young adults moving out on their own, making up for a shortfall in independent living that had built up in the decade prior.² As shown in Figure 3, even with the rise in construction levels over the last two years, the surge in demand expanded the gap between household growth and construction levels, adding to the already large shortfall in housing supply.

The tight housing supply is also evident in vacancy rates for rental housing. According to data from CoStar, rental vacancy rates rose sharply at the start of the pandemic, driven mostly by rates in prime urban markets, but then fell to historic lows (**Figure 4**). These excessively tight conditions were a significant factor in the rapid increases in rents that ensued. Over the last six months there have been signs of easing of market conditions as vacancy rates have edged back up to the levels that prevailed before the pandemic, but not yet enough to provide substantial relief.

¹ Khater, Sam, Len Kiefer, and Venkataramana Yanamandra. "Housing Supply: A Growing Deficit." Freddie Mac, Economics and Housing Research Note, May 2021. Available at: https://www.freddiemac.com/fmac-resources/research/pdf/202105-Note-Housing_Supply-08.pdf

² McCue, Daniel. "The Surge in Household Growth and What It Suggests About the Future Of Housing Demand." Harvard University, Joint Center for Housing Studies, *Housing Perspectives*, January 17, 2023. Available at: <https://www.jchs.harvard.edu/blog/surge-household-growth-and-what-it-suggests-about-future-housing-demand>

The owner-occupied market has also been marked by a significant shortage of homes for sale. A balanced market is generally thought to be marked by a 6-month supply of homes available for sale as levels below this are associated with upward pressure on prices. The supply of homes for sale has stayed below this level since 2012 and dipped below 2 months at the start of 2022 (**Figure 5**). Even with the recent slowdown in homebuying activity, the number of homes on the market has stayed near historic lows, increasing the month's supply to just above 3, still well below what's needed to reduce price pressure in the market. With so many existing homeowners having well below market interest rates on their mortgages, it seems likely that the supply of existing homes put up for sale will remain constrained.

Further contributing to the tight existing home market is the increased activity by investors in purchasing single-family homes. Analysis by CoreLogic identified a substantial increase in investors' share of single-family home purchases during the pandemic, which has remained at high levels even through 2022.³ In fact, the role of investors in the housing market more generally has increased substantially over the past two decades. As documented by the Rental Housing Finance Survey, the overall share of rental housing properties owned by non-individual investors (that is, some form of legal ownership other than in individuals' names) has grown substantially over the last two decades (**Figure 6**). From 2001 to 2021, the share of properties owned by non-individuals increased from 18 to 26 percent, with the largest increases among properties with between 2 and 49 units. There are concerns that larger-scale investors will pursue strategies that are more focused on maximizing rents contributing further to rent pressures. Although a recent study of the increased role of investors in Canadian multifamily housing highlights that investors have various investment strategies from seeking stable income to aggressively pushing rents.⁴

Freddie Mac's assessment of the supply shortage pointed to the fact that an important part of this trend has been a substantial decline in the number of entry-level homes built over time, which they define as being under 1,400 square feet. Since the 1980s the number and market share of these homes has fallen steadily, from roughly a third of the market and over 400,000 homes annually to just 69,000 homes in 2021 and only 7 percent of the market. There are many factors contributing to this trend, including rising land costs, higher construction costs and fees, a shortage of labor, and restrictive zoning.⁵ The implication of

³ Malone, Thomas. "The New Normal? Single-family Investor Activity Remains Steady in Q3." CoreLogic, December 8, 2022.

⁴ August, Martine. "The financialization of Canadian multi-family rental housing: From trailer to tower." *Journal of Urban Affairs* 42, no. 7 (2020): 975-997.

⁵ Freddie Mac, Economics and Research Group. *The Housing Supply Shortage: State of the States*. Economic and Housing Research Insight, February 2020. Available at: <http://www.freddiemac.com/fmac->

the lack of starter homes is that entry-level homebuyers have fewer affordable choices, delaying transitions to homeownership and increasing rental demand.

In short, a deficit in the supply of new housing has been an important factor in the rising house prices and rents that have been evident in recent years. These factors were exacerbated during the pandemic when housing demand surged and builders were unable to meet the need for homes. While the Federal Reserve's efforts to control excessive growth in housing prices and rents was clearly necessary, it has unfortunately also resulted in a decline in new construction which will ultimately be needed to bring the housing market into a more healthy balance.

Given the important contribution of supply-side constraints in producing our affordability challenge, there is a clear need for concerted efforts by the public, private, and non-profit sectors to pursue both regulatory reform and more efficient means of production to increase the supply of housing, and particularly of modest cost homes. Doing so will require concerted efforts that address the multiple barriers to added supply, including the need for relief from restrictive zoning codes and approval processes, more efficient means of building homes through off-site production, and growth of the labor force in the building trades. There is a role for action at all levels of government and by the private sector to make progress in these areas.

Renter Affordability Has Deteriorated Substantially

With rents rising at record pace and renter incomes declining during the pandemic (the median income for renter households decreased from \$44,500 in 2019 to \$43,500 in 2021, a decline of 2.3 percent), the last few years have seen a substantial erosion in rental affordability, reversing a trend toward modest improvement that had been evident since the middle of the last decade.⁶ Between 2011 and 2019 the share of renters that were cost burdened (paying more than 30 percent of their income for housing) fell from a record high of 50.8 percent to 46.3 percent (**Figure 7**). But between 2019 and 2021 this share jumped to 49.0 percent, wiping out much of the ground gained and pushing the number of cost burdened renters to a new record of 21.6 million households. Most of the increase was among those facing severe cost burdens (paying 50 percent of their income for housing), which rose by 1.1 million to 11.6 million, or more than one-in-four renters.

Cost burdens increased across all income groups, but the gains were largest among middle

[resources/research/pdf/202002-Insight-12.pdf](#); and Badger, Emily. "Whatever Happened to the Starter Home?" New York Times, September 22, 2022. <https://www.nytimes.com/2022/09/25/upshot/starter-home-prices.html>

⁶ Whitney, Peyton. "Number of Renters Burdened by Housing Costs Reached a Record High in 2021." Harvard University, Joint Center for Housing Studies, *Housing Perspectives*, February 1, 2023. Available at: <https://www.jchs.harvard.edu/blog/number-renters-burdened-housing-costs-reached-record-high-2021>

income households, continuing a trend that has been evident since the early 2000s. Renters with an income between \$30,000 and \$44,999 experienced a 3.1 percentage point increase in cost burdens to 62.7 percent, while households with incomes between \$45,000 and \$74,999 saw a 3.5 percentage point jump to 34.3 percent (**Figure 8**). Cost burden increases were somewhat smaller for lower-income renters, but these households still faced the highest overall share of cost burdens. Among renter households with a real income under \$30,000, fully 82.7 percent were cost burdened, a 1.6 percentage point increase from 2019. Importantly, a large majority of these renters (76 percent) were severely burdened, highlighting the acuteness of the affordability challenges facing lowest-income renters.

Very high shares of lowest-income renters are cost burdened in all areas of the country, while the incidence of cost burdens among higher income renters varies significantly with housing costs. The share of lowest-income renters with cost burdens ranges from a low of 71 percent in non-metro areas to 87 percent in the 25 largest metro areas with the highest housing costs (**Figure 9**). Meanwhile, among households earning between \$30,000 and \$45,000 the cost burdened share is more than 50 percentage points higher between non-metros areas and the highest cost metros. The difference is also nearly as large among those earning \$45,000-\$75,000.

These affordability challenges can be traced to the difficulty of providing housing at rents affordable at modest income levels. Applying the 30 percent of income standard, households earning \$30,000 a year could afford to pay \$750 a month for housing—a level that has become more difficult for landlords and developers to meet. Since 2014 the number of rental homes available for less than \$1,000 a month has declined by 7 million, including a decline of 3.3 million units renting for under \$600 a month (**Figure 10**). New construction of low-cost units has been particularly rare. Census data show that less than 3 percent of new apartments rented for less than \$1,050 while the median asking rent for these apartments was \$1,745.⁷

Homelessness and Evictions on the Rise

Deteriorating rental affordability is evident in both increases in homelessness and a rebound in eviction rates. From 2016 to 2022 the overall number of people experiencing homelessness increased only modestly, from 550,000 to 582,000. However, this broader trend masks a rapid increase in the same period among unsheltered individuals, which increased by 38 percent with 59,000 more people living on the streets (**Figure 11**). This trend has been most evident in California where there has been an increase of unsheltered individuals of 37,000. But increases of 1,000 individuals or more also occurred in Arizona,

⁷ US Census Bureau, Survey of Market Absorption, available at: <https://www.census.gov/programs-surveys/soma/about/table-creator.html>

Colorado, Tennessee, Texas, Oregon, and Washington. In all, 22 states experiencing increases of more than 50 percent of this 6-year period.

At the beginning of the pandemic there was significant concern about the potential for a massive wave of evictions as millions of renters lost income and fell behind on rent. However, due in large part to a combination of eviction moratoria during the public health emergency and a significant commitment of federal funds for Emergency Rental Assistance⁸ the level of evictions remained low by historical standards for the first two years of the pandemic. According to data collected by The Eviction Lab of Princeton University for much of 2021 eviction rates in the cities and states they are able to track remained below half of their average level from 2012 to 2016 (**Figure 12**). Eviction rates began to rise in late 2021 as eviction moratoria ended and then rose more sharply at the start of 2022 as Emergency Rental Assistance funds were drawn down. Since March of last year eviction rates have stabilized at between 80 and 90 percent of historic levels.

While these trends are perhaps better than might be hoped given rising affordability challenges and the reduction of public supports, the harm caused by evictions highlights the importance of minimizing these outcomes. As Matthew Desmond's research has documented, eviction has profound impacts on families, disrupting schooling and undermining the ability to maintain employment, leading him to conclude that evictions are both a consequence and a cause of poverty.⁹ Research during the pandemic has also documented the negative consequences of missed rent payments for landlords and thus highlight the value of rent relief for property owners as well.¹⁰ Given the high costs of evictions for individuals and society, it is important that policy makers recognize the lessons learned from the pandemic about the effectiveness of support for renters in financial distress.

