

HOUSING AFFORDABILITY TOOLKIT

Housing Affordability Can Be Solved in This Generation



By: **Professor Matthew Kwatinetz**
NYU Schack Institute of Real Estate



NATIONAL
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Executive Summary



About one-third of all American households rent their homes. Among these households incomes vary tremendously, from extremely low-income renter households with limited or fixed earnings to moderate- and higher-income households who choose to rent for flexibility or lifestyle reasons. As a result, rental affordability challenges do not affect all households equally. While many households are able to secure housing that aligns with their budgets, others face constraints that limit their ability to afford available options without experiencing financial strain.

In the United States, rental housing is considered affordable when a household spends no more than 30 percent of its income on rent—a standard set by the U.S. Department of Housing and Urban Development (HUD). Households paying more than this amount are considered “rent-burdened”. Today, around half of all renter households—over 22.4 million—fall into this category, revealing a severe affordability crisis. Meeting this shortfall requires a combination of developing new market-rate rental housing, preserving existing units at attainable rent levels and targeting subsidies for households with the lowest incomes. This report recommends addressing the 22.4 million rent-burdened households through a combination of:

- **Developing new subsidized rental housing and increasing rental assistance programs (for existing and new private housing)** (Capital A Affordable);
- **Creating and preserving non-subsidized affordable housing** (“lowercase a”), including naturally occurring affordable housing (NOAH); and
- **Enacting broad local deregulation** to increase market-driven rental supply and put downward pressure on rents in existing rental households.

The Rental Affordability Problem Has Multiple Layers

For the half of renter households that are rent-burdened, there are two distinct rental affordability crises. The first is due to a chronic undersupply of homes in certain markets, leading to high rent burdens even among households with moderate-to-high incomes. The second affordability crisis stems from the high share of extremely low-income households for which no private housing will ever be affordable without some sort of subsidy (referred to in this report as “subsidy-dependent households”). To determine how much new rental housing is needed, it is essential to first be clear on the nature of the problem.

Housing Production Declined Sharply Since the 1970s

Since the late 1960s, it has become more difficult for housing providers to build housing in some areas with strong economic growth. Whereas previously building booms would follow economic booms, constraints on building in some areas have instead led to higher prices when demand increases.⁴

¹ A household is all the people who occupy a housing unit as their usual place of residence, regardless of whether they are related to one another. A housing unit can be a house, apartment, single room or even a group of rooms, so long as it is intended as separate living quarters (meaning occupants live and eat separately from other households and have direct access to the unit).

² These figures are from 2023—the latest ACS figures available as of May 2025.

³ Edward Glaeser & Joseph Gyourko, 2017. “The Economic Implications of Housing Supply,” NBER Working Papers 23833, National Bureau of Economic Research, Inc.

⁴ Glaeser & Gyourko, 2017.

This is one of the critical issues underlying the decrease in housing affordability.⁵ In fact, total private housing production (for rental and for-sale housing) has been declining on an absolute (and relative) basis since 1973, when total private housing production peaked at 2.1 million units.⁶ In 2024, total private housing production was 1.6 million units, a 30 percent decrease from 1974. During that period population has grown by 58 percent. While production is cyclical, this dual impact has led to price increases in both for-sale and for-rent housing. For new rental inventory added versus new rental households, the picture is bleaker: production has fallen by 68.4 percent since 1973⁷ ([Demand: How Many Units Are Needed](#)). Any economist—or even regular shopper—will highlight limited availability as a major driver of increased pricing.

Reduced Rental Housing Supply Leads to Higher Rents

In a market-based economy, housing cannot be produced by the private sector unless the price (rent) can cover the cost of providing it. Even in well-supplied markets, rents are still determined by the underlying cost of delivering and operating housing ([Housing 101: Operating Budgets](#)). Economics teaches us that as supply increases sufficiently, given the same demand levels, prices should fall until they are just above the cost of producing another unit of housing (the “marginal cost”). For this to occur, there must be low barriers to producing new housing (elastic supply), a fact that is true in some U.S. markets but not all. Increased demand puts upward pressure on the price of housing (rental and for-sale) until more housing is produced. But in a constrained supply market (where barriers and/or costs to produce housing are high), new supply does not come online, and upward price pressure continues. One of the things examined in this toolkit is how supply can be increased through deregulation to reverse this condition.

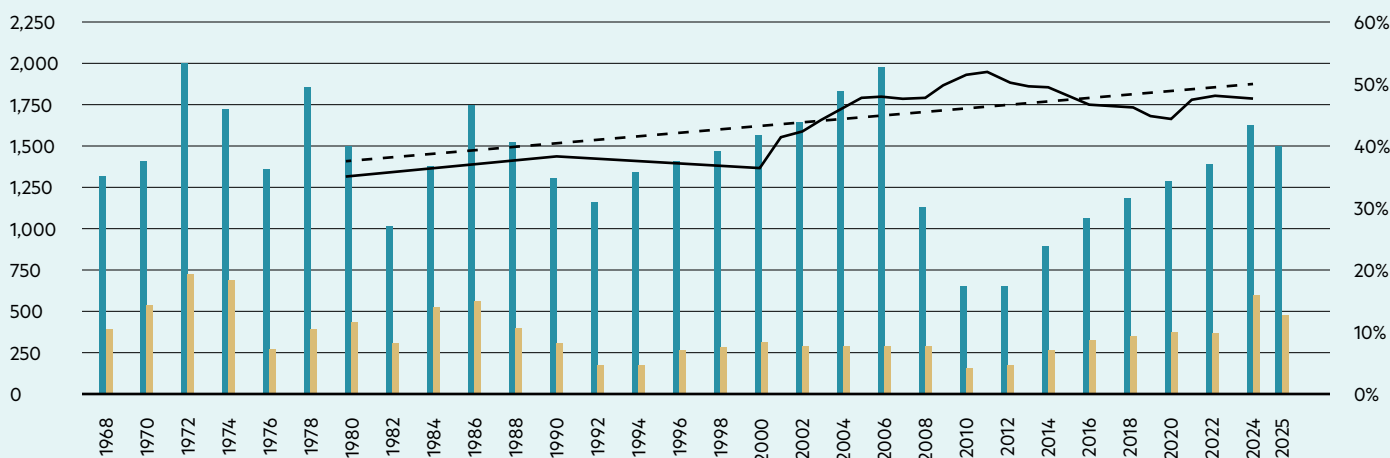
Rental Housing Supply Is Constrained by the Increased Cost of Providing Housing

During the same period since 1973 that housing production on a per household basis plummeted, multifamily housing (2+ units) has been most affected. Since 1973, single family completions have pulled back 15 percent while multifamily (2+ units) have decreased 33 percent—from 903,000 units per year to 608,000 per year (even when taking into account recent high completion levels for multifamily). New development costs in some markets have increased by three to 20 times. The rise in cost to provide housing directly increases the rents (and for-sale prices) that must be charged to make it feasible to provide housing ([Housing 101: Cost Impacts to Feasibility](#)). Moreover, this increased cost of development has in many cases caused the price of new housing to rise significantly faster than household incomes, creating an increasing affordability gap in market-rate housing.⁸

Annual Private Housing Completions (All) and Apartment Completions (5+ Units) vs. U.S. Rent-Burdened Households

FIGURE 1

■ Apartment Completions (5+ units) ■ Housing Completions (Total) — Rent-Burdened Households (30%+) --- Linear (Rent Burdened 30% / Rental HH)



Sources: U.S. Census housing completions and IPUMS USA extract. Rent burden = share of renter households paying 30% or more of household income toward gross rent.

⁵ While the prevailing view holds that supply constraints drive affordability disparities, some recent research challenges the consensus that this is due to the elasticity of supply that is attributed to regulation (Louie et al., 2025), though this remains an actively debated question in the literature. However, even Louie et al. explain that their framework assumes the “fundamental and correct premise” that expansions in housing supply will expand quantities and reduce prices—the debate is to whether such expansion can be achieved by reducing certain specific regulatory conditions. Of note is that this report defines regulation (and deregulation) more broadly than that definition in Louie, et al., to for instance include entitlement delay, infrastructure impositions, affordability requirements and rent regulation.

⁶ Production is cyclical, with peaks as high as 1.9 million units per year, which is discussed further below. From 1974–2006, the average was 1.5 million units per year. The first year recorded since 2007 that met or exceeded that previous average was 2024, with 1.6 million units delivered. In addition to the secular decline overall, the series is notable for its volatility. This volatility represents the interplay between the space market real estate cycle (which consistently delivers hyper-supply of product due to the lack of complete market efficiency of the real estate development industry), the economic cycle of the asset market (in which interest rates rise and fall as a result of exogenous factors to real estate production, but are key inputs to real estate feasibility) and the influence of government policy and non-market social actors (referred to as the Polis). This report has two relevant arguments with regard to this cyclicity. First it argues that this last factor has led to a prime disincentive for development through increased regulation, discussed in [Cost Drivers: The Economics of Housing Production](#). Second, the report claims that the policies promoted herein can activate “dormant development” in the moments when the real estate cycle and/or economic cycle would otherwise halt development. This would create consistency of production at higher levels, delivering large numbers of units influenced by the Polis at exactly the moments when market-based capacity would not otherwise produce.

⁷ NYU Urban Lab / Kwatinetz analysis of U.S. Census Bureau and US Department of Housing and Urban Development, Survey of Construction, February 2025. Overall Multifamily inventory added per US household has decreased by 74.6% over the same period.

⁸ Ingrid Gould Ellen, “Defining Affordability: Long-Term Trends in Home Prices, Rents and Incomes in New York City,” Furman Center. May 2022 Conference of NYU Schack Institute of Real Estate and the Center for Architecture; For national single family cost data see Lynch, E. (2025, January 20).

Regulation Has Created Benefits But Also Increased Cost of Providing Housing

The increasing costs of multifamily (2+ unit) rental housing is driven primarily by regulatory requirements and the extended timeframes required for project approvals ([Cost Drivers](#)).⁹ Research by the National Multifamily Housing Council (NMHC) and the National Association of Home Builders (NAHB) found that regulation accounts for an average of 40.6 percent of the cost of developing a new apartment building with five or more units.¹⁰ The academic literature¹¹ demonstrates that increasing housing costs are divided into three categories:

- **Heavily regulated areas** where pricing is far above the marginal cost of production after accounting for structural cost alone.
- **Low demand areas** where new building is not feasible due to supply exceeding demand.
- **Low regulation areas** in which housing providers respond to increased demand with increased supply—and housing prices remain around the marginal cost of production.

While some regulations serve important public and safety purposes, shifting the full cost of regulatory measures to the private sector ultimately raises housing costs—undermining housing affordability, itself a critical public good.¹²

Moonshot: Housing Affordability Can Be Solved in This Generation

This toolkit is anchored by a bold but achievable goal: ending the rental housing affordability crisis. The U.S. has 22.4 million rental households—or half of all rental households—that need help affording their rental units. Recent housing production has averaged just 1.4 million units a year—more than 600,000 below the pace set in the 1970s. Meanwhile, 14 million homes sit vacant—this is a large figure, representing over 30 percent of all rental households ([America's Housing Supply](#)).¹³ If production can be restored to historic highs while simultaneously placing vacant homes back into service at affordable rents, the gap could be closed within a generation. A 17-year timeline sets the target. The math is clear: a 13 percent boost in private-market production, sustained over time, returns to the output levels of the early 1970s. With the right policies, this is not just possible—it's the moment to prove that the rental housing affordability problem can finally be solved in America.

Deregulation of Local Housing Markets Could Yield 4.3 Million or More New Housing Units

Reducing regulatory costs¹⁴ and streamlining project approvals in local markets would increase housing production serving both homeowners and renters ([Policy Brief: Deregulation](#)). Greater supply across the housing market would put downward pressure on rents through two primary mechanisms:

- **Lower production costs** would enable housing providers to offer units at reduced rents (and sales prices) while maintaining financial viability; and
- **At a sufficient scale of production, expanded housing supply** would increase competition, pushing prices closer to the (now lower) marginal cost of production.

Provided that household incomes remain stable relative to rental price changes, these dynamics are expected to decrease the proportion of rent-burdened households. While deregulation alone will not resolve all housing affordability challenges, a broad body of research highlights the need for new construction—one analysis found 4.3 million apartments need to be built alone from 2022 to 2035 to keep up with demand.¹⁵ Freddie Mac estimates a current shortfall of 3.7 million total housing units, while Brookings suggests it is 4.9 million. Other research highlights the cumulative impact of supply constraints over time—for example, Glaeser & Gyourko estimate that approximately 750,000 units per year were not built between 2000 and 2020, implying a 15 million unit shortfall in construction relative to a less regulated market.¹⁶

⁹ This is an established conclusion. For industry verification see NMHC/NAHB study in Section 6. For academic literature verification see Glaeser & Gyourko, 2017.

¹⁰ Emrath, P., & Walter, C. S., 2022.

¹¹ Glaeser & Gyourko, 2017.

¹² In this report we group infrastructure requirements imposed on private developers (and therefore passed on to individual projects) as “regulation”. See note 5 for counterargument citation.

¹³ The cause of the large amount of vacancy is heterogenous and location specific. Not every vacant unit can simply be converted into affordable supply without improvement (some are not habitable), but this report asserts that with the right policy levers, some can. Full treatment of vacancy is beyond the scope of this report but see for example Bruen, 2022 and McClure, 2024. Markets require some structural vacancy to function, and bringing vacant units into service would likely also cause production of supply to increase to restore some structural vacancy.

¹⁴ Regulatory costs are costs imposed by government authorities on housing producers and can include building code requirements, project review costs, fire code requirements, environmental review and zoning density restrictions. They are described more fully [here](#).

¹⁵ National Multifamily Housing Council & National Apartment Association. (2022, July).

¹⁶ Khater, S., Kiefer, L., & Yanamandra, V. (2024, November 25), Freddie Mac (2024, November), Emrath, P., & Sugrue, C. (2022, June), National Multifamily Housing Council & National Apartment Association. (2022, July), Glaeser, E. L., & Gyourko, J. (2025), Urban Institute (2023).

Subsidy-Dependent Households: Deregulation Alone Will Not House Everyone

Incomes in the U.S. have not kept pace with the rising costs of providing housing.¹⁷ Consequently, even if increased development lowers rental prices, many of the currently rent-burdened households would still spend more than 30 percent of their income on rent. Those that are rent-burdened can be divided into four categories for the purpose of policy analysis:

- High-income households choosing to be rent-burdened for lifestyle reasons;
- Moderate-income household which will have reduced rent-burden provided deregulation can increase supply;
- Low-and-moderate-income households for which public-private tools such as tax incentives can offset the high rents caused by increased but necessary regulation; and
- Extremely low-income households that need income assistance.

This report estimates that approximately 10.1 million households earn too little to afford any type of housing without assistance and are currently unassisted.¹⁸ Their incomes fall short of covering basic operating and utility costs. Because their incomes do not meet the cost of producing housing, no private market solution can adequately serve them without public subsidy. These households are classified as “subsidy-dependent.” Housing created for this group requires targeted public investment—referred to in this report as Capital A Affordable housing.

Subsidized Affordable (Capital A Affordable) Housing Supply Is Also Constrained

In some cases, the government provides capital and operating subsidy to effectively reduce rent levels charged to households while still paying the housing provider for the cost of producing and operating housing. The largest tool in the public subsidy toolbox ([Affordable Housing Glossary](#)) on the supply side is the Low-Income Housing Tax Credit (LIHTC) which, since it was created in 1986, has produced approximately 3.7 million units of subsidized housing. On average, the production volume of new LIHTC has been 89,000 apartments annually.¹⁹ At that rate it would take over 100 years to meet the need of all the current subsidy-dependent households, and **it would take over 250 years to accommodate all rent-burdened households** ([Time-to-Address: A New Metric to Assess Housing Policy](#)). In a best case scenario, the enactment of 2025 tax legislation that expanded LIHTC could lead to a doubling of LIHTC production to 178,000 Affordable rental housing units per year, with early estimates forecasting the creation of up to 1.2 million new LIHTC rental homes over the long term against the 10.1 million need.²⁰ This increase can be helpful but still leaves the pathway to a solution at 50+ years from now.

Subsidized Demand May Boost Private Housing Production if Implemented Efficiently

On the demand side, the government provides income assistance to rental households to help them afford rental units that are available in the private market but cost more than 30 percent of the rental household’s income. About five million households, who are counted in the national statistics as rent-burdened households, but do not earn enough income to afford even the most affordable of market rents (“subsidy-dependent households”), use the Section 8 Housing Choice Voucher and Project-Based Rental Assistance programs (See [Demand: How Many Housing Units Are Needed to Solve the Rental Affordability Crisis](#)). In both heavily regulated markets and low regulation markets, an increase in income assistance may yield an increase in housing production if the economics of the income assistance are favorable enough to fill the gap between housing production costs and limited income households. This report models a hypothetical scenario in which income assistance is doubled—an increase sufficient to support approximately five million additional subsidy-dependent households—to illustrate the scale of resources that would be required to address these needs. This number fills the gap of estimated subsidy-dependent households that will still need assistance after maximizing LIHTC and public housing expansion. The income assistance should be targeted primarily at existing units (three million of the existing vacant rental inventory) but also can support the development of up to two million newly constructed rental units targeted at subsidy-dependent households (given historic peaks of new construction). Notwithstanding the political and fiscal challenges of this aggressive increase to income assistance, the nature of the combined problems of subsidy-dependent households and supply-side constraints yields increasing income assistance as one of the few viable methods for achieving the moonshot goal described in this report. Even with the bold hypothetical increase of income assistance, this demand-side approach is only effective if there is sufficiently increased supply to satisfy the increased demand.

¹⁷ Ellen, 2022 and Joint Center, 2025.

¹⁸ This number was estimated at 8M by HUD in 2022, 11.2M in the 2023 American Community Survey and 12M by Harvard Joint Center for Housing Studies in 2024. Using the HUD “worst case” methodology, we identified renter households using the 2024 ACS Public Use Microdata Sample (PUMS). We identified severe housing cost burden as 50% or greater. We then applied FY2024 Very Low-Income limits from HUD (Section 8) and constructed PUMA specific income thresholds. We estimated households as likely assisted using ACS based approximations of subsidy status. We then combined the three criteria within the rental population. The final national estimate was obtained by using the ACS household weight to generate nationally representative estimates, which produced 14.73 million rental households with severe cost burden regardless of income, 11.34 million very low-income renters with severe burden and 10.11 million very low-income unassisted renters with severe burden.

¹⁹ LIHTC totals vary depending on methodology. See footnote 32 for further discussion on aggregate LIHTC production. For annual deliveries, see [America’s Rental Housing Supply](#) and Jaffe & Ingram, 2025.

²⁰ Novogradac estimates that the combination of a permanent 12% increase in 9% allocations and the reduction of the bond “50% test” to 25% could finance 1.22 million additional affordable rental homes over 2026–2035, which we have simplified to a doubling of average production given political uncertainty and time for industry ramp-up. See Lawrence, P. (2025, July 2).

The Private Market Produces Naturally Occurring Affordable Housing in Large Quantities Already—But Not Enough

There are still geographies in which the cost of producing housing allows market-rate housing providers to produce affordable units without public subsidy ([The Importance of Local Policy](#)), something that is alternatively called “lower case a” affordable, attainable housing or Naturally Occurring Affordable Housing (NOAH). While in some of the literature, NOAH can be used to refer only to older apartment buildings that retain low rents due to quality, here NOAH is defined broadly as all rental units (Single-Family, 2-4 unit and 5+ unit structures) that offer affordable rents without subsidy.²¹ The private market continues to provide more housing that is affordable than the total Capital A Affordable housing produced since the government started Capital A Affordable programs—in fact over 70 percent of the affordable rental housing inventory in the urban U.S. today is privately developed and operated without Capital A Affordable subsidy ([Hidden Factor: Naturally Occurring Affordable Housing](#)). NOAH is either developed new or provided by preserving existing rental properties.

Use Tax Abatement to Revive and Retain Existing Units as NOAH

On average, more existing NOAH units are lost per year than new LIHTC Capital A Affordable units are created, reinforcing the need to defend NOAH as a key plank of any overall housing affordability policy platform. This report argues that two of the most effective policies involve promoting dormant development and engaging with by-right tax abatement programs. Between 2012 and 2022 the supply of the lowest rent units experienced a loss of 2.1 million units, with more than half a million low-rent units lost just between 2019 and 2022.²² There are several existing preservation programs around the country that provide useful lessons ([Policy Brief: Preservation](#)). Based on these programs, this report recommends utilizing by-right tax²³ abatement programs to:

- Preserve units that are currently NOAH; and
- Convert free market vacant units to affordable units.

This could result in the preservation of up to seven million units of existing multifamily housing at affordable rent levels through by-right tax abatement. Some of these may be vacant units and some existing and operating NOAH buildings.

Use By-Right Tax Abatement to Build New

As stated above, local deregulation could increase overall supply of housing. Specific deregulation recommendations include lowering costs of overall entitlement regulation as well as reducing time to achieve approvals to build. In most markets, reducing local regulation without subsidy should increase the amount of NOAH being produced. Adding a by-right tax abatement could increase this effect while preserving some critical pieces of regulation that act for the public good. A properly tuned tax abatement program in the style of those previously seen in Austin and in New York City ([Policy Brief: Tax Incentives](#)) could stimulate the creation of four million new units of affordable housing through by-right tax abatement programs. This is an addition of 250,000 units per year to be built.

