

# U.S. Housing Supply: Recent Trends and Policy Considerations

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At the national level, several measures indicate that housing supply may be relatively low. Local housing market conditions can vary substantially, and national indicators do not necessarily accurately reflect conditions in a particular local market. These national indicators seem to suggest, however, that supply constraints may be an important factor in many housing markets across the country. A few key points are summarized below.

- When accounting for population, the housing stock (total number of housing units) remained largely unchanged between 1980 and 2022.
- Across rental and owner-occupied markets, vacancy rates have decreased since the housing market crash and financial crisis of 2007-2009. Vacancy rates dipped further during the COVID-19 pandemic and hit several-decade lows in 2022.
- The number of single-family homes available for sale each year has trended downward since 2000 but particularly after the housing crisis of 2007-2009.
- New housing units, as measured by total population-controlled housing starts (housing starts divided by total population), have trended downwards in recent decades, most notably after the 2007-2009 crisis. Total starts rose at a relatively slow pace in the years after, never recovering to pre-2007 levels. (Starts for multifamily rental properties increased over this period but represent a small portion of total starts.)
- Several research organizations have found evidence of supply or underbuilding gaps in the U.S. housing market, although estimates of the number of units needed to close this gap differ.

Relatively low housing supply, especially when demand for housing is strong, can cause undesirable frictions in the housing market. One of the main results of low supply has been decreasing affordability. Prices for both homeowners and renters have increased over recent decades, even when controlling for inflation and income. Rental and owned-housing affordability indexes have also shown a trend of decreasing affordability in the past decade, and cost burdens are fairly widespread for those at or below median income. Additional issues may arise at the local level, such as housing shortages based on job growth or demographic changes in a particular location, and individual preferences may be harder for the housing market to meet due to supply or price constraints.

Identifying the main causes of lagging housing supply can be important not only in understanding the issue but also in considering potential policy options to increase supply without increasing price. In recent decades, increasing regulatory costs, restrictive zoning and land use, and changing demographics have contributed to supply issues. The housing market crash in 2007 significantly impacted supply, with the construction industry (and therefore new housing construction) never fully recovering and therefore contributing to the underbuilding gap. In more recent years, disruptions from the COVID-19 pandemic and rising inflation have increased costs of inputs to construction, and policies to counteract rising inflation have increased mortgage financing costs. On a longer-term horizon, climate change may be a risk to housing supply should natural disasters increase in frequency or intensity, as they have in recent years.

Given the specific challenges facing housing supply, policy considerations may differ notably at the local level and national level. Policymakers may be equally interested in local and national supply issues and policies. Further, many of the supply constraints discussed in this report are regulated at the local level. To the extent that the federal government has policy authority in national and local housing markets, Congress may have influence in shifting the housing supply curve when it comes to the inputs to building new units and refurbishing existing ones, potentially by incentivizing local zoning reform and construction, among other things.

For related issues and background on the housing market, see CRS Report R46855, *Housing Issues in the 117th Congress*, coordinated by Katie Jones.

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## Introduction and Economic Context

While the national housing market may be marked by certain characteristics, the supply and demand for housing may vary notably locally across the country. Supply conditions can vary greatly from place to place depending on historical factors, construction trends, and pre-existing stock and infrastructure. Job markets, infrastructure, public transportation, and density all differ among locations and can contribute to changing demographics and household characteristics. These local differences can influence the demand to own or rent and whether to do so in a detached dwelling or multifamily structure. The result can be large variations in price and availability across localities.

Supply and demand for housing are fairly fixed in the short term. On the supply side, new homes cannot be built—nor can existing homes be refurbished—overnight. Constructing or renovating housing is a lengthy process, and delays and disruptions may occur at any step. First, land must be available. The available land must be properly zoned for the type of housing being built. Owners/builders must secure financing, obtain necessary permits, and potentially wait for environmental studies to be conducted. Plans must be submitted to local governments to ensure compliance with all building codes and local ordinances. (In certain scenarios, homeowners' associations or other organizations may have to be consulted.) Once the construction process begins, the necessary raw materials, machinery, and labor could prove scarce. Once housing is built, final inspections are generally required before occupancy. All in all, depending on the type and location of housing, this process can take several years and could include unforeseen delays and disruptions. Many projects never actually come to fruition. All of this is to say that meaningfully changing the amount of housing available across price points takes time.<sup>1</sup>

On the demand side, at the national level, the population ultimately determines the demand for housing. Trends over time in demographics and household formation can change the level of demand, but in the short term, absent a shock to the housing market (such as during the COVID-19 pandemic), demand is fairly static.<sup>2</sup> There are a certain number of people, and all of those people presumably want shelter.

This report focuses on the important policy question of whether there is enough housing generally for the population. Related to this is another policy question: What can policymakers do to expand the supply of housing, and what can they not do? Lastly, there is the question of whether there is adequate housing locally that meets individual preferences. While this report focuses on the first and second questions and discusses national-level trends and policy considerations, local-level considerations can provide important context for aggregate trends, and as such, this report briefly discusses certain local considerations, as relevant.

This report first discusses various metrics and customary interpretations of housing supply (in relation to housing demand) and how those trends affect other aspects of the housing market. The report then discusses factors that have contributed to housing market trends in recent decades and considers potential policy options available to Congress.

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<sup>1</sup> See CRS In Focus IF12048, *High Home Prices: Contributing Factors and Policy Considerations*, by Mark P. Keightley and Lida R. Weinstock.

<sup>2</sup> For example, see David Albouy, Gabriel Ehrlich, and Yingyi Liu, *Housing Demand, Cost-of-Living Inequality, and the Affordability Crisis*, National Bureau of Economic Research, Working Paper no. 22816, November 2016, p. 2, [https://www.nber.org/system/files/working\\_papers/w22816/w22816.pdf](https://www.nber.org/system/files/working_papers/w22816/w22816.pdf).

## Trends in Housing Supply<sup>3</sup>

No single metric paints a complete picture of the housing supply in the United States. Instead, economists rely on several measures to summarize the housing supply. These measures are not always comparable, and they do not always segment clearly. This section discusses a few such measures, including stock, vacancy rates, inventory, and construction metrics. Where possible, owner-occupied versus rental markets are parsed, although this is not entirely possible with all of the data.<sup>4</sup> Additionally, owner-occupied and rental housing markets interact with one another. Homes can transition between being owner-occupied and rented, and this directly affects how much of each type of housing exists. For the purposes of analysis in this report, the focus is on overall supply (inclusive of all housing types). Data are caveated as necessary.

### Housing Stock

One of the clearest ways of thinking about housing supply is to look at how many housing units exist in the country.<sup>5</sup> As shown in **Figure 1**, the number of housing units in the United States increased at a fairly steady rate between 1980 and 2022. The population of the United States also grew over this time. When accounting for population ages 16 and over, the number of housing units was essentially stagnant over this period, with the number of housing units fluctuating between 0.5 and 0.6 per person.<sup>6</sup> Data used here do not account for the rate at which a single household may own or rent multiple housing units or the rate of household formation. A steady housing stock indicates steady supply over time and therefore does not necessarily indicate a housing supply issue. However, overall housing stock numbers do not provide information about changes in the type, size, or quality of housing.