Homeownership Affordability Has Worsened Substantially, Threatening Recent Gains

In the years following the Great Recession the homeownership rate plunged from 69.0 percent in 2004 to a low of 63.4 percent in 2016. The decline in homeownership was most pronounced among adults under age 35, between ages 35 and 44, and Black households, for whom rates of owning fell by 8 percentage points or more (**Figure 13**). Beginning in 2016

⁸ For information on the nature and use of Emergency Rental Assistance see <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/emergency-rental-assistance-program>.

⁹ Desmond, Matthew. *Evicted: Poverty and profit in the American city*. Crown, 2016.

¹⁰ de la Campa, Elijah, Vincent J. Reina, and Christopher Herbert. "How Are Landlords Faring During the COVID-19 Pandemic?." Harvard University, Joint Center for Housing Studies, August 2021 (available at: <https://www.jchs.harvard.edu/research-areas/working-papers/how-are-landlords-faring-during-covid-19-pandemic-evidence-national>; and Decker, Nathaniel. "The uneven impact of the pandemic on the tenants and owners of small rental properties." Turner Center for Housing Innovation, UC Berkeley. July 13, 2021 (available at: <https://turnercenter.berkeley.edu/research-and-policy/pandemic-impact-tenants-owners-small-rental-properties/>).

these trends reversed and rates began to rise again with particularly strong gains for young adults and Black and Asian, Native Hawaiian and Pacific Islander (ANHPI) households. These trends continued during the pandemic with these same groups showing notable gains in owning. However, despite these increases, homeownership rates for young adults remain well below their levels from the early 2000s, while rates of owning for Black and Hispanic households continue to substantially lag white households with differences of 29 and 26 percentage points, respectively.

The gains in homeownership of recent years in part reflect the relative affordability of homebuying for much of the past decade as relatively low interest rates offset increases in home prices (**Figure 14**). However, the sharp jump in interest rates since the start of 2022, coupled with the recent substantial gains in home prices, have significantly increased the income needed to afford the median home. In April 2021 the median price of homes sold according to the National Association of Realtors was \$340,700, which when coupled with prevailing interest rates of 3.06 percent meant that homebuyers needed an income of \$79,600 to qualify for a mortgage under standard underwriting assumptions (**Figure 15**). A year later the combination of home price gains and an increase in prevailing interest rates to nearly 5 percent pushed the qualifying income needed to \$107,900, leaving a large majority of renters unable to afford the median home. While the price of homes sold declined over the last half of the year, continued increases in interest rates offset these declines so qualifying incomes remained well above \$100,000.

The substantial erosion of homebuyer affordability will make it much more challenging for young adults and people of color to transition into homeownership. In addition to the high incomes needed to qualify, the amount of savings needed for a downpayment represents a considerable barrier. One implication of today's much higher home prices is that homebuyers need a substantial amount of savings to meet downpayment and closing costs. As shown in Figure 15, for the national median-priced home, buyers generally have needed to bring about \$25,000 in savings to the closing table. According to the 2019 Survey of Consumer Finances, very few renters have cash reserves near this amount. Only renters in the top income quintile have median savings of \$20,000, while the median renter overall only has \$1,500.¹¹ The levels are even lower for Black and Hispanic renters, who have only \$800 and \$1,000 in savings respectively.

Efforts to expand homeownership opportunities start with ensuring that would-be buyers have access to adequate information and advice about the homebuying process. Surveys by Fannie Mae have found that many consumers have limited or erroneous understanding

¹¹ Joint Center for Housing Studies of Harvard University. *The State of the Nation's Housing 2022*. Harvard University, 2022. Available at: <https://www.jchs.harvard.edu/state-nations-housing-2022>

of the credit and downpayment standards needed to buy a home.¹² Support for homebuyer education and counseling can help ensure that homeseekers have the information they need to make to good choice about buying a home. Access to safe and affordable mortgage credit is obviously another key ingredient. Analysis by Freddie Mac shows that while many young adults have credit histories that would pass muster for conventional financing, many more are only near mortgage-ready based on their credit histories, with many more Black and Hispanic renters falling into this category.¹³ For this reason, efforts to expand access to credit for those who have the ability to sustain homeownership but may not measure up given standard metrics are needed. Finally, given the lack of savings among young households, efforts to expand homeownership opportunities and to close racial homeownership gaps will need to include support for downpayment assistance to overcome this significant hurdle to buying a home.

Gentrification Pressures are Growing, But Neighborhood Decline Remains Much More Pervasive

Neighborhood conditions are also an important consideration for housing policy, both to help ensure that long-term residents can maintain residence in economically improving areas and to help remedy a lack of effective demand that makes it difficult to maintain decent housing in economically depressed communities.

The past two decades have been marked by a growing focus on gentrification, the process where lower-income neighborhoods experience an influx of higher-income households and new investment capital, which bring about a significant rise in house values and rents that can displace lower-income residents. Gentrification raises particular concerns when it impacts historically depressed, urban neighborhoods where the majority of residents are Hispanic or Black.

The growing incidence of this type of neighborhood change is shaped by the significant movement of younger, highly educated adults into central cities over this period.¹⁴ In fact, an analysis by *Governing* magazine found a significant increase in the prevalence of gentrification in the period 2000-2013 in the country's 50 largest cities compared to the

¹² Palim, Mark and Sarah Shahdad. "Consumers Continue to Overestimate Mortgage Requirements." Fannie Mae, Perspectives Blog, June 5, 2019. Available at: <https://www.fanniemae.com/research-and-insights/perspectives/consumers-continue-overestimate-mortgage-requirements>

¹³ Dey, Jaya, Sijie Li, Robert Argento, and Jintao Huang. "Who Are the Future Borrowers? A Deep dive into their Barriers and Opportunities." Freddie Mac, *Insight Report*, July 16, 2021. Available at: <https://www.freddiemac.com/research/insight/20211021-future-borrowers>

¹⁴ Baum-Snow, Nathaniel, and Daniel Hartley. "Causes and consequences of central neighborhood change, 1970–2010." In Research Symposium on Gentrification and Neighborhood Change, vol. 3, pp. 57-85. 2016.

1990s.¹⁵ The same study found, however, that gentrification was not all that common, affecting only 8 percent of all neighborhoods examined, and was highly concentrated in a small number of cities. This same conclusion—that gentrification was fairly rare and was concentrated in select markets—was also reached by subsequent studies employing varying measures of gentrification.¹⁶

Gentrification raises a number of concerns about changes to longstanding low-income communities and communities of color—including the loss of businesses and social and cultural amenities—not benefiting existing residents. But perhaps the principal concern is how rising housing costs due to gentrification may displace residents.

Displacement is difficult to measure with most available data and so has been challenging to document. Detailed studies of the movement of households in New York City and Philadelphia concluded that the rate of out-movement of lower-income residents from gentrifying areas either remained fairly constant or slowed, but that the household composition of these neighborhoods changed as fewer new low-income residents moved in.¹⁷ Still, in the aggregate the results were a decline in the low-income population. The Philadelphia study also found that residents displaced from gentrifying neighborhoods moved to lower-income areas. The 2019 study by the National Community Reinvestment Coalition, which focused on net declines in Black and Hispanic populations in gentrifying neighborhoods rather than the movement of individual households, also found a significant loss of these populations.¹⁸

But while gentrification has received a great deal of attention, far less attention has been paid to the problems of neighborhood decline and growing neighborhood poverty.¹⁹ In order to compare the two challenges of upward and downward mobility of neighborhoods, researchers at the University of Minnesota examined what types of change occurred in neighborhoods in the 50 largest metropolitan areas in the country between 2000 and

¹⁵ Maciag, Michael. "Gentrification in America Report." *Governing*, January 23, 2015. Available at: <https://www.governing.com/archive/gentrification-in-cities-governing-report.html#:~:text=Gentrification%20still%20remains%20rare%20nationally,declines%20in%20the%20poverty%20rate.>

¹⁶ Richardson, Jason, Bruce Mitchell, and Juan Franco. "Shifting neighborhoods: Gentrification and cultural displacement in American cities." National Community Reinvestment Coalition, March 19, 2019 (available at <https://ncrc.org/gentrification/>); and Drew, Rachel Bogardus. "Gentrification: Framing Our Perspectives." Enterprise Community Partners, Inc., 2018 (available at https://www.enterprisecommunity.org/sites/default/files/2021-07/Gentrification%20White%20Paper10-9-Final_1.pdf).

¹⁷ Freeman, Lance, and Frank Braconi. "Gentrification and displacement New York City in the 1990s." *Journal of the American planning association* 70, no. 1 (2004): 39-52; and Ding, Lei, Jackelyn Hwang, and Eileen Divringi. "Gentrification and residential mobility in Philadelphia." *Regional science and urban economics* 61 (2016): 38-51.

¹⁸ See Richardson, Mitchell and Franco, 2019.

¹⁹ Mallach, Alan. *The divided city: Poverty and prosperity in urban America*. Island Press, 2018.

2016.²⁰ They created a typology of four categories of neighborhoods that were experiencing at least moderate change in population: (1) neighborhoods where both low- and non-low-income populations were growing, (2) neighborhoods with low-income displacement, (3) neighborhoods where the number of lower-income residents was growing, so-called “low-income concentration,” and finally, (4) neighborhood abandonment marked by both a declining population and high shares of low-income households.²¹

Figure 16 shows the results of this analysis for the 50 largest metro areas. The principal insight from their results is that by far the most common type of neighborhood change is that of low-income concentration, evident in neighborhoods where 36.5 million people live, accounting for more than two-thirds of all residents experiencing neighborhood change. In contrast, low-income displacement impacted 9.5 million individuals, only about a quarter of the population impacted by a growing concentration of poverty. The incidence of abandonment over the study period was fairly rare, but did impact 2.2 million residents. In contrast, areas experiencing growth accounted for 4.8 million residents.