Summary of Policy Recommendations

In summary, this report recommends three effective mechanisms to address the shortage of affordable rental homes, all of which are currently at play in parts of the U.S.:

- **Capital A Affordable Housing:** Developing new subsidized rental housing and increasing rental assistance programs for existing and new private housing;
- **“Lowercase a” affordable:** Creating and preserving non-subsidized affordable housing including naturally occurring affordable housing (NOAH); and
- **Enacting broad local deregulation** to increase market-driven rental supply and put downward pressure on rents in existing rental households.

These three mechanisms can be applied to both construct new units and preserve existing units.

²¹ Our methodology estimated the presence of Naturally Occurring Affordable Housing (NOAH) within a metropolitan statistical area (MSA) is determined by comparing average market rents to the MSA's maximum affordable rent burden limit based on 80% Area Median Income (AMI) limit for a four-person household (HUD). This income level is multiplied by 30 percent and divided by 12 to establish the MSA's maximum affordable monthly gross rent. Approximating the Net Rent is then determined by subtracting average utility expenditures. This affordability threshold is then compared against the average two-bedroom market rent as reported by CoStar. MSAs are classified based on the relationship between these values: if the maximum affordable net rent exceeds the average market rent, the MSA is considered to produce NOAH; if the maximum affordable net rent is within five percent of the average market rent, the MSA is classified as near producing NOAH; and if the maximum affordable net rent falls more than five percent below the average market rent, the MSA is considered not to produce NOAH. [Section 5: NOAH](#)

²² [Joint Center for Housing Studies, 2025.](#)

²³ By-right development (also known as as-of-right development) is “the easiest path to qualify for development under the zoning and building codes of local jurisdictions. By-right approvals are also described as ministerial—a common legal term that also describes a lack of discretionary approval”, see Planetizen (n.d.).

Method of Delivery: Development, Preservation and Economic Forces

Addressing the needs of 22.4 million rent-burdened households in one generation is a challenge. This toolkit focuses on a three-part strategy: unlocking dormant development, creating incentives for preservation and working to balance existing economic forces. Continued development is required just to maintain the status quo, and even if development production can be increased back to historical heights, not all the production can be allocated to affordability solutions. This toolkit's approach is to select a reasonable maximum expansion of the annual development pipeline (called "dormant development"), paired with aggressive preservation strategies. Preservation strategies target already existing units. For purposes of analytic clarity, this report focuses on vacant inventory—units that are built but currently unoccupied. As these units are preserved and absorbed over time, the vacant inventory will slowly replace itself. While these vacant units exist physically, it will still take some time to execute upon the financial and regulatory processes necessary to add them to the affordable inventory. Finally, as supply increases across the market, and demand is reshaped through the various interventions described herein, some reduction is anticipated in the 22.4 million need as there will be increased downward pressure on pricing through expanded inventory.

Dormant Development

A reasonable upper bound was selected for how many units can be constructed per year as the peak number of units developed in the 1970s. The delta between 2020-2024 average production (1.4 million units per year) and 1974 production (2.1 million units per year) is called dormant development. Dormant development is sized at approximately 600,000-700,000 newly constructed rental units per year.²⁴ This number is roughly in line with the 750,000 annual supply suppression described by Glaeser & Gyourko.²⁵ For purposes of this paper, dormant development is an estimate of the reasonable capacity of the housing production industry to create more units, as benchmarked to historic records of production. Dormant development for this report includes market-rate units as well as the development of units that will service Capital A Affordable housing, be supported by income assistance, or are commissioned by a public entity to expand public housing.

Preservation and Vacancy

There is an existing inventory of 14 million units, some of which can be preserved annually as affordable. While these units already exist, there is a process for directing them toward affordability solutions by acquiring units and then applying financial and regulatory tools to preserve them as affordable. In most instances it is expected that this process will be both quicker and more cost efficient than new development. Preservation is substantially more cost-effective than new affordable construction—in Chicago, rehabilitation costs an estimated 80 percent less than new construction, and comparable cost differentials have been documented in Los Angeles, Minneapolis and New York City.²⁶ But given the uncertainty of the timing of execution at this stage of planning the pipeline, the level of preservation is set annually to match the pipeline of dormant development annually.

²⁴ The total pipeline of housing completions being discussed here includes both rental and for-sale product. However, policies that promote the activation of the dormant development pipeline can be targeted to rentals. Some percentage of investors and developers may choose how to target their housing production via tenure, and policy can be tuned to make rentals more attractive.

²⁵ Glaeser & Gyourko, 2025.

²⁶ Axios/PreserveNOAH, 2025; McKinsey Global Institute, 2021.

Housing Affordability Solution Pipeline

CHART 1

Active Dormant Development Capacity

	UNITS/YEAR	YEARS	TOTAL
Deregulation	250,000	17	4,250,000
By-right tax abatement (new construction)	250,000	17	4,250,000
Low-Income Housing Tax Credit	35,000	17	595,000
Public Housing Expansion	23,000	17	425,000
Income assistance (new construction)	110,000	17	1,870,000
Sub-Total, Dormant Development	670,000		11,390,000
Average Annual Production 2020-2024	1,419,000		
Total Average Annual Production of New Units (2026-2043)	2,089,000		

Preservation of Existing Units (including vacant)

	UNITS/YEAR	YEARS	TOTAL
By-right tax abatement (Revive & Retain)	437,500	17	7,437,500
Low-Income Housing Tax Credit (Preservation)	45,000	17	765,000
Public Housing Expansion (Acquisition)	50,000	17	850,000
Income Assistance	125,000	17	2,125,000
Sub-Total, Preservation	657,500		11,177,500
Total, Dormant Development & Preservation	1,327,500	17 Years	22,567,500

This toolkit outlines the state of rental housing affordability in the U.S., evaluates the various tools at play in attempting to address the issue and then argues for these three policies as a broad plan which can address rental housing affordability across the U.S. in our lifetime. The critical question is how to craft policy that allows private development of housing at affordable rents. To prepare this toolkit the latest available [public data on housing inventory and completions by purpose](#) were used and publications from 2019 to February 2026 spanning academic research, practitioner/industry surveys and debates in the public square evident in media publications ([Policy Report Card](#)) were surveyed. Some of the [best research available](#) was then synthesized with an original [data analysis](#).

The mechanisms of making housing more affordable are specific and require partnership between the public and private sectors:

- Provide public funds where necessary on both the supply and demand side to bridge the gap between the increased cost of housing and the incomes of subsidy-dependent households;
- Incentivize and increase the production of non-subsidized rental housing (activating dormant development) such that the total housing created (for-rent and for-sale) is in line with historic norms to balance supply and demand; and
- Remove regulation where possible, including easing building codes to allow for new construction technology and techniques, to lower the cost of housing production and preservation.

A combination of unleashing dormant development and creating favorable economics for existing vacant and NOAH units will activate the private development industry toward producing housing that is affordable to a greater number of people while also maximizing the potential for public/private tools that enable Capital A Affordable housing to serve subsidy-dependent households.

Housing Affordability Can Be Solved in This Generation

America's Rental Housing Supply

Total Housing Inventory: By Tenure

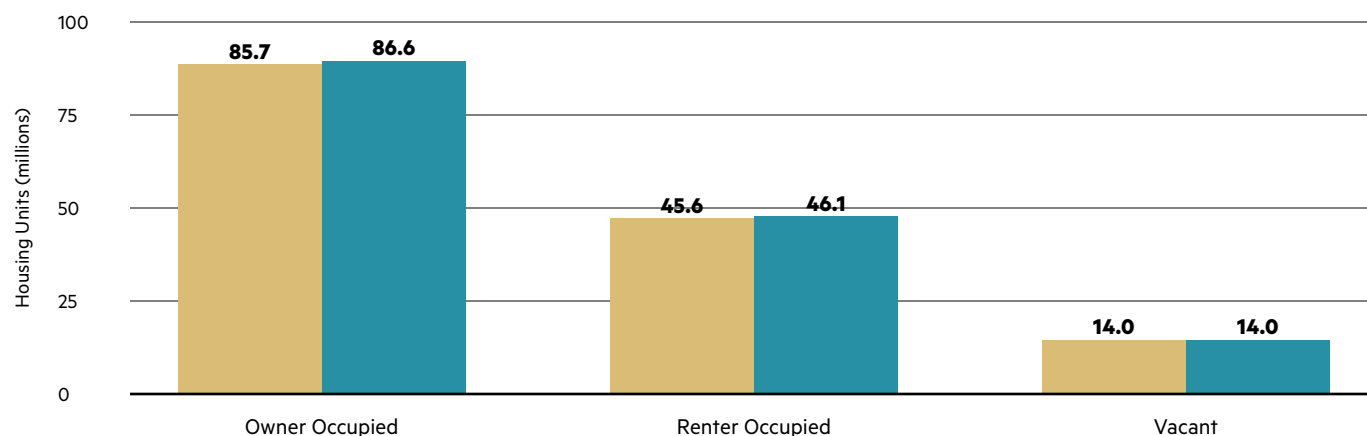
Rental housing is part of the broader U.S. housing system. Units are classified by tenure—whether they are owner-occupied or renter-occupied. In 2024, the U.S. had 147 million housing units: 87 million owner-occupied, 46 million renter-occupied and 14 million vacant.²⁷ Of the renter households, approximately half were rent-burdened, most at the lower end of the income spectrum.²⁸ Prices in the ownership and rental markets are linked: households that can choose between buying and renting weigh relative costs, shifting demand accordingly.²⁹ This can have an outsized effect for low income households. Since 2021 about 55 percent of newly completed housing has been built for sale, 27 percent for rent and 18 percent reported with no stated purpose ([Appendix Chart 1: Completions by Purpose](#)).

Housing Units in the United States by Occupancy Status

ACS 1-year comparison: 2023 vs 2024

FIGURE 2

2023 2024



Source: U.S. Census Bureau, ACS 1-year (Tables B25002, B25003)

²⁷ Utilizing the U.S. Census ACS figures from 2024, the precise numbers are 86.6 million owner-occupied, 46.1 million for-rent and 14.0 million vacant. Different US sources, such as the Population Survey/Housing Vacancy (quarterly household survey of ~60k households) yield slightly different numbers, with HVS yielding a “tighter market” view due to exclusion of seasonal/second homes and actively marketed units.

²⁸ These figures are from 2024 ACS—see note 2. Our latest rent burden numbers from ACS are from 2022, which estimate 22.4 million rent-burdened households. Joint Center for Housing Studies of Harvard University, 2024.

²⁹ When purchase prices for homes are cheap enough that those with capital can make profits by purchasing homes and then entering them into the rental market, there is a dual effect on both for-sale and for-rent pricing and demand.

Total Rental Inventory: By Structure Type

Rental housing can also be classified by structure type: single-family homes, 2-4 unit buildings and buildings of 5+ units. Historically, single-family homes were predominantly owner-occupied, while many 2-4 family structures housed an owner in one unit and renters in the others. Large-scale rental housing providers have traditionally focused on (preserving or producing) multifamily buildings of 5+ units, but in recent years more housing providers have begun developing communities of single-family homes specifically as rentals. Today, the largest share of renter households live in 5+ unit buildings, followed by single-family homes and then 2-4 unit buildings. Because household sizes differ, the number of residents in single-family rentals is roughly equal to those in 5+ unit buildings. In this report: “all rental housing” refers to single family, 2-4 units and 5+ unit structures; “multifamily” refers to 2+ unit structures; and “apartments” refers to 5+ unit buildings. While this analysis is primarily framed around apartments, the same policies examined in this report also affect single-family rentals and can shift a portion of the single-family inventory toward rental use.

What Type of Structure Do Renters Live in?				CHART 2
STRUCTURE TYPE	HOUSEHOLDS	PERCENT	RESIDENTS	PERCENT
Single-Family	14,392,315	31	40,793,042	39
2 to 4 Units	7,937,709	17	17,753,545	17
5 or More Units	22,008,628	48	41,242,173	40
Mobile Homes	1,700,948	4	4,392,093	4
Other	62,030	0	119,813	0
Total	46,101,640	100	104,300,666	100

Source: 2024 American Community Survey 1-Year Estimates, U.S. Census Bureau, Tables B25032 and B25033. As of 02/2026

Total Housing Production

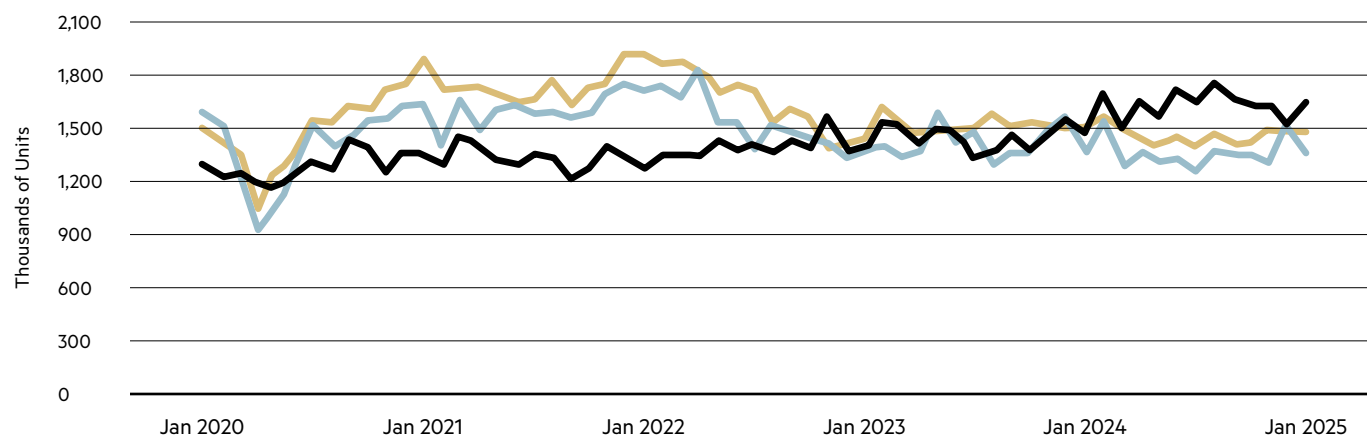
The U.S. housing market has historically relied on private development to meet demand across all income levels and tenures. On average, private developers have produced 1.2-1.5 million housing units per year—almost entirely market-rate. By contrast, only about 89,000 subsidized affordable rental units are added annually (see next section).³⁰ The peak year for housing production was 1973, when 2.1 million units were built. At the low point, output fell to about 600,000 (total housing) units ([Figure 1: U.S. Housing Production vs Rent Burden](#)). These figures include both rental and for-sale housing, across multifamily (2+) and single-family structures. Over the last 20 years, multifamily housing (2+ unit) construction has fluctuated from under 100,000 units per year to a recent peak of about 600,000 per year. The amount of multifamily housing units produced is directly related to the economics of production ([Housing 101: Cost Impacts to Feasibility](#)). In some markets, this production yields new units that offer contract rents that are affordable without subsidy, what we call in this report [Naturally Occurring Affordable Housing](#).

³⁰ The average from number of LIHTC units placed in service in any given year for the entire U.S. from 1990-2022 was 89,000. National Housing Preservation Database as quoted in Jaffe, 2025.

New Residential Construction (Seasonally Adjusted Annual Rate)

FIGURE 3

■ Permits ■ Starts ■ Completions

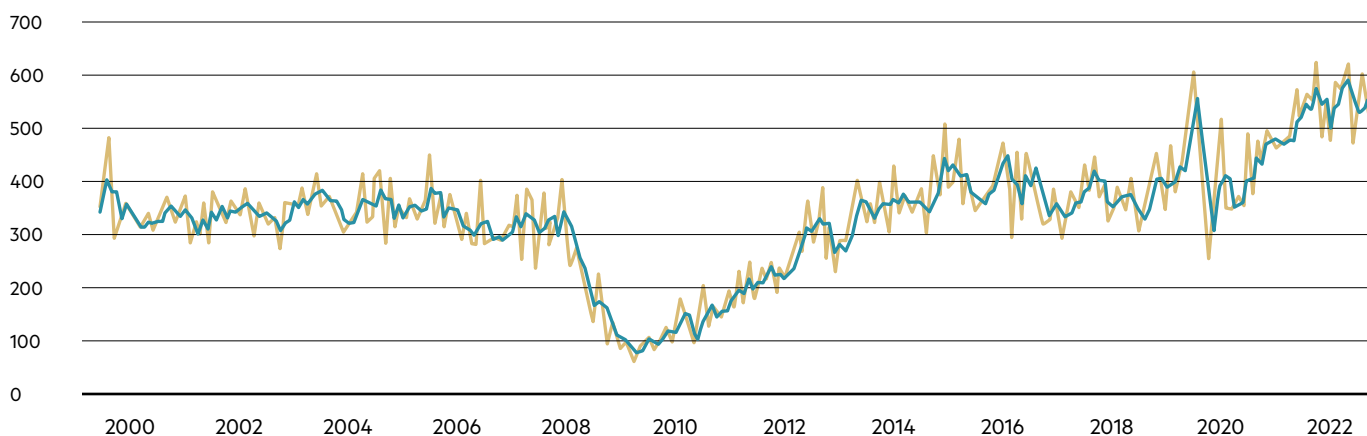


Source: U.S. Census Bureau, HUD, February 19, 2025

Annualized Multifamily Units (Thousands, Seasonally Adjusted)

FIGURE 4

■ Monthly Starts ■ Average Starts (3-Month Trailing)



Note: Data are for buildings with at least two units and are through October 2023
Source: JCHS Tabulations of US Census Bureau, New Residential Construction data

Affordable Housing Production

Government expands Capital A Affordable rental housing supply by lowering rents through capital and/or operating support ([Housing 101: Definitions](#)). The main Capital A Affordable supply tools are:

- Low-Income Housing Tax Credits (LIHTC),
- Project-Based Section 8 (PBV and PBRA),
- Section 236, and
- Public housing

The [Affordable Housing Glossary](#) explains each of these more fully.

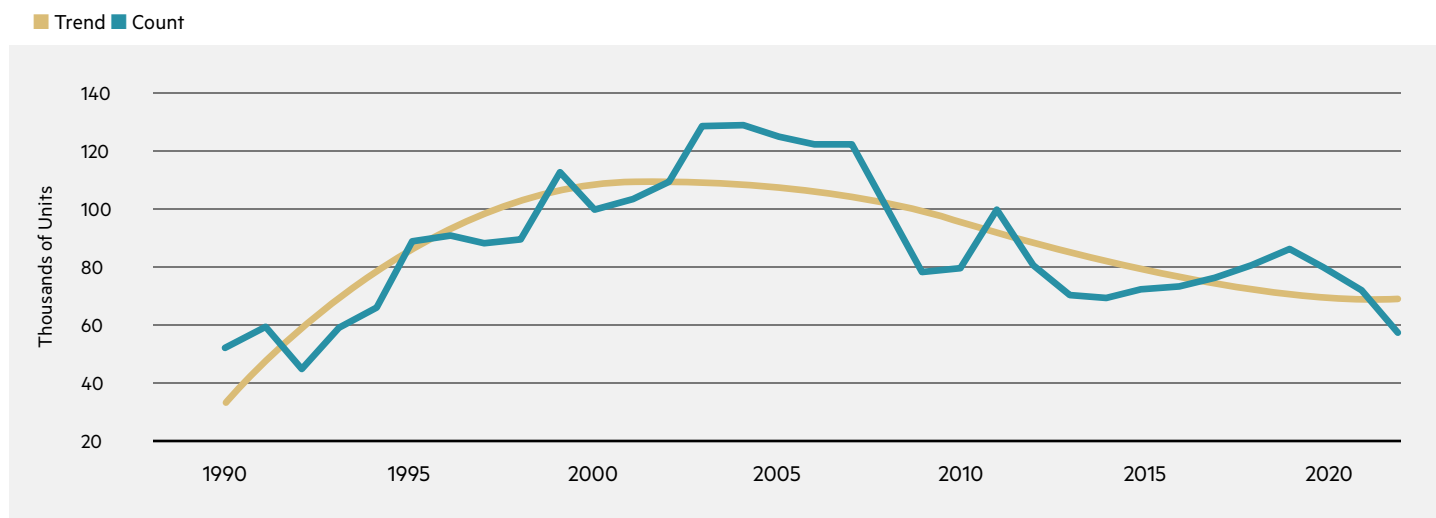
LIHTC is now the largest source of new construction funds for Capital A Affordable rental housing in the country.³¹ As the dominant production program for Affordable rental housing, LIHTC has financed about 3.7 million affordable rental units since 1986 according to most recent HUD data³² and added on average 89,000 apartments annually.³³

Project-Based Section 8 is a Capital A Affordable program that prioritizes production subsidy (supply side). Project Based Rental Assistance (PBRA), authorized in 1974, supported new construction of 850,000 units, peaking at 150,000 new units per year before the program was ended. Today there are 1.2 million legacy PBRA units that receive annual funding of roughly \$15 billion. PBV was first used in 2000, and grew slowly to 200,000 units by 2024, mostly through public housing conversions rather than new private builds. PBV is supported by \$2-3 billion of annual funding.