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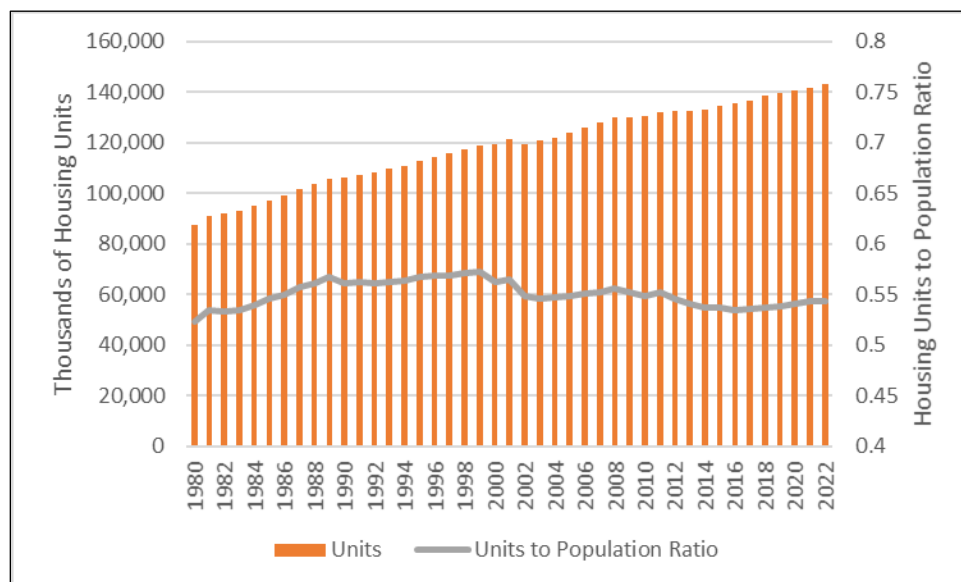
<sup>3</sup> For more details on overall housing market trends and current housing policy issues, see CRS Report R46855, *Housing Issues in the 117th Congress*, coordinated by Katie Jones.

<sup>4</sup> For example, single-unit, detached homes are sometimes used as a proxy for owner-occupied homes, but, in actuality, a growing percentage of that market is rentals.

<sup>5</sup> Census defines *housing unit* as “a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters.” See <https://www.census.gov/housing/hvs/definitions.pdf>.

<sup>6</sup> This type of statistic could be calculated in various ways and using various types of population data. This is only one methodology and may not be illustrative of all other methodologies.

**Figure 1. Total Housing Units**  
1980-2022



**Source:** CRS calculations based on Census Bureau, *Housing Vacancies and Homeownership Historical Tables*, Table 7. Annual Estimates of the Housing Inventory: 1965 to Present, <https://www.census.gov/housing/hvs/data/histtabs.html>; and Bureau of Labor Statistics (BLS), "Current Population Survey," <https://www.bls.gov/cps/data.htm>.

**Notes:** Figure uses population based on BLS definition of *civilian noninstitutional population* for those ages 16 and older. This includes all people residing in the United States who are not on active duty in the military or in institutions, such as prison. Foreigners residing in the United States are included in this number. BLS does not provide the civilian noninstitutional population for all other age groups back to 1980. For more information, see BLS, "Current Population Survey: Concepts," <https://www.bls.gov/opub/hom/cps/concepts.htm>. Housing data are affected by revisions in 1981, 1989, 1993, and 2002.

## Vacancy Rates

Vacancy rates measure how much housing inventory is vacant at a given time. Housing units could be vacant for a variety of reasons, such as being on the market for sale or rent or in the middle of renovations. From 1980 to 2007, the amount of vacant owner-occupied and rental housing units as a percentage of all units was somewhat volatile but did not have a discernible trend.<sup>7</sup> **Figure 2** shows the vacancy rate since 1980 for owned homes, while **Figure 3** shows the vacancy rate for rented homes over the same period.<sup>8</sup> In general, for the structures with comparable units, the vacancy rate for rental units has been higher than that for owned homes. However, across types of properties and markets, vacancy rates have decreased since the housing

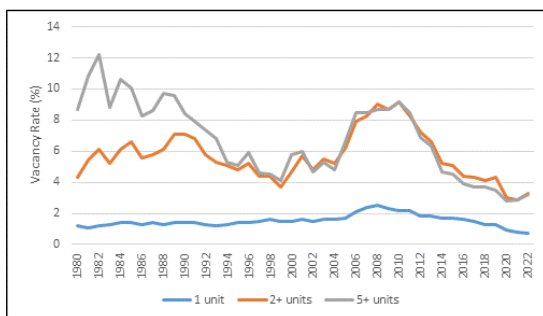
<sup>7</sup> From the first quarter of 1980 to the first quarter of 2023 the owner vacancy rate went from 1.3% to 0.8%, and the rental vacancy rate went from 5.2% to 6.4%. See Census Bureau, *Housing Vacancies and Homeownership Historical Tables*, Table 1. Quarterly Rental Vacancy Rates: 1956 to Present, and Table 2. Quarterly Homeowner Vacancy Rates: 1956 to Present, <https://www.census.gov/housing/hvs/data/histtabs.html>.

<sup>8</sup> Census calculates the rental vacancy rate, expressed as a percentage, by dividing the number of vacant year-round units for rent by the sum of renter-occupied units, vacant year-round units rented but awaiting occupancy, and vacant year-round units for rent. Census calculates the homeowner vacancy rate, expressed as a percentage, by dividing the number of vacant year-round units for sale by the sum of owner-occupied units, vacant year-round units sold but awaiting occupancy, and vacant year-round units for sale. *Year-round units* is defined as those intended for occupancy at any time, even if they are not always in use. See Census Bureau, *Current Population Survey Design and Methodology*, October 2006, pp. 11-2, 11-4, <https://www.census.gov/housing/hvs/files/tp-66.pdf>.

market crash and financial crisis of 2007-2009. Vacancy rates dipped further during the COVID-19 pandemic and hit several-decade lows in 2022. Altogether, the current vacancy rates indicate relatively low housing availability.<sup>9</sup>

**Figure 2. Homeowner Vacancy Rate**

1980-2022

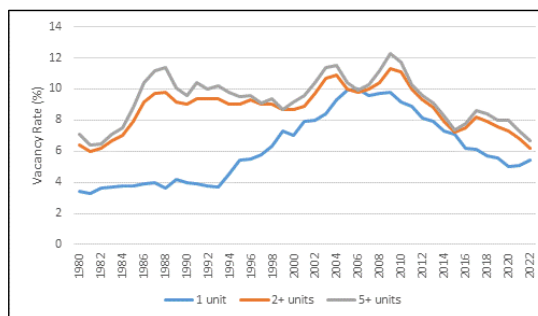


**Source:** Census, *Housing Vacancy and Homeownership Historical Tables*, Table 6, <https://www.census.gov/housing/hvs/data/histtabs.html>.

**Notes:** Figure uses data that incorporate most recent American Housing Survey data for number of units in a structure. Data are affected by revisions in 1993 and 2002.

**Figure 3. Rental Vacancy Rate**

1980-2022



**Source:** Census, *Housing Vacancy and Homeownership Historical Tables*, Table 5, <https://www.census.gov/housing/hvs/data/histtabs.html>.

**Notes:** Figure uses data that incorporate most recent American Housing Survey data for number of units in a structure. Data are affected by revisions in 1993 and 2002.

## Available Single-Family Housing Inventory

The number of single-family homes for sale each year has trended downward since 2000 but particularly after the housing crisis of 2007-2009, as shown in **Figure 4**.<sup>10</sup> The total number of single-family units for sale decreased each year since 2018, hitting a two-decade low in 2021. New homes for sale actually increased over this period but still remained below their 2006 peak. The recent decrease in single-family homes for sale was a result of significant decreases in the availability of existing homes, which was four times smaller in 2021 than in 2007, when it peaked.

*Months' supply of housing* measures the balance of supply and demand in the housing market. It is calculated as the ratio of active listings at the end of a month to the number of sales during that month, and it indicates how long current for-sale inventory would last if no new homes went on the market.<sup>11</sup> While there is some disagreement about the exact amount of supply that would constitute a balanced housing market—one in which price appreciation is relatively stable—many housing economists typically put that number around between four and six months.<sup>12</sup> What

<sup>9</sup> For more information about quarterly vacancy rates during the housing crisis and pandemic, see Census, *Housing Vacancy Rates Near Historic Lows*, March 12, 2022, <https://www.census.gov/library/stories/2022/05/housing-vacancy-rates-near-historic-lows.html>.

