TRANSMITTED TO CONGRESS
MARCH 2024

TOGETHER WITH THE
ANNUAL REPORT OF THE
COUNCIL OF ECONOMIC ADVISERS

# ECONOMIC REPORT OF THE PRESIDENT

TRANSMITTED TO CONGRESS | MARCH 2024

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Chapter 4

# Increasing the Supply of Affordable Housing: Economic Insights and Federal Policy Solutions

The Biden-Harris Administration believes that every American should have access to safe and affordable housing (White House 2023a). Where people live determines their available housing quality and amenities, such as labor market access, transportation options, schools, protection from crime, environmental quality, and social networks—all of which affect their quality of life and intergenerational economic mobility (Chetty and Hendren 2018). However, the housing supply has failed to keep up with demand over the last several decades, leading to a nationwide shortage of 1.5 to 3.8 million homes and driving up the cost of housing (Calanog, Metcalfe, and Fagan 2023; Khater, Kiefer, and Yanamandra 2021; Lee, Kemp, and Reina 2022). As a result, 45 percent of renters are now cost-burdened, meaning that they spend 30 percent or more of their family income on rent, more than twice the share who were cost-burdened in 1960 (Ruggles et al. 2023).

Economic analyses of housing markets identify at least two frictions restricting supply: (1) land-use regulations and zoning restrictions that limit what can be built, and (2) rising input costs associated with construction (Khater, Keifer, and Yanamandra 2021). While some land-use regulations can be a reasonable part of community planning—for example, keeping factories away from schools or ensuring that parks are situated near residential areas—many other building regulations—for example, limiting housing density and building heights, or imposing minimum lot sizes or parking requirements—can create artificial barriers that hinder growth and drive

up the cost of housing. These policies arise naturally from a local decision-making process that is influenced by homeowners, who prefer higher home prices, and account for the local costs of increased housing, such as more congestion, but they fail to account for any regional or national benefits. This classic market failure negatively affects individuals in neighboring communities and potential new residents.

The costs of these housing restrictions reach across neighborhoods. Housing shortages can lead to inefficiently low levels of labor mobility and human capital investment, affecting both individual well-being and the macro-economy. Research shows that relaxing local land-use regulations increases migration, allowing workers to relocate from low- to high-productivity regions, and boosts aggregate output (Peri 2012; Moretti 2012). Moreover, homeownership is a wealth-building tool with a long tradition in the United States, and restrictive housing policies are an important factor explaining class and racial gaps in wealth and economic outcomes (Rothstein 2017). Increasing the housing supply, especially when combined with policies that directly support the production of affordable rental and ownership units, can increase access and equity for groups with few financial resources, increase overall wealth, and reduce disparities across groups (Carroll and Cohen-Kristiansen 2021).

This chapter focuses on the major causes and consequences of the United States' long-standing shortage of housing—and especially affordable housing—as well as Federal policy's ability to alleviate these issues. While there are policy levers at all levels of government, this chapter focuses on Federal policy. For example, public funds could be tied to zoning reforms and used to reduce financing constraints for affordable housing developments, and workforce training could increase the supply of labor used to construct housing. The first section illustrates the magnitude and trends in the housing supply shortage over the last six decades. The second and third sections discuss the causes and consequences of housing shortages. The fourth

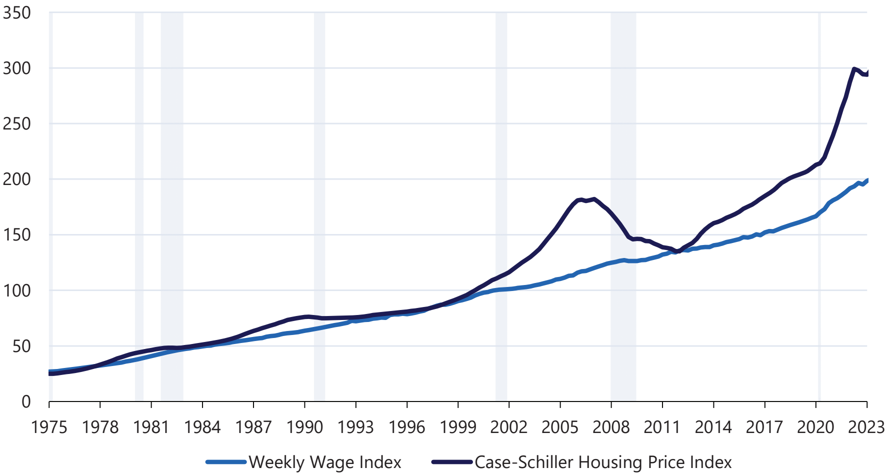
section highlights several areas where Federal policy can equitably boost the housing supply and alleviate rising housing unaffordability.

## Magnitude and Trends

Housing costs are demanding a growing share of household budgets in the United States. At the same time, the U.S. housing market faces a long-run supply shortage.

**Figure 4-1. Housing Price Index versus Wage Index, 1975–2023**

*Index: 2000:Q1 = 100*

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Sources: Bureau of Labor Statistics (Quarterly Census of Employment and Wages); CEA calculations.
Note: Weekly Wage Index has been smoothed using a 4-quarter moving average. Gray bars indicate recessions.
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### *Unaffordable Housing*

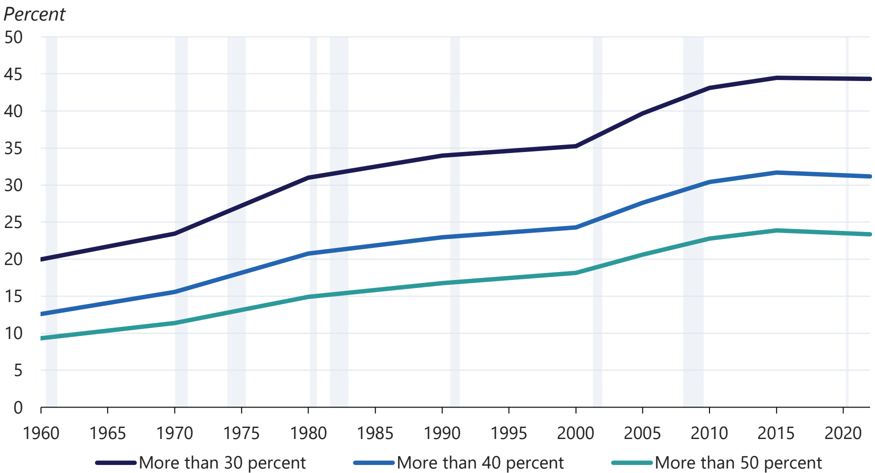
Figure 4-1 shows that housing price increases have outpaced wage growth in the last 20 years. Between 2000 and the early 2020s, housing prices tripled while household income doubled; in other words, the price of housing rose by 50 percent more than household income in the last 20 years.[1] Of course, increased spending on housing could be a rational consumption choice. Some people will choose to spend more on housing in exchange for lower nonhousing consumption because they prefer better housing amenities, like

[1] Figure 4-1 reports changes in the housing price index. To provide additional context for the level of rental expenses during this period: the median rent in 1960, 1980, 2000, and 2020 was, respectively, $544, $692, $867, and $1,086, measured in 2022 dollars; and the 25th percentile of rent in 1960, 1980, 2000, and 2020 was $445, $479, $595, and $735.

a nicer location or a newer structure. But the steadily rising financial burden of housing over many decades suggests that for many families, expensive housing is not a proactive choice but rather a trend they are increasingly forced to accept.

The share of households burdened by housing expenses has risen steadily over the last 60 years. A common benchmark for describing rent-burdened households is the income share spent on housing (i.e., rent/mortgage, utilities, and other housing needs) (Cromwell 2022).[2] The U.S. Department of Housing and Urban Development defines families as rent-burdened if this share exceeds 30 percent;[3] and severely rent-burdened if households spend more than half their income on housing. Figure 4-2 shows the share of renter households that spend more than 30 percent, 40 percent, and 50 percent of their income on rent. For each measure, the share has more than doubled since the 1960s. Today, nearly 45 percent of renters are rent-burdened and nearly 24 percent of renters are severely rent-burdened.

**Figure 4-2. Renter Households That Spent More Than 30 Percent of Family Income on Rent, 1960–2022**

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Sources: Census Bureau (American Community Survey); CEA calculations.

Note: The data for years after 2000 are averaged in 5-year bins. Gray bars indicate recessions.