As these results show, four times as many residents lived in communities experiencing a growing concentration of poor households, than lived in gentrifying neighborhoods. And while the problem of abandonment has not been nearly as common in the first decades of this century, neighborhood depopulation still affected more than 2 million people, not accounting for areas that have depopulated over previous decades.

Housing policy has an important role to play in addressing the challenges in both declining and gentrifying areas. For areas that are gentrifying the most obvious need is for an expansion of supports for permanently affordable rental housing and paths to affordable homeownership that create opportunities for long-time residents to remain and to promote racially and socioeconomically diverse communities that can benefit from improving neighborhood conditions. For neighborhoods subject to disinvestment and decline a broader toolbox is needed, including efforts to support investment and upgrading of existing homes, access to mortgage financing for both small balance loans and rehabilitation, new construction as part of a revitalization strategy, and reclaiming and repurposing vacant and abandoned land and properties.

Meeting the Housing Needs of a Rapidly Aging Population

²⁰ Orfield, Myron W. "American neighborhood change in the 21st century." Institute on Metropolitan Opportunity, University of Minnesota Law School, April 2019.

²¹ Low-income households were defined as those with incomes below 200 percent of the poverty level with non-low-income households having incomes above that level. Neighborhoods experiencing at least moderate change had changes in the non-low-income population of at least 10 percent and changes in the share of low-income population of at least 5 percent.

Since the first baby boomer turned 65 in 2011, older adults have been the fastest growing segment of the population. And with these oldest boomers now well into their 70s, our Center projects that the fastest growing household segment between 2021 and 2040 will be those age 75 and older, with particularly strong growth among those age 80 and older (**Figure 17**).²² Indeed, by 2040 there will be some 17 million of these households, representing 12 percent of the total.

While advanced age is associated with increased resilience and other social advantages, older people have unique housing needs, particularly at the oldest ages. These include limited and often declining income that affects capacity to pay for housing along with other necessities like food and out of pocket healthcare expenses, difficulty navigating and using their homes as mobility declines, and a need for assistance with household chores and activities of daily living.

Older adults are not immune to the challenge of finding housing that fits within their budgets. While lowest-income homeowners and renters both face affordability challenges, renters are more likely to experience housing cost burdens across the income spectrum (**Figure 18**). A large majority of both owners (84 percent) and renters (75 percent) with incomes under \$15,000 are cost burdened, with most of these households facing severe cost burdens. As incomes rise, cost burdens drop more sharply for owners, but among renters more than two-thirds of those with incomes of \$15,000-29,999 are cost burdened as are more than half of those with incomes between \$30,000-44,999.

To assess how well housing assistance programs are meeting the needs of low-income renters, the US Department of Housing and Urban Development prepares a biennial report to Congress reporting on the incidence of worst case housing needs, which is defined as having severe rent burdens, severely inadequate housing, or both.²³ The latest report documents how the rapid growth of older renters facing significant affordability challenges is swamping any increases in rental assistance. In 2009 there were 3.6 million very-low-income renters (with incomes up to 50 percent of area median) eligible for most rental assistance, with available support only sufficient to reach 36 percent of eligible households. By 2019 the number of very low-income older renters had grown to 5.6 million, an increase of more than 50 percent (**Figure 19**). The number of assisted renters also increased by a similar rate over this period so that the share receiving assistance stayed essentially constant at 36 percent. But among unassisted renters the incidence of worst cast housing

²² Joint Center for Housing Studies household projections, re-benchmarked to 2021 population and assuming low immigration scenario.

²³ US Department of Housing and Urban Development. *Worst Case Housing Needs Report to Congress 2021*. Available at: <https://www.huduser.gov/portal/sites/default/files/pdf/Worst-Case-Housing-Needs-2021.pdf>

needs increased. As a result, there were 2.2 million older households with worst case housing needs in 2019, up from 1.3 million a decade earlier, an increase of 69 percent.

Aside from affordability, another significant housing challenge for older adults is whether their homes are able to accommodate their physical needs as they age. The incidence of physical disability rises with age, and older adults are most likely of all age groups to report being unable to navigate and use features of their homes (**Figure 20**). Yet less than 1 percent of the housing stock is estimated to be wheelchair accessible and under 4 percent to offer no-step entry, a bedroom and bathroom on the main living floor, and wide halls and doors that could accommodate a wheelchair. A mismatch between a person's needs and their environment can increase dependence on others for conducting daily activities.²⁴

Our research has shown that publicly-assisted housing is more likely to offer accessibility features than market-rate housing, but still more than a quarter of older assisted renters (who are more likely to have disabilities than peers in non-subsidized units) have difficulties with access in their homes.²⁵ There is a clear need for investment in assisted housing to expand the number of adaptable and fully accessible units. Older adult households now make up over a third of all subsidized renters, so this need is only going to grow as these residents age.

For those living in non-subsidized housing, including millions of low- and moderate-income older homeowners, home modifications to enhance safety and accessibility can be financially out of reach. HUD's new Older Adult Home Modification Program offers a template to meet these needs with modest grants to make needed changes. To date, however, allocations to the program have been relatively small. Programs that offer higher value no-interest loans and grants, such as the Massachusetts Homeowner Modification Program, may allow for more comprehensive accessibility modifications. Programs might also support modifications for safety to prevent falls and other accidents that lead to disability, rather than requiring documentation of a disability (as is required by many modification programs).

In addition to housing units that are accessible, most older adults will need supports and services to remain in their communities; for millions, these are as important as an

²⁴ Samara Scheckler, Jennifer Molinsky, and Whitney Airgood-Obyrcki. 2022. *How Well Does the Housing Stock Meet Accessibility Needs? An Analysis of the 2019 American Housing Survey*. Joint Center for Housing Studies. https://www.jchs.harvard.edu/sites/default/files/research/files/harvard_jchs_housing_stock_accessibility_scheckler_2022_0.pdf

²⁵ Whitney Airgood-Obyrcki and Jennifer Molinsky. 2020. *Accessibility Features for Older Adults in Subsidized Housing*. Joint Center for Housing Studies. https://www.jchs.harvard.edu/sites/default/files/harvard_jchs_aging_in_subsidized_housing_airgood-obrycki%20molinsky_2020.pdf

affordable and accessible home to the goal of remaining in a community (e.g., non-nursing home) setting. Yet access to home-based personal care and assistance is extremely limited. In some states, it may be available to the lowest-income older adults under Medicaid Home and Community Based Services waivers, but not as an entitlement, and often there are long waiting lists. Middle-income older adults often cannot afford to hire caregivers or homemaker services but have few public options for support.

As a result, most older adults (90 percent) in need of support rely on family and friends.²⁶ Older adults living alone are most likely to have unmet needs for support (and despite having lower incomes and higher rates of disabilities than other types of households, to pay for the care they need) and the number of older people living alone in their 80s and beyond is set to double in the next decade.²⁷

Given the importance of affordable, accessible and supportive housing for successful aging, the rapid growth in the number of the adults over age 80 in the next few decades will require increased attention by policy makers to ensure that these critical housing needs are met.

Investments Needed in Existing Homes

In addition to the need to invest in the nation's homes to adapt them to support an aging population, there is also a need to support investments to remedy inadequate conditions, make homes more energy efficient to reduce the residential sector's carbon footprint, and to address the risks and damage from extreme weather events.

One consequence of lagging rates of new construction is that the nation's housing stock is itself aging. The median age of the nation's homes was 42 in 2021, up from 37 a decade earlier, and just 28 years in 1995.²⁸ Older homes are much more likely to suffer from structural defects that affect the health and well-being of occupants. The American Housing Survey documents a range of these defects, from severe problems such as a lack of kitchens and bathrooms and significant failures of heating systems, to more moderate problems such as cracks and holes in walls and floors, rodent infestations, and exposed wiring. While inadequate housing conditions are much less common than they were decades ago, they

²⁶ *Caregiving in the US 2020: A Focused Look at Family Caregivers of Adults Age 50+*. 2020. AARP Family Caregiving.

²⁷ *Housing America's Older Adults 2019*. Joint Center for Housing Studies. https://www.caregiving.org/wp-content/uploads/2021/05/AARP1340_RR_Caregiving50Plus_508.pdf; https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Housing_Americas_Older_Adults_2019.pdf; Chris Herbert, Samara Scheckler, and Jennifer Molinsky. 2022. Household Composition, Resource Use, and the Resilience of Older Adults During Covid-19. University of Wisconsin Center for Financial Security. <https://cfsrdrc.wisc.edu/publications/working-paper/wi22-13>

²⁸ US Census Bureau, The American Housing Survey, 2011 and 2021. Available at: <https://www.census.gov/programs-surveys/ahs.html>

can be pervasive in older homes (**Figure 21**). Housing inadequacy is nearly three times as common among homes built in 1960-79 compared to the newest homes, with more than one in twenty being either moderately or severely inadequate. Meanwhile, nearly one in ten of the oldest homes built before 1940 are inadequate. Since older homes often are an important source of more affordable housing, efforts to support the maintenance and improvements of these homes can be an important means of meeting the need for modest-cost housing. Inadequate housing is also much more common for Black (8.2 percent), Hispanic (7.3 percent) and Native American (11.2 percent) households compared to white households (4.0 percent), and so an important aspect of racial disparities in housing conditions.

In addition to housing quality, investments in improving the energy efficiency of existing homes is essential if the nation is to meet its goals for reduction of carbon production. Housing's energy use produces one fifth of the nation's greenhouse gas emissions from both the direct combustion of carbon-based fuels in homes as well as the mix of fuels used to generate the retail electricity that homes consume.²⁹ Another consequence of the nation's aging housing stock is that older homes are less efficient than newer ones and require higher levels of investment in energy-efficiency retrofits. In fact, the benefits of these investments are evident in the improvements in energy use of older homes over time, although area for further improvement remains (**Figure 22**).