<sup>10</sup> The data in this section are focused on single-family homes available for sale. However, once sold, a home could be occupied by the owner or rented by the owner.

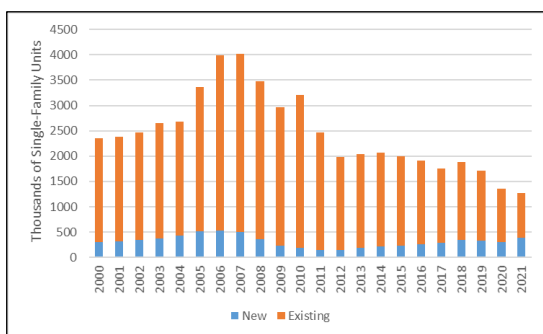
<sup>11</sup> Wichita State University Center for Real Estate, "What Is 'Months' Supply'?", <https://realestate.wichita.edu/question/what-is-months-supply/>.

<sup>12</sup> For example, see National Association of Realtors (NAR), "Inventory and Months' Supply," January 22, 2021, <https://www.nar.realtor/blogs/economists-outlook/inventory-and-months-supply>; and Redfin, "Real Estate Glossary: Definition of Months of Supply," <https://www.redfin.com/definition/monthsof-supply>.



constitutes a balanced housing market may additionally differ from place to place. A lower number generally indicates that there are relatively few sellers compared to buyers. Assuming four to six months' supply indicates a housing market in equilibrium, anything above six months indicates a surplus of housing, and anything below four months indicates a shortage. As shown in **Figure 5**, the months' supply of homes has trended downward since the housing crisis. The months' supply of new homes is higher than that of existing homes, which has been lower than pre-crisis for several years. The months' supply of new homes most recently indicates equilibrium in that market, but the months' supply of existing homes indicates a shortage over the past few years.

**Figure 4. Inventory of Single-Family Homes for Sale**  
2000-2021



**Source:** Department of Housing and Urban Development (HUD) U.S. Housing Market Conditions data, which uses data from the National Association of Realtors (NAR), [https://www.huduser.gov/portal/ushmc/hs\\_newsfs.html](https://www.huduser.gov/portal/ushmc/hs_newsfs.html).

**Note:** Existing homes data are not available prior to 1999.

**Figure 5. Months' Supply of Single-Family Homes**  
2000-2021



**Source:** HUD and NAR via HUD, [https://www.huduser.gov/portal/ushmc/hs\\_newsfs.html](https://www.huduser.gov/portal/ushmc/hs_newsfs.html).

**Notes:** Existing homes data are not available prior to 1999. Dashed gray lines represent the range of balanced months' supply. Values above this range represent a surplus of homes, and values below this range represent a shortage of homes.

When the months' supply of homes is evaluated along with the relatively low inventory of homes for sale, the combination would suggest low supply to satisfy the demand in the single-family homes market.

## Housing Construction

Low inventory and vacancy rates in the national housing market would generally signal to homebuilders that with a demand for more units, they may be able to receive higher prices in the future, prompting them to increase construction. There are several metrics to measure the level of construction in the United States, including new permits, starts, completions, units currently under construction, and private spending on construction.

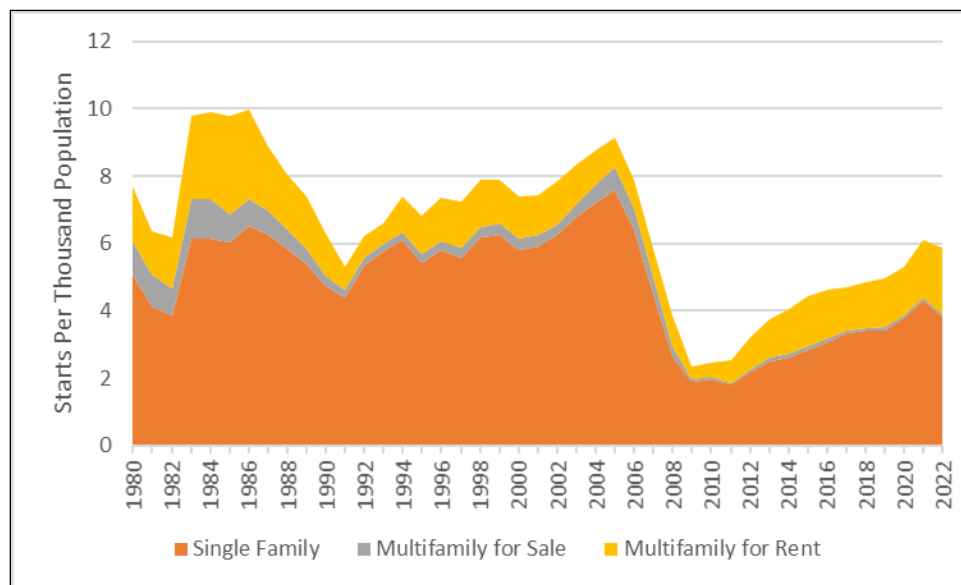
**Figure 6** below shows population-controlled housing starts (starts divided by total population) since 1980. Although somewhat cyclical with the business cycle, housing starts have more recently trended downward.<sup>13</sup> Notably, housing starts fell rapidly after the housing and financial

<sup>13</sup> An additional facet to declining construction is declining construction of specific types of housing. For example, the share of construction of "starter homes"—single family homes of 1,400 square feet or less—has been trending (continued...)



crisis of 2007-2009, then rose at a much slower pace in the years after, and never fully recovered to pre-2007 levels. Despite the declining vacancy rates in 2022, construction starts actually decreased in 2022.

**Figure 6. Ratio of New Privately Owned Housing Units Started to Population**  
1980-2022



**Sources:** U.S. Census Bureau, “New Residential Construction Historical Data, Housing Units Started by Purpose and Design,” [https://www.census.gov/construction/nrc/historical\\_data/index.html](https://www.census.gov/construction/nrc/historical_data/index.html); and BLS, “Current Population Survey,” <https://www.bls.gov/cps/data.htm>.

**Notes:** Single family data are not disaggregated by for sale versus rent. Figure uses population based on BLS definition of *civilian noninstitutional population* for those ages 16 and older.

The pace of residential construction is subject to the availability of labor, supply chains, and financing costs, which may have contributed to what has been referred to as an *underbuilding gap* in recent decades.<sup>14</sup> While the exact magnitude of the underbuilding of housing units is debatable, many observers agree that the gap exists and puts upward pressures on housing prices.<sup>15</sup>

downward over the past several decades. This alone does not necessarily contribute to low supply of all units but may have negative consequences for specific demographic groups or specific local markets. However, such trends are not within the scope of this report. See Sam Khater, “The Housing Supply Shortage,” Freddie Mac Presentation for the Bipartisan Policy Center, December 2021, <https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2021/12/BPC-Final-Supply-Presentation.pdf>.

<sup>14</sup> For example, see Bipartisan Policy Center, “Getting Serious About Housing Supply Series,” <https://bipartisanpolicy.org/getting-serious-about-housing-supply-series/>.

<sup>15</sup> For example, a report from NAR suggests an underbuilding gap of 5.5 million units from 2000 to 2020 and a cumulative gap of 6.8 million units in 2020. Using different methodology, Freddie Mac estimated a gap of 3.8 million units in 2020. In either case, the gap is significant. See Kenneth T. Rosen et al., “Housing Is Critical Infrastructure: Social and Economic Benefits of Building More Housing,” Rosen Consulting Group for NAR, June 2021, <https://cdn.nar.realtor/sites/default/files/documents/Housing-is-Critical-Infrastructure-Social-and-Economic-Benefits-of-Building-More-Housing-6-15-2021.pdf>; and Freddie Mac, “Housing Supply: A Growing Deficit,” May 7, 2021, <https://www.freddiemac.com/research/insight/20210507-housing-supply>. For a review of the above and additional estimates of housing gaps, see Annie Lowrey, “The U.S. Needs More Housing Than Almost Anyone Can Imagine,” *The Atlantic*, November 21, 2022, <https://www.theatlantic.com/ideas/archive/2022/11/us-housing-gap-cost-affordability-big-cities/672184/>.