Section 236 (1968) subsidizes private multifamily rental housing for low-to-moderate income families through interest rate reduction payments that lowered mortgages to 1.0 percent. Private developers borrowed through FHA-insured or state HFA loans at market-rates, with HUD paying the difference to make the effective rate 1 percent in exchange for rental reductions to rates that would be no more than 30 percent of resident income. This program produced 544,000 units across a 10 year period. Many of these units now have loan maturities forthcoming, raising the need for further subsidy to enable preservation.³⁴

New Rent-restricted LIHTC Units (U.S., 1990-2022)

FIGURE 5



³¹ Gyourko, 2023.

³² LIHTC totals vary depending on methodology. HUD's property-level database reports 3.7 million housing units placed in service between 1987 and 2023, while the ACTION Campaign reports 4.13 million homes developed or preserved since 1986; the difference reflects whether a source counts only placed-in-service units or also includes preservation and rehabilitation (U.S. Department of Housing and Urban Development, Office of Policy Development and Research, 2025; The ACTION Campaign, n.d.).

³³ Jaffe, M., & Ingram, D. (2025) calculated the chart based on data from the Public and Affordable Housing Research Corporation and National Low Income Housing Coalition, National Housing Preservation Database. The gray shading indicates official periods of recession as identified by the National Bureau of Economic Research. The trend is calculated using a third-order polynomial regression, which accounts for the nonlinearity of the trend.

³⁴ Von Hoffman, 2016.

Public housing in the United States began with the 1937 Housing Act. The Housing Act initially funded local public housing agencies (PHAs) with \$500 million in federal capital to build units for low-income families, which led to the construction of about 150,000 units by the early 1940s (completions were typically under 25,000 per year). The program’s inventory peaked in the mid-1990s at ~1.4 million units with annual federal funding of \$6–7 billion (inflation-adjusted) that was primarily operating funding—the building boom ended before 1990 and a moratorium on new public housing construction was instituted in 1996. By 2025 the inventory had declined to 810,000–850,000 units supported by ~\$8 billion in operating subsidies, due to chronic underfunding, aging infrastructure and HOPE VI demolitions (over 260,000 units razed/replaced 1992–2010).³⁵ Programs like RAD (2012) and PACT (2023) have accelerated the conversion of distressed public housing to Project Based Section 8 (PBRA or PBV), transferring over 200,000 units from public housing to PBRA/PBV—this reduces public housing counts in the data while total subsidized Capital A Affordable unit supply remains relatively stable (relative to this delta only).³⁶

Housing Production Has Declined

Since 2005, the U.S. has only once delivered more than 1.6 million new housing completions in a year ([Appendix Chart 1: Completions by Purpose](#)), even as the population has continued to grow. The result has been a steady rise in rent-burdened households—now above 50 percent—closely tracking the decline in private housing production relative to population ([Figure 1: U.S. Housing Production vs Rent Burden](#)). Multifamily housing has borne the steepest drop: since 1973, completions of 2+ unit buildings have fallen 33 percent, from 903,000 to 608,000 annually, compared to a 15 percent decline in single-family completions (Chart 3: Completions by Structure Type right). Over the same period, new development costs in many markets have risen three- to twenty-fold, further straining affordability.

Completions by Structure Type			CHART 3
BUILDING TYPE	NUMBER OF UNITS COMPLETED		
	1973	2024	
Single-Family	1,197,200	1,019,000	
2-4 Family	123,500	17,000	
5+ Family	779,800	591,000	
Total	2,100,500	1,627,000	

Subsidized Production Is a Fraction of the Supply

Subsidized production (Capital A Affordable housing supply) represents an estimated 14.3 percent of the overall rental occupied supply. Even with a well-established infrastructure and industry surrounding the creation of subsidized housing production, LIHTC-financed units make up about 8 percent of today’s rental inventory, and affordability restrictions eventually expire unless renewed with additional subsidy.³⁷ Project-Based Rental Assistance (PBRA) preserves affordability for about 1.3 million households but since 1990 rarely adds new units. Public housing adds roughly another one million units, some of which are being converted to Project Based income assistance. Taken together, subsidized housing supply is significant, but the highest production years of Capital A Affordable production hover below 200,000 new rental units per year (a fraction of market production). The proposed scenario in this report relies on subsidized production on the demand and supply side—we propose more than doubling this amount through increased LIHTC rental units (80,000/year), new public housing rental units (75,000/year) and expanded income assistance (tenant-based and project-based) of 235,000/year ([Executive Summary](#)). These are achievable numbers based on the history of the Capital A Affordable programs described above. Yet they are also extremely aggressive numbers when evaluating the expected increase of public sector fiscal impact of income assistance. However, if these numbers were achieved, significantly more supply would be needed to hit our goal.

Capital A Affordable as a Percentage of Total Rental Supply			CHART 4
	TOTAL RENTAL UNITS	% OF RENTALS	
Public Housing (Including PBV conversions)	1,100,000	2.5%	
Section 8 Public Based Rental Assistance (PBRA)	1,300,000	2.9%	
Section 236 (Interest Rate Subsidy)	544,000	1.2%	
LIHTC	3,410,756	7.7%	
Rental	38,097,244	85.7%	
Total Renter Occupied	44,452,000	100%	

³⁵ HOPE VI (Housing Opportunities for People Everywhere) was authorized in 1992 as a HUD program launched in 1992 to demolish and replace distressed public housing with mixed-income developments, deconcentrating poverty and improving site design. It demolished 260,000 public housing units across multiple sites but only replaced them with 100,000 mixed-income units, displacing many residents. HOPE VI explains a 15 to 20 percent share of overall public housing decline in inventory since the 1990s peak. JCHS, 2025 and Von Hoffman, 2024.

³⁶ Von Hoffman, 2024.

³⁷ Differences between LIHTC supply and LIHTC production noted earlier in the report is due to the expiration of regulations governing LIHTC units. Jaffe (2025) highlights unprecedented numbers of LIHTC units reaching scheduled expiration dates, with roughly one-third of all currently active LIHTC units set to expire by 2035.

“Lowercase a” Affordable Housing: The Market’s Critical Role

In 2012, there were over 9.3 million market-rate apartments with contract rents below \$600, which represent apartments affordable to the 26 percent of renters with incomes under \$24,000. The entirety of the Affordable housing rental stock consisting of LIHTC rental units and public housing consisted of less than half of that amount by 2022—and during that same period 2.1 million of these market-rate apartments had been lost. In fact, market-rate development has produced the majority of the nation’s “lowercase a” affordable rental supply, compared to only about 14 percent created through Capital A Affordable subsidized programs such as LIHTC, Project-Based Section 8 (PBRA and PBV), Section 236 and public housing. Some market-rate supply offering higher contract rents is made affordable through public–private partnerships in which government provides income assistance to help households rent market-rate units. The remaining affordable supply emerged without subsidy, in local markets where regulatory conditions and construction costs allowed Naturally Occurring Affordable Housing (NOAH) to form. This distinction is critical: Capital A Affordable production programs remain essential for subsidy-dependent households, but they account for only a fraction of total supply. The private market—when conditions permit ([Local Policy Effects Housing](#))—creates far more affordable units (“lowercase a”) than government programs alone (Capital A). Preserving and expanding this unsubsidized stock of NOAH is therefore just as important as growing the subsidized inventory.

How Supply Shortfalls Drive Costs, Reduce NOAH and Weaken the Economy

- **A reduced supply of new housing pushes both rents and home prices higher.**³⁸
- **Rents are rising faster than incomes**—in 2022, median rents were 21 percent higher than in 2001, while renters’ incomes rose just 2 percent during the same period.³⁹ This national statistic both showcases and disproportionately impacts the lowest income renters. For some, this gap between wage and rents is insurmountable without income assistance.
- **The U.S. is short millions of housing units.** Research for NMHC and the National Apartment Association (NAA) projects a need for 4.3 million more apartments—roughly 266,000 per year—to meet demand from 2022 to 2035.⁴⁰ Exact figures vary by region, but the message is clear: large-scale construction is essential to restore balance in the rental market.⁴¹ The number 4.3 million should not be seen as a fixed target, but as a rough benchmark to frame the magnitude of the supply need.⁴²
- **Rising development costs push providers to upgrade or repurpose older properties rather than build new affordable units** ([Cost Drivers](#)). This accelerates the loss of “lowercase a” affordable housing (NOAH) as modestly priced units are repositioned at higher rents through “reverse filtering”. Each lost NOAH unit increases pressure on Capital A Affordable programs like LIHTC and PBRA, which are limited in scale.⁴³
- **The impacts extend beyond housing.** In 2024, housing accounted for 16 percent of U.S. GDP, including both residential investment and housing-related consumption. Apartment construction contributed \$191 billion and supported 960,000 jobs. When housing supply falters, the effects ripple outward—slowing job creation, curbing consumer spending and weakening local fiscal health.⁴⁴

In sum, supply shortfalls threaten both housing affordability and the broader economy. Expanding supply is not only housing policy—it is economic policy.

³⁸ In 2023, real rents—adjusted for inflation—rose 3.8%, the largest increase since at least 2011. Pew Research Center, 2024. The Federal Housing Finance Agency’s state-level house price indices have increased for every U.S. state and the District of Columbia, by anywhere from 22.6% (D.C.) to 82.3% (Maine) between the second quarters of 2019 and 2024. Among the nation’s 100 largest metro areas, Miami-Miami Beach-Kendall in Florida had the biggest five-year increase in its house price index between the second quarters of 2019 and 2024: 95.0%. For comparison, the [Consumer Price Index](#)—which measures price changes for a broad range of consumer goods and services—rose 22.8% overall between September 2019 and September 2024.

³⁹ Joint Center for Housing Studies, 2025.

⁴⁰ <https://weareapartments.org/data>

⁴¹ Ibid.

⁴² See note 11 and corresponding discussion in Executive Summary for further detail.

⁴³ Office/retail conversions are an emerging but potentially countervailing force in some markets. When NOAH is possible, or by-right incentives are available, conversions can hit thresholds of affordability for middle- and low-income renters.

⁴⁴ <https://weareapartments.org/data>.

Demand: How Many Housing Units Are Needed to Solve the Rental Affordability Crisis

How Many Rental Units Do We Need?

The U.S. faces two distinct rental affordability crises. For many households, market-rate housing is priced beyond reach, and the solution lies in expanding supply to bring costs down. For others, incomes are so low that no amount of market production will make housing affordable without subsidy. To size the total need, we must first be clear on the nature of the problem.

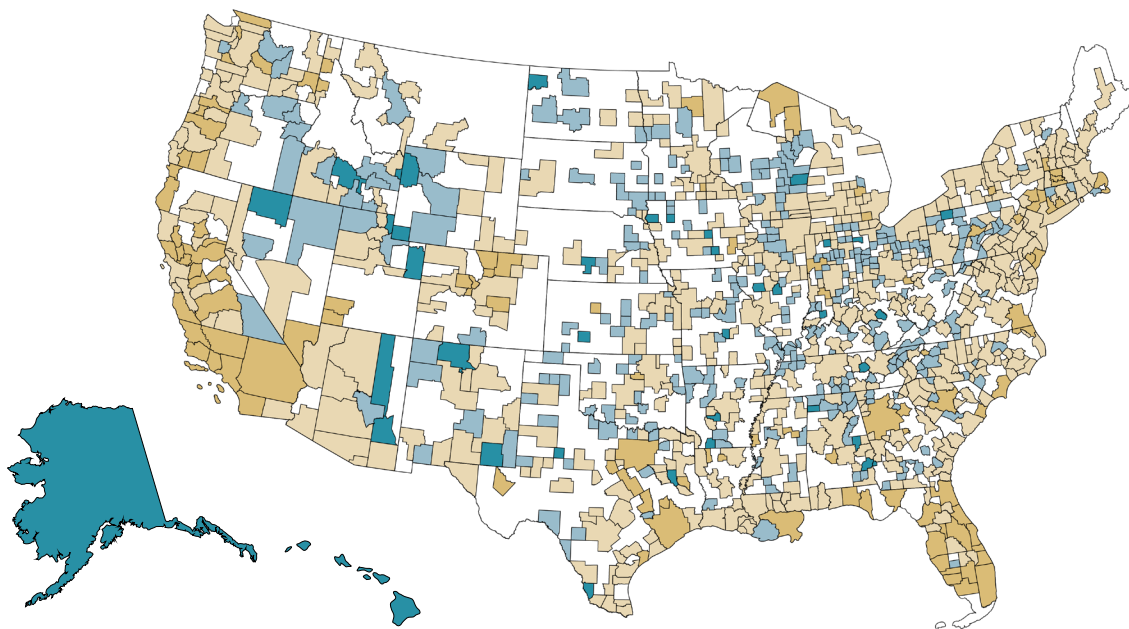
Overall Need: 22.4 million Units

From a demand perspective, the starting point is household income, measured against the 30 percent “Rule of Thumb” for affordability ([Affordable Housing 101: Income Limits](#)). U.S. Census Rent Burden data allows us to divide renter households (as opposed to the supply of rental units) by how their income compares to the rent they pay (See figure below).⁴⁵ This framing underscores that affordability must be measured against what households can pay, not just how much housing is produced.

Rent Burden by Area (≥30%)

FIGURE 6

■ 20-29 ■ 30-39 ■ 30-49 ■ 50 and Over



Source: U.S. Census Bureau, American Community Survey (ACS) 5-year estimates, Table B25070 (2024). CBSA boundaries (Metro+Micro) and State boundaries: TIGER/Line 2024.

Market-Rate Supply-Side Can Provide 4.3 million New Units

In the previous section, we estimated market demand for new supply at about 4.3 million units. The potential inability to meet this market demand is driven primarily by [local regulatory cost drivers](#), addressed later in the report. If those costs are reduced, more housing can be built, pushing prices toward the marginal cost of production ([Housing 101: NOI](#)). Greater supply would place downward pressure on rents and reduce the number of rent-burdened households, particularly those spending 30-50 percent of their income on housing. In effect, deregulation unlocks “dormant development” capacity—reviving the production levels that once kept pace with demand.

⁴⁵ Looking at rent burden alone can skew the picture. To a low-income household, rent burden can cause significant distress and inability to achieve a basic quality of life. A high income household may choose rent burden for lifestyle reasons. The effect of rent burden on higher income households and lower income households is not the same. See below and note 51 for further discussion.

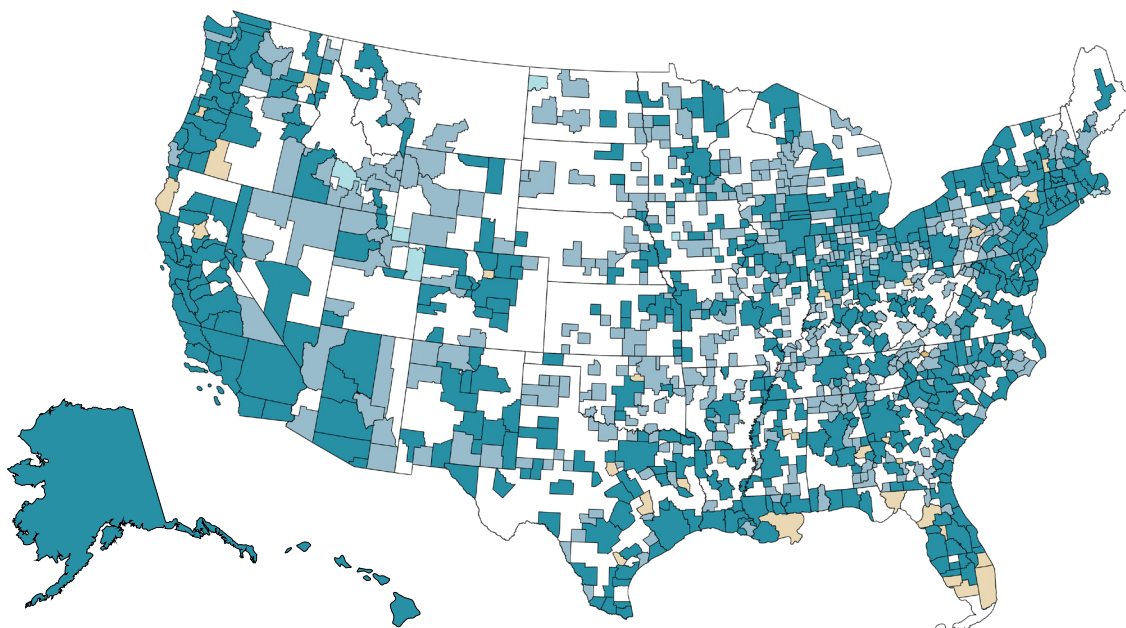
Deep Need: Subsidy-Dependent Households: 10.1 million

Expanding overall supply alone will not solve affordability for the lowest-income renters. Incomes in the United States have not kept pace with the rising costs of providing housing.⁴⁶ In 2022, median rents were 21 percent higher than in 2001, while renters' incomes rose just 2 percent during the same period.⁴⁷ Consequently, even if increased development successfully puts downward pressure on rental prices, we still need demand side interventions. Many household incomes are so low that they are severely rent burdened—paying over 50 percent of their income on rent (see figure below). We estimate that approximately 10.1 million households earn too little to afford any type of housing without assistance, and are currently unassisted.⁴⁸ Their incomes fall short of covering basic operating and utility costs. Because their incomes are not sufficient to pay the rent necessary to meet the cost of producing housing ([Housing 101: Cost Impacts to Feasibility](#)) no private market solution can adequately serve them without public subsidy. We classify these households in this report as **subsidy-dependent**. Housing created for this group requires targeted public investment—referred to in this report as Capital A Affordable housing. Three programs form the core of this response: LIHTC-supported supply, income assistance and public housing.

Severe Rent Burden by Area (≥50%)

FIGURE 7

Less than 10 10–19 20–29 30–39 40–49



Source: U.S. Census Bureau, American Community Survey (ACS) 5-year estimates, Table B25070 (2024). CBSA boundaries (Metro+Micro) and State boundaries: TIGER/Line 2024.

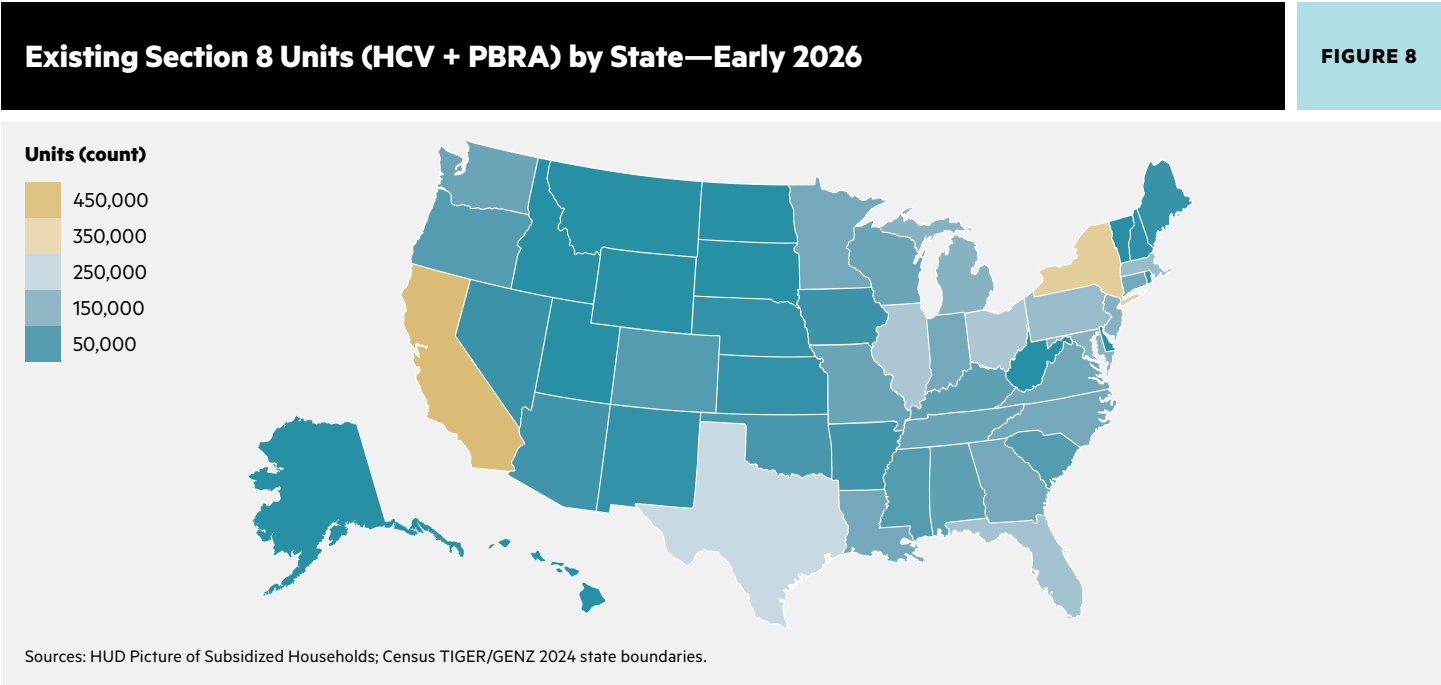
The first response, LIHTC-supported supply, cannot keep pace with the growing need. According to the Joint Center for Housing Studies of Harvard University, in 2012 there were 9.3 million units that had contract rents affordable to the bottom 26 percent of all rental households—but by 2022 that number had reduced to 7.1 million units, with more than half a million of those affordable units lost in the three year period from 2019–2022. This means that over 150,000 of the most affordable rental units were lost per year. For context, in that year, Capital A Affordable rental housing delivered on average only 80,000 new LIHTC rental units those years. In other words, it took two years of Capital A Affordable production to replace each year's loss of existing naturally occurring affordable units. This dynamic, and its implications for NOAH, are explored further in the [NOAH](#) chapter and the [Revive & Retain](#) policy case study.