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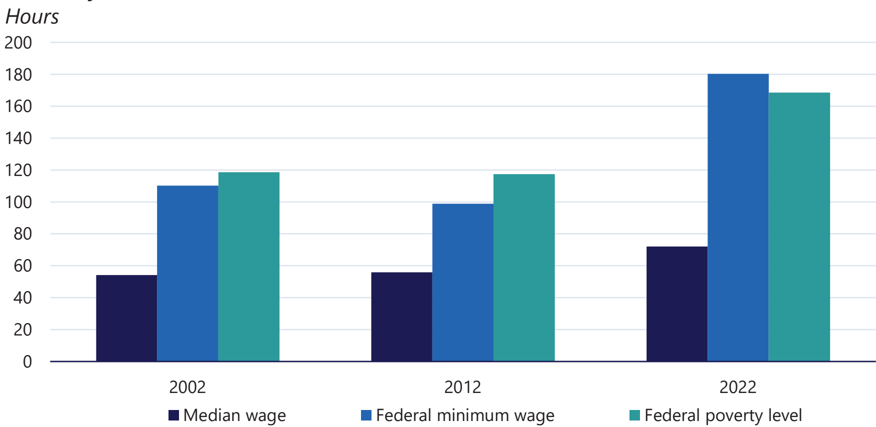
[2] Owners are typically excluded from the cost-burdened analysis because monthly mortgage payments that reduce the principal are a transfer to savings.

[3] This benchmark is based on public housing rent limits, which originated with the Brooke Amendment in 1969 and were last updated in the 1980s.

The financial burden of housing can also be illustrated by the number of work hours required to pay for housing. Figure 4-3 reports the minimum monthly work hours required to pay for monthly median rental rate housing in 2002, 2012, and 2022. Estimates are shown separately for households earning the median wage, the Federal minimum wage, and the wages that put someone at 100 percent of the Federal poverty level for single-adult households with no children.[4] Median wage earners had to work nearly 55 hours to pay for monthly housing costs in 2002, or more than one week per month based on a 40-hour work week; this number grew to more than 70 hours in 2022, or slightly less than two weeks of work. Households earning the Federal minimum wage had to work 110 hours to pay for housing in 2002, or nearly three quarters of the monthly hours worked by full-time workers. This number increased to 180 hours in 2022, suggesting that more than a full month of minimum-wage work is now required to pay for median rental-rate housing. In other words, median rental-rate housing has become increasingly out-of-reach for low-wage workers, and even median-wage

**Figure 4-3. Minimum Monthly Hours of Work Needed to Pay for Median Monthly Rent**

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Sources: Bureau of Labor Statistics; Census Bureau; Department of Labor; CEA calculations.
Note: Real median rent in 2002, 2012, and 2022, respectively: $923, $914, and $1306. The Federal poverty level is the poverty level for a single individual with no children. Effective July 2009, the Federal minimum wage was raised to $7.25. Unlike in 2002 or 2012, the Federal minimum wage led to income below the Federal poverty level in 2022.
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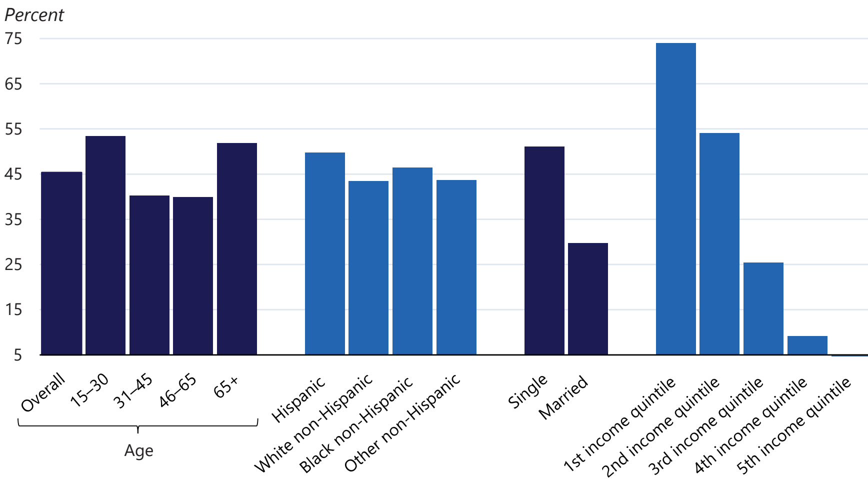
[4] The minimum number of hours of work required to pay for median monthly rent is calculated as median monthly rent divided by hourly wage for workers that earn the median monthly earnings, the Federal minimum wage, or 100 percent of the Federal poverty level. For workers earning the median monthly earnings or 100 percent of the Federal poverty level, monthly earnings are converted to hourly earnings by assuming a that an employee works 160 hours per month, a typical full-time schedule.

Figure 4-4. Share of Households That Are Rent-Burdened by Household Head Characteristics, 2022




**Council of Economic Advisers**
Sources: Census Bureau (American Community Survey); CEA calculations.
Note: A household is defined as rent burdened if the share of family income spent on rent is more than 30 percent.
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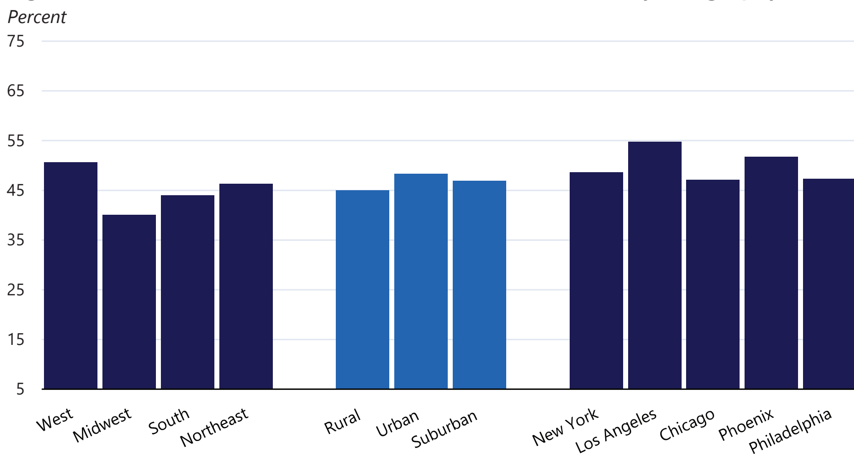
workers must devote a considerable share of their monthly earnings toward housing expenses. Many households have little disposable income after paying for housing.

Figure 4-4 reports the share of rent-burdened households by age, race and ethnicity, marital status, and income in 2022. Younger households are more likely to be rent-burdened than older households, Hispanic households are more likely to be rent-burdened than non-Hispanic households, single households are almost twice as likely to be rent-burdened as married households, and 74 percent of households in the bottom quintile of the income distribution are rent burdened. Additionally, figure 4-5 reports the share of rent-burdened households by geographic region and population density, as well as for households in the largest U.S. cities. While some variation emerges based on demographic and geographic characteristics, a large fraction of households across the entire country are rent burdened. Rent-burdened households are not just located in urban centers or in coastal States: 45 percent of rural households are rent-burdened, as are 44 and 40 percent of households in the South and Midwest, respectively.

## *The Housing Supply Shortage*

Years of insufficient new construction relative to household formation have led to a housing supply shortage (Khater, Keifer, and Yanamandra 2021). Estimates of the stock of the total housing shortage range from 1.5 million (Calanog, Metcalfe, and Fagan 2023) to 3.8 million (Khater, Keifer, and

**Figure 4-5. Share of Households That Are Rent-Burdened by Geography, 2022**

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Sources: Census Bureau (American Community Survey); CEA calculations.

Note: A household is defined as rent-burdened if the share of family income spent on rent is more than 30 percent. The cities chosen for the graph are among the largest six cities in the U.S. by population as of 2022. Houston is not shown here as it is not recorded in the 2022 American Community Survey data.

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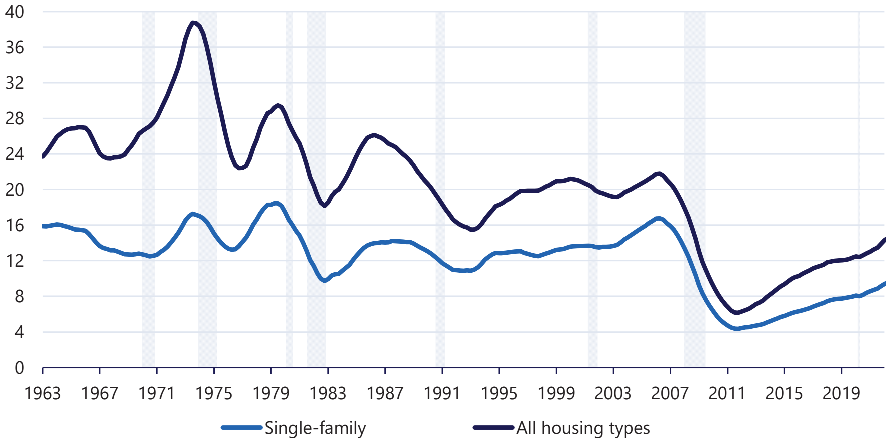
Yanamandra 2021), and the annual flow of the shortage of units under construction is estimated to be 100,000 (Parrott and Zandi 2021).

Increased housing demand is driven by a growing economy and a growing population. In recent decades, however, housing production has fallen dramatically. As figure 4-6 shows, quarterly housing starts per 1,000 people (shown in navy blue) fell from 22–40 units between 1963 and 1980 to 15–21 units between 1990 and 2005. Figure 4-6 also shows quarterly single-family housing starts in light blue. Single-family housing starts were relatively flat between 1963 and 2005 (averaging 10–18 units per 1,000 people). All types of housing starts fell sharply after the global financial crisis and have not yet recovered to pre-2007 levels.