## Consequences of Low Housing Supply

Metrics of housing supply offer mixed evidence on the overall supply of housing. On the one hand, the housing stock has remained steady over the past several decades. On the other hand, housing construction has trended downward and inventories are relatively low. To determine if housing supply is low (relative to housing demand), economists often look to wider housing market conditions. Relatively low housing supply, especially when demand for housing is strong, can cause undesirable frictions in the economy. This section provides a brief overview of selected notable issues that can and have arisen from low supply, including rising prices and a lack of housing options.

Evidence suggests that low supply may be an issue concentrated in particular markets, for particular types of housing, or at particular price points. For example, even if enough housing units exist in the aggregate, there may not be enough housing units that are available and affordable to certain income brackets. Such discussions are largely outside the scope of this report, but this section briefly highlights certain statistics that support the idea that supply issues may be concentrated.

## Affordability Implications

In economics, price changes are a direct result of changing supply, demand, or both in a particular market. The housing market has been no exception. With strong demand for housing, but lagging supply, prices have increased. For example, when many people bid on a smaller set of houses, the final prices are likely to be higher compared to when there is a larger set of houses available for sale. As illustrated in **Figure 7** and **Figure 8**, prices for both homeowners and renters have increased over recent decades, even when accounting for inflation or income.<sup>16</sup> Prices can also rise due to improvements in the quality of housing. Certain measures account for quality changes. For example, the U.S. Federal Housing Finance Agency produces house price indexes based on repeat transactions on the same physical property units, which helps to control for differences in housing quality in its sample.<sup>17</sup> According to this measure, for owner-occupied single-family properties, year-over-year price increases have been positive since the early 1990s, apart from the period during and immediately after the housing crisis (2007-2011).<sup>18</sup>

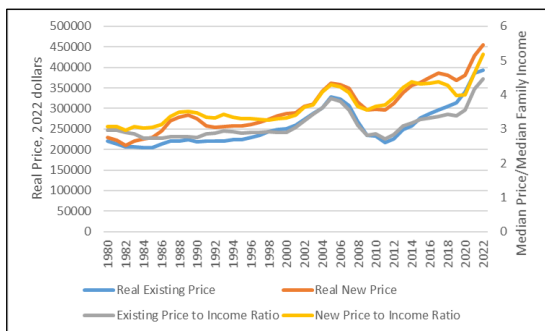
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<sup>16</sup> **Figure 7** and **Figure 8** do not account for the entire housing market. Notably, owned units in multifamily buildings are not included.

<sup>17</sup> Charles A. Calhoun, *OFHEO House Price Indexes: HPI Technical Description*, March 1996, p. 1, [https://www.fhfa.gov/PolicyProgramsResearch/Research/PaperDocuments/1996-03\\_HPI\\_TechDescription\\_N508.pdf](https://www.fhfa.gov/PolicyProgramsResearch/Research/PaperDocuments/1996-03_HPI_TechDescription_N508.pdf).

<sup>18</sup> Federal Housing Finance Agency (FHFA) House Price Index Datasets are available for download at <https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#mpo>.

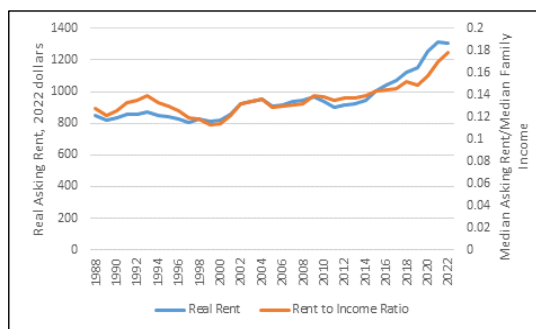
**Figure 7. Real Home Prices and Ratio of Single-Family Median Home Price to Income**  
1980-2022



**Sources:** CRS calculations based on HUD's U.S. Housing Market Conditions reports, which use data from NAR for existing home prices and the Census American Community Survey for median family income, available at [https://www.huduser.gov/portal/ushmc/hd\\_home\\_prices.html](https://www.huduser.gov/portal/ushmc/hd_home_prices.html). Inflation data are from the BLS Consumer Price Index (CPI), <https://www.bls.gov/cpi/data.htm>.

**Notes:** Median family income was used for consistency with HUD methodology for affordability considerations. Owned units in multifamily buildings are not included.

**Figure 8. Real Rent and Ratio of Median Asking Rent to Income**  
1988-2022



**Sources:** CRS calculations based on Census Current Population Survey and Housing Vacancy Survey Historical Table I1A. Quarterly Median Asking Rent: 1988 to Present, available at <https://www.census.gov/housing/hvs/data/histabs.html>. Inflation data are from the CPI, and median family income data are from the American Community Survey.

**Notes:** Data are affected by revisions in 1989, 1993, and 2002.

In addition to actual prices, housing and rental affordability indexes can also be useful to consider. NAR calculates a housing affordability index that measures whether a family with median income can qualify for a mortgage on a median-priced home with a 20% down payment.<sup>19</sup> Mortgage affordability is a function of mortgage interest rates as well as home prices, meaning that mortgages can become more affordable because interest rates decreased, prices decreased, or both. Since 1980, the affordability index for fixed-rate mortgages has generally trended upward, meaning that home buying became more affordable. Even though house prices were increasing over this period, low mortgage rates enhanced affordability. Affordability has trended downward since 2012—decreasing notably between 2020 and 2022—but still remains at an index value that indicates a family with median income can afford a median fixed rate mortgage.<sup>20</sup>

The U.S. Department of Housing and Urban Development (HUD) calculates a rental affordability index that considers “whether a typical renter household has enough income to qualify for a lease on a typical rental home at the national level” based on median income among renters and the

<sup>19</sup> NAR no longer produces the Housing Affordability Index Composite Index owing to FHFA’s discontinuation of the release of certain mortgage rates. As such, this CRS report considers only the index for fixed-rate mortgages, which NAR continues to produce. For more details, see NAR, “Housing Affordability Index,” <https://www.nar.realtor/research-and-statistics/housing-statistics/housing-affordability-index>.

<sup>20</sup> For Fixed-Rate Housing Affordability Index, see U.S. Department of Housing and Urban Development (HUD), “U.S. Housing Market Conditions National Housing Market Summary and Data,” Fixed-Rate HAI, [https://www.huduser.gov/portal/ushmc/hd\\_hsg\\_aff.html](https://www.huduser.gov/portal/ushmc/hd_hsg_aff.html).

median price of rental units.<sup>21</sup> Based on HUD’s methodology, rent affordability trended downward between 2001 and 2021 and hit an index level below 100 in 2021, indicating that the typical renter household did not have the income required to qualify for a lease on a typical rental home.<sup>22</sup>

Another indication that lower affordability has become a widespread issue in housing markets is high rates of cost burden among renters and homeowners. (By standard definition, cost-burdened households spend more than 30% of household income on rent or mortgage payments.<sup>23</sup>) According to a recent Fannie Mae analysis, across the 30 most populous core-based statistical areas,<sup>24</sup> between 30% and 60% of owner households earning median income or less for their areas were cost-burdened, and between 50% and 90% of analogous renter households were cost-burdened in 2019.<sup>25</sup> The Harvard Joint Center for Housing Studies analyzed cost burdens by income bracket using 2020 data. According to this analysis, cost burdens are more widespread among lower-income households, with over 70% of households making under \$30,000 cost-burdened and almost 50% of households making between \$30,000 and \$44,999 cost-burdened.<sup>26</sup>