⁴⁶ Ellen, 2022 and Joint Center, 2025.

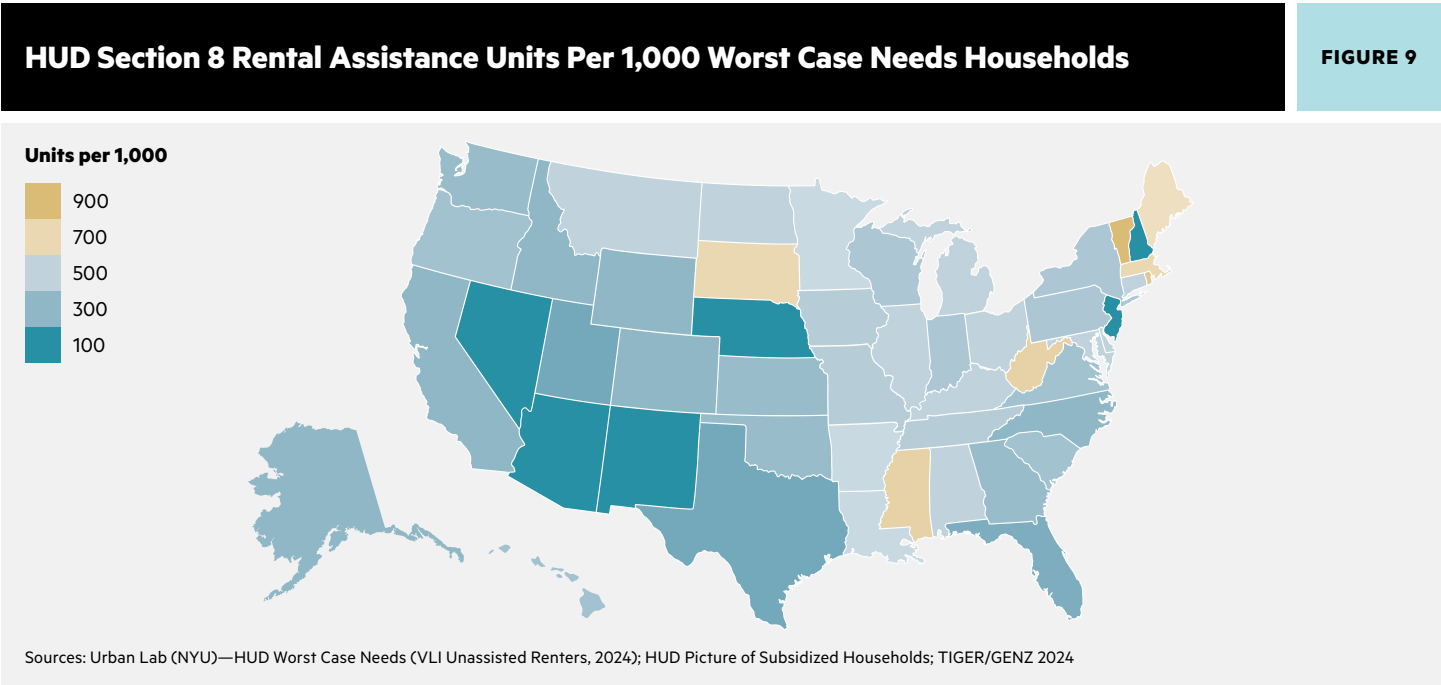
⁴⁷ Joint Center for Housing Studies, 2025.

⁴⁸ This number was estimated at 8M by HUD in 2022. Using the HUD “worst case” methodology, we identified renter households using the 2024 ACS Public Use Microdata Sample (PUMS). We identified severe housing cost burden as 50% or greater. We then applied FY2024 Very Low-Income limits from HUD (Section 8) and constructed PUMA specific income thresholds. We estimated households as likely assisted using ACS based approximations of subsidy status. We then combined the three criteria within the rental population. The final national estimate was obtained by using the ACS household weight to generate nationally representative estimates, which produced 14.73 million rental households with severe cost burden regardless of income, 11.34 million very low-income renters with severe burden and 10.1 million very low-income unassisted renters with severe burden.

Income assistance includes both supply side tools (Project Based rental assistance PBRA and PBV) and demand side tools such as Tenant-Based Rental Assistance (TBRA) (see both earlier discussion in [Supply](#) of PBRA as a preservation tool and [Affordable Housing Glossary](#) for more details on the programs).



The largest federal TBRA program is the Housing Choice Voucher (HCV) which traces back to 1965. The program provides households with vouchers that enable them to rent market-based housing at a maximum of 30 percent of their household income, with the voucher covering the remainder of the amount and making payment directly to the housing provider. The program started at 100,000 certificates in the mid-70s and has grown to 2.3 million households served today. Funding for this program has risen sharply due to rent inflation despite the household count growing only modestly.⁴⁹



⁴⁹ This is a critical economic linkage of supply-side and demand-side interventions—as long as supply is limited, the cost of demand-side solutions will be pushed higher (i.e., upward pressure on rents noted earlier in this report).

The existing supply of income assisted units is significant (See [Figure 8](#)). However, when comparing the number of income assisted units per 1,000 subsidy-dependent households, the analysis finds that the need far exceeds the supply (See [Figure 9](#)). For example, in California which has over 400,000 income assisted units, there are only about 300 existing income assisted units per additional 1,000 worst case needs households that, by definition, do not have any assistance. Doubling the number of income assisted units would reach an additional five million households—approximately half of the NYU Urban Lab’s current estimate of subsidy-dependent households. These new income assisted units would be split, including three million *existing* (preserved) rental units (including three million units of the 14 million units of vacant stock brought into the program) and two million *newly constructed* rental units. The scale of this proposal reflects three constraints: the number of vacant units that can realistically be absorbed, the NYU Urban Lab’s estimate of maximum feasible annual production ([Time-to-Address: A New Metric to Assess Housing Policy](#)), and the practical limits of expanding federal programs at this pace.

Income Assisted Households in the U.S.				CHART 5
INCOME ASSISTANCE	ALL	PROJECT BASED	TENANT BASED	
TBRA—Housing Choice Vouchers	2,286,800		2,286,800	
Public Housing	816,900		816,900	
Section 8 (PBRA)	1,198,400	1,198,400		
Section 8 (PBV)—Estimated	200,000	200,000		
Supportive, Elderly & Disabled	149,600		149,600	
USDA, Rural Rental	283,800		283,800	
Other/Gap	295,500		295,500	
	5,231,000	1,398,400	3,832,600	

Source: Center on Budget & Policy Priorities (Jan 2025), HUD, JCHS and author calculations

The Residual Need is Eight Million Units of Attainable Housing

From the demand side, the total number of rental households that need additional affordability in their housing is about 22.4 million. It is estimated that targeted deregulation could cause 4.2 million additional units to be built, in which increased supply (as well as deregulation) causes downward pressure on contract rents. As noted above, those 10.1 million households will need some form of income assistance. After subtracting these two from the rent-burdened population, approximately eight million households remain. Those in this group are not subsidy-dependent, but it is assumed (by our definition of market-rate) that they likely cannot afford a purely market-delivered unit, even after deregulation, without rent burden.⁵⁰

This group is referred to as the “residual need” or the demand for “attainable housing”—units affordable to moderate-income renters who do not qualify for deep subsidy but still face significant rent burdens. In our framework, this residual group falls between Capital A Affordable housing (for subsidy-dependent households) and unsubsidized “lowercase a” affordable housing (NOAH). Addressing their needs requires a mix of tools: lowering regulatory costs to expand supply, targeted tax abatements to preserve affordability and policies that ensure moderate-income households are not priced out of the market.

Demand-Side Calculation for Housing Affordability			CHART 6
Total Rent-Burdened Households	22,400,000	Estimated based on 2022 Census	
(-) Less New Market-Rate Supply from Deregulation	4,300,000	Estimated based on WeAreApartments	
(-) Less New Market-Rate Supply from Income Assistance	10,110,000	Subsidy-Dependent Households (2024)	
Total Residual Need of Renter Occupied Households	7,990,000		
Percentage of Rent-Burdened Households	36%		
Percentage of Total Renter Households	17%		

⁵⁰ Further research is needed to evaluate the characteristics of this population. These may be households composed of low wage workers—and in that case if these workers receive a wage increase, the household may no longer need the subsidy provided by rental assistance. However, in other cases the population may be permanently part of this class—whether the household includes low income seniors on fixed incomes, or includes members on permanent disability and in need of permanent support.

Interpreting the Numbers: Benchmarks, Not Absolutes

The numbers in this report—22.4 million rent-burdened households, 4.3 million units of supply shortfall, 10.1 million subsidy-dependent households and eight million with residual need—are not fixed targets. They are benchmarks designed to size a policy response that balances supply, demand and production constraints.

The key point is that affordability solutions must address the full spectrum of renter households, not just those at the extremes. Our pipeline is designed to be achievable within a generational [time frame](#) while flexible enough to adjust as economic conditions evolve.

Housing Affordability Solution Pipeline

CHART 1

Active Dormant Development Capacity

	UNITS/YEAR	YEARS	TOTAL
Deregulation	250,000	17	4,250,000
By-right tax abatement (new construction)	250,000	17	4,250,000
Low-Income Housing Tax Credit	35,000	17	595,000
Public Housing Expansion	23,000	17	425,000
Income assistance (new construction)	110,000	17	1,870,000
Sub-Total, Dormant Development	670,000		11,390,000
Average Annual Production 2020-2024	1,419,000		
Total Average Annual Production of New Units (2026-2043)	2,089,000		

Preservation of Existing Units (including vacant)

	UNITS/YEAR	YEARS	TOTAL
By-right tax abatement (Revive & Retain)	437,500	17	7,437,500
Low-Income Housing Tax Credit (Preservation)	45,000	17	765,000
Public Housing Expansion (Acquisition)	50,000	17	850,000
Income Assistance	125,000	17	2,125,000
Sub-Total, Preservation	657,500		11,177,500
Total, Dormant Development & Preservation	1,327,500	17 Years	22,567,500

Several factors will influence the precise numbers, including:

- the pace of household income growth relative to housing production cost;
- geographic variation in rent burden;
- equilibrium effects of supply and demand;
- the opportunity cost of capital;
- interest rate policy; and
- changes in household size as housing prices fluctuate.

From Numbers to Policy Pipeline

These benchmarks translate into a pipeline of solutions that combines new development with preservation.

- **Dormant Development strategies**—deregulation, by-right tax abatements, LIHTC expansion, public housing growth and new income-assisted units—could add **11.4 million homes** over 17 years, lifting annual production from today’s 1.4 million to more than two million units. The two assumptions underlying the sizing of this pipeline are:
 - Annual completions can be brought consistently up to the past peak (2.1 million units) every year, which is 800,000 units higher than average production of the last 10 years (1.3-1.4 million units); and
 - Policy levers can be tuned to have a significant amount of this production (670,000/year) turned into rental housing.
- **Preservation strategies**—tax abatements, LIHTC preservation, public housing acquisition and income assistance—could secure another **11.2 million units** by keeping existing homes, including vacant stock, affordable. While economics suggests a healthy housing market will include some vacancy, an aggressive public policy can draw down on the 14 million existing vacant housing units across 17 years. This is likely to cause the market to respond with increased supply.

Together, these approaches would produce and preserve **22.6 million units over 17 years**, aligned with the scale of need. Development primarily expands “lowercase a” affordable housing, while preservation protects both unsubsidized “lowercase a” affordable units (NOAH) and Capital A Affordable subsidized stock.

Overall Recommendations

Meeting the affordability challenge requires tailored solutions for three groups:

- **Market-supply shortages**, reduced through deregulation and expanded production.
- **Subsidy-dependent households**, supported with Capital A Affordable programs like LIHTC, income assistance (PBRA and TBRA) and public housing.
- **Residual need for attainable housing**, addressed through regulatory reform, tax abatements and preservation tools that keep moderate-income rents within reach.

By scaling development and preservation in tandem, these strategies can deliver generational progress. Taken together they represent a realistic moonshot: solving the affordability crisis within a generation.

Impact of the Shortfall on Renters

- **When rents outpace incomes, the number of rent-burdened households rises.** A low-income rent-burdened household has little left after housing costs for food, childcare, healthcare or savings⁵¹—which can lead to reduced quality of life for the household and higher fiscal burdens on government.
- **Renters face these pressures more acutely than homeowners.** In 2023, 24 percent of homeowners were cost-burdened, compared to nearly 50 percent of renters.⁵² Federal policy has long favored homeownership through tax benefits and subsidies, yet in every state today, more renters than owners are cost-burdened. This imbalance discourages new rental housing production and weakens the housing system’s ability to meet demand. The success of homeownership policy, however, demonstrates that federal policy can reduce costs—and similar approaches could be applied to rental housing.⁵³
- **Rising development costs have pushed the price of new housing far ahead of household incomes, widening the affordability gap in market-rate housing** (see [Housing 101: Cost Impacts to Feasibility](#)).⁵⁴
- **Scarcity also harms the broader economy.** In high-cost areas, employers struggle to attract and retain workers, forcing higher wages to offset housing costs. This reduces business profitability, slows growth and diminishes tax revenues—limiting resources for public investment.

Taken together, these factors are driving millions of renters into precarious living conditions, while constraining both economic mobility and national competitiveness.

⁵¹ A “basket of goods” is a representative set of items to be purchased by a consumer or household. The typical household basket of goods includes shelter/housing costs as well as the costs for food, clothing, healthcare, daycare, retirement savings, taxes and other necessary items. When housing costs rise, and household incomes remain constant at the lower income levels, this leaves less money available to spend on the remainder of the basket. For higher income households, rent burden may not have a significant effect on the ability to purchase goods in the basket that maintain a sufficient quality of life.

⁵² Joint Center for Housing Studies of Harvard University, 2024.

⁵³ Again, note that rent burden for higher income rental households is not an indicator of the same type of pressure that applies to lower income rental households. See note 50.

⁵⁴ Ellen, 2022. For national single-family cost data see Lynch, 2025.

Time-to-Address: A New Metric to Assess Policy Solutions

To evaluate how realistic different policy solutions may be in addressing rental housing affordability, we introduce a metric called **Time-to-Address (TTA)**. TTA answers the key question: *How long would it take for a given policy to reduce rent burden at scale?* The metric draws on multiple data sources, including the U.S. Census American Community Survey, HUD, Yardi, CoStar and state reporting.

TTA is an illustrative tool, not a precise forecast. Its purpose is to contextualize policy impact and test whether proposals align with our moonshot goal: solving the rental affordability crisis within a generation. By applying the TTA lens, we can see that no single policy tool—whether subsidy, deregulation, preservation or income assistance—can close the gap alone. Each has limits of scale, speed or cost.

The examples that follow illustrate these limits:

- Capital A Affordable supply tools like LIHTC are too slow to scale the whole problem.
- Capital A Affordable demand tools like income assistance (HCV and PBRA) can move quickly but are costly, politically challenging and risk overextension of public budgets.
- “Lowercase a” affordable tools like deregulation and new construction tax abatements accelerate supply but hit a ceiling on how much new development can realistically be delivered.
- Preservation of existing and vacant units provides the single largest contribution but cannot solve the challenge by itself.

Together, these examples show why only a balanced pipeline—combining new development and preservation, Capital A Affordable and “lowercase a” affordable strategies—can reach the single generation (17-year) target outlined in this report.

TTA has two components:

1. **Target Households:** The number of renter households a policy aims to serve. For consistency, we use four demand categories identified earlier (See [Demand: How Many Units Are Needed](#)):

a. Total rent-burdened households	22.4 million units
b. Subsidy-dependent households (<50 percent AMI)	10.1 million units
c. Market-rate supply shortfall	4.3 million units
d. Residual need (attainable housing)	8 million units

Targets can also be scoped geographically (city, state or national) depending on the jurisdiction of the policy tool.

2. **Average Policy Pipeline:** the number of units that can realistically be delivered per year through that policy. For example:
 - a. LIHTC: ~89,000 units/year; expanded best case = 178,000 units/year
 - b. Deregulation: additional 650,000 units/year if restored to peak 1973 levels
 - c. Preservation (Revive and Retain tax abatements): 437,500 units/year
 - d. Income assistance (HCV + PBRA): 235,000 units/year (new + preserved units), though fiscally constrained.

TTA formula (conceptual):

$$\text{TTA} = \text{Target Households} \div \text{Average Annual Policy Pipeline (in years)}$$

Importantly, TTA reveals ceilings as well as timelines. Even under optimal conditions, there is a cap on how many new units the U.S. can produce annually. Preservation strategies, by contrast, can stabilize millions of existing and vacant units, helping to shorten the timeframe to generational solutions.

Example Policy 1: Using LIHTC to Address Rent Burden

Public housing has remained flat or declined for decades, leaving the Low-Income Housing Tax Credit (LIHTC) as the dominant federal production tool for Capital A Affordable housing ([Supply: America's Rental Housing](#)). The question is: could expanded LIHTC production realistically solve affordability for the 22.4 million rent-burdened households in the U.S.?

- **Target households:** 22.4 million
- **Average pipeline:** LIHTC produces on average 89,000 units annually. A best-case expansion scenario (as noted in the [Executive Summary](#)) raises this to 178,000 units per year.
- **TTA:** $22.4\text{M} \div 178,000 = 125 \text{ years}$
- **Policy analysis:** Even if production nearly tripled, it would still take more than a century to eliminate rent burden through LIHTC alone. LIHTC remains an indispensable Capital A Affordable program for subsidy-dependent households, but its scale and speed are mismatched to the size of the larger problem of housing affordability beyond subsidy-dependent households. Affordability restrictions also expire without reinvestment, so LIHTC's contribution is not permanently additive. LIHTC is therefore necessary but insufficient and must be complemented by faster-moving tools such as tax abatements, deregulation and preservation strategies if we are to meet the **moonshot goal of solving affordability within a generation.**

Example Policy 2: Deregulation and New Construction Tax Abatements (Dormant Development)

If LIHTC alone cannot meet the generational goal, we must look at activating the private sector's capacity to build more. Private sector production peaked at 2.1 million units annually ([America's Rental Housing Supply](#)), and exhibits cyclical annual variation due to the economics of supply and demand. If the theoretical maximum is 2.1 million units per year, and on average we have produced 1.3 million units annually from 2016 to 2024,⁵⁵ we can name "dormant" development capacity of up to 800,000 units per year ($2.1 - 1.3 = 0.8$) even in recent peak years. In trough years, when market production is below 900,000 units, the industry has the capacity to create over one million additional units. Not all of this capacity will necessarily be completed with the purpose of creating rental product—private industry will favor the most persuasive economics. Policies can be designed to exactly target this—improve the economics of rental production and activate this "dormant" development. In our solution pipeline ([Executive Summary](#)) we have sized total dormant development (deregulation, tax abatement, LIHTC, public housing and income assistance) at 670,000 new rental unit completions annually.

As shown in [Cost Drivers](#) and [Policy Report Card](#), today's regulatory environment discourages rental housing production. Revising these policies—"deregulation"—could spur the private market back to historic highs of development, activating what is now dormant capacity to build (See [Policy Study: Deregulation](#)).

The public sector can also partner with developers through offering tax abatements that change the economics of production, enabling units to be built that are attainable to residual-need households. Programs such as Minneapolis 4d, New York's 421a and Texas Public Facility Corporations demonstrate how abatements can move units more quickly than LIHTC or income assistance (See [Policy Case Study—Tax Incentives](#)). The industry's capacity to produce under changed economics still may be gated by the total amount of development activity the industry can sustain without ramping up infrastructure significantly.

Both approaches—deregulation and construction tax abatements—expand supply by altering development economics. Could such policies—through deregulation and new construction tax abatements—restore private market production to a level that solves affordability for the 22.4M rent-burdened households?

- **Target households:** 22.4M
- **Average pipeline:** In 2023 the U.S. produced 1.45M units. Returning to the 1973 peak of 2.1M would add ~650,000 units annually.
- **TTA:** $22.4\text{M} \div 650,000 = 34 \text{ years}$
- **Policy analysis:** Dormant development could make a major contribution, but even at historic peak levels it would take more than three decades to eliminate rent burden—about twice the generational timeframe. More importantly, not all rent-burdened households can be served by market production. Roughly 10.1M subsidy-dependent households earn too little to afford market rents under any scenario, meaning the true impact is smaller than the math suggests. Dormant development is therefore insufficient on its own but indispensable as part of a broader pipeline. It expands "lowercase a" affordable housing, reduces upward rent pressure and shortens TTA for moderate-income households. But since new construction faces a theoretical upper limit on annual output, it must be paired with preservation strategies that stabilize existing units and prevent NOAH loss.