Data from the latest Residential Energy Consumption Survey suggest that millions of homes across the country will require significant investment in the conversion of home systems and equipment to become more or fully electrified, especially in the Northeast and Midwest where less than 15 percent of the occupied housing stock was all-electric in 2020. Almost 75 million US homes currently use natural gas for at least one energy need, over 60 percent of the nation's housing stock. With incentives provided through the 2022 Inflation Reduction Act set to be offered this year, there is a major opportunity for the residential remodeling industry to electrify the US housing stock and make it more efficient. However, how effective states are in implementing this funding will impact the degree of geographic concentration of energy efficient housing.

The 2021 Infrastructure Investment and Jobs Act also supports home energy improvements through its \$3.5 billion in additional appropriations for the Weatherization Assistance Program. The national program, along with state and local government programs and regulated utilities, improves the efficiency of the housing stock and can reduce energy

²⁹ Environmental Protection Agency. 2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. U.S. Environmental Protection Agency, EPA 430-R-22-003. <https://www.epa.gov/ghgemissions/draft-inventory-us-greenhouse-gas-emissionsand-sinks-1990-2020>.

insecurity and energy burdens. Low-income households are more likely to live in poorly insulated and inefficient homes and, despite consuming less energy than households with higher incomes, spend a higher share of their incomes on energy costs. In 2021, the typical homeowner with household income under \$32,000 devoted nearly a quarter of their monthly housing costs to energy utilities including electric, gas, oil, and other fuels. In comparison, owners with incomes over \$150,000 typically spent less than 11 percent of their total housing cost for energy bills. Homeowners of color are also disproportionately likely to experience energy insecurity or related energy hardships that home improvements could rectify.³⁰

Finally, the increased frequency of extreme weather events is also expanding the need for investments to repair and protect the nation's homes from these impacts. The National Oceanic and Atmospheric Administration reports that the number of billion-dollar weather- and climate-related disasters increased from 14 in 2019 to 22 in 2020 and 20 in 2021, while the combined inflation-adjusted damages climbed from an average of \$59 billion annually in the 2000s to \$94 billion annually in the 2010s, to \$145 billion from 2020–2022 (**Figure 23**). Although hurricanes, tornadoes, and wildfires capture news headlines, a large share of disaster repair expenditure is for damages caused by other types of severe storms, such as snow, hail, and wind, which accounted for fully 45 percent of disaster-related restoration in 2021.

As an increasing number of homes are exposed to environmental hazards, there is a need for increased investment in homes not just after disaster hits, but in modifications that homeowners might make to mitigate their homes before disasters hit. According to a recent Freddie Mac survey, 66 percent of homeowners are somewhat or extremely concerned about severe weather-related events impacting their home in the next five years.³¹ However, the high cost of retrofitting homes and the limited public assistance for home mitigation, combined with a lack of information about the benefits of retrofits and unclear insurance coverage and premium incentives, prevent many households from pursuing mitigation actions. Federal investment to address for hazards and climate effects is largely going to large public works rather than to housing, though infrastructure can only protect homes from a small number of hazards such as floods. Expanding assistance for low-income households, who are more financially vulnerable to hazards but less able to afford home mitigation work or relocate, is critically important to maintain the housing stock and reduce

³⁰ Harvard Joint Center for Housing Studies. *Improving America's Housing 2023*. Forthcoming.

³¹ Freddie Mac. "Homeowners Are Growing More Concerned about the Effects of Severe Weather." Research Note, October 5, 2022. Available at: <https://www.freddiemac.com/research/consumer-research/20221005-homeowners-are-growing-more-concerned-about-effects>

unwanted displacement of households when preventable.

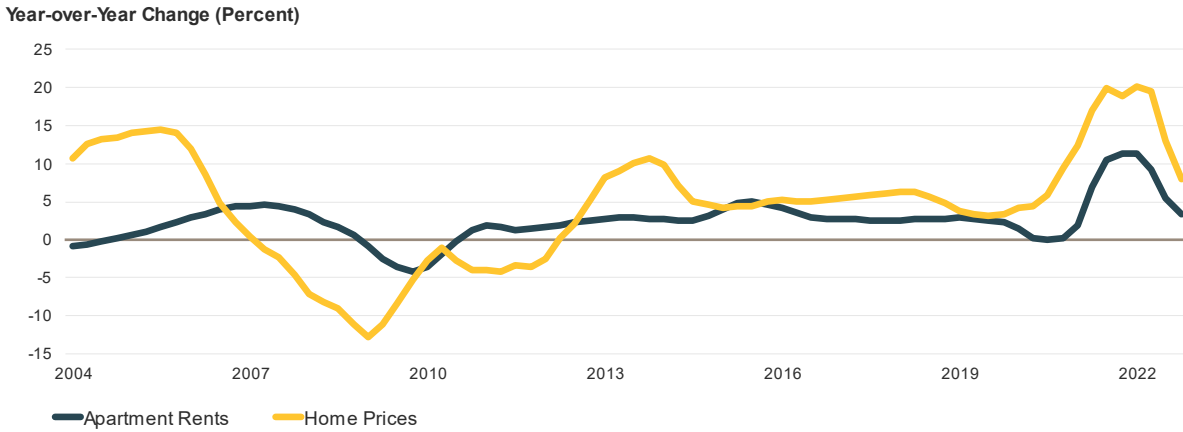
However, the high cost of retrofitting homes and the limited public assistance for home mitigation, combined with a lack of information about the benefits of retrofits, prevent many households from pursuing mitigation actions. Expanding assistance for low-income households, who are more financially vulnerable to hazards but less able to afford home mitigation, is critically important to maintain the housing stock and reduce displacement of households.

Concluding Remarks

I realize that I have outlined a broad set of housing challenges that are perhaps daunting in their scope and scale. But having a good quality, affordable, and secure home in a thriving community is foundational for a healthy and productive life for every person in America. Addressing our country's housing challenges will take a substantial commitment from the public, private, and non-profit sectors. But this investment would pay dividends in improved quality of life for those who are unaffordably and inadequately housed and in improved access to good quality neighborhoods. Investments in housing also need to be an important part of the country's efforts to house its aging population, and to mitigate and adapt to climate change, both of which are becoming more pressing with each passing year.

Thank you for turning your attention to these critical issues and for your invitation to share this information with you today. I look forward to answering any questions you may have.

Figure 1: Home Prices and Apartment Rents Soared to New Heights in 2021 but Slowed Sharply in 2022

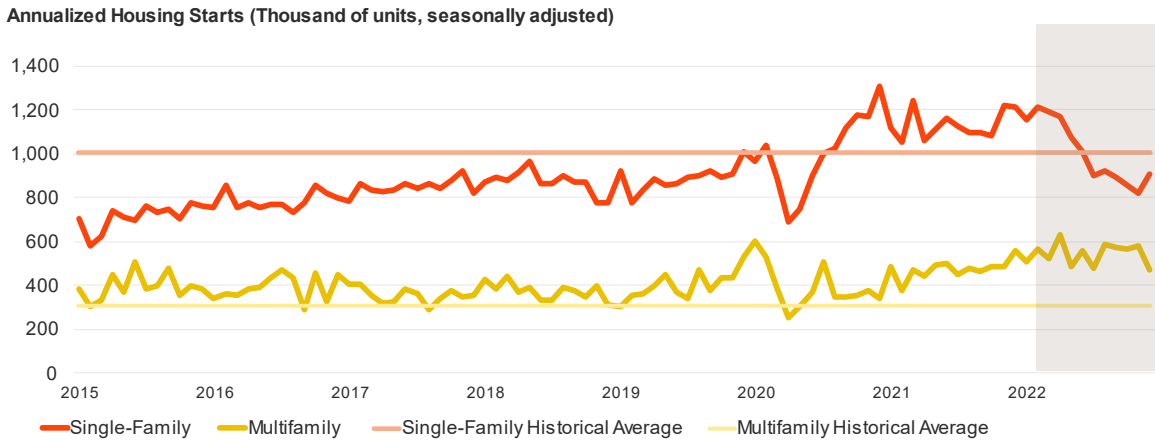


Note: CoStar samestore rents are for professionally managed market-rate apartments in buildings with five or more units. Homeprices in 2022q4 reflect data for October and November only.
 Source: JCHS tabulations of CoStar data; S&P CoreLogic CaseShiller US National Home Price Index.

2 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University **JCHS**

Figure 2: While Single-Family Construction Has Turned Down Sharply, the Pace of Multifamily Building Has Not Yet Slowed

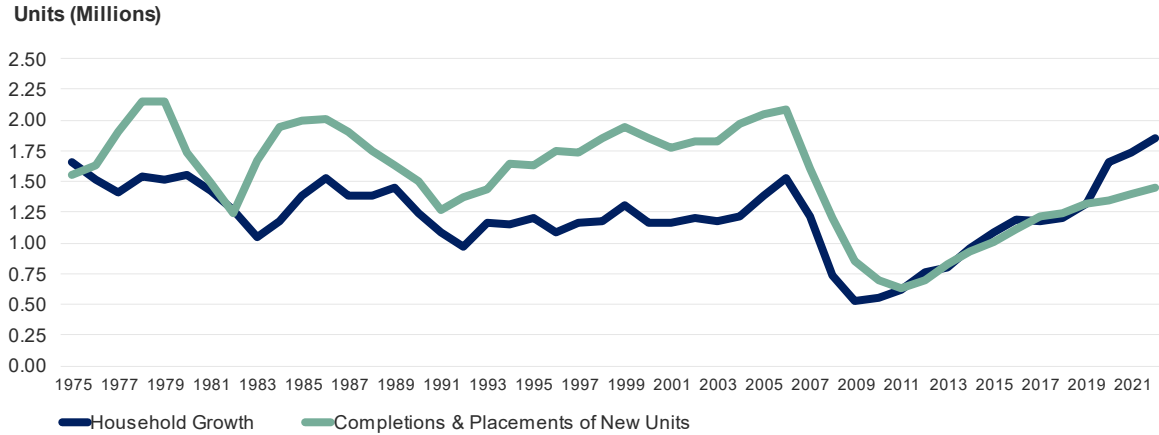


Note: Single-family and multifamily historical averages are of seasonally adjusted monthly data from January 1990 to September 2022.
 Source: JCHS tabulations of US Census Bureau, New Residential Construction data.