A decline in new housing construction has been concurrent with the reduced availability of relatively small "starter homes" and low-cost rental units. As illustrated in figure 4-7, the fraction of all new single-family homes under 1,400 square feet declined from nearly 40 percent in the early 1970s to about 7 percent in the early 2020s. Moreover, the supply of low-cost rental units, measured as the share of rental units with contract rent below the maximum amount affordable for households in the lowest quintile of the income distribution, fell from 26.7 percent in 2011 to 17.1 percent in 2021 after adjusting for inflation. This is equivalent to the loss of 3.9 million affordable units in the last decade (Joint Center for Housing Studies 2023).

**Figure 4-6. U.S. Housing Production, 1963–2022**

*Housing starts per 1,000 people*

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Sources: Census Bureau; CEA calculations.

Note: The quarterly data are smoothed using a 3-year moving average. Gray bars indicate recessions.

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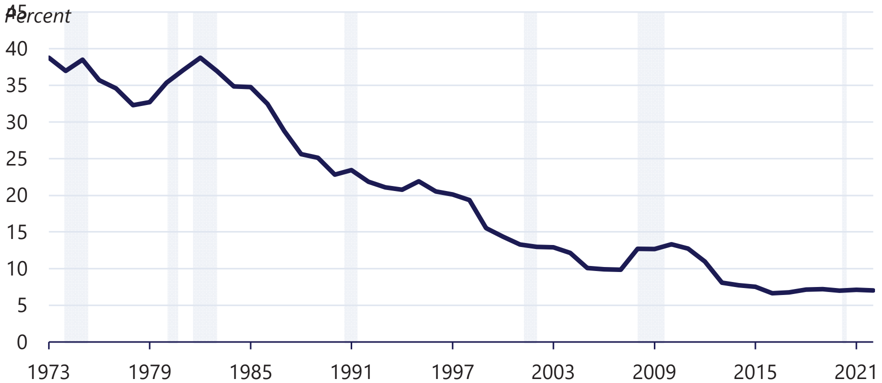
**Figure 4-7. Share of New Single-Family Homes under 1,400 Square Feet,**
**1973–2022**

*Percent*

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Sources: Census Bureau; CEA calculations.

Note: The data shows the share of completed new single family homes that are under 1,400 square feet. Gray bars indicate recessions.

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## Causes of Housing Supply Shortages

The incentives of several key stakeholders inform economic models of housing markets that predict a constrained housing supply. First, homeowners typically seek to maximize their home's value. Second, local governments

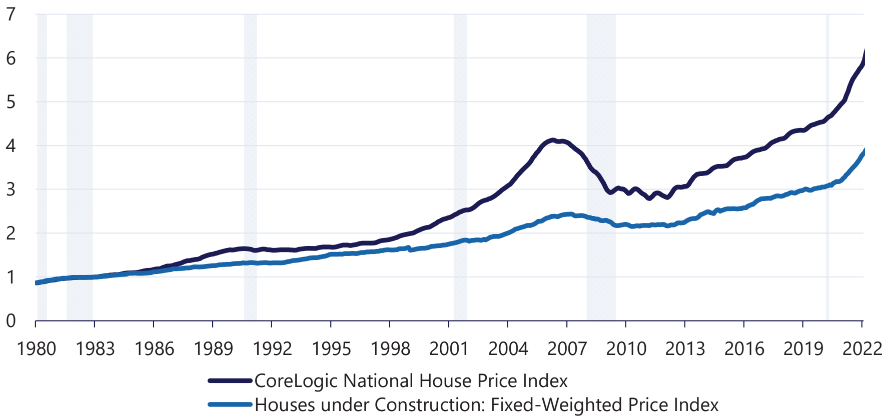
have an incentive to raise public funds to maximize the welfare of their constituents—among other things—which is generally linked to land value through property taxation. Third, developers and landowners seek to maximize their profit from economic development of residential and commercial real estate. These incentives jointly determine land value within a community through zoning and land-use regulations, which generally enrich insiders (i.e., existing property owners) at the expense of outsiders (i.e., renters and would-be property owners) (Fischel 2001).

Economic models make several predictions about how stakeholder incentives influence changes to land-use regulations, the housing supply, and housing prices (Ortalo-Magne and Prat 2014; Hilber and Robert-Nicoud 2013; Glaeser, Gyourko, and Saks 2005). Locations with more homeowners than renters have stricter housing supply regulations than their counterparts, and the regulations tighten as homeowners' political influence grows (Fang, Stewart, and Tyndall 2023). Regulations reduce the price elasticity of the housing supply; in other words, the supply of housing is less responsive to market prices in markets with more regulation.

Research consistently finds that increasingly stringent zoning restrictions lead to lower housing construction and a lower price elasticity of the housing supply, while decreasingly stringent zoning restrictions lead to higher housing construction costs and a higher price elasticity of the housing supply (Baum-Snow 2023; Gyourko and Molloy 2015; Stacy et al. 2023; Landis and Reina 2021). The relationship between zoning restrictiveness and housing prices is more nuanced: tighter zoning restrictions lead to more expensive housing, often by requiring new homes to be larger and occupy larger lots (Gyourko and McCulloch 2023). More relaxed zoning restrictions lead to a higher supply of smaller, lower-cost housing, and, in at least some instances, can lead to lower prices and rents or slower growth in rents among existing housing (Crump et al. 2020; Been, Ellen, and O'Regan 2023; Baum-Snow 2023; Greenaway-McGrevy 2023).

Broadly, local decision-making processes lead to at least two cascading housing market failures. The first is of negative externalities, which predict too much land-use regulation relative to the social optimum because homeowners, developers, and local governments do not account for the welfare cost of these regulations for individuals in neighboring communities or would-be residents. The excessive regulations lead to an incomplete housing market, where the private sector does not create enough supply to meet demand. Corrective policy at the State or Federal level can help bridge the gap between housing supply and demand.

**Figure 4-8. Housing Prices and Construction Costs, 1980–2022**

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Sources: Census Bureau; CoreLogic; CEA calculations.

Note: Both price indices are adjusted for inflation using the Personal Consumption Expenditures price index (core services excluding housing), reindexed to 1982 = 100. The data are not seasonally adjusted. Gray bars indicate recessions.

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### *The Wedge Between Price and Construction Cost: Land Value*

The causes and consequences of housing supply shortages in the United States can be understood within the context of the housing market's pricing efficiency, or the relationship between price and cost. As shown in figure 4-8, physical construction costs have quadrupled since the 1980s, accelerated by an increase in labor and material costs (Khater, Keifer, and Yanamandra 2021; CBRE 2022), while construction sector productivity has fallen (Goolsbee and Syverson 2023). Also seen in figure 4-8, housing prices have increased more quickly than construction costs. Between 1980 and the early 2020s, housing prices grew by over sixfold, or about 50 percent more than the fourfold increase in construction costs. Economists attribute the growing gap between housing prices and physical construction costs in the U.S. housing market to land prices, which largely reflect the impact of restrictive land-use regulations (Gyourko and Molloy 2015).

### *Zoning and Land-Use Regulations: Effects on the Housing Supply*

Exclusionary zoning policies are a subset of local land-use regulations that can constrain the housing supply and thus decrease affordability. Examples include prohibitions on multifamily homes, height limits, minimum lot sizes, square footage minimums, and parking requirements—each of which functions to constrain housing and population density. Researchers estimate that loosening land-use restrictions would lead to a small but significant

increase in the metropolitan housing supply over the next decade (Stacy et al. 2023).

Some zoning laws date back to the late 1800s, when city planners were concerned about fire hazards, access to light and outdoor air, or proximity to industry (Fischel 2004). While some zoning laws were intended to improve the quality of life for poor and vulnerable families, others were designed to discriminate against minority groups and raise property prices in suburban and urban neighborhoods (Rigsby 2016; Mangin 2014). Some of the first zoning laws appeared in about 1917, when the Supreme Court banned explicit race-based segregation in zoning ordinances in *Buchanan v. Warley* (Rothstein 2017). Scholars have shown that certain zoning practices enabled cities to continue race-based segregation (Gray 2022; Kahlenberg 2023). Box 4-1 provides additional detail on the history of zoning laws and their effects on racial and ethnic minorities.

Single-family zoning is imposed on most residentially zoned land across the country and constitutes 70 percent of all U.S. residential zoning (Frank 2021). Minimum lot size requirements force developers to build homes on larger lots than the market would otherwise provide (Gyourko, Hartley, and Krimmel 2019; Furth and Gray 2019). For example, 81 percent of Connecticut land requires a minimum of 1 acre lots (Bronin 2023). Research finds that doubling minimum lot sizes increases sale prices by 14 percent and rents by 6 percent, while intensifying residential segregation (Song 2021). Recent zoning changes allowing multifamily housing in Boston and Minneapolis–Saint Paul has led to increased housing supply, desegregation, and increased shares of Black and Hispanic residents (Resseger 2022; Furth and Webster 2022).