⁵⁵ Going back further captures truly low production periods—from 2009 to 2015 average annual production was only 756 million units (total for-sale and for-rent). At that rate dormant development capacity could be as high as 1.3 million units during that 7 year period, yielding 9.1 million additional attainable units if put to work.

Example Policy 3: Preservation (Revive & Retain and Vacant Units)

If new construction faces an upper ceiling, preservation provides the single largest and fastest lever to close the affordability gap. Preservation operates on two fronts:

- **Stabilizing existing occupied affordable units**—LIHTC properties nearing expiration and NOAH buildings at risk of condo conversion or Class A repositioning; and
- **Activating underused stock**, including the nation's ~14M vacant housing units (See [Rental Supply](#)). Both strategies can shorten Time-to-Address (TTA) because protecting affordability is typically faster and cheaper than delivering entirely new units.

The Revive & Retain model is a by-right tax abatement designed to keep existing rentals affordable and prevent reverse filtering. In our proposed pipeline, Revive & Retain contributes 437,500 units per year (7.4M over 17 years)—the single largest line item. Additional proposed contributions include:

- Increased LIHTC preservation: 45,000/year,
- New public housing acquisition: 50,000/year, and
- Income-assistance preservation: 125,000/year.

Combined, these preservation tools yield 657,500 units per year (≈11.2M over 17 years).

- **Target households:** 22.4M rent-burdened households (with primary impact on the 8.1M residual-need group and on subsidy-dependent households via PBRA preservation).
- **Average pipeline (proposed):** 657,500 units/year.
- **TTA (illustrative):** $22.4\text{M} \div 657,500 \approx 34 \text{ years}$; prioritizing vacant-unit activation alongside occupied-unit preservation can shorten this.
- **Policy analysis.** Preservation is often the most cost-effective approach (avoids full new-build costs) and the most scalable (leverages existing inventory). For scale: 14M vacant units are roughly 62 percent of the 22.4M rent-burdened households—not a one-to-one match (locations/conditions vary), but large enough that capturing even a modest share meaningfully accelerates progress. Preservation cannot meet the entire need alone, but in our proposed pipeline it supplies the largest single block of units, buying time for new construction to ramp and preventing further NOAH loss.

Example Policy 4: Income Assistance (TBRA/Housing Choice Vouchers and PBRA)

Income assistance—primarily through tenant-based **Housing Choice Vouchers (HCV)** and **Project-Based Rental Assistance (PBRA)**—is the most direct way to close the gap for subsidy-dependent households because it allows them to access existing units, including vacancies, without waiting for new construction (For discussion of these tools in detail, see [Affordable Housing Glossary](#)).

- **Target households:** 10.1M subsidy-dependent renter households (≤50 percent AMI)
- **Average pipeline (proposed expansion):** 235,000 households/year. This figure is benchmarked to two factors: (1) the estimated share of vacant units that can feasibly be absorbed each year, and (2) the administrative pace HUD and state agencies have managed during past large-scale voucher expansions.
- **TTA:** $10.1\text{M} \div 235,000 \approx 43 \text{ years}$
- **Policy analysis:** Income assistance can reduce rent burden immediately, making it the fastest-moving tool in the pipeline.⁵⁶ Large-scale expansion carries risks. Both programs have been going in the opposite direction, with PBRA and HCV being winnowed down for several reasons. The first is fiscal strain. Funding for both programs has risen sharply against a minimal (or no) increased household coverage due to the increased cost of housing. The second is inflationary pressure: without supply-side reforms, vouchers can lead to higher rents in already tight markets. Evidence suggests these effects are modest in markets with vacancy, but real in constrained metros. Mitigation requires pairing income assistance with supply measures like tax abatements, deregulation and preservation to ensure subsidies expand access rather than chase too few units. The third risk is targeting: without guardrails, subsidies may reach households who are not subsidy-dependent, diluting impact.

For these reasons, income assistance should be viewed as a critical but bounded tool. It is indispensable for the 10.1M households who cannot afford market rents at any level, but it cannot serve as the backbone of a generational strategy. In the proposed pipeline, income assistance complements preservation and production, ensuring the lowest-income renters are not left behind while other tools expand overall supply.

⁵⁶ HCV and PBRA function differently with respect to supply. HCV (tenant-based) enables households to rent any qualifying unit, tapping vacant stock quickly but relying on housing provider participation. PBRA (project-based) ties assistance to units, stabilizing affordability in existing stock or new developments, but expanding more slowly.

Synthesis: Why No Single Tool is Enough

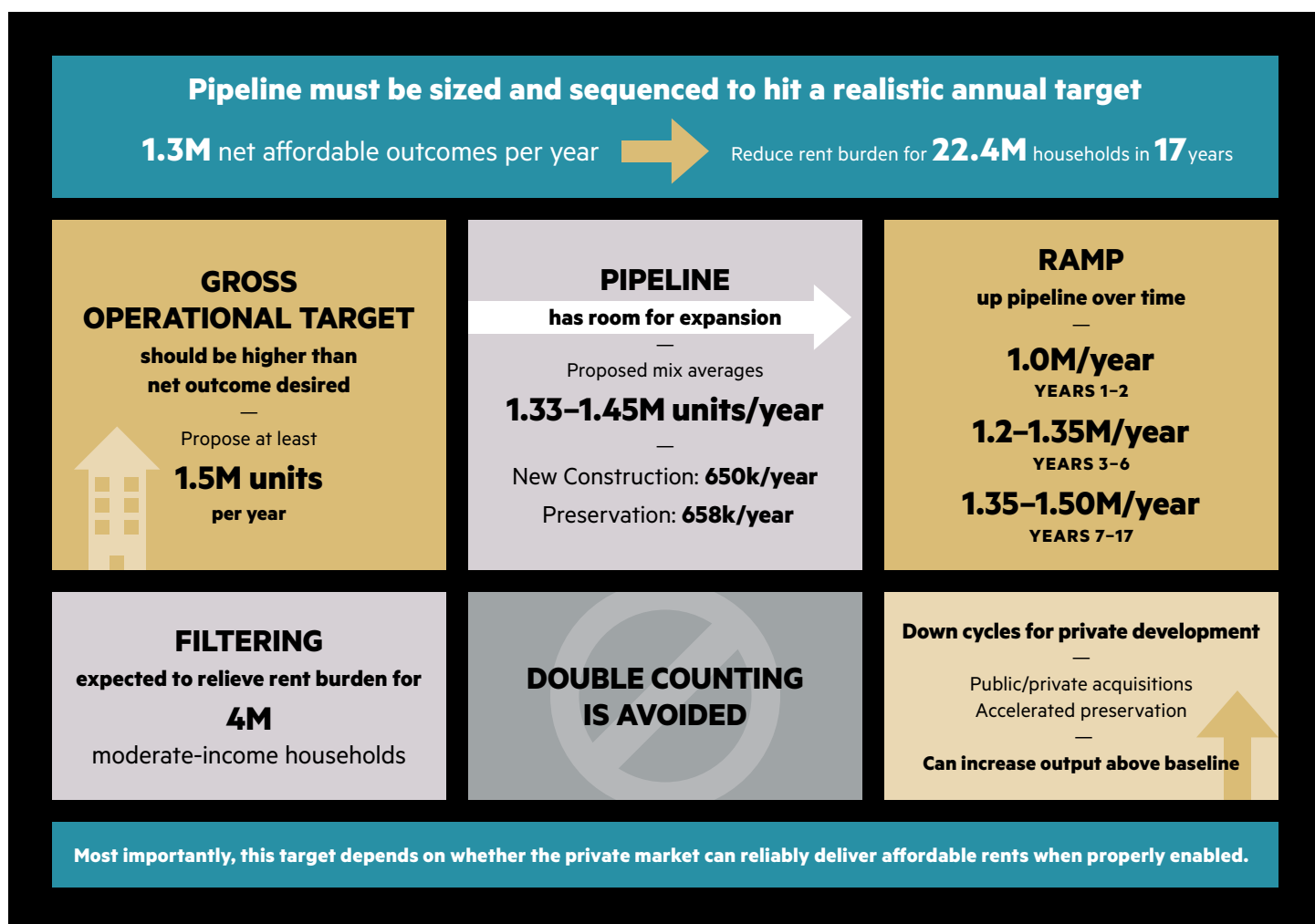
The TTA examples demonstrate that no single policy can close the affordability gap within a generation:

- **LIHTC (Capital A Affordable production):** Essential for subsidy-dependent households, but even at an expanded 178,000 units/year it would take 125 years to eliminate rent burden.
- **Dormant Development (deregulation and new construction abatements):** Can add 650,000 units annually between any combination of levers,⁵⁷ and meaningfully expand “lowercase a” affordability, but still require 34 years and cannot serve the 10.1M subsidy-dependent households who cannot afford market rents.
- **Preservation (Revive & Retain, vacant units, NOAH):** The single largest lever, contributing 437,500 units/year through proposed abatements, plus additional preservation through LIHTC, income assistance and public housing acquisition. Together, preservation strategies deliver 657,500 units/year (11.2M over 17 years), protecting both existing and vacant stock.
- **Income assistance (HCV + PBRA):** The fastest tool for subsidy-dependent households, but constrained by political will, fiscal capacity, risk of inflation in tight markets and the need for careful targeting. At an expanded 235,000 households/year, it would still take more than four decades to reach all eligible households.

Taken together, these examples make two points clear:

1. **Limits of scale.** Each tool alone falls short—whether too slow, too costly or too narrow.
2. **Strength in balance.** When combined in a coordinated pipeline, the tools complement each other: production expands overall stock, preservation prevents backsliding and captures vacancies and income assistance ensures the lowest-income renters are served.

Setting the Target and Sequencing the Pipeline



⁵⁷ In this report we have highlighted a reasonable dormant development pipeline as the difference between recent average annual production (1.3 million units) and peak production (2.1 million units), or 800,000 per year. We then have chosen 650,000 units per year as an upper bound, giving an allocation to units chosen to be produced for-sale and for units not built. In this TTA example, we use dormant development as a standalone pipeline. In our solution pipeline, we allocate dormant development between pure market strategies (deregulation), by-right public/private strategies (tax abatement) and Capital A Affordable strategies (LIHTC, income assistance and public housing).

The pipeline must be sized and sequenced to hit a realistic annual target. Our proposed pathway delivers about **1.3M net affordable outcomes per year**, enough to reduce rent burden for 22.4M households in 17 years. As mentioned earlier, this is a theoretical number to give a sense of scale of a reasonable solution to actually solve affordability issues in our lifetime. Were this program to be operationalized, some considerations must be taken into account to operationalize the pipeline in a realistic 17 years:

- **Gross vs. net:** We lose rental units each year. There are [NOAH](#) losses, as well as losses from obsolescence (end of building life), and regulatory periods ending,⁵⁸ so the gross operational target should be higher than the net outcome desired. Given estimates of 100,000–150,000 NOAH units lost per year and 30,000–50,000 units lost to other factors, we would propose a gross operational target of at least 1.5M units per year.
- **Pipeline composition:** There is room in our pipeline for expansion. Dormant development could be as high as 800,000 new units per year (and higher in trough years), while there are over 14 million existing vacant units that could be preserved as affordable. Our proposed mix averages 1.33–1.45M units/year, split between:
 - Dormant development (new construction): 650k/year
 - Preservation (existing units): 658k/year
- **Ramp profile:** Any solution pipeline would need to be ramped up over time. Shown here, the pipeline begins at 1.0M/year in Years 1–2, rises to 1.2–1.35M/year in Years 3–6 and stabilizes at 1.35–1.50M/year in steady state (Years 7–17). Preservation provides the earliest impact, while filtering from new supply builds later.
- **Filtering effect:** As stated earlier in the report ([Executive Summary](#)) a population with 22.4 million rent-burdened households does not necessitate 22.4 million new rental units to alleviate it. As new development reaches scale, and the development pipeline further expands to replace vacant units pulled into the rental inventory and preserved as “lowercase a”, filtering is expected to relieve rent burden for as many as 4M moderate-income households—roughly one-quarter of the total need—compounding the impact of preservation and income assistance.
- **Double counting avoided:** Each unit is assigned to a single pathway (development, preservation or income assistance).
- **Counter-cyclical design:** In down cycles for private development, public/private acquisitions and accelerated preservation can increase output above the baseline.

Most importantly, this target depends on whether the private market can reliably deliver affordable rents when properly enabled. Research already shows that some metros naturally produce NOAH, while others do not. The next chapter turns to this critical question: how and where the private market produces enough naturally affordable units, and how policy can replicate those conditions to make the TTA solution achievable.⁵⁹

⁵⁸ I Jaffe, M., & Ingram, D, 2025.

⁵⁹ The dormant development pipeline represents overall capacity to produce—this includes for-sale and for-rent housing. But the dormant development pipeline is accretive—it starts building precisely the moment when market-based building would otherwise stop. It is activated through targeted policy incentives and tools. The policy tools (deregulation, tax abatement, income assistance, LIHTC) would be tuned to become available to produce rental product in conditions when the private market would otherwise be dormant.

The Importance of Local Policy

Local policy choices shape whether housing markets move closer to or farther from affordability. TTA shortens or lengthens depending on how policies affect three interrelated dynamics: tenure (rental vs. ownership), structure type (single-family vs. multifamily) and production costs.

- **Rental vs. Ownership.** Rental and ownership markets are deeply linked. When ownership is attainable, pressure on rental markets eases, reducing rent burden. Conversely, when ownership costs rise beyond reach—as in many high-cost metros—households remain renters longer, increasing rental demand. Local policies that make ownership more attainable (such as zoning reforms that allow starter homes, or mortgage support for first-time buyers) indirectly improve rental affordability by shifting some demand into the ownership market.
- **Single-Family vs. Multifamily.** Structure type also matters. Historically, single-family homes have been more affordable for ownership, while multifamily buildings provide the bulk of affordable rental stock. But in recent years, purpose-built rental communities—often referred to as build-to-rent (BTR)—have expanded, adding a new form of single-family housing designed specifically for renters and functioning in many ways similar to multifamily housing. As of 2023, while there are more rental households in 5+ unit multifamily buildings than single-family structures, there are almost the same number of residents renting in single-family homes (see chart below). Giving residents housing choices that expand to include single-family options is not inherently a negative. It can allow residents to form larger households, which can reduce individual rent burden without over-crowding. It also can cause competition on rental pricing between rental options in single-family and 5+ unit buildings as more inventory enters the market from both sources. But this shift means policies that expand or restrict single-family development affect both ownership and rental affordability. For example, allowing smaller-lot single-family development or accessory dwelling units (ADUs) can expand ownership opportunities while simultaneously adding to rental supply. Multifamily zoning reforms—such as lifting bans on duplexes or easing density restrictions—are equally critical, since larger buildings deliver the highest share of affordable rentals (See [Policy Case Study—Deregulation](#)).
- **Production Costs and Naturally Affordable Rents.** Perhaps the most direct way local policies shape TTA is through their effect on production costs. Policies that streamline permitting, reduce fees or increase allowable density lower development costs, enabling developers to deliver units at rents that are naturally affordable (“lowercase a”). In contrast, restrictive zoning, protracted entitlement timelines and high local fees raise costs, stretching TTA to a time further into the future ([Policy Report Card](#)).
- **Subsidized Supply and the Denominator Effect.** Local governments also influence the share of Capital A Affordable housing in the overall supply. By using local bonding authority, land-use tools or public-private partnerships, jurisdictions can add subsidized units that directly reduce rent burden. Even modest increases in subsidized supply have a “denominator effect,” reducing the proportion of rent-burdened households and shortening TTA.

No single lever is decisive. For example, lowering production costs without preservation can accelerate displacement through gentrification. Subsidizing new Affordable units without ownership opportunities can limit household flexibility, leaving renters with fewer pathways to move or change their housing situation over time. The most effective local policy bundles all of the effective approaches—including ownership access, multifamily production, cost reduction and subsidized supply—to create the conditions for sustained affordability improvements.

What Type of Structure Do Renters Live in?				CHART 7
STRUCTURE TYPE	HOUSEHOLDS	PERCENT	RESIDENTS	PERCENT
Single-Family	14,392,315	31	4,250,000	39
2 to 4 Units	7,937,709	17	17,753,545	17
5 or More Units	22,008,628	48	41,242,173	40
Mobile Homes	1,700,948	4	4,392,093	4
Other	62,030	0	119,813	0
Total	46,101,640	100	104,300,666	100

Source: 2024 American Community Survey 1-Year Estimates, U.S. Census Bureau, Tables B25032 and B25033. As of 02/2026

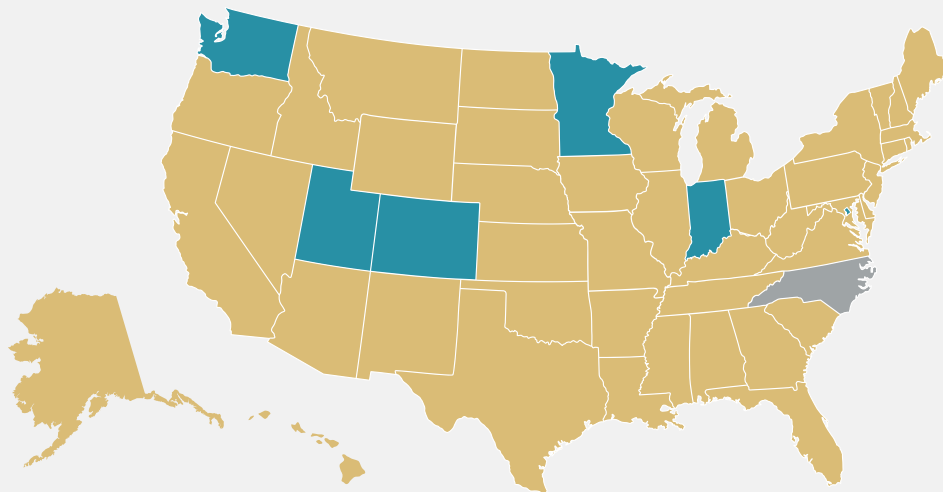
State-Level TTA Analysis

Time-to-Address Rent Burden

50 States by Level of Affordable Housing Production

FIGURE 11

■ Less than a generation ■ Three generations ■ More than a century



Source: Created by M. Kwatinetz at NYU Urban Lab for NMHC using data from ACS, CoStar, Yardi and direct calls to State HFAs.

Figure 11 places the national TTA framework into state-level context.⁶⁰ It shows that most states would take more than three generations⁶¹ to address rent burden relying only on current levels of Capital A Affordable housing production.⁶² But a small set of states stand out as outliers. These results suggest that state-level policy choices and market conditions can significantly shorten TTA (See [Appendix Chart 2: State TTA Analysis](#)).

North Carolina is the only state that achieves a TTA of about a generation—the only state where current production levels of Capital A Affordable housing could realistically close the rent-burdened gap within 17 years.⁶³ North Carolina has benefited from both moderate construction costs and a strong record of layering local subsidies on top of federal programs to expand multifamily supply.⁶⁴ Moderate construction costs enable developers to charge lower rents and still produce feasible projects ([Housing 101: Cost Impacts to Feasibility](#)) while layering local subsidy on top of federal programs deepens Affordability ([Affordable Housing 101: Capital Budget & NOI](#)). North Carolina is operating to increase supply of both “lowercase a” affordable housing and Capital A Affordable housing.

Utah comes in after North Carolina with the next best TTA. Utah’s position is primarily driven by a high number of Capital A Affordable deliveries in 2019, equal to 8.9 percent of the rent-burdened households. But in 2020, Capital A Affordable production goes down to less than 1.0 percent of rent-burdened households, where it remains for the rest of the analysis period, even as the percentage of rent-burdened households increases by over 22 percent in 2021. Overall, Utah has met combined rapid population growth with a streamlined entitlement process and statewide zoning reforms that encourage multifamily construction, but Capital A Affordable production has not kept pace.⁶⁵

⁶⁰ Time-to-Address (TTA) the Subsidized Affordable Supply Deficit measures the amount of time in generations Subsidized Affordable housing would address the rent-burdened housing deficit, calculated for each metropolitan statistical area (MSA) and State. The TTA measure is defined as the number of rent-burdened households (1-year ACS, excluding 2020 due to pandemic data inconsistencies), adjusted by a factor (28% reduction, ANHD estimate) to exclude wealthier households >80% Area Median Income (AMI) electing rent-burdened housing and for whom Subsidized Affordable housing supply does not address. The <80% AMI burdened household deficit is then divided by the annual rate of Subsidized Affordable housing production, determined by either State data from housing agencies’ direct reporting, or the largest of HUD’s production data (PBRA + LIHTC + Public), Yardi’s Affordable Housing Production, or CoStar’s Affordable Housing Production. This ratio provides an estimate of the number of years and subsequent generations (per 35 years) required for levels of subsidized production to offset the existing burdened household deficit, both annualized and averaged across the study period (2019-2023).

⁶¹ We utilize a generous estimate of a generation at 40 years.