3 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University **JCHS**

Figure 3: Housing Construction Has Struggled to Keep Pace with Household Growth for a Decade and Fell Further Behind in the Pandemic

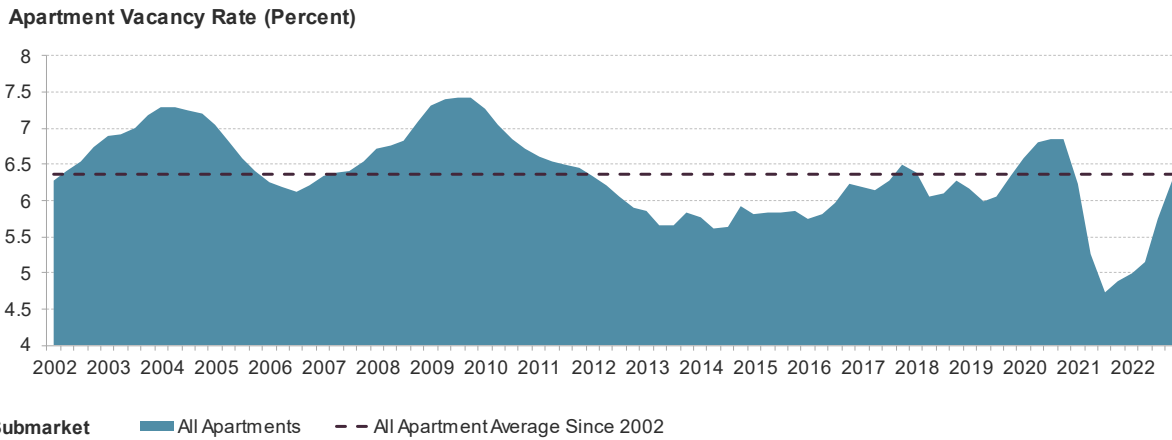


Notes: Household growth data are three-year trailing averages. Placements refers to newly built mobile homes placed for residential use.
Source: JCHS tabulations of US Census Bureau Housing Vacancy Survey, New Residential Construction data.

4 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 4: Vacancy Rates Have Retreated From Historic Lows but the Market Remains Fairly Tight

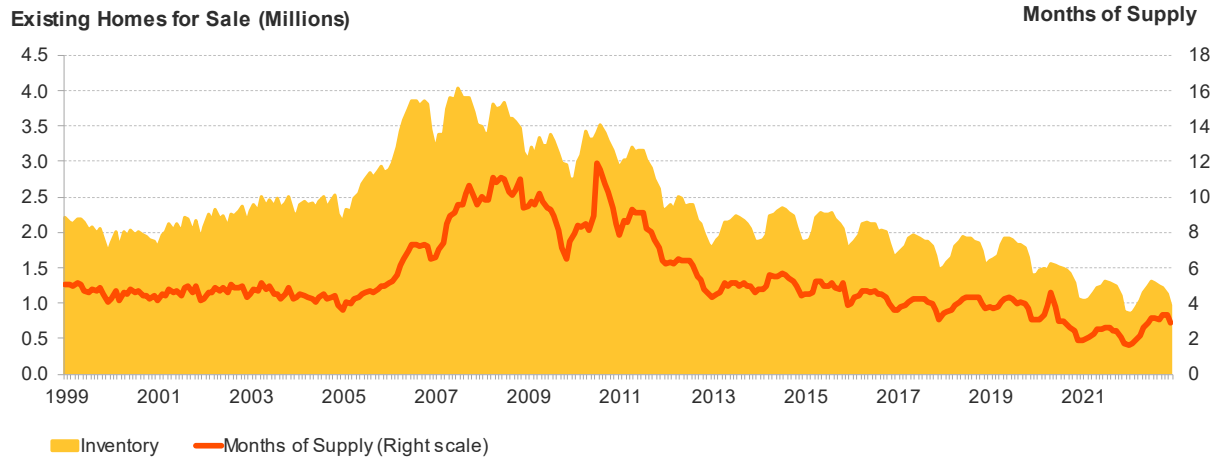


Notes: Urban/suburban areas are based on density in the 54 largest markets that CoStar tracks. Prime submarkets have the highest density.
Source: JCHS tabulations of CoStar data.

5 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 5: The Supply of Homes on the Market Has Increased Since Early 2022 but Remains Well Below Normal Levels

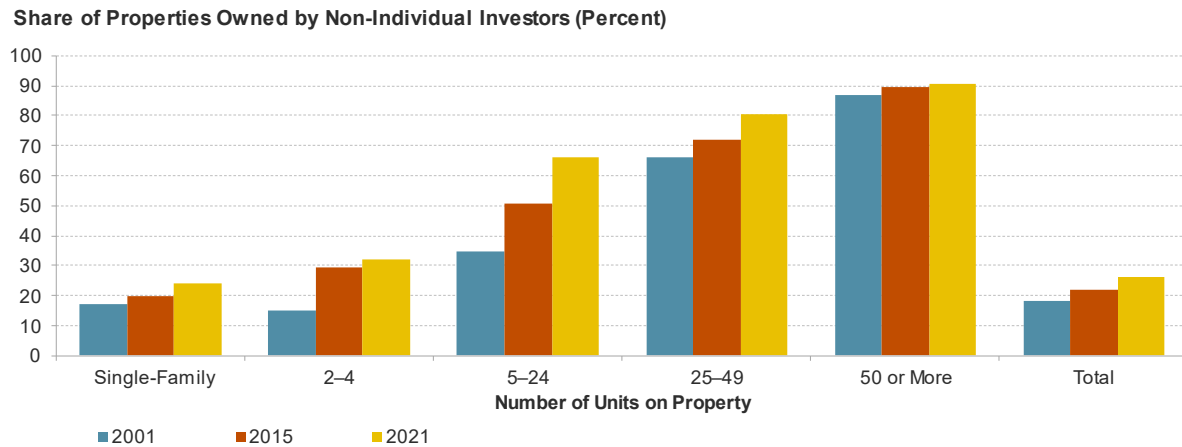


Note: Months of supply measure how long it would take homes on the market to sell at the current rate, where six months is typically considered a balanced market.
 Source: JCHS tabulations of NAR, Existing Home Sales.

6 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 6: Non-Individual Investors Own a Growing Share of Rental Properties

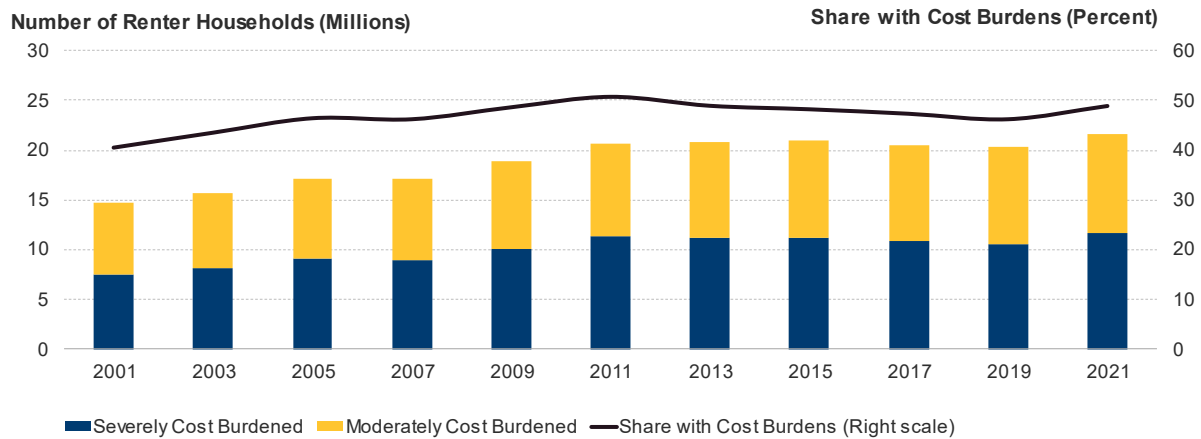


Note: Non-individual investors include partnerships, trustees for estate, real estate corporations, Real Estate Investment Funds, and nonprofit organizations, and other entities.
 Source: JCHS tabulations of HUD, Rental Housing Finance Surveys. Data for 2021 are preliminary and subject to change.

7 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 7: The Number of Cost -Burdened Renter Households Reached a Record High in 2021



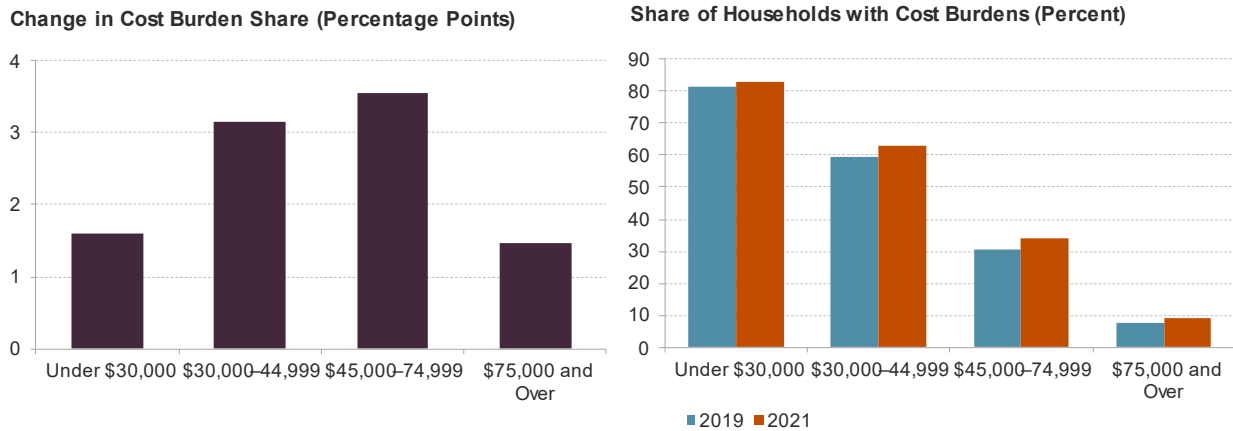
Notes: Moderately (severely) costburdened households pay more than 30% (more than 50%) of income for housing. Households with zero or negative income are assumed to have burdens, while households paying no cash rent are assumed to be without burdens.