## Housing Mismatch in Local Markets

Perhaps the most obvious result of low supply in the housing market is an actual lack of adequate housing. NAR creates a housing “shortage” tracker that compares new permits to new jobs in metropolitan areas.<sup>27</sup> According to NAR, the historical average across metropolitan areas is one permit per every two new jobs, which NAR categorizes as sufficient supply.<sup>28</sup> A majority of metropolitan areas do not meet this criterion. A little over half of the areas considered by NAR have one permit per three or more new jobs. Based on single-family permits only, there are even

<sup>21</sup> This index assumes that to qualify for a lease, a household must have an annual income of which the rent in question is 30% or less. See HUD, “HUD’s New Rental Affordability Index,” November 7, 2016, <https://www.huduser.gov/portal/pdredge/pdr-edge-trending-110716.html>. Some question the use of housing cost to income ratio as an appropriate measure of affordability, because such ratios do not account for the fact that the housing costs incurred by a household are partly a choice rather than a necessity. For example, some households may choose to pay more than 30% of their income on rent for the convenience of living closer to work or having a larger unit with better amenities. Opponents of the 30% affordability threshold also point out that this measure implies that a household must have at least 70% of its income left for non-housing-related spending. But this suggests that a household making, for example, \$40,000 needs twice as much money for non-housing spending than an identical household earning \$20,000 (\$28,000 vs. \$14,000, respectively).

<sup>22</sup> HUD, “U.S. Housing Market Conditions National Housing Market Summary and Data,” Rental Affordability Index, [https://www.huduser.gov/portal/ushmc/hd\\_rai.html](https://www.huduser.gov/portal/ushmc/hd_rai.html).

<sup>23</sup> Some households, particularly those at the higher end of the income distribution, may choose to be cost-burdened.

<sup>24</sup> According to 2020 standards for delineating core-based statistical areas, they are defined as “a geographic entity associated with at least one core of 10,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.” See Office of Management and Budget, Office of Information and Regulatory Affairs, “2020 Standards for Delineating Core Based Statistical Areas,” 86 *Federal Register* 37770-37778, July 16, 2021.

<sup>25</sup> Kim Betancourt et al., “The U.S. Housing Shortage from a Local Perspective,” *Fannie Mae*, October 2022, p. 8, <https://www.fanniemae.com/media/45106/display>.

<sup>26</sup> Harvard University, Joint Center for Housing Studies, *The State of the Nation’s Housing 2022*, p. 7, [https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard\\_JCHS\\_State\\_Nations\\_Housing\\_2022.pdf](https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_State_Nations_Housing_2022.pdf).

<sup>27</sup> *Metropolitan area* is defined as an area with at least 100,000 total non-farm employees.

<sup>28</sup> NAR, “Housing Shortage Tracker,” September 2022, <https://www.nar.realtor/research-and-statistics/housing-statistics/housing-shortage-tracker>. This tracker proxies shortages and likely does not do so perfectly. For example, every new job does not necessarily indicate the need for a housing unit, and the availability and condition of existing stock may be an important factor in the extent to which new housing is needed. Nonetheless, this proxy can provide useful information on the pace of job growth compared to the pace of housing stock growth in local areas and help identify those areas that may be falling behind on housing needs relative to others.

fewer areas with sufficient supply. As mentioned in the “Housing Construction” section above, several sources, including NAR and Freddie Mac, have additionally identified a gap between how many units exist and how many units are demanded.<sup>29</sup>

On a national level, it is not necessarily obvious that there is a shortage of housing units. There may be housing gaps, but it is not clear that there are not enough units for the population on the whole. Instead, the market appears to be clearing at a higher price point. However, even if there are technically enough units to house the population, that may not be true at certain price points or in certain locations. For example, the NAR shortage tracker notes several metropolitan areas that showed a 1:1 permit to new job ratio, while other areas had much higher ratios, such as Springfield, IL, with a ratio of 1 permit for every 20 new jobs. Supply constraints in local markets can also lead to shortages of houses at certain price points even if there are technically enough units per household. A 2022 report from Fannie Mae analyzes housing shortages from a local perspective and identifies eight different types of metro areas that have different supply and economic characteristics. These different characteristics have led, in the authors’ estimation, to varying levels of affordability and differing needs in terms of the types of housing necessary to address supply and affordability concerns.<sup>30</sup>

Another potential mismatch resulting from relatively low housing supply is that individual preferences may result in distortions in housing markets as individuals make decisions to meet their preferences at a given price point. There may not be adequate housing across price points for all types of housing and in all locations. Therefore, the higher prices resulting from relatively low supply and high demand could result in people needing to compromise on the type of housing or housing location in order to afford housing.<sup>31</sup> This type of phenomenon might not be obvious in aggregate statistics but could result in distortions in local and national housing markets if widespread enough. For example, increased migration from 2018 to 2020 away from popular but expensive markets to more affordable markets resulted in increasing home prices in the destination markets, particularly in the West and South.<sup>32</sup>

## Causes of Low Housing Supply

The combination of high and rising home prices and rents but largely stagnant or decreasing supply trends (depending on the metric) suggests that supply is not adequately responding to these higher prices. Generally, this lagging supply in the face of increasing prices suggests that costs to building homes has increased or that there are other barriers to increasing supply. A complicating factor is that supply does not respond immediately to prices or policy changes, and therefore determining if supply is increasing appropriately is an inexact science.

This section briefly highlights a few of the most commonly cited specific explanations of why housing supply may not be responding adequately to demand and price changes and is not meant to be an all-inclusive list of factors that could be contributing to lagging supply. Of note, some conditions or policy stances that may contribute to relatively low housing supply may be

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<sup>29</sup> A housing gap and an affordable housing gap are related but distinct phenomena. An affordable housing gap refers to the difference between how many units are available that households of certain incomes could afford and how many units that particular group of earners demands. Low supply likely exacerbates the affordable housing gap, but an in-depth analysis of the link between the two is not within the scope of this report. For example, see National Low Income Housing Coalition, “The Gap: A Shortage of Affordable Rental Homes,” <https://nlihc.org/gap>.

<sup>30</sup> For details of Fannie Mae’s analysis, see Betancourt et al., “The U.S. Housing Shortage from a Local Perspective.”

<sup>31</sup> For more detail, see CRS In Focus IF12048, *High Home Prices: Contributing Factors and Policy Considerations*, by Mark P. Keightley and Lida R. Weinstock.

<sup>32</sup> Khater, “The Housing Supply Shortage.”

desirable in others ways. This section is meant only to highlight conditions that could be contributing to low supply and does not purport to evaluate the full costs and benefits of any policy. In addition, many policy proposals act on the demand side of the housing market, which is beyond the scope of this report.