⁶² As stated earlier, rent burden is a coarse measure, as some higher income households choose to be rent burdened. See note 51 for the limits of using rent burden as the metric when considering all households, and not just low-income households.

⁶³ Both North Carolina and Utah were highlights of the building boom since 2020. North Carolina delivered 270,500 units over the period, one of five states in the West and South that captured half of the period’s increase. Utah⁶ experienced the highest percentage increase in its inventory (9%) of any state during this period. See Henderson, T. (2024, May 16).

⁶⁴ North Carolina Housing Finance Agency. “Programs.” NCHFA.gov.

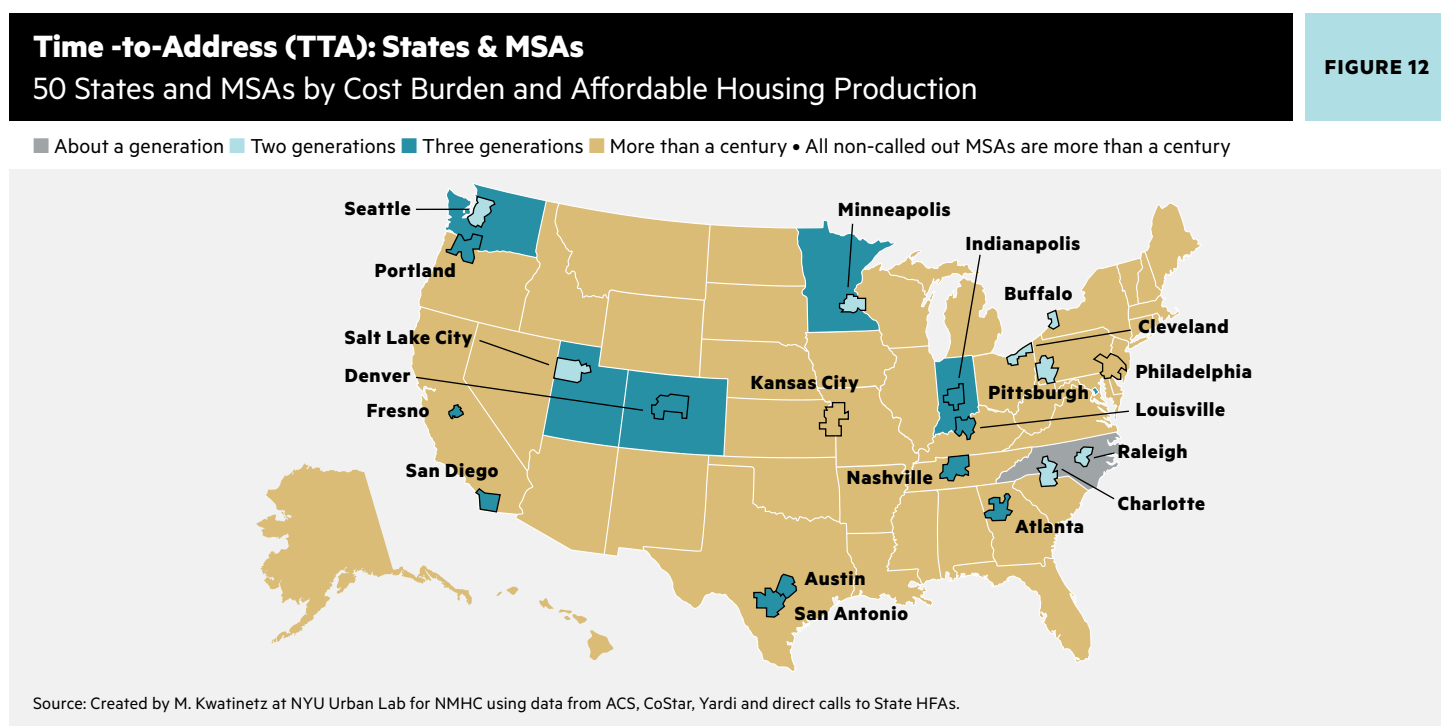
⁶⁵ Utah State Legislature. “Housing Affordability Amendments (HB 462).” 2022 and direct calls to Utah State Housing Agency by NYU Urban Lab researchers.

A third group of states—Washington, Colorado, Minnesota and Indiana—show TTAs of about three generations. While still too slow to meet the moonshot target, these states outperform the national median and point to conditions worth studying:

- Washington has consistently expanded state housing trust fund investments alongside local mandatory inclusionary policies.⁶⁶
- Colorado recently passed statewide land-use reforms enabling higher-density housing near transit.⁶⁷
- Minnesota has maintained robust state housing finance agency programs, including preservation initiatives that stabilize NOAH.⁶⁸
- Indiana benefits from relatively low construction costs and a pro-development regulatory environment.⁶⁹

The pattern is instructive. Despite differences in size, politics and geography, these six states share a willingness to pair Capital A Affordable subsidy with “lowercase a” affordable supply reforms. Conversely, the majority of states fall into the “more than a century” category, where restrictive zoning, higher costs and slower entitlement processes lengthen TTA far beyond the moonshot horizon. In short, Figure 11 illustrates that state-level policy and regulatory environments play a decisive role in TTA outcomes. This variation not only confirms that local policy matters, but also points to specific levers—zoning reform, cost reduction, subsidy layering—that can accelerate progress when deployed consistently.

MSA-level TTA Analysis versus State-Level TTA Analysis



Both policy and housing market conditions vary not just between states, but also at the metro/local level. Research and a review of the literature show that local policies correlate highly with cost drivers, profitability and a housing producer’s willingness to enter a market ([Local Policy Affects Housing Market Affordability](#)). Historically, urban areas have produced housing at scale, creating more affordable options within a reasonable commuting distance through public regional transit systems. For that reason, we chose to overlay data for the 50 highest population U.S. cities and their surrounding economic employment areas (“MSAs”) to see how the MSAs might deal more or less successfully with the housing affordability problem, as measured by TTA.

Figure 12 overlays TTA estimates onto the 50 largest metropolitan statistical areas (MSAs). The comparison highlights a critical finding: MSA-level outcomes often diverge from their surrounding state. Some metros perform better than their state average, while others perform worse, underscoring that local policy and market conditions are decisive in shaping affordability trajectories (See [Appendix Chart 3: MSA TTA Analysis & NOAH Market Identification](#)).

⁶⁶ Washington State Department of Commerce. “Housing Trust Fund.” 2023.

⁶⁷ Colorado General Assembly. “HB 23-1313: Land Use Reform.” 2023.

⁶⁸ Minnesota Housing Finance Agency, 2023.

⁶⁹ Indiana Housing & Community Development Authority; National Association of Home Builders. “Cost of Constructing a Home.” 2022.

- **Best Performers (<80 years).** Eight metros have TTAs of two generations or less, relying on Capital A Affordable production—Raleigh-Cary, Charlotte-Concord-Gastonia, Cleveland, Salt Lake City-Murray, Buffalo-Cheektowaga, Minneapolis-St. Paul-Bloomington, Seattle-Tacoma-Bellevue and Pittsburgh, PA. Five of the eight lie in states that are outperforming the pack. Notably, Salt Lake City outperforms Utah’s strong statewide average by pairing transit-oriented development with streamlined zoning that accelerates multifamily approvals.⁷⁰ Buffalo is a low demand market with low construction costs, which conditions are described further below ([Naturally Occurring Affordable Housing](#)). Pittsburgh had bumper deliveries of Capital A Affordable units in 2021 and 2023,⁷¹ and Cleveland ramped up its Capital A Affordable unit completions as a percentage of population from 2019 to 2023.⁷² Both Raleigh and Charlotte lie in North Carolina, both benefiting from moderate cost of construction combined with local subsidy programs complementing federal affordable development programs.
- **Middle Performers (88-119 years for TTA using Capital A Affordable).** Ten metros fall into the “three generations” range. Notable are Louisville, Denver, Indianapolis and Fresno. Each of these is clearly making progress toward lowering the TTA over the observation period. Fresno is discussed further below ([Naturally Occurring Affordable Housing](#)).
- **Laggards (>120 years).** The remainder of the largest 50 American MSAs fall into the “three generations or more” category. Philadelphia underperforms Pennsylvania’s state average, with slower entitlement processes and high rehab costs for its aging housing stock.⁷³ By contrast, Kansas City has established one of the Midwest’s most structured regional housing coordination efforts through the Greater Kansas City Regional Housing Partnership—a MARC and LISC-convened initiative targeting 23,000 additional units—but the metro continues to face a shortage of at least 25,000 units, a projected loss of 10,000 LIHTC units over the next decade and permitting declines that underscore the gap between planning infrastructure and production outcomes.⁷⁴

Implication. The state-level analysis in Figure 11 showed that only a handful of states could reach affordability within a generation or two. Figure 12 deepens this insight by showing that metro-level policy can tip the scales within those states.⁷⁵ The variation confirms that affordability is not just a national or state challenge but also a distinctly local one—determined by the willingness of individual MSAs to implement reforms that enable both Capital A Affordable and “lowercase a” affordable production.

Conclusion

At current rates of Capital A Affordable housing production, even the strongest-performing MSAs would take nearly a generation to close the affordability gap if policy relied on subsidies alone. Figure 12 shows why: while some metros outperform their surrounding states and others underperform, no MSA can reach the moonshot goal on subsidized supply alone.

Our research explains these results by identifying two recurring drivers that work together:

- **Market-rate production effects.** Higher levels of market-rate housing production, relative to total inventory, correlate with lower cost burdens and shorter TTAs. These gains typically come from naturally lower costs of development, cost reductions achieved through deregulation or faster entitlement processes.
- **Subsidized production effects.** A higher level of subsidized affordable housing also shortens TTA when combined with cost-reduction measures. This occurs where jurisdictions adopt deregulation programs that specifically facilitate subsidized or mixed-income housing, or “by-right” cost-reduction tools (such as abatements or density bonuses) tied to affordable outcomes.⁷⁶

Together, Figures 11 and 12 confirm that local policy choices—at both the state and metro level—are decisive in shaping affordability trajectories. The same national Capital A Affordable programs (LIHTC, income assistance, public housing) operate everywhere, yet outcomes diverge sharply across states and metros because of the local policy effect on market-rate production—local cost environments, regulatory structures and subsidy layering.

This insight leads directly to the core of this toolkit’s thesis, described more fully in the next chapter: expanding the TTA framework to incorporate not only Capital A Affordable subsidized production but also “lowercase a” affordable housing (NOAH). By combining both, we can evaluate how local policy can accelerate the generational moonshot from theory into practice.

⁷⁰ Utah Transit Authority. “Transit-Oriented Development and Zoning Initiatives.” 2022.

⁷¹ As reported to NYU Urban Lab in direct calls to the state of Pennsylvania in the summer of 2024.

⁷² Affordable deliveries were 1.08% of total inventory in 2019, 2.21% in 2020, 1.24% in 2021, 2.48% in 2022 and 1.52% in 2023 as reported to NYU Urban Lab in direct calls to the state of Ohio in the summer of 2024.

⁷³ City of Philadelphia, 2022.

⁷⁴ MARC/LISC, 2024; REB, 2026.

⁷⁵ Similar to earlier, this estimate assumes no new immigration, no loss of units and no income degradation.

⁷⁶ Examples include Minneapolis’s 4d Program, New York’s 421a Program (expired 2022; succeeded by 485-x in 2024) and Texas Public Facility Corporations (PFCs). See [Policy Case Studies](#) in this report for more detail on each.

The Hidden Factor: Naturally Occurring Affordable Housing

Definition and Importance of NOAH

Not all affordable housing requires subsidy (See [Housing 101: Definitions](#)). A large share of rental units across the United States achieve affordability on their own, without government intervention. We refer to this stock as “lowercase a” affordability, or **Naturally Occurring Affordable Housing (NOAH)**: housing without government subsidy that is still able to achieve affordable rent levels, as measured by rents compared to area median income (AMI).

While many observers associate NOAH exclusively with older properties, our definition focuses on affordability outcomes rather than age or vintage. This broader approach includes not only aging stock but also includes:

- New construction that enters the market at affordable rent levels; as well as
- Single-family homes, 2–4 unit buildings and 5+ unit multifamily communities that today offer rents at affordable levels.

For some readers, this may be a departure from narrower definitions, but it reflects the reality that unsubsidized affordability can exist across a wide range of building types and ages.⁷⁷

The size of the NOAH market is substantial, though estimates vary depending on definitions and data sources. CoStar estimated in 2020 that there were 5.5 million unsubsidized units affordable to households earning less than 60 percent of AMI.⁷⁸ McKinsey, using a broader threshold, identified seven million such units in 2019.⁷⁹ Harvard’s Joint Center for Housing Studies in 2020 estimated that 75 percent of rental units in major cities that were affordable to households earning less than 80 percent AMI nationwide received no government subsidy.⁸⁰

Building on these national estimates, we developed a conservative baseline for this report. Drawing on Harvard JCHS estimates of 12 million affordable rental units in major cities, of which 75 percent (~9 million) are unsubsidized, we allocate those units 60 percent to 5+ unit multifamily buildings and 40 percent to 1–4 family structures.⁸¹ As shown below, when we account for LIHTC, PBRA and public housing separately, the balance of affordable rental housing is unsubsidized NOAH—roughly 9 million units, or 62 percent of the total affordable stock.

Preservation is substantially more cost-effective than new affordable construction—in Chicago, rehabilitation costs an estimated 80 percent less than new construction, and comparable cost differentials have been documented in Los Angeles, Minneapolis and New York City.⁸² But the number of NOAH units continues to decrease as the development of new supply becomes prohibitively expensive and no large-scale policy exists to preserve NOAH. In 2022, just 7.2 million units had contract rents under \$600—a loss of 2.1 million units since 2012—with more than half a million low-rent units lost between 2019 and 2022 alone.⁸³ The Joint Center for Housing Studies estimated the loss of more than 500,000 low-rent units between 2019 and 2022—roughly 150,000 per year—an amount greater than the total new supply of subsidized affordable units produced annually through LIHTC.⁸⁴ This is further discussed in the [Policy Case Study on Preservation Strategies](#).

Supply Side—Rental Housing Affordability		CHART 8
NOAH	9,000,000	61.6%
PBV	1,198,400	8.2%
Public Housing	1,000,000	6.8%
LIHTC	3,410,756	23.3%
Total	14,609,156	

⁷⁷ The definition of NOAH is not standardized, but generally it refers to one or more of the following: (i) older building stock (CoStar defines 1- and 2-star properties as NOAH), (ii) providing rents affordable to households earning 80% of AMI without subsidy (McKinsey), (iii) providing rents affordable to households earning 100% of AMI without subsidy (this report). It is normally owned by non-institutional housing providers (see also CoStar Group, 2020 and Woetzel, J. et al, 2021).

⁷⁸ CoStar, 2020.

⁷⁹ Woetzel, J., et al., 2021.

⁸⁰ Joint Center for Housing Studies of Harvard University, 2020.

⁸¹ Author’s calculation based on Harvard JCHS (2020) 75% unsubsidized ratio applied to AHS-derived national affordable unit count at ≤80% AMI. The 14.7 million unit baseline reflects 2019 American Housing Survey data on units with gross rents affordable at ≤80% AMI in the 50 largest metros. The 62% figure refers specifically to this threshold; the 70%+ figure cited elsewhere in this report reflects a broader definition inclusive of units affordable at market-rates above 80% AMI.

⁸² Axios/PreserveNOAH, 2025; McKinsey Global Institute, 2021.

⁸³ Joint Center for Housing Studies of Harvard University, 2025.

⁸⁴ Harvard JCHS, 2025.

Where Can NOAH Still Work?

To identify metros where new construction of unsubsidized affordability is still viable, NYU Urban Lab constructed a new NOAH dataset, following our discussion above (See [Appendix Chart 3: MSA TTA Analysis & NOAH Market Identification](#)). For the dataset, we compare affordable rent thresholds for a target family size at a target income level to average market rents:

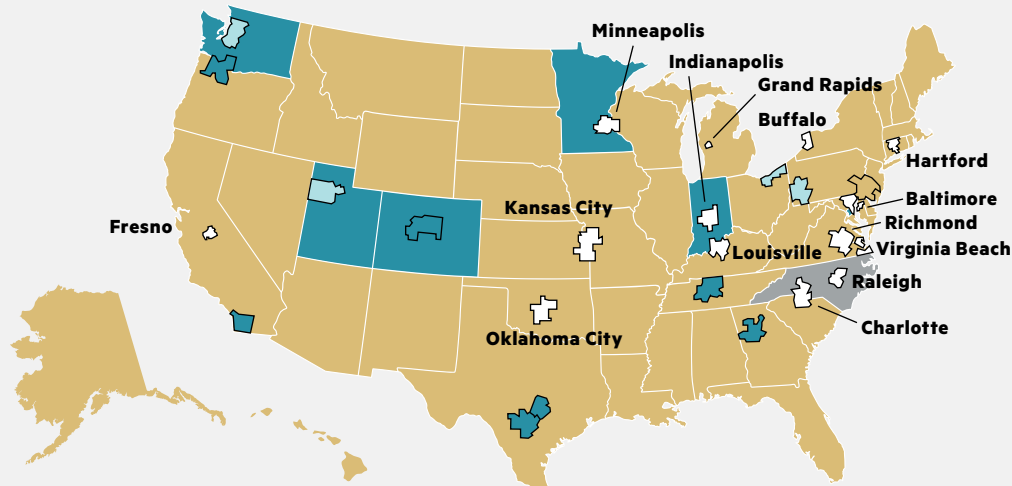
- Affordable rent thresholds: U.S. HUD data for a family of four at 80 percent AMI, renting a 2-bedroom unit (affordability defined as 30 percent of income). The 80 percent AMI threshold is chosen based upon the targeting of most Capital A Affordable programs at households earning 80 percent AMI or below.⁸⁵
- Average market rents: CoStar average 2-bedroom asking rents across the entire MSA.
- Rule for defining NOAH: For each of the 50 largest MSAs, if the CoStar average two-bedroom rent is less than or equal to the HUD affordable two-bedroom rent (for a household of 4) at 80 percent AMI, we classify that metro as having current NOAH feasibility (i.e., new construction unsubsidized units can meet affordability levels under our definition). If the average rent exceeds the threshold, unsubsidized affordability is not broadly feasible without preservation or cost-reduction policy. This outcome-based test goes beyond the common “older buildings only” assumption. By anchoring to rent/AMI relationships for a standard household (family of four, two-bedroom), it captures any unsubsidized stock—whether new or old, single-family, 2–4 unit or 5+ apartments—that clears the affordability bar. This metric is a high-level proxy—it does not measure affordability at a neighborhood level, nor does it guarantee that housing is available of equitably distributed. It simply asks: Is the average asking rent across the MSA affordable to a median-income household?⁸⁶

Time-to-Address (TTA): States vs MSAs NOAH

50 States and MSAs by Cost Burden and Affordable Housing Production

FIGURE 13

□ NOAH (+5% margin) ■ About a generation ■ More than a generation ■ More than a century



Note: All those not pictured are more than a century and include:

Chicago-Naperville-Elgin, IL-IN MSA; Memphis, TN-MS-AR MSA; Washington-Arlington-Alexandria, DC-VA-MD-WV MSA; San Francisco-Oakland-Fremont, CA MSA; Milwaukee-Waukesha, WI MSA; New York-Newark-Jersey City, NY-NJ MSA; San Jose-Sunnyvale-Santa Clara, CA MSA; Los Angeles-Long Beach-Anaheim, CA MSA; Sacramento-Roseville-Folsom, CA MSA; Phoenix-Mesa-Chandler, AZ MSA; Miami-Fort Lauderdale-West Palm Beach, FL MSA; Jacksonville, FL MSA; Orlando-Kissimmee-Sanford, FL MSA; Riverside-San Bernardino-Ontario, CA MSA; Las Vegas-Henderson-North Las Vegas, NV MSA; Tampa-St. Petersburg-Clearwater, FL MSA; Providence-Warwick, RI-MA MSA; Cincinnati, OH-KY-IN MSA; Boston-Cambridge-Newton, MA-NH MSA; Columbus, OH MSA; Dallas-Fort Worth-Arlington, TX MSA; Houston-Pasadena-The Woodlands, TX MSA; Detroit-Warren-Dearborn, MI MSA; Birmingham, AL MSA; St. Louis, MO-IL MSA

Source: Created by M. Kwatinetz at NYU Urban Lab for NMHC using data from ACS, CoStar, Yardi and direct calls to State HFAs.

⁸⁵ This is a large assumption but correlates with our belief that increased supply through deregulation will put downward pressure on the rental inventory. Our scenario for by-right tax abatement production (and preservation) most effectively targets 80%+ AMI households in high cost cities.

⁸⁶ This dataset is included in the Appendix for review.

What the Map Reveals

The results of this test are stark (See [Appendix Chart 3: MSA TTA Analysis & NOAH Market Identification](#)). Of the 50 largest MSAs by size, five have average rents for two-bedroom units at or below HUD's affordable rent threshold, with an additional seven (7) approaching those levels ("near" NOAH) in 2022 and/or 2023. In these twelve metros, unsubsidized affordability remains possible at scale. In the other 38 MSAs, average rents exceed affordable thresholds, signaling that no new NOAH is being produced (at the level studied) and existing NOAH may be at risk of disappearing unless preserved or supported through policy. These findings align with the three categories of housing markets described in the Executive Summary and analyzed further in the [Cost Drivers](#) section.