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

8 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 8: Renter Cost Burdens Increased Across All Income Levels in 2021 but Were Largest among Middle -Income Groups



Notes: Moderately (severely) costburdened households pay more than 30% up to 50% (more than 50%) of household income for housing. Households with zero or negative income are assumed to be severely burdened, while households paying no cash rent are assumed to be unburdened. Household incomes are inflated to 2021 dollars using CPI-U All Items.

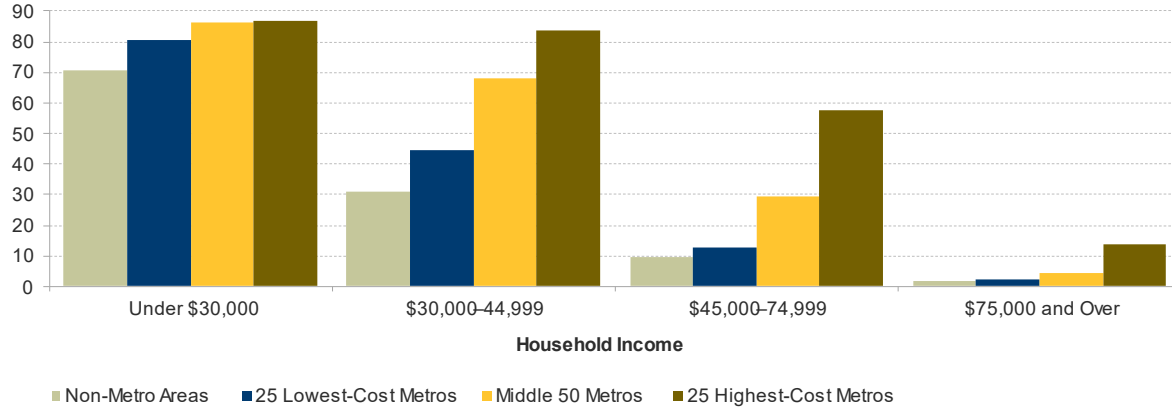
Source: JCHS Tabulations of US Census Bureau, 2019 & 2021 American Community Survey Year Estimates.

9 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 9: In Expensive Rental Markets, Even Middle -Income Households Face Elevated Cost Burdens

Share of Cost-Burdened Renters (Percent)



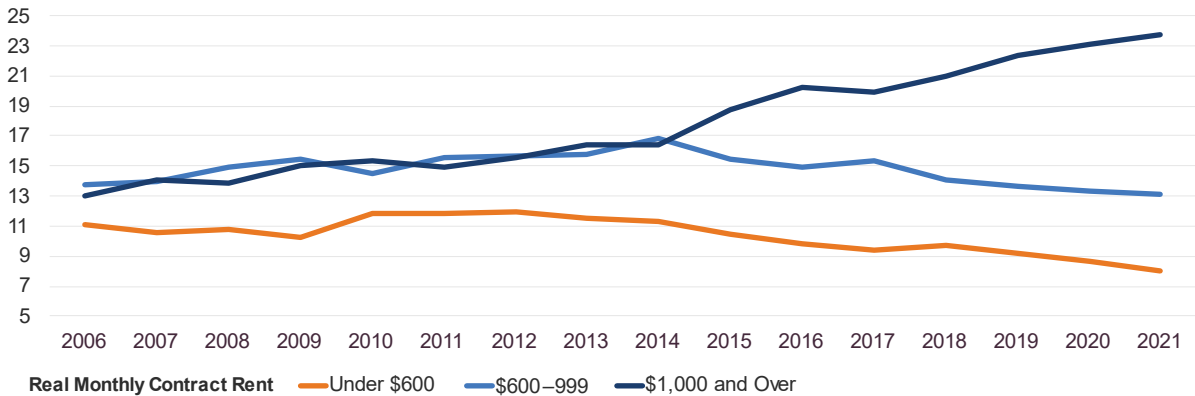
Notes: Cost-burdened households pay more than 30% of their income on housing. Households with zero or negative income are assumed to have burdens, while households paying no cash rent are assumed to be without burdens. In metro areas, only the 100 largest metro areas are shown, categorized by the median gross rent. Source: JCHS tabulations of US Census Bureau, 2021 American Community Survey Year Estimates and Missouri Census Data Center.

10 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 10: Strong Growth in High -Cost Rentals Has Coincided with Dramatic Declines in Low -Cost Units

Rental Units (Millions)

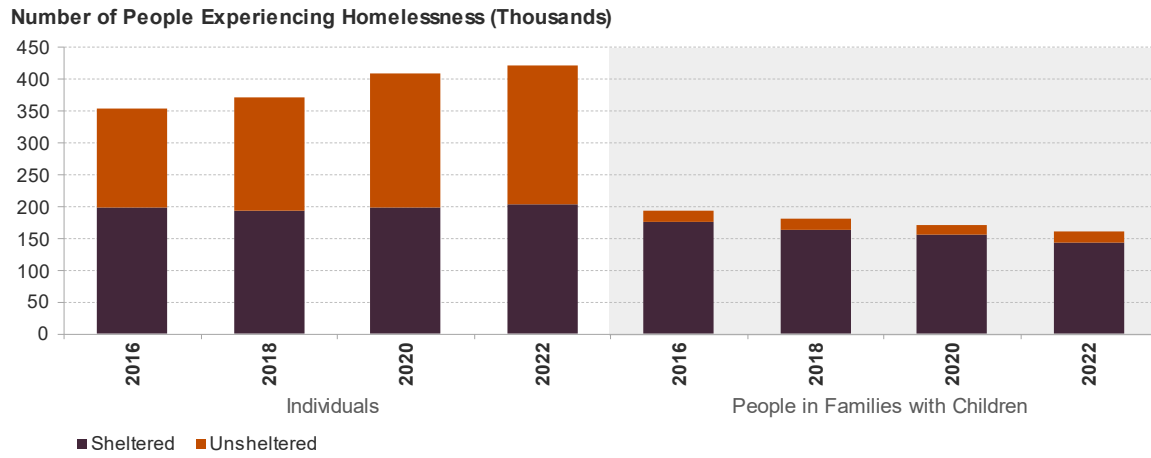


Notes: Rental units may be occupied, vacant for rent, or rented but unoccupied; excludes units occupied without cash rent. Values are adjusted for inflation using the CPI-U for All Items Less Shelter. Contract rent excludes all utilities paid separately. 2020 values are interpolated. Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates via IPUMS USA.

11 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 11: The Number of Unsheltered Homeless Individuals Has Increased Dramatically Since 2016



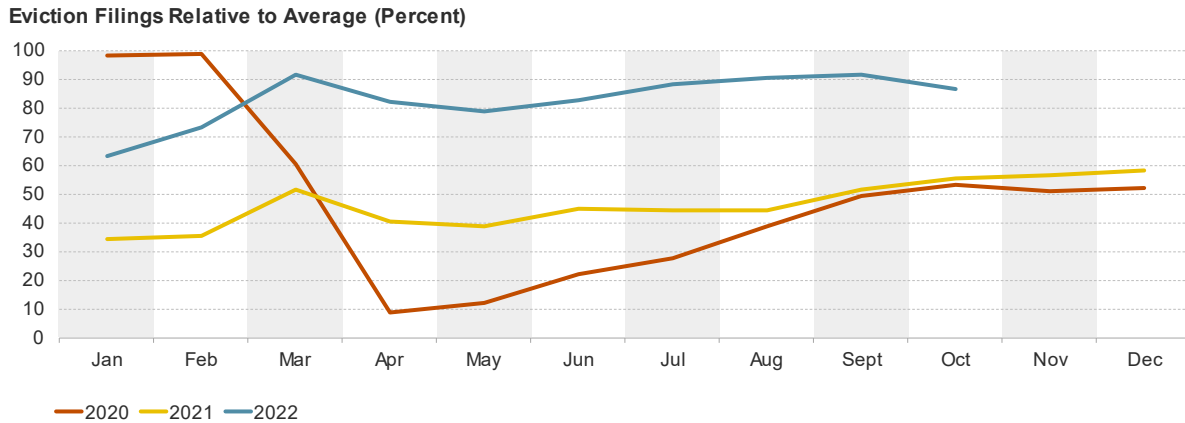
Notes: People experiencing homelessness in families with children have at least one adult age 18 or over and at least one child under 18. Point-in-time estimates are conducted in January, so the 2020 estimates are pre-pandemic estimates.

Source: JCHS tabulations of HUD, Annual Homeless Assessment Report Point-in-Time Estimates.

12 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 12: Eviction Filings Are Near Historic Averages Following the Expiration of Pandemic Relief Measures



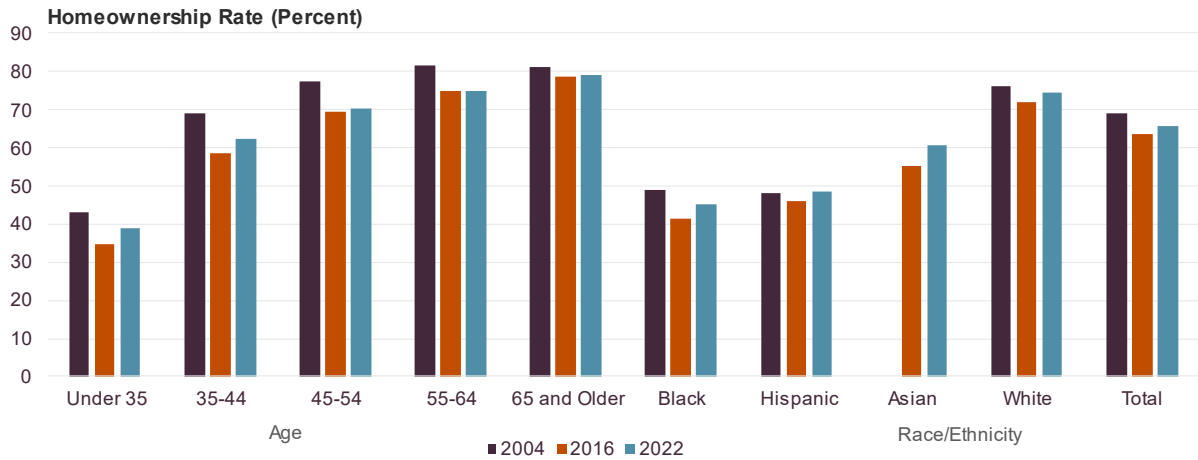
Note: Data include eviction filings in 6 states and 31 cities. Averages are from 2016-2019.