Another important land-use regulation concerns minimum parking requirements, which dictate a minimum number of off-street spaces per housing unit or business. However, studies have shown the requirements often exceed what is needed to meet demand, leading to large shares of land devoted to parking lots. For example, 30 percent of downtown Detroit is dedicated to parking, compared with 12 percent in Los Angeles and 4 percent in Chicago (Sorens 2023; Chester et al. 2015; Kaufmann 2023). Parking requirements impose space requirements beyond lot sizes, reducing the housing supply and increasing the cost of housing (WGI 2021). Research has found that parking requirements in Los Angeles reduce the number of units in apartment buildings by 13 percent (Shoup 2014). A Seattle reform that reduced parking requirements was found to be associated with developers building 40 percent less parking than would have been required before the reform, resulting in 18,000 fewer parking spaces and saving an estimated $537 million in construction costs, ultimately leading to lower-priced housing (Gabbe, Pierce, and Clowers 2020).

## Box 4-1. A Brief History of Exclusionary Zoning Laws in the United States

Some of the earliest zoning ordinances were enacted in the mid to late 1800s to isolate nuisance land use, such as by slaughterhouses, from residential areas. Under the guise of further resident protection, however, other ordinances were implemented that isolated racial and ethnic minorities. For example, the historic "Chinese laundry" regulations allowed many white proprietors to be licensed while excluding Chinese business owners (Howells 2022).

In 1910, Baltimore enacted one of the first zoning laws that explicitly segregated neighborhoods by suggesting that the ordinances protected the public. The Supreme Court's 1917 *Buchanan v. Warley* decision struck down explicitly racist zoning laws (Howells 2022).

In the wake of *Buchanan v. Warley*, communities began implicitly segregating by race with new forms of zoning. Single-family zoning in Berkeley, California, in early 1910s attempted to prohibit "Negroes and Asiatics" from living in certain areas, and the strategy began to spread across the country (Barber 2019). Single-family zoning also prohibited apartment buildings and other types of affordable housing, leading to increased class segregation (Gray 2022). Saint Louis introduced zoning designed to preserve homes in areas unaffordable to most Black families in 1919, and the city often changed areas' zoning designations from residential to industrial once numerous Black families moved in (Rothstein 2014). Similarly, Seattle's 1923 zoning laws changed many areas with a large number of Black or Chinese American families from residential to commercial (Twinam 2018). The Supreme Court upheld various zoning restrictions, including against multifamily housing, in *Euclid v. Ambler* (Supreme Court 1926), furthering class-based discrimination. The new zoning rules restricted new housing levels and made prices unaffordable for low income and most nonwhite households (CEA 2021).

In the 1920s, the Secretary of Commerce, Herbert Hoover, published "A Zoning Primer," which encouraged States to allow municipalities to adopt exclusionary zoning (Gries 1922). The 1923 Standard State Zoning Enabling Act provided model legislation that States could pass to give municipalities zoning power; eventually, all States gave municipalities the right to determine local zoning regulations (Flint 2022). The number of cities with zoning rules increased by 1,246 additional municipalities between 1916 and 1936 (Fischel 2004).

The 1970s saw a second wave of zoning in response to (1) the 1968 Fair Housing Act, which attempted to clamp down on discrimination by race and other factors, as communities responded by increasing economically discriminatory zoning; and (2) the growing importance of real estate within household financial portfolios. By the 2000s, more than 30,000 local governments in the United States had their own zoning

rules (Kahlenberg 2023). In recent decades, America's neighborhoods have continued to be segregated by race and income (Loh, Coes, and Buthe 2020).

One analysis found that 40 percent of Manhattan buildings could not be built today because they do not conform to zoning codes (Bui, Chaban, and White 2016). Dense city centers would be almost impossible to build with modern minimum parking requirements, and many new developments are only approved after receiving special permits or variances to circumvent zoning rules (Bui, Chaban, and White 2016; Gray 2022). Other factors restricting the housing supply include mandatory public hearings, fees and exactions, environmental review, design standards, lot configuration requirements, building size regulations, rising insurance costs, and occupancy rules (Bronin 2023). Each regulation restricts what developers can build, increases time-to-construction and structure costs, and leads many would-be housing projects to be financially infeasible.

### *Additional Constraints*

New multifamily housing development, whether for renter- or owner-occupied units, is a complex, long-run capital investment process that is highly sensitive to the macroeconomic environment. The projects involve various development costs, including (1) physical construction ("hard") costs, (2) project design and development ("soft") costs, and (3) land costs. Developers draw project financing from a combination of debt and equity that require different rates of return from completed projects, imposing minimum profitability thresholds and tying private development to interest rate fluctuations. At the same time, most revenue for multifamily rental development comes from rent charged to tenants, which is related to local land-use regulations. Box 4-2 describes the calculus behind financing housing development projects—this calculus is sometimes referred to as "penciling the deal."

Demographic shifts in the American population affect both housing supply and demand. For example, a sharp increase in life expectancy during the last century—combined with the aging of the baby boom generation—has increased the demand for housing among older Americans (*Berkeley Economic Review* 2019). In addition, to the extent that homeowners choose not to move as they age, this will tend to reduce the rate of repeat sales for the current stock of homes, reducing the supply of available homes. Changes in fertility and international immigration have also affected housing demand.

### Box 4-2. Penciling the Deal: The Math Behind Developing Rental Housing with LIHTC

New multifamily development projects are characterized by large upfront costs and long-run investment returns. Most of the revenue generated by housing developments comes from rent charged to tenants, as determined by local market conditions. The Low-Income Housing Tax Credit (LIHTC) enables developers to meet these upfront costs and charge less rent, making units affordable for 30 years after construction.

Developers balance future revenue streams against development and financing costs to determine whether a property is worth constructing; in other words, whether the deal "pencils out" (Garcia 2019). Development costs can be grouped into three categories: (1) hard physical construction costs, including labor and materials; (2) soft costs (e.g., fees, financing, consulting, taxes, title, and insurance); and (3) land acquisition costs, including those associated with closing (e.g., environmental studies and resolving zoning issues). While local market conditions vary across the United States, land costs generally comprise 10–20 percent of total costs, soft costs comprise 20–30 percent, and hard costs comprise 60–70 percent. Local land-use regulations, such as zoning restrictions, parking requirements, and density restrictions, can all increase development costs (Urban Institute 2016; Hoyt and Schuetz 2020).

To finance projects, developers obtain funding from debt and equity. Debt typically comprises most of the funding, with loan-to-cost ratios of 50 to 75 percent (Urban Institute 2016; Garcia 2019; RCN Capital n.d.). Historically, interest rates have fluctuated between 4 and 8 percent. Equity, mostly from private investors, fills the gap between debt and project costs. Housing development equity is a relatively risky investment class due to the time required for projects to generate revenue. At a high level, equity investors compare the return on cost—the ratio of the project's first year net operating income to its costs—with local capitalization rates. Local capitalization rates capture the average rates of return on alternative housing projects and typically range between 3 and 6 percent. According to one analysis, differences of 1 to 1.5 percent between the return on cost and capitalization rates would incentivize private investment (Garcia 2019; JPMorgan Chase 2022).

For example, on a $20 million project, the building could be financed with $13 million in loans—which require $780,000 in debt service payments, assuming a 6 percent interest rate—and $7 million in private equity, which require $455,000 in returns to be attractive based on typical market capitalization rates. Assuming a per-unit rent that equals the nationwide median, the structure can have, at most, 136 units; this structure could generate a 6.5 percent capitalization rate in 10 years. These units would be affordable for a tenant who earns the

median income in 2022 ($74,755), but they would be unaffordable for low-income households. For example, households in the bottom 20th percentile of the income distribution can spend, at most, $765 in monthly rent in order to not be considered cost-burdened, about half the nationwide median monthly rent ($1,300). Developers can privately choose to designate some units as affordable by charging below-market-rate rent, but to maintain profitability, they must raise rent on the remaining units.

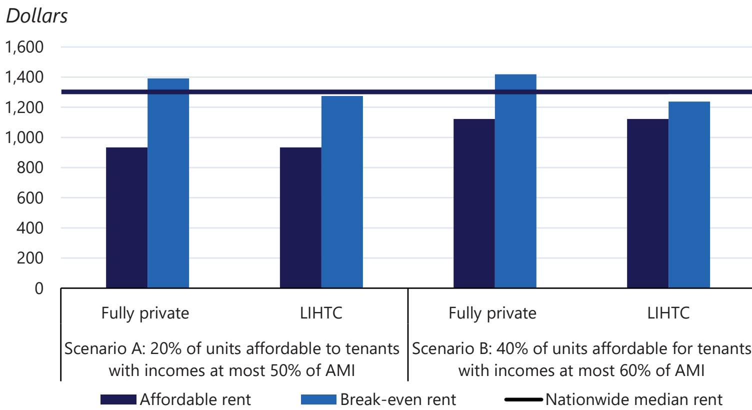
Affordable housing can reduce the net operating income of a housing development project and threaten its viability. The LIHTC offers an incentive to construct affordable housing by providing tax credit equity in exchange for affordable unit construction. Among other requirements, projects must meet one of three income tests to be eligible:

A. At least 20 percent of the units are occupied by tenants with an income of 50 percent or less of area median income (AMI), adjusted for family size.
B. At least 40 percent of the units are occupied by tenants with an income of 60 percent or less of AMI, adjusted for family size.
C. At least 40 percent of the units are occupied by tenants with income averaging no more than 60 percent of AMI, and no units are occupied by tenants with income greater than 80 percent of AMI, adjusted for family size.