- Heavily regulated metros—such as Los Angeles, San Jose and Boston—where regulatory costs push housing prices far above the marginal cost of production.
- Low-demand metros—such as Buffalo and Fresno—where new development is limited but existing supply exceeds demand, keeping rents naturally affordable.
- Low-regulation, higher-demand metros—such as Raleigh—where flexible zoning and permitting enable new supply, keeping rents closer to marginal cost.

Research by the National Multifamily Housing Council and the National Association of Home Builders shows that regulation accounts for an average of 40.6 percent of the development cost for a new apartment building with five or more units.⁸⁷ While many regulations serve important public purposes, shifting their full cost onto the private sector ultimately raises housing prices—undermining affordability, itself a critical public good (See [Cost Drivers: The Economics of Housing Production](#)).

The Risk of Losing NOAH

While NOAH currently accounts for the majority of affordable rental housing, it is also the most fragile part of the housing system. Unlike subsidized properties, NOAH units carry no regulatory protections to ensure continued affordability. They can be lost through three main channels:

- Demolition: particularly in high-demand, heavily regulated metros where redevelopment incentives are strong.
- Redevelopment and conversion: often in low-regulation, high-demand metros in which supply lags household growth.
- Rent escalation: across all markets, where NOAH units can be subject to the market pressure of rent escalation, pushing rents out of reach for low- and moderate-income households.

These risks are magnified by the structural imbalance between “lowercase a” affordable and Capital A Affordable supply. From 2012 to 2022 on average 100,000 NOAH units exited the affordable stock,⁸⁸ while only about 89,000 Capital A Affordable units were added.⁸⁹ In effect, the unsubsidized market (“lowercase a”) is shrinking more quickly than the subsidized pipeline (Capital A Affordable) can expand—guaranteeing that affordability pressures will intensify unless preservation strategies are scaled.

Research from the Institute for Housing Studies at DePaul University found that Chicago lost nearly 10 percent of its affordable rental stock between 2012 and 2019—with losses driven by rent escalation in higher-cost neighborhoods and demolition of 2-to-4-unit buildings in lower-cost ones. By 2023, the share of affordable rentals in Cook County had declined 8.6 percentage points from its 2012 level, from 45.3 percent to 36.7 percent.⁹⁰ McKinsey found similar dynamics nationally, with unsubsidized affordable units declining even in markets where demand growth was modest.⁹¹

⁸⁷ Emrath, P., et al., National Multifamily Housing Council, 2022.

⁸⁸ Joint Center for Housing Studies of Harvard University, 2025.

⁸⁹ Jaffe, M., & Ingram, D, 2025.

⁹⁰ IHS, 2021; IHS, 2025.

⁹¹ Woetzel, J., et al., 2021.

Why Preserving NOAH Matters

NOAH is not just legacy stock of older buildings—it is also being produced today in markets where rents remain near affordable thresholds. Both preserving existing NOAH and enabling the creation of new NOAH are central to the nation’s affordability strategy. Without preservation, millions of existing units are lost each year to demolition, conversion or rent escalation. Without new production, affordability cannot keep pace with demand as household growth continues.

Preservation is often the most cost-effective strategy, locking in affordability at lower cost than building new units from scratch. But preservation alone is not sufficient. Rising construction costs, driven by regulation, land constraints and lengthy entitlement processes, threaten to eliminate the feasibility of producing new NOAH. Here, activating dormant development capacity becomes critical. Policies such as construction tax abatements can offset these regulatory costs and allow the private sector to deliver new unsubsidized (“lowercase a”) units at affordable levels. In certain markets, these tools can keep affordability tethered to market production without relying exclusively on Capital A Affordable federal programs like LIHTC, income assistance or public housing (See [Policy Study—Revive and Retain NOAH](#)). The combination of preservation and cost-offsetting strategies creates a dual pathway:

- Revive and Retain (Preservation): preserving existing NOAH through tax abatements, rehabilitation incentives and acquisition funds.
- Dormant Development (New “lowercase a” affordable supply): using dormant development tools like abatements to make new unsubsidized housing viable in markets where rising costs otherwise price out affordability.

Together, these approaches expand the pipeline while keeping costs manageable. They also reveal a key insight: solving affordability does not require choosing between market-based “lowercase a” affordable and subsidized Capital A Affordable. Instead, it requires aligning the two so that subsidies stretch further and market feasibility is preserved.

Policy Levers Across Affordability Types		
	PRESERVATION	NEW CONSTRUCTION
“Lowercase a” affordable (NOAH / Unsubsidized)	Revive & Retain: Preserve existing NOAH through deregulation as well as through tax abatements, rehabilitation incentives and acquisition funds.	Dormant Development for market-rate: Lower regulatory barriers to encourage unassisted NOAH; use tools like tax abatements to offset regulatory costs and enable by-right affordability in new builds.
Capital A Affordable (Subsidized Affordable)	Preserve expiring-use LIHTC units and income assistance contracts; maintain public housing stock through reinvestment; transform existing vacant units into Capital A Affordable where possible through LIHTC and income assistance.	Dormant Development for Capital A Affordable: Expand LIHTC, income assistance and public housing programs to add new regulated Affordable supply.

This leads directly into the next chapter on [Cost Drivers](#). To scale both preservation and dormant development (new construction) strategies, we must first understand why development has become so expensive—and how policy can target those costs without undermining affordability itself.

Cost Drivers: The Economics of Housing Production

Introduction: Why Cost Drivers Matter

Affordability challenges stem not only from supply and demand but from the costs embedded in producing housing. The [Time-to-Address \(TTA\) analysis](#) showed some metro areas can close their affordability gap in a generation, while others require two or more. These differences reflect how local [cost drivers](#)—regulation, entitlement timelines, rent rules, labor, materials and financing—shape feasibility. Some cost drivers are controllable by rental housing providers. But some are not. Examples of non-controllable cost drivers include taxes (state and local) and insurance. When increases in non-controllable expenses are paired with regulated limits on rent levels (such as through rent regulation), affordability issues can be exacerbated. Without understanding these drivers, we cannot explain why [dormant development capacity remains idle](#) or why some metro areas produce [NOAH](#) while others lose it.

The Economics of Development Feasibility

Every market-based housing project is governed by a simple equation: land, construction costs and financing costs must be covered by rents households can pay.⁹² If projected rents fall short, the project stalls—we discuss this in depth in [Housing 101: Cost Impacts to Feasibility](#). In high-cost markets, only the highest rent developments “pencil out” unless external support steps in.

That support comes either from **Capital A Affordable subsidy programs** (LIHTC, income assistance, public housing) or from **by-right incentives** (tax abatements, density bonuses, automatic entitlements) that reduce costs without lengthy negotiations. LIHTC yields only about 89,000 units annually in part because each deal requires complex approvals, while by-right programs deliver units more quickly.

This equation explains why unsubsidized affordability is scarce in some metro areas and available in others. Where costs track marginal construction prices, developers can still produce [NOAH](#). Where costs exceed feasible rents, assisted preservation becomes the only option. Hybrid programs, such as New York’s 421a (now 485x) and Texas’s Public Facilities Corporations (PFCs), show how well-targeted abatements can produce moderate-income housing with less friction than subsidies (see [Policy Case Study—Tax Incentives](#)).

Costs Outpacing Feasible Rents and The Role of Preservation

In many high-cost metro areas, development costs now exceed rents affordable to most households. High rent projects may still be feasible, but middle- and moderate-income housing is not. [NOAH](#) preservation is therefore essential: older or unsubsidized units drift upward in rent unless protected. Without intervention, housing providers often demolish or convert them to Class A.

In rent-regulated markets, rising operating costs—taxes, insurance, maintenance, labor—often exceed allowable rent increases. Instead of maintaining affordable rentals, housing providers avoid regulated projects or build only at levels targeting high-income households. This is evident in New York City, where thousands of rent-stabilized units remain vacant because costs outstrip permissible rent growth.⁹³ Similar pressures appear in California, where rising expenses under rent control force housing providers to withdraw units.⁹⁴

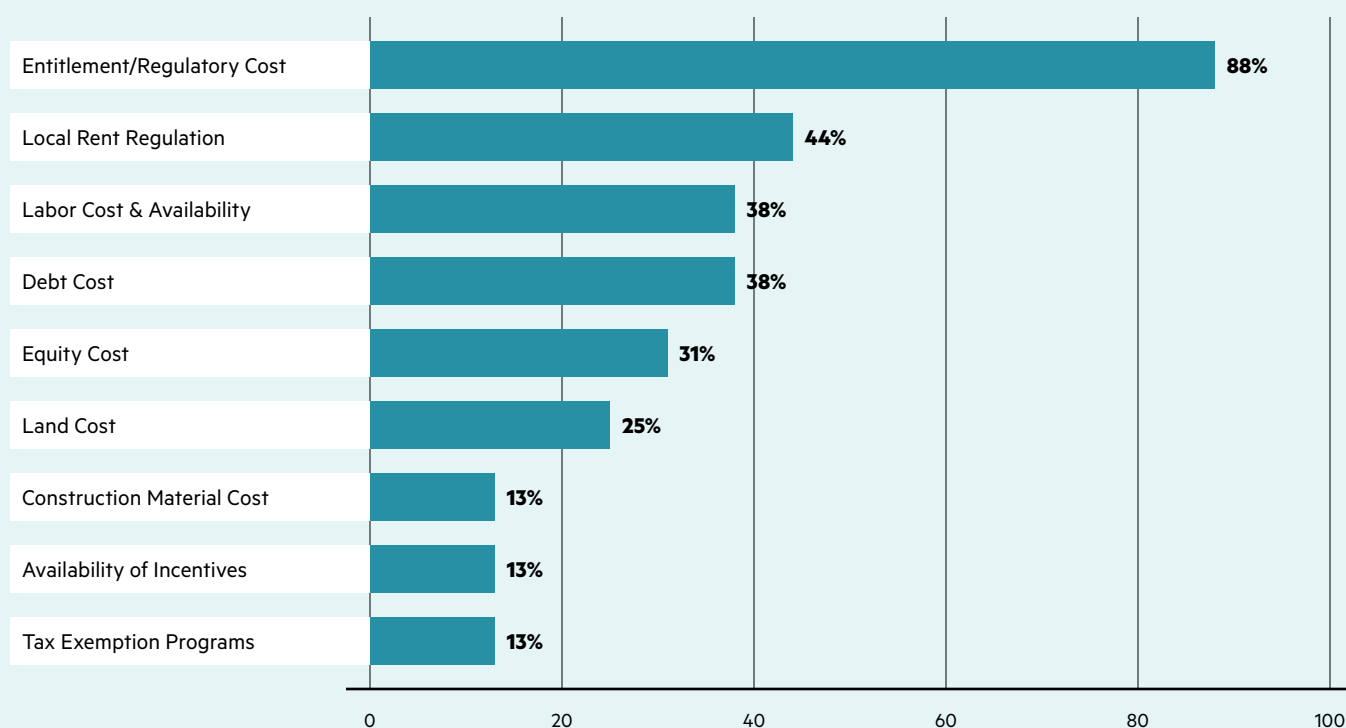
⁹² Debt and equity costs are typically competitive with assets nationally or internationally. Construction costs are likewise more similar nationally—other than increased labor costs due to local regulation.

⁹³ NMHC, 2024.

⁹⁴ LAO, 2022.

Cost Drivers of Multifamily Development or Acquisition

FIGURE 14



Note: November 2024 Survey of NMHC Workforce Housing Committee (n=16)

What Developers Really Say: Regulatory Costs, Not Just Construction Costs

Developer survey data confirms that “non-construction” costs are now the main barrier. A 2022 NYU Urban Lab survey showed:⁹⁵

- **88 percent** cite entitlement delays as critical.
- **44 percent** cite rent regulation as depressing revenue.
- Other concerns: land costs, financing, interest rate volatility.

Construction cost inflation has largely tracked broader inflation,⁹⁶ but project costs—regulatory fees, holding costs from delay and capped revenues from regulation—have risen far faster.⁹⁷ Local rules simultaneously raise costs and reduce revenues, leaving many projects unbuilt.

Regulation, Efficiency and Rent Regulation

Regulation of zoning, impact fees and permitting contributes substantially to cost. A joint NMHC/NAHB study found regulation makes up an average of **40.6 percent** of the development cost of a new 5+ unit multifamily building.⁹⁸ When regulations are misaligned or layered, they inflate costs without delivering equivalent public benefits.

⁹⁵ The NMHC Workforce Housing Committee includes representatives from the entire spectrum of the multifamily (rental) development industry targeting all structure types (single-family, multi-plex, multi-family), all geographic locations in the U.S., all parts of the capital stack (debt, mezzanine, equity), all rental target levels (Capital A Affordable, NOAH, workforce, market-rate, Class A), production modes (core, core plus, value add, opportunistic) including preservation and development, construction companies, brokerage groups, research groups, service providers and companies from small start-ups to publicly traded organizations and non-profit and government sponsored entities.

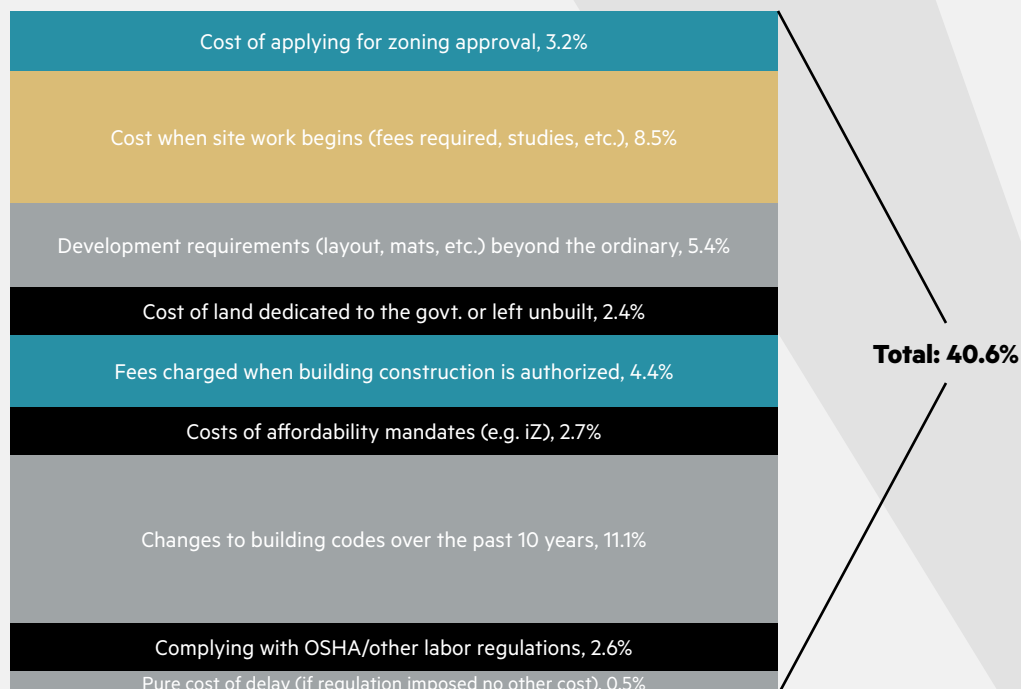
⁹⁶ Glaeser, E. & Gyourko, J. 2017.

⁹⁷ Ibid.

⁹⁸ Emrath, P., & Walter, C.S. (2022).

Average Cost of Regulation as Percent of Total Multifamily Development Cost

FIGURE 15



Source: NAHB and NMHC

Rent regulation, while meant to protect renters, deters supply, encourages vacancy or conversion and reduces investment in maintenance.⁹⁹ The result is fewer units and declining quality. This report suggests that one-size-fits-all rent regulation approaches, such as broad rent control or rent stabilization policies, can reduce housing opportunities over time by constraining supply and limiting market mobility, while failing to effectively target the lowest-income renters who face the fewest housing options. Greater efficiency comes from [activating dormant development capacity](#) and preserving NOAH so that competitive markets can work in tandem with Capital A Affordable programs to assist in delivering affordability, thereby creating the ability to hit the [moonshot goal](#): address housing affordability [in this lifetime](#).

Conclusion: Recalibrating Cost Drivers with Policy Leverage

Cost drivers can be recalibrated, so regulation fulfills its purpose without neutralizing affordability. Where regulation is vital—for safety, health or environment—governments should offset its costs rather than pass them entirely onto developers, who are otherwise forced to raise rents.

Preservation of NOAH must remain foundational. Equally important is enabling new NOAH through cost-offset tools, particularly in high-demand, high-regulation markets. With recalibration, dormant development capacity can be activated and private markets can again deliver unsubsidized affordability at scale to complement the subsidized delivery of Capital A Affordable supply.

Cost drivers are the hidden infrastructure of housing policy. They explain why [NOAH](#) thrives in some markets and vanishes in others, why [some MSAs achieve affordability within a generation](#) while others cannot and why [any pipeline that hits our moonshot goal requires preservation and dormant development strategies to work together across “lowercase a” affordable and Capital A Affordable delivery](#).

⁹⁹ See National Multifamily Housing Council. *Rent Regulation Policy in the United States: 2024 Report*, and LAO 2022.



Policy Case Studies

Policy Case Study—Deregulation

Introduction: Deregulation as a Cost Driver Response

As described in [Cost Drivers](#), regulation accounts for an average of 40 percent of total multifamily development cost.¹⁰⁰ Regulation hurts affordability in two ways:

- (1) constraining overall supply, putting upward pressure on rents since there is not enough supply to meet demand; and
- (2) raising the cost of the units that are built, which in turn requires higher rents to pay back the money borrowed to create the project (as described in [Housing 101: Cost Impacts to Feasibility](#)).

Deregulation means revising or removing rules that add cost or delay. Some rules (safety, health, environmental) are essential; some are targeted taxation; others are outdated or duplicative. The public benefit of any regulation must therefore be weighed against its cost burden: every rule imposed on a housing project raises the rent required to make it financially viable. When that cost crosses the feasibility threshold, the project is not built—and the public pays in scarcity rather than in code compliance.

Streamlining these rules where possible (deregulation) has the potential to restore feasibility for some projects that would otherwise stall—helping to address the supply constraint. In our public/private framework, deregulation is a by-right, supply side tool: it doesn't add subsidy, but it lowers capital (and often operating) costs, activates dormant development capacity and helps the market (through both private and public/private housing) deliver more units at attainable price points—central to the [TTA](#) goals in this report. As the case studies below demonstrate, however, deregulation works differently at different scales: reforms targeting ADUs and missing middle housing expand supply incrementally through homeowner-driven, small-format production; reforms enabling large-scale apartment (5+ units) development drive the bulk of measurable rent suppression and income-restricted affordability outcomes. Both are necessary, and neither alone is sufficient.

¹⁰⁰ Emrath, P., & Walter, C.S. (2022).

Forms of Deregulation

Reforms in this section include both changes to how land can be used and how projects move through the approval process. For clarity, we group them into two categories: Land Use Reforms and Process Reforms.

- **Large-scale supply reforms (primary drivers of rent suppression and income-restricted affordability)**

- Upzoning to enable 5+ unit multifamily development (Land use)
- Legalizing missing middle housing (duplex, triplex, fourplex) (Middle supply)
- Reducing/eliminating minimum parking
- Streamlined by-right permitting with time-certain reviews
- Shifting discretionary reviews to by-right approval

- **Incremental / infill supply reforms:**

- Legalizing “missing middle” housing (duplexes, triplexes, fourplexes)
- Legalizing Accessory Dwelling Units (ADUs)

Each measure reduces cost by either:

- Spreading land cost over more units (primary benefit of large-scale upzoning and missing middle legalization)
- Cutting carry time and soft costs (primary benefit of process reforms: ministerial approval, time-certain reviews)
- Lowering compliance risk (benefit of by-right approval—applies at all scales)
- Lowering operating costs (benefit of parking elimination, fee waivers)
- Directly improving capital budgets (Applies at all scales; most material for 5+ unit developments where financing structures are more complex)

From 2015 to 2025, a growing number of U.S. jurisdictions have adopted one or more of these changes. Below, we examine four prominent cases—Minneapolis, Austin, California and Portland (Oregon)—along with supporting examples from other metros.