Source: JCHS tabulations of Eviction Lab, Eviction Tracking System through October 31, 2022.

13 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 13: Homeownership Rates Have Rebounded from Post-Recession Lows but Remain Well Below Previous Highs

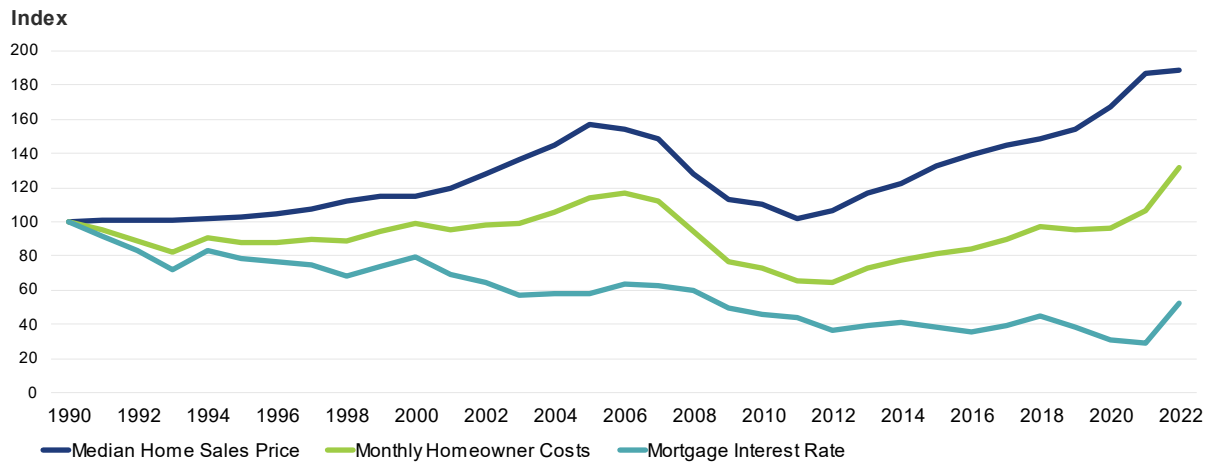


Note: Hispanics may be of any race.
Source: US Census Bureau, Housing Vacancy Survey.

14 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University **JCHS**

Figure 14: Rising Interest Rates Have Dramatically Increased Monthly Cost of Owning After Long Period of Relatively Favorable Affordability



Notes: House prices and monthly homeowner costs are adjusted to 2020 dollars using the GDP for All Items less shelter. Monthly homeowner costs assume a 3.5% downpayment on a median-priced, existing single-family home (including condos and coops); property taxes of 1.15%, property insurance of 0.5%, and mortgage insurance of 0.85%.

Source: JCHS tabulations of Moody's Analytics estimates; US Census Bureau, Current Population Surveys; and Freddie Mac, Primary Mortgage Market Surveys.

15 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University **JCHS**

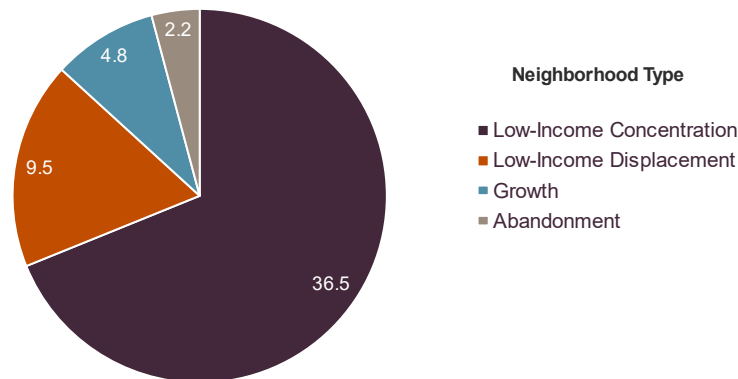
Figure 15: Recent Interest Rate Hikes on Top of Rapid Price Increases Have Greatly Eroded Homebuyer Affordability

	April 2021	April 2022	July 2022	Dec 2022
Interest Rate (Percent)	3.06	4.98	5.41	6.36
Median Home Price (Dollars)	340,700	391,200	403,800	366,900
Downpayment & Closing Costs	22,100	25,400	26,250	23,800
Monthly Mortgage Payment	1,400	2,020	2,190	2,200
Total Monthly Owner Costs	2,060	2,780	2,970	2,910
Annual Income Needed	\$79,600	\$107,600	\$115,000	\$112,600

Note: Estimates assume 3.5% downpayment on a 30-year fixed rate loan with zero points, 0.85% mortgage insurance, 0.35% property taxes, 1.15% property taxes, 3% closing costs, and a maximum 31% debt to income ratio.
 Source: JCHS tabulations of Freddie Mac, Primary Mortgage Market Surveys; NAR, Existing Home Sales.

Figure 16: Between 2000 and 2016 Neighborhood Decline Was More Common than Gentrification

Number of Residents in Neighborhoods Experiencing Population Change 2000-2016 (Millions)

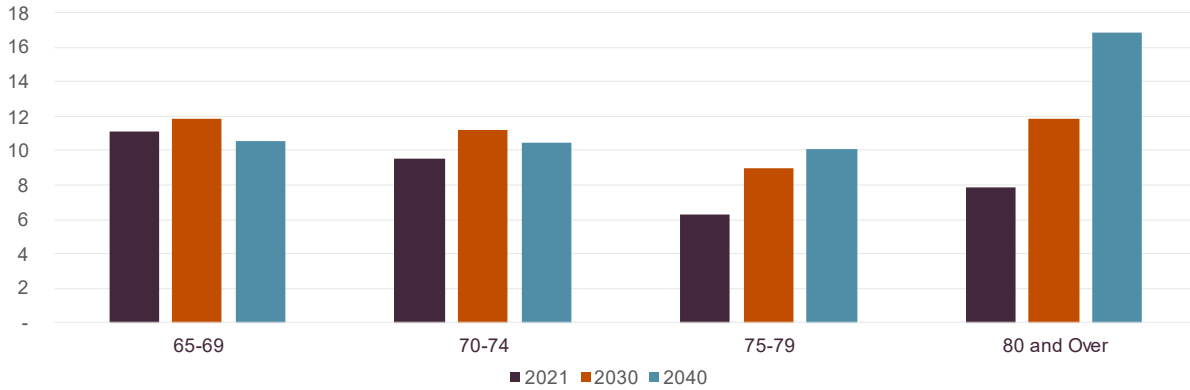


Note: Neighborhood change based on change in population above and below 200 percent of the federal poverty line. See [our study](#) for detailed definition of categories of neighborhood change.

Source: Institute on Metropolitan Opportunity (2019), "American Neighborhood Change in the 21st Century." Research Report: https://www.law.umn.edu/sites/law.umn.edu/files/media/american_neighborhood_change_in_the_21st_century_full_report_4-1-2019.pdf

Figure 17: The Number of Households Headed by Someone Age 80 or Over Will Double by 2040

Households by Age of Household Head (Millions)



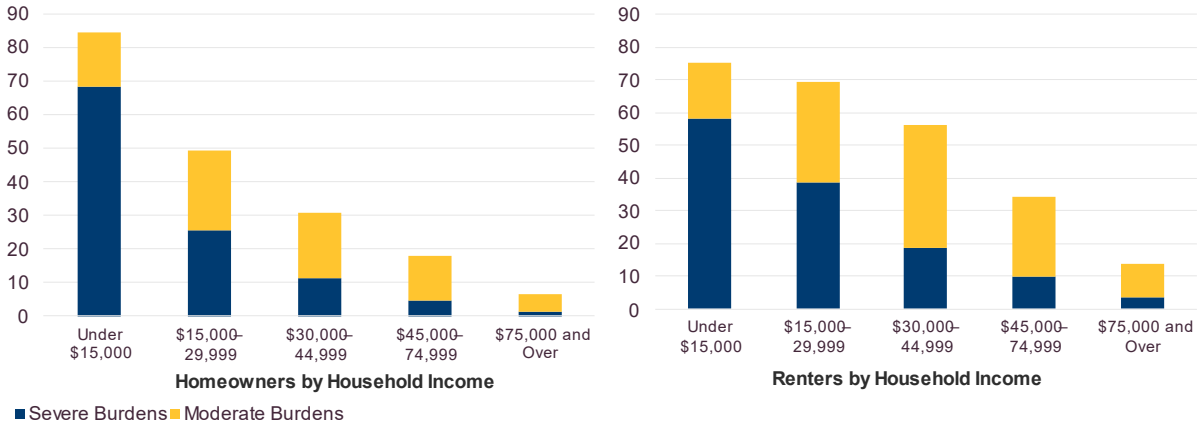
Note: Projections use Census 2017 population projections with low immigration scenario. Projections have been benchmarked with 2021 actual population. Source: JCHS household projections.