The LIHTC provides a 10-year stream of annual credits based on a housing project's construction costs equal to either 30 or 70 percent of the present value of the qualified basis, depending on whether the project was approved for the competitive or noncompetitive allocation (Tax Policy Center n.d.). The LIHTC is one of the few tax programs that allows for credits to be bought and sold on a secondary market. In particular, developers can sell their tax credits to investors who are better able to take advantage of the LIHTC and other project-related tax benefits to reduce their tax liability. Credits are typically sold by developers at a discount, which fluctuated between $0.85 and $0.90 on the $1 as of 2021, to reflect the time-value of money (Kimura 2022). The tax equity investors typically take a passive role, receiving the benefits but not participating in day-to-day decision-making.

In the case of the $20 million building, if 20 percent of the units are set aside for low-income tenants, as specified by income test A above, and the LIHTC credits were awarded competitively, the LIHTC program can provide $1.4 million in equity, assuming that investors are willing to purchase credits at a discount of $0.85 on $1. With this tax equity, only $5.6 million in private equity is needed, which will require 7 percent fewer returns from rent to cover financing costs.

Figure 4-i compares the per-unit rent in the affordable and remaining units with and without the LIHTC and under two scenarios: (1) 20 percent of units affordable at 50 percent of the nationwide median

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Sources: Census Bureau (2022); CEA calculations.

Note: LIHTC = Low Income Housing Tax Credit; AMI = Area Median Income. The figure illustrates calculations for a $20 million hypothetical building.

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income; and (2) 40 percent of units affordable at 60 percent of the nationwide median. As shown, the LIHTC program allows developers to allocate units to low-income renters without cross-subsidizing via increased rent on the remaining units. If developers instead choose to fund affordable units privately, for example, in order to satisfy an inclusionary zoning requirement, the building's remaining units would need to be rented at above the market rate, as characterized in figure 4-i, based on the nationwide median rent for illustrative purposes, for the developer to break even on costs. This funding scenario, however, introduces additional risk as the developer would have no guarantee of demand for the above-market-rate units.

Researchers estimate that the combined effect of changes in life expectancy, international immigration, urbanization, and fertility can account for 41 percent of the observed housing price increase from 1970 to 2010 and forecast an additional increase of 5 to 19 percent in housing prices through 2050 (Gong and Yao 2022). Likewise, research finds that a 1-percentage-point increase in the current birthrate would increase housing prices by 4 to 5 percent in 25 to 30 years (Francke and Korevaar 2022). Moreover, foreign-born household heads are projected to be the primary source of new housing demand by 2040 (Nguyen 2015).

## Housing Supply Shortages: Consequences for Welfare, Economic Mobility, and Aggregate Output

Even in functional housing markets, income variation across households implies that low-income households face higher housing cost burdens than those with a higher income. When land-use restrictions drive supply constraints, growing housing demand in cities and neighborhoods leads to more expensive housing, rather than new housing development (Baum-Snow 2023). The resulting housing shortages manifest as lower vacancy rates and higher prices and rents relative to wage growth. As the gap widens between market prices and production costs, more households experience housing insecurity, which negatively affects individual welfare and economic mobility (Been et al. 2011; Taylor 2018).

### *Neighborhood Choice, Individual Welfare, and Economic Mobility*

Prices affect not only the type of housing in which individuals choose to live, but also where they live. The latter decision is tied to a bundle of local amenities, including access to jobs and transportation, schools, exposure to crime, environmental quality, health care access, and social networks. Importantly, neighborhood choice shapes children's long-run educational and economic outcomes, and neighborhood environment affects adult health and well-being (Chetty and Hendren 2018; Chyn and Katz 2021).

Property taxes typically fund public schools; the greater the tax base per capita, the more funds are available for education. Children from high-income households tend to live in expensive neighborhoods and, therefore, have access to higher quality schools. Housing near high-scoring public schools costs on average 2.4 times more, or nearly $11,000 more per year, than housing near low-scoring schools (Rothwell 2012). Few affordable housing options exist near high-quality schools (DiSalvo and Yu 2023), which reduces the number of low-income, as well as Black and Hispanic, students attending them, and exacerbates intergenerational inequality (Ihlanfeldt 2019). Black and Hispanic students attending more segregated schools are less likely to graduate from high school and attend college than their peers attending less segregated schools, and they are less likely to work and more likely to have low earnings as adults (Gould Ellen, De la Roca, and Steil 2015).

Economic models, such as that developed by Tiebout (1956), suggest that beyond valuing neighborhoods for their schools, households "vote with their feet" and choose neighborhoods that best match their preferences. However, because housing markets are incomplete and affordable houses are often not available in neighborhoods with high-quality amenities,

rising housing prices push low-income households toward areas with few amenities.

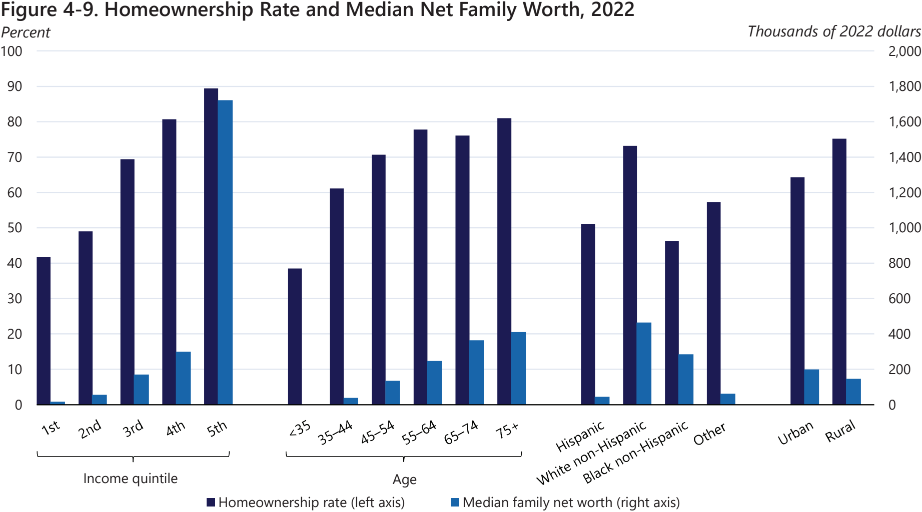
Housing supply constraints can affect demographic shifts in the American population. For instance, young adults primarily demand entry-level and lower-priced housing. As a result, shortages in the entry-level market sector are felt most by young adults. Research has shown household formation rates decreased in recent years as a result of increased housing prices: a 1 percent increase in housing prices decreases household formation by almost 5 percent for young adults (Kiefer, Atreya, and Yanamandra 2018). Consistent with this finding, homeownership rates have been declining over time for young adults (Goodman, Choi, and Zhu 2023).

## *Wealth Accumulation*

Homeownership has long been a common path to wealth accumulation in the United States, with returns being especially high for those who can afford expensive homes (Wolff 2022). As a result, housing supply restrictions have implications for wealth accumulation (La Cava 2016). Figure 4-9 reports homeownership rates and median net family worth by income, age, race and ethnicity, and geography. Generally, patterns in homeownership rates according to these characteristics are correlated with wealth patterns. Higher-income, older, and white non-Hispanic households are more likely to own their homes and have accumulated more wealth than other groups.

Intergenerational wealth transfers interact with homeownership. For example, individuals are about 8 percentage points more likely to become

**Figure 4-9. Homeownership Rate and Median Net Family Worth, 2022**

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Sources: Survey of Consumer Finances; Census Bureau; CEA calculations.

Note: The values for the fifth income quintile are calculated by averaging over data reported for 80–89.9 and 90–100 income quintiles.

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homeowners if their parents are homeowners rather than nonhomeowners (Choi, Zhu, and Goodman 2018). Because housing is the main source of wealth for most households, disparities in homeownership rates and valuations across groups are likely to lead to differences in wealth accumulation (figure 4-9). In particular, generations of discrimination in the housing market have created a substantial racial wealth gap in America; one paper estimates that, on average, Black Americans had 17 cents for every $1 in wealth white Americans had in 2019 (Derenoncourt et al. 2023). Many researchers show that these trends are likely to be perpetuated into the future (Derenoncourt et al. 2023; Aaronson, Hartley, and Mazumder 2023). Black and Hispanic homeowners also face an assessment bias in the value of their homes, creating further household wealth disparities by race and ethnicity (Avenancio-Leon and Howard 2022).