## Regulatory Costs

The cost of acquiring and preparing land for construction has increased relative to the price of the housing units being built in recent decades.<sup>33</sup> In some areas, there is little undeveloped land to build on, and this partly explains why land prices would rise. But even in those areas, price signals would eventually lead to greater housing density absent regulatory obstacles to increasing supply. According to a Freddie Mac analysis, tightening land use restrictions (discussed below) are partly responsible for this increasing cost, which can cause significant delays in permit approvals, slowing the rate of new construction.<sup>34</sup>

Apart from slowing construction, some regulation already directly impacts supply. Notably, certain zoning restrictions—such as single-family zoning requirements, minimum lot sizes, and parking requirements, among others—affect how much land can be built on and how many housing units can be built on that land.<sup>35</sup> Another factor that can further exacerbate these issues is existing residents’ opposition to new developments near or in their own neighborhoods. Requirements for community hearings or input, therefore, may slow or halt construction projects. Additionally, community opposition to regulatory changes that would reduce costs, such as zoning reform, could perpetuate existing challenges.<sup>36</sup>

Official government data on the cost of regulation on the construction or renovation of housing do not exist. However, some private groups have done such analyses. According to a 2021 study by the National Association of Home Builders (NAHB), state, local, and federal government regulations accounted for 23.8% of the average sales price of a new single-family home in 2021 (down from 24.3% in 2016 and 25% in 2011).<sup>37</sup> On a dollar basis, the average cost of regulation accounted for \$93,870 in 2021, up from \$84,671 in 2016 and \$65,224 in 2011.<sup>38</sup> Researchers at the Wharton School created the Wharton Residential Land Use Regulatory Index in 2006 and updated it in 2018. In comparing the index across these years, researchers found:

In terms of the regulatory process, the number of entities needed to approve projects requiring a zoning variance is increasing in the typical place. This makes the process more cumbersome and increases the potential for projects to be vetoed. Density controls are also used more widely and are more severe on average. The use of minimum lot sizes to control

<sup>33</sup> Freddie Mac, “What Is Causing the Lean Inventory of Houses?,” July 27, 2017, <https://www.freddiemac.com/research/forecast/20170726-lean-inventory-of-houses>.

<sup>34</sup> Freddie Mac, “What Is Causing the Lean Inventory of Houses?”

<sup>35</sup> Alexander Von Hoffman, “Single-Family Zoning: Can History Be Reversed?,” Harvard Joint Center for Housing Studies, <https://www.jchs.harvard.edu/blog/single-family-zoning-can-history-be-reversed>; and Catie Gould, “Shifting Gears: Why Communities Are Eliminating Off-Street Parking Requirements—and What Comes Next,” Lincoln Institute of Land Policy, October 12, 2022, <https://www.lincolninstitute.org/publications/articles/2022-10-shifting-gears-eliminating-off-street-parking-requirements>.

<sup>36</sup> Freddie Mac, “What Is Causing the Lean Inventory of Houses?”

<sup>37</sup> Paul Emrath, *Government Regulation in the Price of New Home: 2021*, NAHB, May 5, 2021, <https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2021/special-study-government-regulation-in-the-price-of-a-new-home-may-2021.pdf>. Estimates for 2016 and 2011 can be found at <https://www.nahb.org/-/media/F927CA599F4343F19541BD9F929E50ED.ashx> and <https://eyehousing.wordpress.com/2011/07/08/government-regulations-25-cost-of-a-new-home/>, respectively.

<sup>38</sup> Emrath, *Government Regulation in the Price of New Home: 2021*.



density is now almost omnipresent. And, it is no longer uncommon to see one-acre (or greater) minimums in suburban areas; this was much rarer in the 2006 data. Other regulations investigated (e.g., open space requirements and affordable housing programs) do not show such big increases in the aggregate, but there also is no evidence they are declining—either in usage or strictness of enforcement. The one exception involves impact fees on developers. The aggregate propensity for communities to impose them fell by one-third, from about 75% in the 2006 survey to 50% in 2018.<sup>39</sup>

## The Cost of Financing

The trend in interest rates in the U.S. economy directly affects the housing market by affecting borrowing costs for building, renovating, and purchasing homes.

Following a prolonged period of high inflation and interest rates, the Federal Reserve began lowering the federal funds rate in the mid-1980s. In response to the 2007-2009 housing and financial crisis, the Federal Reserve reduced the federal funds rate to a range of 0-0.25%, where it remained unchanged for several years. Since early 2022, the Federal Reserve has aggressively raised the federal funds rate to combat high inflation.<sup>40</sup> As a result, borrowing costs have increased, which has potential implications for the housing supply.

Homebuilders are heavily reliant on borrowing to finance new construction. Higher interest rates increase the costs of financing residential construction and renovation. As the costs of building and refurbishing homes increases, the rate of construction can slow and the supply of new homes can tighten. According to the NAHB, rising interest rates, along with rising material costs, have raised construction costs and slowed the rate of homebuilding, perpetuating the “long-term housing deficit.”<sup>41</sup> In addition, rising rates can disincentivize existing homeowners from moving so that they do not lose the low mortgage rates they received in the past, lowering the inventory of existing homes for sale.<sup>42</sup> A recent academic estimate suggests that, given projected mortgage rates (and holding other variables constant),<sup>43</sup> moving could decline by around 25% between 2018 and 2033, which could significantly diminish available housing inventory.<sup>44</sup>

## Construction Input Costs

Employment in the residential building construction industry fell by roughly 465,000 jobs from a peak in April 2006 to a trough in January 2011, coinciding with the housing market crash and financial crisis of 2007-2009. Despite job growth in this industry since 2011, employment in residential building construction has still not recovered to 2006 levels. For the construction industry as a whole, the monthly job openings rate has fairly consistently been above 4% between

<sup>39</sup> Joseph Gyourko, Jonathan Hartley, and Jacob Krimmel, *The Local Residential Land Use Regulatory Environment Across U.S. Housing Markets: Evidence from a New Wharton Index*, National Bureau of Economic Research Working Paper no. 26573, December 2019, [https://www.nber.org/system/files/working\\_papers/w26573/w26573.pdf](https://www.nber.org/system/files/working_papers/w26573/w26573.pdf).

<sup>40</sup> For more information on the inflation and Fed’s actions in response, see CRS Report R47273, *Inflation in the U.S. Economy: Causes and Policy Options*, by Marc Labonte and Lida R. Weinstock. For more information on monetary policy more generally, see CRS In Focus IF11751, *Introduction to U.S. Economy: Monetary Policy*, by Marc Labonte.

<sup>41</sup> NAHB, “Rising Interest Rates, Higher Construction Costs Slow Housing Production,” press release, June 16, 2022, <https://www.nahb.org/news-and-economics/press-releases/2022/06/rising-interest-rates-costs-slow-housing-production>.

<sup>42</sup> Nicole Friedman, “The Home Buyer’s Quandary: Nobody’s Selling,” *Wall Street Journal*, May 10, 2023, <https://www.wsj.com/articles/low-mortgage-rates-home-sales-low-supply-899aab29>.

<sup>43</sup> The authors control for zip code fixed effects, county and year fixed effects, mortgage and borrower controls, and a zip code house price index.

<sup>44</sup> Julia Fonseca and Lu Liu, “Mortgage Lock-In, Mobility, and Labor Reallocation,” *Social Science Research Network*, March 24, 2023, p. 3, <https://dx.doi.org/10.2139/ssrn.4399613>.



March 2021 and March 2023, representing between 300,000 and 400,000 openings per month.<sup>45</sup> Altogether, the construction industry faces significant labor shortages, which has likely hindered both residential and nonresidential construction alike.

In nominal terms, over the past few years, the employment cost to employers in the construction industry (as measured by the index for the total compensation for private industry workers in construction) has generally increased on a quarterly basis as measured by the percent change from a year previously. However, in real terms, these costs have actually decreased each quarter from the second quarter of 2021 to the first quarter of 2023, meaning that the cost of labor may not currently be a major constraint to increased residential construction.<sup>46</sup> The relatively low employment in the construction industry combined with declines in real employment costs indicates either that the main labor constraint to increased construction is a pool of labor that is small relative to the demand for construction or that builders prefer lower costs but less construction to higher costs but more construction.