18 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 18: Lowest -Income Older Owners and Renters are Highly Cost Burdened , but So Too Are Moderate-Income Older Renters

Share of Cost Burdened Households Age 65 and Over (Percent)

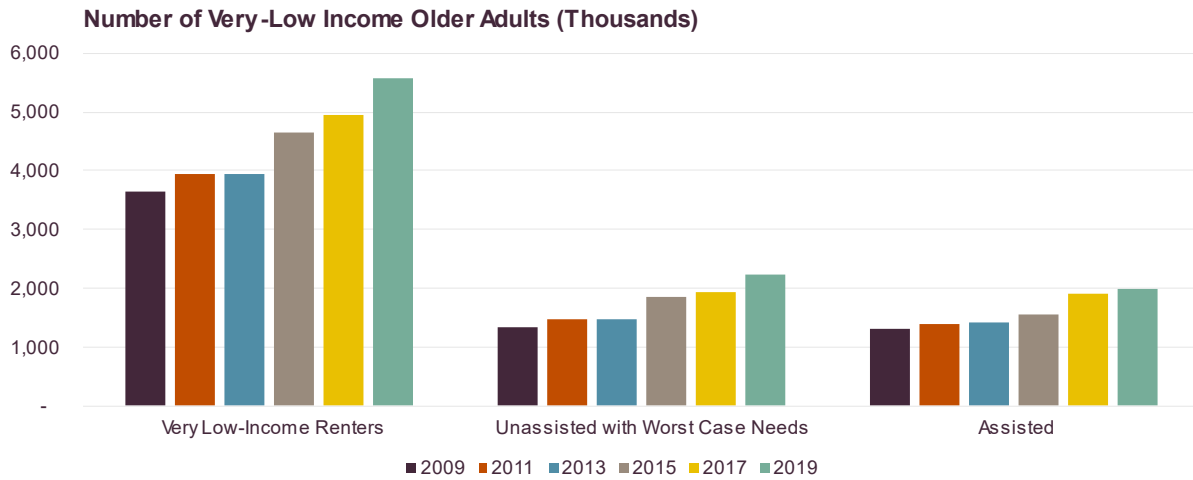


Note: Moderate (severe) cost burdens are defined as housing costs of 30% (more than 50%) of household income. Households with zero or negative income are assumed to be severely burdened, while renters not paying cash are assumed to be unburdened. Source: JCHS tabulations of US Census Bureau, 2021 American Community Survey Year Estimates.

19 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 19: The Number of Very-Low Income Older Renters with Worst Case Housing Needs Has Been Increasing Sharply



Notes: Older adults are age 62 and over. Unassisted with severe problems have severe cost burdens, live in severely inadequate housing, or both. Very low income older adults earn below 50 percent of area median income.

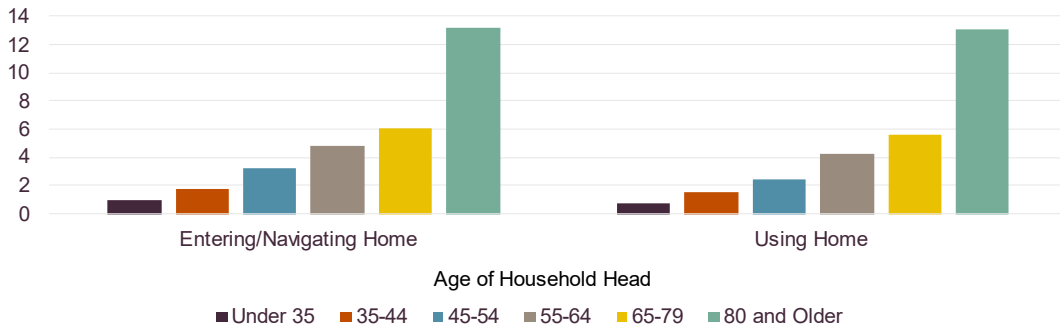
Source: JCHS analysis of Table A-5A, Worst Case Housing Needs Reports to Congress 2009-2019.

20 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 20: Older Households Are More Likely to Report Difficulties Entering, Navigating, and Using Their Homes

Share of Households Reporting Difficulty Entering, Navigating, and Using Home (Percent)



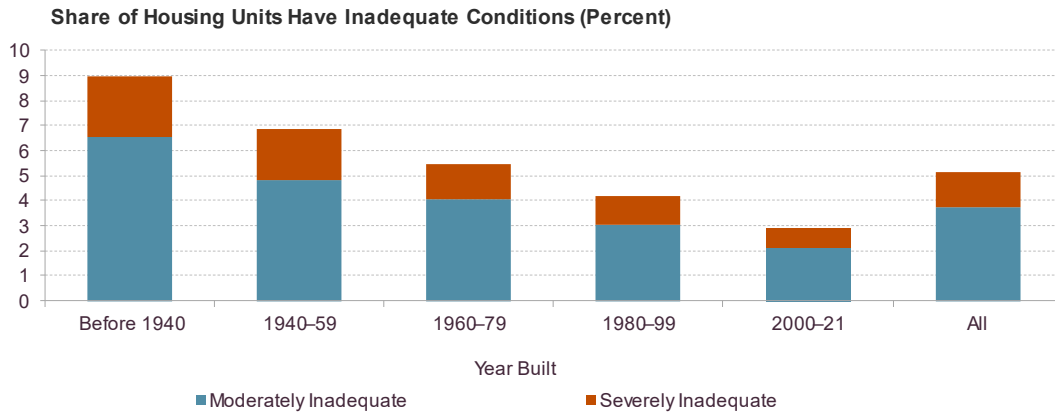
Note: Difficulties entering, navigating, and using the home without assistance are the result of a condition other than a physical injury and apply to occupants over 6 years old.

Source: JCHS tabulations of HUD, 2019 American Housing Survey.

21 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University JCHS

Figure 21: Housing Inadequacy is More Common in Older Homes



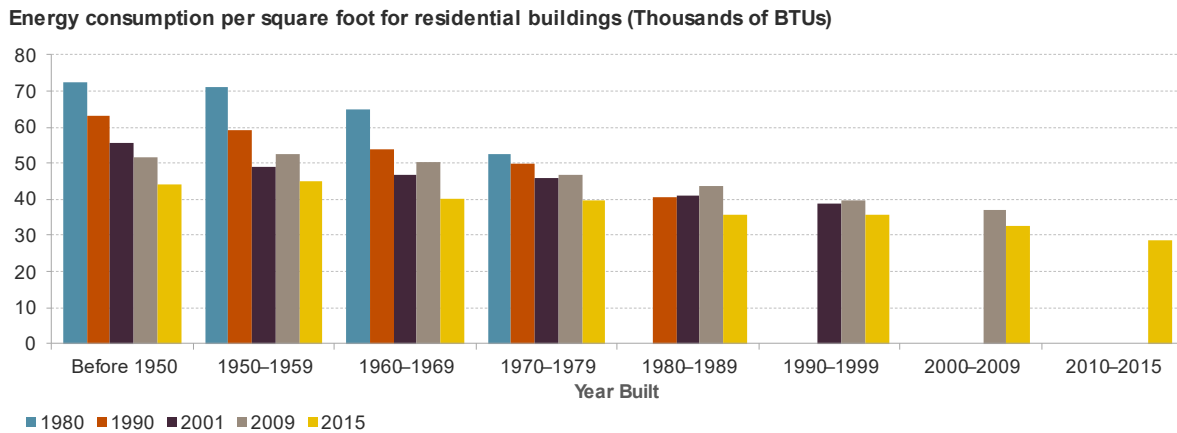
Notes: Housing inadequacy refers to a variety of structural deficiencies, such as large holes and leaks or the absence of basic features such as plumbing, electricity, water, or heat. HUD classifies units as moderately or severely inadequate depending on the type and number of these physical problem

Source: JCHS tabulations of HUD, 2021 American Housing Survey.

22 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University 

Figure 22: Remodeling Has Helped Improve the Energy Efficiency of the Existing Housing Stock

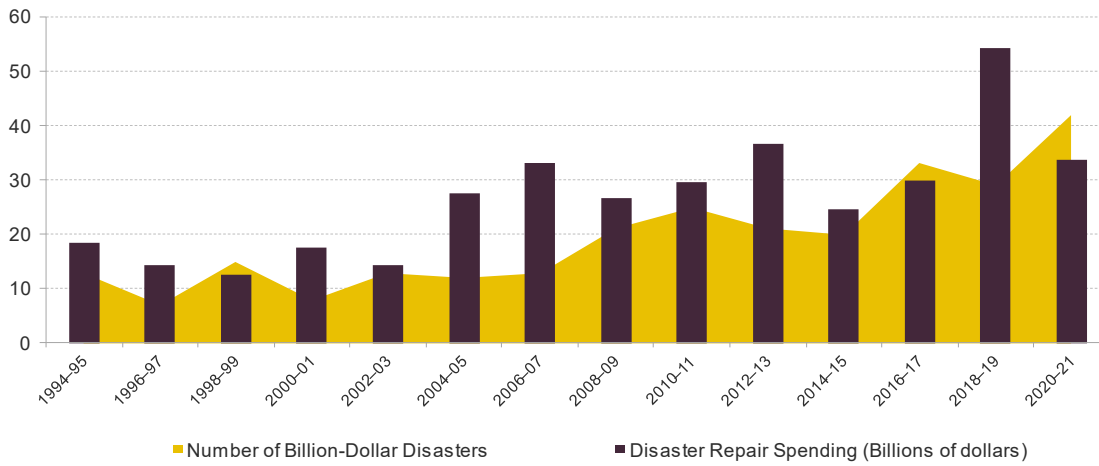


Source: US Department of Energy, Energy Information Administration, Residential Energy Consumption Survey 2005.

23 | © PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Joint Center for Housing Studies of Harvard University 

Figure 23: Size of the Disaster Reconstruction Market Has Grown with More Frequent and Severe Storms



Notes: Billion-dollar disasters are events that generate over \$1 billion in damages after adjusting for inflation. Disaster repair spending is to owner-occupied homes.
 Source: JCHS tabulations of NOAA, US Billion-Dollar Weather and Climate Disasters; and HUD, American Housing Surveys.