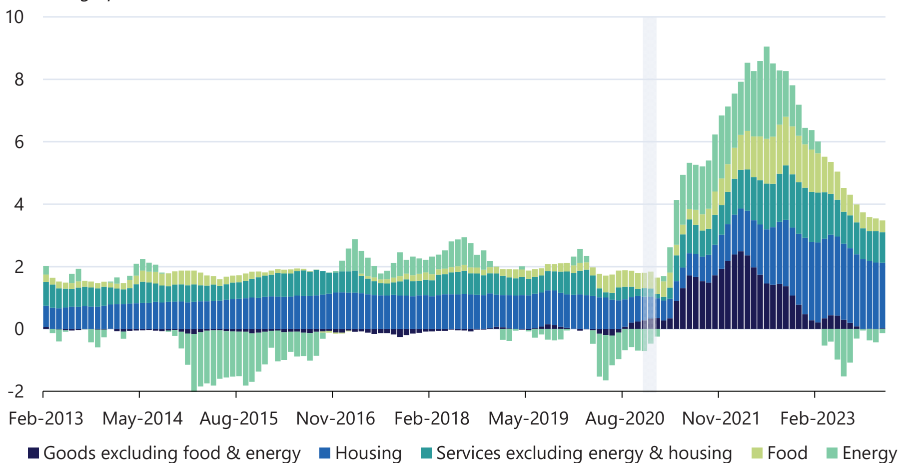
### *Income Shocks, Housing Instability, and Homelessness*

Homeownership and home values affect households' ability to withstand income shocks. Black and Hispanic households were disproportionately affected by the foreclosure crisis after the global financial crisis and the financial hardship related to the COVID-19 pandemic (Reid et al. 2016; Bayer et al. 2016; Gerardi et al. 2021; Cornelissen and Pack 2023; Hermann et al. 2023). Foreclosures cause sustained housing instability and make future homeownership difficult, in addition to inflicting other forms of financial distress (Diamond, Guren, and Tan 2020).

While homeowners benefit from rising housing costs in their own neighborhood, the 35 percent of households who rent their home do not (Ruggles et al. 2023), and low-income residents who do not own their home face the threat of eviction. Eviction orders, which are increasingly likely after earnings declines and employment losses, increase homelessness and further reduce future earnings, durable consumption, and credit access (Collinson et al. 2023). Children are at the greatest risk for eviction, and extensive research suggests they are substantially and lastingly harmed by housing instability (Graetz et al. 2023). Finally, housing stability, quality, safety, and affordability are all associated with improved health outcomes (Taylor 2018).

Evidence suggests that regional variation in housing costs and availability explains regional variation in homelessness (Aldern and Colburn 2022). Counter to intuition, poverty rates are lower in places with higher rates of homelessness (Aldern and Colburn 2022). Homelessness is strongly correlated with median rent at the city or county level; one study shows that a $100 increase in median rent is associated with a 15 percent rise in homelessness in metropolitan areas (Byrne et al. 2016). Moreover, evidence suggests that higher homelessness rates are not associated with higher

**Figure 4-10. Components of Year-on-Year Headline CPI Inflation, 2013–23**




**Council of Economic Advisers**
Sources: Bureau of Labor Statistics; CEA calculations.
Note: Gray bars indicate recessions.
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incidence of mental health issues, substance abuse, or generosity of the local safety net (Aldern and Colburn 2022). A statewide California study finds that 75 percent of homeless residents remain in the county where they last had housing (Benioff Homelessness and Housing Initiative 2023).

### *Implications for Inflation and Aggregate Growth*

A constricted housing supply across regions creates migration frictions that can lead to a geographic labor misallocation (Ganong and Shoag 2017). All else being equal, workers should migrate from low to high productivity cities until productivity, and therefore wages, equalizes across cities. If high-productivity cities also have a constrained housing supply, fewer workers can respond to productivity and wage incentives. Recent evidence suggests that many workers might not move to places with higher wages because higher housing costs completely offset any increase in wages (Card, Rothstein, and Yi 2023).

Housing supply restrictions also exacerbate inflation. When measured by the Consumer Price Index (CPI), inflation reflects changes over time in the price paid for a market basket of consumer goods and services, including food, energy, and housing. Housing expenses—the single largest basket component—have accounted for at least 25 percent of the CPI basket since 1993. Figure 4-10 depicts a decade of inflation trends, including a decomposition of the market basket's core components. As the level of housing

prices has increased, the contribution of housing to CPI has increased simultaneously (CEA 2023a). High housing inflation partially reflects a shift in housing demand—for example, increased working from home—paired with an already-constrained housing supply (Mischke et al. 2023). Housing inflation has steadily declined since the spring 2023 peak, and as a result, annual inflation declined to 3.4 percent at the end of 2023.

## Federal Policy's Role

The three prominent frictions related to long-run housing supply shortages and affordability issues are (1) locally determined land-use regulations, which lead to exclusionary zoning; (2) financing and other construction costs that increase the cost of producing housing; and (3) the spatial mismatch of workers and jobs, which reduces aggregate output. These three costs motivate multiple Federal policy solutions.

Although much of housing supply policy is local, the Federal Government can affect national priorities through various mechanisms. For example, the government can help address long-standing implicit and explicit discriminatory zoning practices. To this end, the Federal Government can align its agency resources and policy priorities to promote zoning reforms that reduce barriers that limit what can be built. Likewise, the Federal purse can be used to advance existing agency priorities and launch new initiatives to alleviate housing supply constraints, increase the production of affordable units, and address the Nation's growing affordability challenges.

A central goal of the Biden-Harris Administration is an economy in which every American has access to a safe and affordable home. On one hand, demand-side policies, including direct subsidies to cost-burdened households, can help address acute affordability issues. Box 4-3 describes several important examples. On the other hand, supply-side policies that directly boost housing construction are an integral part of the solution.

### *Zoning Reforms: Expanding the Housing Supply and Increasing Affordability*

Local zoning and land-use restrictions are a long-standing, fundamental hurdle for increasing the housing supply. Under these restrictions, housing supply shortages have become increasingly salient, with a growing share of household budgets dedicated to housing. Reducing barriers to the housing supply can lead to several benefits: increased housing production, economic growth, job creation, reduced class and racial segregation, and increased climate resiliency through reduced sprawl and commuting times. Fortunately, momentum is building for zoning reforms, and numerous policy changes have been enacted at the State and local levels. Examples, detailed in box

## Box 4-3. Assistance for Housing Demand

Even in a functioning housing market with abundant supply, many low-income families still struggle to afford housing. Federal policies can help families close the gap between housing expenditures and personal financial resources. The Federal Government can provide financial assistance to individuals directly and also enact policies to decrease the price of housing.

The Federal Government uses several assistance programs to help low-income families access affordable housing, including Project-Based Rental Assistance, Public Housing, and housing vouchers. The Section 8 Housing Choice Voucher Program, administered by HUD in partnership with local public housing agencies, is one of the largest Federal housing programs (Center on Budget and Policy Priorities 2017). The program generally caps families' housing costs at 30 percent of their income, helping 2.3 million low-income households annually, while also reducing evictions and homelessness (HUD 2023d, 2023i). Almost three-quarters of families receiving housing vouchers have children (Center on Budget and Policy Priorities 2017). Households using vouchers were once young relative to the general population but have steadily become older (Reina and Aiken 2022). Many voucher households live in high-poverty and low-opportunity areas, where vouchers are more often accepted; however, only about one in four voucher-eligible households actually receive and use a voucher, due to the lack of program funding (Gould Ellen 2018). When families use vouchers to move to low poverty neighborhoods, children's long-run outcomes improve in the form of higher college attendance rates and adult earnings (Chetty, Hendren, and Katz 2016).

Recognizing that funding limitations constrain the number of households able to receive rental assistance, President Biden's Fiscal Year 2024 Budget proposed expanding rental assistance to well over 200,000 additional households through $2.4 billion in additional funding for the voucher program, as well as $22 billion in mandatory funding to provide guaranteed housing to extremely low income veterans and youth transitioning out of foster care (White House 2023c; HUD 2024b).

Federal financial assistance to families in the form of cash, tax credits, and in-kind benefits like the Supplemental Nutrition Assistance Program (known as SNAP) can help alleviate some of the financial burden of housing. For instance, the temporarily expanded 2021 Child Tax Credit (CTC) helped families maintain stable housing by alleviating other financial burdens (CEA 2023b; Pilkauskas, Michelmore, and Kovski 2023).

The Rural Housing Service of the U.S. Department of Agriculture (USDA) offers direct and guaranteed loans to help low-income rural residents buy and maintain housing. In 2022, USDA's Single Family

Housing Direct Loan Program obligated $1.3 billion to underwrite and service mortgages for low-income families that often face credit constraints. Additionally, USDA obligated $13.1 billion in mortgage loan guarantees to help provide moderate- to low-income rural residents an opportunity to realize the dream of homeownership (USDA 2024).