The cost of inputs to residential construction has been a significant constraint for the homebuilding industry in recent years. Prices—as measured by the percent change in the producer price index<sup>47</sup> from a year ago—for net input goods to residential construction rose rapidly beginning in April 2020 and stayed elevated until 2023, when these costs began to come down. Inflation for input goods to construction was higher than producer inflation for final demand or headline consumer inflation during this period. Much of this inflation in inputs was likely due to lumber supply shortages that began in 2020 as a result of supply-chain disruptions due to the COVID-19 pandemic.<sup>48</sup> A lumber shortage, in and of itself, is a constraint for homebuilders in addition to the constraint of higher costs. NAHB estimated that in the 12 months ending in April 2021, higher lumber costs added around \$35,000 to the price of an average new home and \$119 to monthly rents in new multifamily buildings.<sup>49</sup> In recent years there have been supply bottlenecks for a variety of other materials and inputs, including energy and steel.<sup>50</sup> Altogether, the cost and availability of inputs, including labor and building materials, have likely significantly hindered the homebuilding industry’s ability to increase the amount and pace of residential construction in recent years. While this trend appears to be easing, it is, as of yet, unclear how long it will take construction to recover or if any new disruptions may occur.

## Natural Disasters

Any one specific natural disaster may cause significant damage or destruction to residential property, contributing to supply challenges in the affected market. Disasters can be localized, and

<sup>45</sup> For job openings data, see Bureau of Labor Statistics (BLS), “Job Openings and Labor Turnover Survey,” <https://www.bls.gov/jlt/data.htm>.

<sup>46</sup> For employment cost index data, see BLS, “Employment Cost Index,” <https://www.bls.gov/eci/data.htm>.

<sup>47</sup> The producer price index is a measure of the “average change over time in the selling prices received by domestic producers for their output.” For more information, see BLS, *Producer Prices*, <https://www.bls.gov/opub/hom/pdf/ppi-20111028.pdf>. The data cited uses the series for “inputs to new residential construction, excluding capital investment, labor, and imports.”

<sup>48</sup> For more information on lumber shortages, see CRS Report R46636, *COVID-19 and the U.S. Timber Industry*, by Anne A. Riddle; and John V. Duca and Anthony Murphy, “Why House Prices Surged as the COVID-19 Pandemic Took Hold,” Federal Reserve Bank of Dallas, December 28, 2021, <https://www.dallasfed.org/research/economics/2021/1228>.

<sup>49</sup> Paul Emrath, “Higher Lumber Costs Add More Than \$35K to New Home Prices, \$119 to Monthly Rent,” NAHB, April 28, 2021, <https://eyeonhousing.org/2021/04/higher-lumber-costs-add-more-than-35k-to-new-home-prices-119-to-monthly-rent/>.

<sup>50</sup> For example, see World Construction Today, “Construction Material Shortages to Continue in 2021,” <https://www.worldconstructiontoday.com/news/construction-material-shortages-to-continue-in-2021/>.

while they may not yet result in significant impacts at the national level, the threats associated with natural disasters have been rising recently.<sup>51</sup> Property destruction in one location can result in distortions in other markets owing to resulting shifts in migration and demand.<sup>52</sup> Therefore, the more widespread these risks become, the more likely they are to result in supply disruptions at the national level.<sup>53</sup> Currently, a significant portion of the housing stock is vulnerable to the impacts of flooding, storms, wildfires, and tornadoes, to name a few.<sup>54</sup>

## Aging in Place Trends

Certain demographic characteristics may be affecting housing supply, particularly in owner-occupied markets. Trends such as “aging in place” may be limiting the supply of homes for sale as the relatively large baby boomer generation maintains homeownership.<sup>55</sup> However, by some estimates, homeownership does not begin to drop off until past the age of 75. If this pattern holds, a large number of homes for sale may become available in the coming years as the baby boomer generation ages into this bracket.<sup>56</sup> At the same time, the millennial generation, another relatively large cohort, is largely of home-buying age, and homeownership rates for this group have accelerated in recent years, potentially putting further strain on the supply of owner-occupied housing.<sup>57</sup> Other trends in household characteristics, such as declining marriage rates and birth rates, may also be resulting in challenges to housing supply as it currently exists. (There may not be adequate supply of smaller housing units to meet altered demand, for example.<sup>58</sup>)

## Policy Considerations

To the extent that certain conditions in the housing market—notably issues surrounding affordability and choice—are being caused by low supply, those problems are unlikely to be fixed

<sup>51</sup> Howard Kunreuther, “Reducing Losses from Catastrophes: Role of Insurance and Other Policy Tools,” *Environment: Science and Policy for Sustainable Development*, vol. 58, no. 1 (January/February 2016), pp. 30-37.

<sup>52</sup> Tamara L. Sheldon and Crystal Zhan, “The Impact of Natural Disasters on U.S. Home Ownership,” *Journal of the Association of Environmental and Resource Economists*, vol. 6, no. 6 (September 19, 2019), pp. 1169-1203, [https://www.journals.uchicago.edu/doi/full/10.1086/705398#\\_i18](https://www.journals.uchicago.edu/doi/full/10.1086/705398#_i18).

<sup>53</sup> Many studies link a rise in the frequency, intensity, or magnitude of natural disasters to climate change. Other results of climate change, such as rising sea levels, may also prove a challenge to housing supply in the long term not only because of hazards posed to the housing stock but also because of any policies or migration that arise as a result. See Basel Committee on Banking Supervision, “Climate-Related Risk Drivers and Their Transmission Channels,” April 14, 2021, pp. 6-7, <https://www.bis.org/bcbs/publ/d517.htm>; and Steven Rothstein and Joe Weisbord, *Housing Finance and Climate Risk: Taking Action in an Uncertain Future*, Mortgage Bankers Association, February 16, 2023, p. 12, <https://www.mba.org/docs/default-source/research—riha-reports/24981-riha-climate-change-volume-1.pdf>.

<sup>54</sup> CoreLogic, “2021 Climate Change Catastrophe Report,” February 17, 2022, <https://www.corelogic.com/press-releases/corelogic-climate-change-catastrophe-report-estimates-1-in-10-u-s-residential-properties-impacted-by-natural-disasters-in-2021/>; and CoreLogic, “Risk Redefined: CoreLogic Climate Change Catastrophe Report Emphasizes Need to Address Increasing Frequency of Hazard Events,” press release, January 27, 2021, <https://www.corelogic.com/press-releases/risk-redefined-corelogic-climate-change-catastrophe-report-emphasizes-need-to-address-increasing-frequency-of-hazard-events/>.

<sup>55</sup> Freddie Mac, *U.S. Population Growth: Where Is Housing Demand Strongest?*, January 2021, p. 4, <https://www.freddiemac.com/fmac-resources/research/pdf/202101-Insight-12.pdf>.

<sup>56</sup> Andrew Van Dam, “The Age at Which People Give Up on Homeownership, and More!,” *Washington Post*, April 14, 2023, <https://www.washingtonpost.com/business/2023/04/14/foreign-tourists-america/>.

<sup>57</sup> Millennial homeownership rates still lag those of older generations. For example, see Freddie Mac, *Millennials and Housing*, 2021, p. 4, [https://sf.freddiemac.com/docs/pdf/fact-sheet/millennial-playbook\\_millennials-and-housing.pdf](https://sf.freddiemac.com/docs/pdf/fact-sheet/millennial-playbook_millennials-and-housing.pdf).

<sup>58</sup> Tracy Hadden Loh and Evan Farrar, “The Great Real Estate Reset, Modernizing Family: American’s Demographics Are Transforming, but Our Housing Supply Is Not,” Brookings Institution, December 16, 2020, <https://www.brookings.edu/essay/trend-2-americas-demographics-are-transforming-but-our-housing-supply-is-not/>.

without supply-side solutions, which happen with a lag and therefore will not be realized in the short term. While this report has focused mainly on low supply nationally, policymakers may be more interested in local solutions given differences in price and availability across localities. Additionally, many housing policies are created, implemented, and regulated at the state or local level, which restricts the ability of federal policymakers to influence housing market policy. Nonetheless, there are certain policy options available to Congress. This section focuses specifically on federal policy considerations for increasing supply across price points. Of note, this section discusses certain policy options that would remove barriers to economically efficient outcomes. Existing policies that cause certain market distortions may be desirable for other reasons. This section does not discuss the potential benefits of such policies.