In a housing market with sufficient supply, demand-side assistance can be very effective. However, in a housing market with a constrained supply, these policies may lead to increased rent prices for some rental units, possibly directing some of the benefits to landlords and property owners rather than renters (Diamond, McQuade, and Qian 2018).

4-4, include initiatives allowing construction of multifamily housing in areas previously zoned for single-family homes, expanding homeowners' right to construct and rent out accessory dwelling units, and abolishing minimum parking requirements (Greene and González-Hermoso 2019; Parking Reform Network n.d.). Federal policy could build on these successes to help cities and States continue their reforms.

Federal dollars can create incentives for State and local policymakers to meet housing policy goals. For instance, the Pathways to Removing Obstacles to Housing (PRO Housing) program sponsored by the Department of Housing and Urban Development (HUD) will award $85 million in competitive grants to communities with plans to remove barriers to affordable housing and production in 2024 (HUD 2023b). In addition, President Biden has called for $20 billion to create a first-of-its-kind fund that will award planning and housing capital grants to State and local jurisdictions to expand the housing supply and lower housing costs for lower- and middle-income households (as described in the forthcoming Fiscal Year 2025 Budget, per the U.S. Department of the Treasury). Further, HUD's 2023 publication *Policy & Practice* collects and disseminates evidence-based insights drawn from State and local housing policy initiatives. HUD also recently announced $4 million in grant funding to support research studying zoning and land-use reforms, and a $350,000 award through the Research Partnerships program to support the development of the "National Zoning Atlas" to "close data gaps that limit our understanding of the relationship between zoning and segregation, affordability, and other outcomes of interest" (HUD 2023j, 2023g). HUD has further reinforced the 1968 Fair Housing Act's goal of "Affirmatively Furthering Fair Housing" with a rule that would require recipients of HUD funding to work to overcome patterns of segregation, promote fair housing choice, eliminate disparities in opportunities, and foster inclusive communities free from discrimination (HUD 2023a).

### Box 4-4. State and Local Zoning: Recent Steps

Zoning is one of the most significant regulatory powers of local government, and research shows reform can unlock economic growth and opportunity (Flint 2022). Zoning reforms that are likely to increase housing supply include allowing more multifamily housing to be built (especially near public transportation hubs), legalizing accessory dwelling units (ADUs), and eliminating minimum parking requirements, minimum lot sizes, minimum square feet requirements, and density restrictions. None of these reforms prevent new single-family home construction; rather, the changes prevent municipalities from requiring only single-family homes.

Some steps taken in recent years include:

- Buffalo became the first major U.S. city to abolish minimum parking requirements in 2017 (Poon 2017). Recently, more cities have followed suit, including Anchorage, San Jose, and Gainesville. Other cities, such as San Diego, made incremental steps in the same direction by eliminating parking requirements near public transit (Wamsley 2024; Khouri 2022).
- Minneapolis banned single-family exclusive zoning in 2018, and Charlotte enacted a similar policy in 2021 (Grabar 2018; Brasuell 2021). At the State level, Oregon, California, and Washington enacted such policies in 2018, 2021, and 2023, respectively (Garcia et al. 2022; Gutman 2023).
- California has enacted multiple policies intended to grow housing supply in recent years. The State has legalized ADUs statewide, allowed duplexes and lot splits in single-family zones, and allowed mixed-income, multifamily housing in all residential areas (Skelton 2021; Gray 2022). At the same time, California has eliminated minimum parking requirements at transit stations statewide (Khouri 2022). California has also set up a Regional Housing Needs Allocation process, whereby local jurisdictions must produce housing and land use plans to comply with State housing targets (California Department of Housing and Community Development 2023).
- Connecticut has enacted significant policy changes, requiring its cities and towns to "affirmatively further fair housing" in their zoning, promote diverse housing options, legalize ADUs, and cap minimum parking requirements (Flint 2022).
- Montana enacted several changes in 2023 aimed at making housing more affordable and reducing sprawl into rural and agricultural areas (State of Montana Governor's Office 2023). These pro-housing changes include allowing duplexes, ADUs, and apartment-style housing, while also speeding up permitting approvals (Dietrich 2023).

- In 2022, Maine passed legislation to allow ADUs and duplexes in residential zones, and legalized quadplexes in "designated growth areas" (SMPDC 2023).
- In Massachusetts, a program known as MBTA Communities, signed in 2021, requires cities and towns to allow multifamily housing near transit stations, with a minimum density of 15 units per acre (Commonwealth of Massachusetts 2023). Fairfax County, Virginia, is taking similar steps, such as easing height and density restrictions near transit stations (Merchant 2016).
- Vermont legalized duplexes in all residential neighborhoods, as well as triplexes and quadruplexes in all areas served by municipal sewer and water infrastructure in 2023 (Brasuell 2023).

In addition to HUD's efforts, the U.S. Department of Transportation (DOT) manages several large grant programs that improve transportation connections, including connections to affordable housing and funding for land-use reform. For example, the Reconnecting Communities and Neighborhoods Program offers grant funding for capital construction, community planning, and regional partnerships that prioritize disadvantaged communities, improve access to daily needs, foster equitable development, and reconnect communities (DOT 2023). The Areas of Persistent Poverty Program awards competitive grants to finance projects including those that improve transit facilities, technologies, and transit service in areas of persistent poverty or in historically disadvantaged communities (FTA 2023). In addition, the Economic Development Administration has updated its guidance to emphasize efficient land use as part of the agency's grantmaking authority (White House 2023a). Many of these efforts are connected with the Administration's Housing Supply Action Plan, which provides incentives for local zoning reforms by tying these reforms to Federal grant process scoring (White House 2022). Together, these policies prioritize and direct Federal spending toward increasing the housing supply and affordability, especially in locations close to public transportation.

### *Reducing Supply Constraints with Federal Taxes and Other Subsidies*

Addressing home affordability requires both short-term and long-term solutions. To unlock supply and increase access in the short run, the Biden-Harris Administration has called for a series of new policies designed to lower costs for homeowners and homebuyers. This includes a temporary mortgage payment relief tax credit for first-time homebuyers, which can increase access to homeownership during this period of historically high

mortgage interest rates (as described in the forthcoming Fiscal Year 2025 Budget, per the U.S. Department of the Treasury). It includes down payment assistance to first-generation homebuyers, which can increase access for families that have not benefited from the generational wealth accumulation associated with homeownership (HUD 2024a). Further, it includes a temporary tax credit targeting low- and middle-income homeowners who sell their starter homes, which can unlock inventory in the starter-home market that is currently facing an acute supply shortage (as described in the forthcoming Fiscal Year 2025 Budget, per the U.S. Department of the Treasury). Finally, to reduce the value gap between rehabilitation costs and postconstruction home values for single-family homes in distressed neighborhoods, it includes new funding to subsidize rehabilitation expenses (White House 2023d). These funds can increase the likelihood that homes are rehabilitated before sale, making it easier to attract homebuyers and boosting revitalization efforts in these neighborhoods.

To address supply issues in the long run requires making progress on both cost and access. However, these policies take time to show progress. President Biden has called for a new Project-Based Rental Assistance Program to fund long-term contracts with private owners to rent new affordable units to America's neediest families (White House 2023c). The Federal Government has also directly reduced the cost of building affordable housing by subsidizing construction expenses through the tax code.

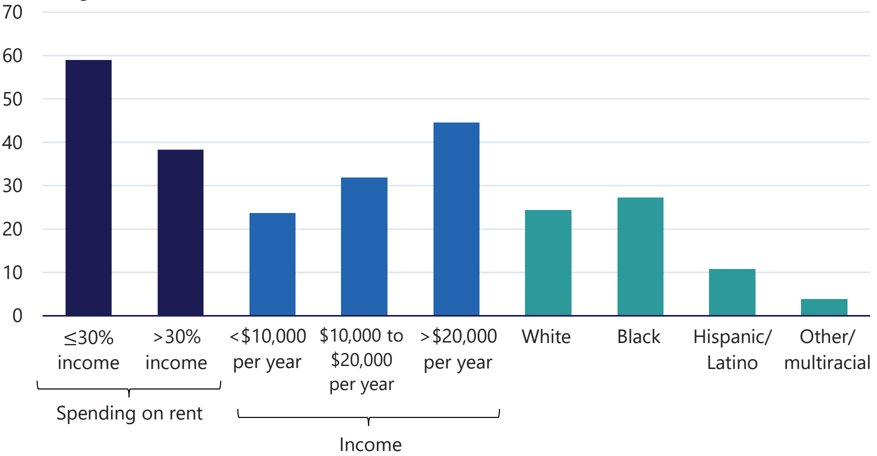
The largest construction subsidy, the LIHTC, has funded one in five of all new multifamily units since 1987 and has created more than 3.5 million affordable rental units (HUD 2023e). The LIHTC awards developers a stream of Federal tax credits over a 10-year period after a project is placed in service. In exchange, developers must designate a subset of units as rent restricted for low-income households. Box 4-2 provides additional details on the LIHTC, including how it helps close the gap between profitability and the investment returns required for investors to fund the project.

Figure 4-11 shows the financial characteristics of LIHTC unit tenants in 2021. LIHTC provides housing for households with very low incomes: 24 percent had an annual income below $10,000, and 56 percent had an income below $20,000. The program benefits a diverse group of households: roughly one-quarter are white, another quarter are Black, and one-tenth self-identify as Hispanic/Latino. The statistics suggest that the LIHTC program effectively targets vulnerable families.[5] Still, nearly 40 percent of tenants spend more than 30 percent of their income on rent (HUD 2021).

[5] While HUD collects demographic information describing households residing in each LIHTC property, these data are incomplete because a universal list of buildings placed in service that received LIHTC is not publicly available. Improving the collection of these data would permit HUD to more completely portray the scope of the LIHTC portfolio and its residents.

**Figure 4-11. Financial Characteristics of LIHTC Unit Tenants, 2021**

*Percentage of households in LIHTC units*




**Council of Economic Advisers**

Sources: U.S. Department of Housing and Urban Development; CEA calculations.

Note: LIHTC = Low-Income Housing Tax Credit. The "other/multiracial category" includes those reporting race as Asian, American Indian/Alaska Native, Native Hawaiian or Other Pacific Islander, other, and multiple races. The shares within each category do not sum to 100 percent due to missing or unreported data.

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LIHTC-funded developments make an impact on both families and neighborhoods, according to multiple studies of the program's benefits (Baum-Snow and Marion 2009; Eriksen and Rosenthal 2010). Evidence from Chicago demonstrates that LIHTC-assisted developments have positive spillover effects on local property values (Voith et al. 2022). Home price appreciation contributes to wealth accumulation for neighborhood residents and increases funding for public services, but it can also make localities inaccessible for financially disadvantaged families. At the same time, LIHTC-assisted developments are associated with reductions in violent crime through neighborhood revitalization (Freedman and Owens 2011). One study estimates that the program's aggregate welfare benefits in low-income areas are $116 million via property value appreciation, declines in crime, and the inflow of racially diverse individuals (Diamond and McQuade 2019). Further, access to affordable housing via LIHTC units gives families and their children the stability required for regular health care access and is associated with decreased rates of child abuse and neglect (Gensheimer et al. 2022; Shanahan et al. 2022).

However, there is also evidence that new LIHTC projects may increase owner turnover rates and crowd out private rental construction (Baum-Snow and Marion 2009; Eriksen and Rosenthal 2010). Still, the Administration believes the program can help improve housing affordability and supply,

and President Biden's Fiscal Year 2025 Budget calls for roughly $30 billion to expand and enhance the program. The President's 2022 Housing Supply Action Plan called for LIHTC reforms, including a now-finalized Treasury rule allowing developers to average incomes across some, rather than all, households in a given property to incentivize more mixed-income developments (White House 2022; Internal Revenue Service 2022).

The Historic Tax Credit subsidizes the rehabilitation of historic properties, including those that result in a new or renovated housing supply.[6] Since its inception in 1976, the program has rehabilitated more than 300,000 housing units and has created 343,000 new housing units, 192,000 of which are low- and moderate-income units (U.S. Department of the Interior 2022). In Fiscal Year 2021, the National Park Service certified 1,063 historic rehabilitation projects to revitalize abandoned and underutilized buildings; nearly 80 percent of them were located in economically distressed areas (U.S. Department of the Interior 2021). The National Park Service has also shown that Historic Tax Credit–related rehabilitation projects provide a better return on investment than equal investments in new construction (U.S. Department of the Interior 2020).

Federal housing tax subsidies can help achieve long-term housing supply goals and affect the U.S. economy's climate impact. Buildings account for 29 percent of all U.S. greenhouse gas emissions (Leung 2018). Estimates suggest that rehabilitated structures produce 50–75 percent fewer carbon emissions than new construction (Gupta, Martinez, and Nieuwerburgh 2023). The Inflation Reduction Act has committed $9 billion in tax credits, rebates, workforce training, and funding opportunities to transform existing homes into green homes and construct new, environmentally friendly residential spaces (Martin 2022). Currently, the commercial real estate market, with high office vacancy rates and rising loan delinquencies, is in a position to be transformed into usable and financially prudent residential spaces (Sorokin 2023; DBRS Morningstar 2023; White House 2023b).

In addition to tax subsidies, the Federal Government provides several block grants to State and local jurisdictions to assist in affordable housing development. HUD's Community Development Block Grant Program (CDBG) can support the acquisition and rehabilitation of housing for low- and moderate-income individuals. In Fiscal Year 2022, the CDBG State and local grantees allocated more than $920 million to housing activities, including public housing modernization and single- and multifamily home rehabilitation (HUD 2022). Recently, HUD issued additional guidance on how to make use of CDBG funds to further develop "decent, accessible, equitable, and affordable housing," providing specific ways that grantees can best make use of CDBG funds (HUD 2023h). HUD also administers the

[6] The Historic Tax Credit is a colloquial name for the Rehabilitation Tax Credit, which was made available under section 47 of the Internal Revenue Code.

HOME Investment Partnerships Program, the largest Federal block grant program that provides funding exclusively to increase access to an adequate, affordable housing supply for low-income households (CRS 2021). Since 1992, HOME appropriations have cumulatively totaled nearly $45 billion, with annual appropriations ranging between about $1 billion and $2 billion. The funds have supported completion of more than 1.3 million affordable housing units (HUD 2023c).

### *Expanding Manufactured Home Delivery and Financing to Address Rural Housing Constraints*

Manufactured housing costs 45 percent less to build per square foot than site-built housing due to efficient production technologies that take advantage of economies of scale (Freddie Mac n.d.). Manufactured homes, which are required to comply with HUD-promulgated Manufactured Home Construction and Safety Standards, are energy efficient, safe, and designed to withstand natural disasters, inclement weather, and fires (Freddie Mac 2022; Code of Federal Regulations 2023). As a result, they may help provide affordable housing units and alleviate supply constraints, especially in rural communities.

Manufactured housing has a higher share of total owner- and renter-occupied housing in rural communities than in more densely populated areas (Layton 2023). However, efforts to expand the manufactured housing supply face hurdles driven by land-use regulations. Although the HUD-promulgated manufactured housing building code preempts State and local design and construction code, local land-use regulations often restrict the placement of manufactured homes, either implicitly or explicitly (HUD 2023f). For example, some jurisdictions have zoning requirements that limit manufactured housing to specific zoning districts, and other jurisdictions may have minimum home size requirements that preclude manufactured housing (Freddie Mac 2022). In addition, minimum lot size and parking regulations increase land costs and price manufactured homeowners out of the market. Federal efforts to encourage the adoption of improved State and local zoning policies could serve as a financial incentive to promote these kinds of reforms as well.

Barriers to manufactured home financing dampen demand. The traditional government-sponsored mortgage enterprises, specifically Fannie Mae and Freddie Mac, cannot purchase and guarantee loans for manufactured homes because their owners do not typically own the land on which they sit. Instead, owners must take out a so-called chattel loan, which, relative to a mortgage, has higher interest rates, shorter repayment periods, and fewer consumer finance protections (CFPB 2021). These loans can be prohibitively costly for low-income families (Goodman and Ganesh 2018). In light

of this, Fannie Mae and Freddie Mac have identified the financing of manufactured and rural housing among the activities targeted by their 2022–24 Duty to Serve Plans, including the plan to begin purchasing loans titled as personal property in 2024 and to increase the purchase of loans titled as real property (FHFA 2022).[7]

## Conclusion

Housing shortages and unaffordability have risen over the last 60 years, in large part because of local land-use policies that restrict housing density and what can be built. These effects are felt most by low-income and vulnerable families, which are increasingly priced out of the housing market. Because many amenities are bundled with housing and neighborhoods, housing supply shortages inhibit economic mobility for millions of Americans. Investing in the housing supply and producing affordable units opens the door for upward mobility and increases overall economic growth.

Persistent market failures in the housing market create a role for government. Demand-side assistance can help households facing affordability constraints. In addition, the Federal Government has encouraged efforts to increase supply-side policies that incentivize local zoning reform, reduce exclusionary zoning via grants and other spending, and directly subsidize affordable unit construction through programs like LIHTC. While the efforts have made a difference, the housing market still faces an acute supply shortage and declining affordability. Ultimately, meaningful change will require State and local governments to reevaluate the land-use regulations that reduce the housing supply.

Fortunately, local, State, and Federal policies can boost the housing supply through incentivized changes to zoning policies, tax credits that subsidize construction costs for affordable units, and other block grants that prioritize affordable unit construction. By taking further steps to address the country's housing supply shortage, the United States will be richer, our citizens will be more financially stable, and our environment will be greener.

[7] The Safety and Soundness Act provides that the "Government-Sponsored Entities" have a "duty to serve underserved markets," specifying that the enterprises "shall provide leadership to the market in developing loan products and flexible underwriting guidelines" to improve access and equity in the mortgage financing market.