## **Policy Options for Lowering Cost of Inputs**

The options below focus on increasing the availability, decreasing the cost, or removing barriers to the use of land, labor, and raw materials in the construction process.

### **Federal Government Recommendations and Grants for Local Reform**

The federal government does not have direct authority over local land use regulation. Zoning, permitting, and land use are generally controlled by states, many of which have delegated authority to localities.<sup>59</sup> Federal agencies, however, can and have made recommendations related to these issues. For example, a recent report from HUD includes the following recommendations for local jurisdictions for pro-housing land use and zoning reforms to increase supply and affordability: “Increase multifamily zoning; allow missing middle and larger multifamily development by-right; enable adaptive reuse and conversions; eliminate parking requirements; reduce minimum lot sizes; support equitable transit-oriented development; and streamline permitting processes and timeline.”<sup>60</sup>

Some have argued that non-traditional building techniques, such as factory-built housing, are more efficient and cost-effective than traditional building techniques, but they face regulatory barriers and financing obstacles that have restricted their use. Past HUD recommendations on this topic have included updating the HUD code, expanding areas zoned to accept factory-built housing by state and local governments, and improving financing conditions by defining factory-built housing as real property. (For example, certain types of factory-built housing are not built on permanent foundations and therefore may be subject to different codes and may not qualify for typical mortgages.<sup>61</sup>)

In addition, federal programs may incentivize or encourage local reforms. For example, the Community Development Block Grant-Pathways to Removing Obstacles<sup>62</sup> (P.L. 117-328, Division L, Title II) tasks HUD with awarding competitive grants to state, local, and regional entities to remove regulatory barriers to affordable housing. HUD recently requested another \$85

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<sup>59</sup> Anika Singh Lemar, “The Role of States in Liberalizing Land Use,” *North Carolina Law Review*, vol. 97, no. 2 (January 1, 2019), p. 297; and Harvard Law Review, “Addressing Challenges to Affordable Housing in Land Use Law: Recognizing Affordable Housing as a Right,” *Housing Law and Policy Note*, February 10, 2022, p. 1107.

<sup>60</sup> HUD Office of Policy Development and Research, *Pro-Housing Land Use and Zoning Reforms*, April 2023, <https://www.huduser.gov/portal/sites/default/files/pdf/policy-and-practice-publication-2023-april.pdf>.

<sup>61</sup> HUD Office of Policy Development and Research, *Factory-Built Housing for Affordability, Efficiency, and Resilience*, Winter/Spring 2020, <https://www.huduser.gov/portal/periodicals/em/WinterSpring20/highlight1.html>.

<sup>62</sup> Previously called the Yes In My Backyard Incentive Grant Program.

million for the program in its FY2024 Congressional Budget Justification.<sup>63</sup> Other legislation on this topic was proposed in the 117<sup>th</sup> Congress, such as the Yes in My Backyard Act (S. 1614 and H.R. 3198) and the Housing, Opportunity, Mobility, and Equity Act of 2022 (S. 5223 and H.R. 9466). The Biden-Harris Administration Housing Supply Action Plan to Help Close the Housing Supply Gap in Five Years similarly included plans to “reward jurisdictions that have reformed zoning and land-use policies with higher scores in certain federal grant processes, for the first time at scale.”<sup>64</sup>

## Incentives for the Construction Industry

Various types of incentives for the construction industry could also potentially affect the amount of production by incentivizing hiring, training, or construction directly. For example, policies such as the low-income housing tax credit (LIHTC), which provides tax credits to offset the cost of producing affordable rental housing units, may increase supply in particular housing markets.<sup>65</sup> The proposed Neighborhood Homes Investment Act (S. 657) would create similar tax credits in owner-occupied markets.<sup>66</sup> There is debate about whether and to what extent such policies improve (or would improve) supply. Many spectators argue that these tax credits are an important tool in increasing supply.<sup>67</sup> For example, LIHTC has created about 3 million units nationwide. Estimates vary greatly on how much LIHTC construction has crowded out private construction and, therefore, how much overall supply has been affected.<sup>68</sup>

## Improving Supply Chains

The cost and availability of materials used in the construction or renovation process have been a constraint to housing supply at various points, as discussed earlier in the “Construction Input Costs” section. To some extent, shocks that affect the cost and availability of inputs are unpredictable. For example, the COVID-19 pandemic and the Russian invasion of Ukraine in 2022 both caused supply chain shocks that were not foreseeable.<sup>69</sup> To the extent that the federal government can reduce frictions in supply chains, such actions could potentially improve supply conditions.<sup>70</sup> For example, as part of the Housing Supply Action Plan, the Biden Administration plans to “work with the private sector to address supply chain challenges and improve building techniques” to improve the pace of construction. Trade policies also affect supply chains.

<sup>63</sup> HUD, “Community Development Program,” *Congressional Justification*, FY2024, [https://www.hud.gov/sites/dfiles/CFO/documents/2024\\_CJ\\_Program\\_-\\_CDF.pdf](https://www.hud.gov/sites/dfiles/CFO/documents/2024_CJ_Program_-_CDF.pdf).

<sup>64</sup> The White House, “President Biden Announces New Actions to Ease the Burden of Housing Costs,” May 16, 2022, <https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/16/president-biden-announces-new-actions-to-ease-the-burden-of-housing-costs/>.

<sup>65</sup> See CRS In Focus IF11335, *The Low-Income Housing Tax Credit: Policy Issues*, by Mark P. Keightley.

<sup>66</sup> See CRS In Focus IF11884, *Neighborhood Homes Investment Act: Overview and Policy Considerations*, by Mark P. Keightley.

<sup>67</sup> For example, see Owen Minott and Julia Selby, “The LIHTC and NHTC: Two Important Tools to Increase Housing Supply,” Bipartisan Policy Center, October 27, 2022, <https://bipartisanpolicy.org/blog/two-tools-increase-housing-supply/>.

<sup>68</sup> For more details, see CRS In Focus IF11335, *The Low-Income Housing Tax Credit: Policy Issues*, by Mark P. Keightley.

<sup>69</sup> See CRS Report R46636, *COVID-19 and the U.S. Timber Industry*, by Anne A. Riddle; and CRS In Focus IF12104, *Russia’s 2022 War Against Ukraine: Global Economic Effects*, by Andres B. Schwarzenberg.

<sup>70</sup> The White House, “President Biden Announces New Actions to Ease the Burden of Housing Costs.” Other, more general supply chain initiatives could have effects on housing markets. See CRS Insight IN11927, *Summary of Selected Biden Administration Actions on Supply Chains*, by Lida R. Weinstock.

In part, the increase in construction costs reflects market dynamics that are beyond the government's control, but some government policies directly contribute to costs. For example, lowering trade barriers to material inputs in the construction process could reduce costs and improve supply. Research suggested that 2017 tariffs on Canadian lumber increased U.S. lumber prices.<sup>71</sup> The NAHB expected that the 2022 decreases in lumber tariffs would improve the volatility of lumber prices.<sup>72</sup> While not the sole factor, the decreased tariff likely contributed to decreasing lumber prices over the past year, as measured by the producer price index for lumber.<sup>73</sup>

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<sup>71</sup> Joseph Buongiorno, "Projected Effects of US Tariffs on Canadian Softwood Lumber and Newsprint Imports: A Cobweb Model," *Canadian Journal of Forest Research*, vol. 48, no. 11 (2018), pp. 1351-1357, <https://www.fs.usda.gov/research/treesearch/58183>.

<sup>72</sup> NAHB, "Canadian Lumber Tariffs Cut by More Than Half," August 5, 2022, <https://www.nahb.org/blog/2022/08/lumber-tariff>.

<sup>73</sup> For producer price index lumber data, see BLS, "PPI Database Commodity Data," <https://www.bls.gov/ppi/databases/>.