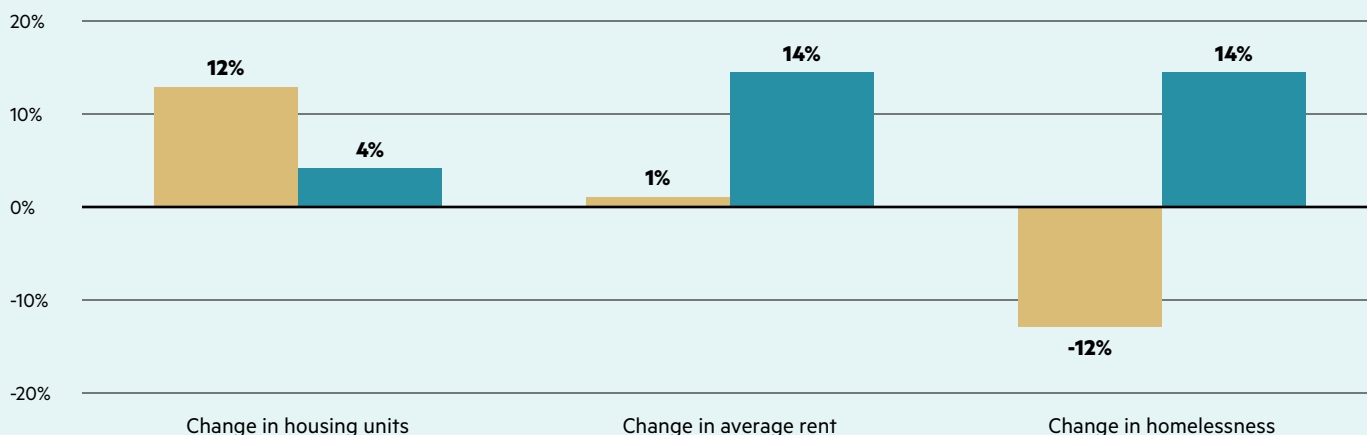
Minneapolis: Citywide Upzoning, with Conflicting Signals

Land Use Reform. Starting in 2009 Minneapolis passed a series of laws (including the 2040 Plan) enabling deregulation through land use reform including upzoning, legalizing ADUs, eliminating minimum parking requirements, creating minimum building heights in high-density zones, transit zoning bonuses and lowering minimum lot size requirements in residential zoning areas.

Minneapolis' Rent Growth Was Much Lower Than Minnesota's Percentage change in housing stock, average rent and homelessness, 2017-2022

FIGURE 16

■ Minneapolis ■ Minnesota



Note: The Minnesota housing unit data does not include Minneapolis. Homelessness data for Minneapolis reflects data for Hennepin County. Homelessness data for Minnesota excludes Hennepin County.

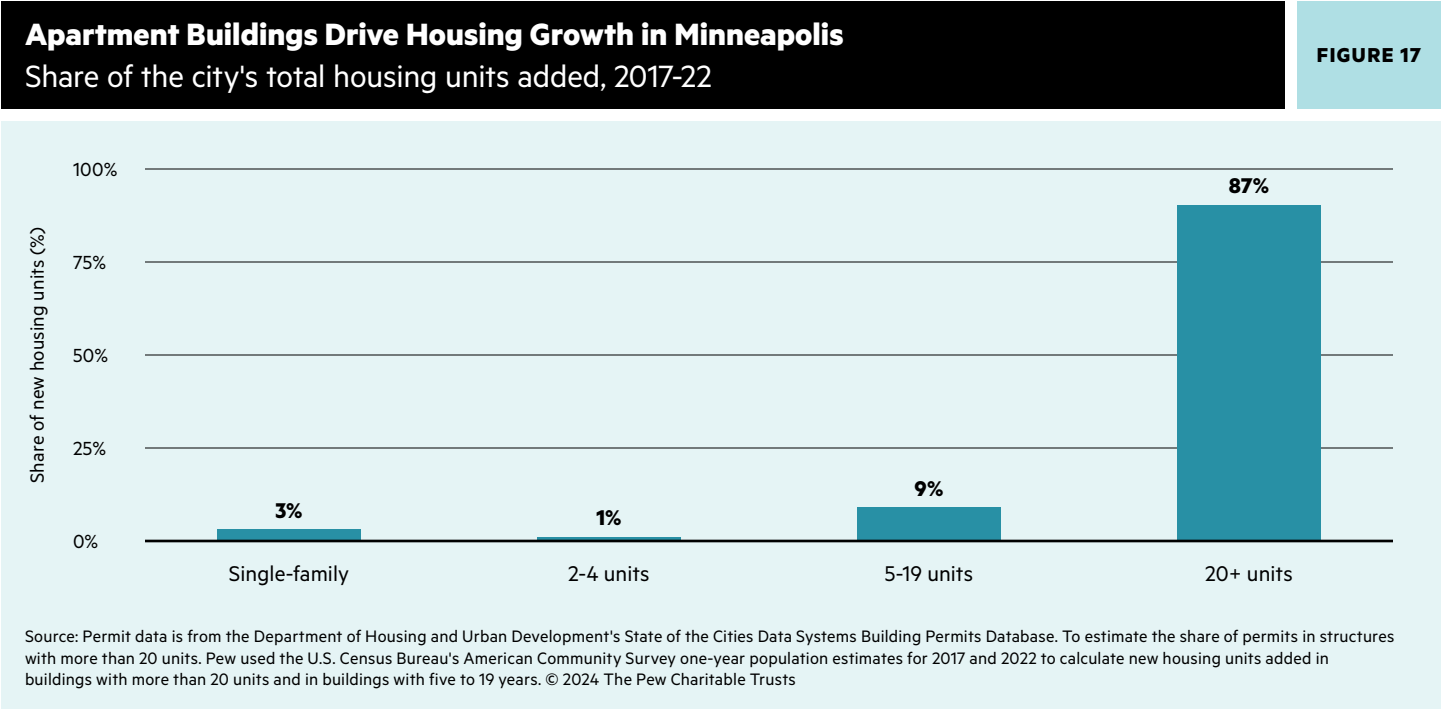
Sources: Rent growth comes from Apartment List's rent estimate data from 2017 and 2022. Rent data was downloaded Oct. 6, 2023, and represents an average of Apartment List's monthly median rent estimates. Data on housing units comes from the U.S. Census Bureau's American Community Surveys one-year population estimates from 2017 and 2022. Homelessness data comes from the Department of Housing and Urban Development's Point-in-Time homelessness counts from 2017 and 2022. © 2024 The Pew Charitable Trusts

Process Reform. The city paired land use reform with process reform: corridor standards and clearer approvals for small infill, modestly reducing entitlement risk and carrying costs.

Impacts. After reform, Minneapolis saw multifamily permit growth outpace suburban peers (particularly in multifamily above 20 units). However, the 2040 Plan’s legalization of duplexes and triplexes produced only modest missing-middle output: from 2020-2024, Minneapolis permitted just 87 new duplex, triplex and fourplex buildings, creating 225 new housing units—a fraction of the 11,503 units in multifamily apartment buildings constructed over the same period.¹⁰¹ Permitting of these small structures peaked in 2023 with only 63 new units across 24 buildings.¹⁰² Minneapolis median rent over the period (2019-23) rose 25.7 percent, or 3.2 percentage points less than a synthetic control group of comparable U.S. cities. By December 2023, Minneapolis had fallen from the 29th-highest rent among 126 peer cities to the 74th-highest—the largest decline in rank of any city during this period.¹⁰³ The Pew Charitable Trust similarly found that Minneapolis’ most consequential production gains came from corridor and transit-oriented upzoning—not the legalization of duplexes and triplexes—and that Minneapolis average rents from 2017-2022 increased by 1 percent while in overall Minnesota (excluding Minneapolis) rent growth increased 14 percent over the same period.¹⁰⁴ Importantly, Federal Reserve Bank of Minneapolis researchers caution that slower rent growth in Minneapolis is attributable at least in part to a negative housing demand shock specific to the city beginning in summer 2020—not solely to increased supply from the 2040 Plan.¹⁰⁵

The Upjohn Institute (2022) documented that St. Paul’s 2021 rent stabilization ordinance—which capped annual rent increases at 3 percent with no inflation adjustment—led to measurable permit cancellations and a documented withdrawal of institutional capital from the St. Paul multifamily market, empirically validating the chilling effect on the regional pipeline.¹⁰⁶

Report Pipeline takeaway. Citywide upzoning can bend the production curve, but contradictory policies (broad rent caps) can neutralize gains. Land-use permissiveness must be matched by revenue predictability. The rent-stabilization push sent conflicting signals: upzoning encouraged building while simultaneously rent limits prevented the returns to scale by capping returns. Additionally, the Minneapolis experience demonstrates that legalized missing-middle (multiplex) typologies do not automatically translate to production at scale; broader multifamily corridor reforms drove the majority of new supply, which was apartments. Policymakers should not overestimate the near-term unit output of multiplex legalization alone.



¹⁰¹ Hembre et al., 2025.
¹⁰² Ibid.
¹⁰³ Ibid.
¹⁰⁴ Liang, L., Staveski, A., & Horowitz, A. (2024, January 4).
¹⁰⁵ Hembre et al. 2025.
¹⁰⁶ Diamond & Shi, 2022, as cited in Upjohn Institute, 2022.

Austin: Process Streamlining within a Constrained Land-Use Code

Reforms. In 2019, Austin passed Affordability Unlocked, which created materially shorter entitlement timelines which lowered interest carry and professional soft costs—direct capital-budget savings that improve feasibility at attainable rents. Since 2023, Austin has substantially expanded its land-use deregulation beyond Affordability Unlocked. In December 2023, the City Council passed the HOME-1 Initiative and in May 2024 the HOME-2 Initiative, both of which relaxed zoning restrictions on residential lots to enable multiplex developments on previously single-family restricted lots. Separately, Texas Senate Bill 840 (2025) created statewide by-right authorization for residential development on any commercially or industrially zoned land, without requiring a local zoning change—a significant expansion of the land-use deregulation framework in Austin and statewide.¹⁰⁸

Impacts. Affordability Unlocked approved over 7,700 housing units by 2023, with over 5,300 of those affordable to low-income households. This exceeds output from previous affordable housing efforts, suggesting that the deregulation policy is working toward its intended goals.¹⁰⁹ As of 2025, Yardi Matrix reported that Austin delivered nearly 3,500 affordable units in that year alone—the most of any U.S. city—driven by the combined effects of Affordability Unlocked, the HOME ordinances and the city's density bonus programs.¹¹⁰ In January 2026, Austin's Planning Department confirmed that the city's density bonus programs collectively had delivered over 46,000 new units since 2019, including 13,000 income restricted affordable units.¹¹¹ Notably, of the units built under Affordability Unlocked, 69 percent met affordability criteria—far exceeding the program's minimum requirements—a market signal that deregulation enabled developers to profitably serve lower-cost renters at scale, with rents falling nearly 20 percent since their 2022 peak.¹¹² The HOME-1 (and HOME-2) results are more mixed. Similar to what was seen in Minneapolis, building permits surged at the deregulation from single-family to multiplex (86 percent in the first year after the ordinance), but a 2025 investigation by *The Austin Bulldog* found that actual projects yielded from 906 permits were only 99, though price points have dropped (relative to average prices in the past which were for larger land area). Political and academic critics point out that without any affordability requirements, it could take five to ten years to see any meaningful impact to low-income households.¹¹³

Report Pipeline takeaway. Austin's evolving experience—now encompassing Affordability Unlocked, HOME-1, HOME-2 and SB 840—demonstrates that layering process and land-use reforms compounds supply outcomes over time. The city's post-2020 permitting surge and subsequent rent decline provide one of the most empirically observable rent-suppression outcomes linked to deregulation of any major U.S. city. Austin's broad deregulation approach caused median rents to fall nearly 20 percent from their 2022 peak of \$1,673 to \$1,355 by September 2025—adjusted for inflation this is below 2017 levels. This was driven by a major permitting surge between 2020–2022 (averaging 3,400–4,300 new units approved monthly) which predates HOME-1 and HOME-2 and can be attributed to Affordability Unlocked. However, Austin also illustrates a key limitation of deregulation alone: production gains are concentrated in the attainable (80–120 percent AMI) band. Deep affordability for households at or below 60 percent AMI still depends on Capital A Affordable subsidy programs such as LIHTC and Affordability Unlocked's¹¹⁴ income-restricted tiers—and critics note that HOME Phases 1 and 2 contain no mandatory affordability requirements whatsoever. Scale requires both land-use and process liberalization; depth of affordability requires explicit income-targeting layered on top.

California

Land Use Reforms. Since 2016, California enacted a compounding series of ADU reform bills, beginning with SB 1069 and AB 2299. These bills removed local barriers, capped parking and setback requirements, standardized ministerial approvals and eliminated owner-occupancy mandates. The results were unambiguous: statewide ADU permitting grew from approximately 1,300 units in 2016 to 23,000 in 2022, reaching an estimated 26,924 in 2023 (nearly one in five of all housing permits issued statewide). In Los Angeles alone, ADU permits grew from 80 in 2016 to 7,160 in 2022, an 8,850 percent increase; in the San Diego region, ADU production grew 247 percent from 2020 to 2024, reaching 3,991 units (27 percent of all housing permitted in the region). Roughly two-thirds of new ADUs qualify as affordable to households earning 80 percent AMI or below, at no direct taxpayer cost.¹¹⁵ ADU reform has also penetrated historically exclusionary suburbs: cities such as Palo Alto and Saratoga, which permitted near-zero ADUs in 2016, were permitting dozens annually by 2020.¹¹⁶

¹⁰⁷ Texas Policy Foundation, 2025.

¹⁰⁸ Luxe Homes Austin, 2025.

¹⁰⁹ Treskon, M., González-Hermoso, J., McDaniel, N., & Su, D. (2023, August).

¹¹⁰ *Austin Business Journal*, 2026.

¹¹¹ Mauck, 2025.

¹¹² Independent Institute, 2026.

¹¹³ Mauck, 2025 referring to Council Member Alison Alter and UT Austin professor Jake Wegmann.

¹¹⁴ Independent Institute, 2026.

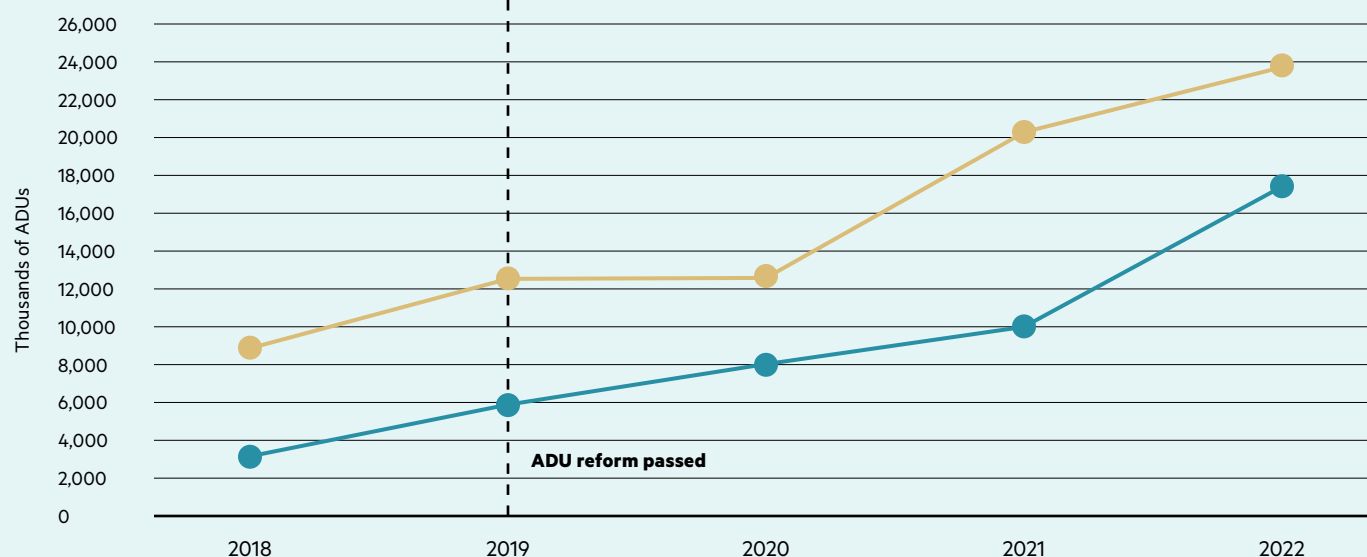
¹¹⁵ Gray, 2024.

¹¹⁶ Gray, M.N. 2024. UC San Diego, 2025. California HCD, 2026.

ADU permitting and construction grew after California's ADU reforms.

FIGURE 18

■ Permitted ■ Constructed



Note: SB 13, AB 670, AB 881, AB 68, AB 587 were all passed in 2019. Among other things, they reduced setback requirements, eliminated ADU occupancy requirements for 5 years, and prevented HOAs from prohibiting ADUs.

Process Reforms. SB 35 (2017) introduced by-right approvals for qualifying multifamily projects in jurisdictions falling short of housing targets, cutting median approval time in Los Angeles from approximately seven months to 2.7 months post-implementation¹¹⁷ SB 423 (2023) extended this streamlined framework through 2036 and broadened its coverage; SB 79 (2025) further extended by-right ministerial approval to housing within one-half mile of major transit stops statewide. In 2025, California enacted a landmark budget-based CEQA reform package exempting rezonings required by housing element law from environmental challenge. Governor Newsom described this package as “a game changer, which will be felt for generations to come.”¹¹⁸

Impacts. From 2019 through 2024, California local jurisdictions permitted approximately 754,000 total new units—roughly 126,000 per year—of which approximately 571,000 were built.¹¹⁹ ADUs were the single largest contributor to new supply growth in California over this period, and ranking the first among all states as measured by ADU share of new residential construction accounting for 127 percent of new residential construction permits as of late 2025.^{120 121} Statewide impact appears to be geographically concentrated in urban cores.¹²² Despite the production record, the California State Auditor (2026) found total permitted output running below targets, underscoring that even California’s aggressive deregulation stack has not fully closed the supply gap, and that high construction costs, interest rate headwinds and labor shortages constrain conversion of permits to completed units.^{123 124}

¹¹⁷ T. Pew Charitable Trust, 2024.

¹¹⁸ Loeb & Loeb, 2026; Fulton, B. et al, 2023. California Legislature, 2023.

¹¹⁹ California State Auditor, 2026.

¹²⁰ Mesocore (2026), Shovels.ai (2025).

¹²¹ Gray 2024.

¹²² UC San Diego (2025), The Pioneer Institute (2026).

¹²³ Katz, D. (2023).

¹²⁴ Manji, S., & Finnigan, R. (2023, August).

Report Pipeline takeaway. California's paired land-use and process deregulation—ADU legalization, SB 35/423 ministerial streamlining, SB 79 transit upzoning and 2025 CEQA reform—demonstrates that layered, rule-based deregulation can compound over time. But similar to examples found in Minneapolis and Austin, ADU reform in California does not achieve the scale needed for meaningful supply contribution. Illustratively, in 2023 California permitted 26,924 ADUs against a statewide shortfall estimated at over two million units.¹²⁵ ADUs have meaningfully expanded housing supply and added units that individually rent below comparable new construction, attributed mainly to small size and homeowner pricing behavior. However, peer-reviewed evidence does not yet support the claim that ADU production at current volumes has reduced market-wide rents in California; the supply increase is insufficient relative to the state's overall housing deficit.¹²⁶ A HUD-funded UCLA study currently underway is expected to provide the first rigorous parcel-level analysis of ADU production's effect on city-level rents.¹²⁷ Despite leading the nation in ADU production, overall permitted output remains below state housing targets, and production is still constrained by construction costs and capital market conditions that no zoning reform can directly resolve.

Portland / Oregon—Legalizing Missing-Middle at Scale

Land Use Reforms. Oregon's 2023 HB 2001 eliminated exclusive single-family zoning statewide, mandating duplexes on most single-family lots and (in larger cities) triplexes, fourplexes and cottage clusters. Portland's Residential Infill Project (RIP) went further: up to four units by-right on most lots, with a bonus to six units when meeting affordability standards, plus house-size caps to deter one-for-one mansion replacements.¹²⁸ These land use reforms were made to single-family zoning to allow conversion to multiplex, but were not made at the scale of apartment (5+ unit) construction at the commercial level, which remains more restricted in Oregon than nearly any other state in the U.S.¹²⁹

Process Reforms. RIP created predictable by-right pathways for these structures of up to six units, limiting discretionary design review and reducing holding costs.

Impacts. In the first years after RIP, Portland issued hundreds of 2-6+ unit permits, moving from near zero to a steady pipeline of market-rate missing middle housing units. New fourplex homes typically sold on average for \$250k-\$300k less than new single detached homes in 2023, because land cost per unit fell—a direct capital-budget benefit of upzoning. After the reforms, the average sale price for new middle housing dropped \$200k (after adjusting for inflation).¹³⁰ The Sightline Institute's January 2025 monitoring report confirmed that middle income housing construction has increased up to 5-10 times following RIP in areas that previously saw near-zero missing middle activity. The share of detached houses in single-family dwelling zones fell from nearly half of new units before RIP to less than 20 percent of new units in the 2023-2024 period. Critically, the RIP's contribution has become proportionally more significant as broader development activity has slowed. In the first half of 2024, these missing middle multiplex developments in single-family zones rose to comprise 43 percent of all citywide permits as commercial and multi-dwelling zone activity contracted sharply due to macro-financial conditions constraining multifamily development. Those conditions are often listed as “macro-conditions” but they more accurately can be described as the buildup of a tax upon capital that has driven away investment in housing as a market-feasible product in Portland. These financial conditions are not national, but are a direct result of the [Cost Drivers](#) in Oregon, shown by our [Cost Impacts to Feasibility](#) and could be predicted by the [Policy Report Card](#).

Report Pipeline takeaway. Broad legalization expands the feasible site set and lowers land cost per unit; production then tracks financing and demand. Land-use reform on single-family zoned lots to allow multifamily construction has significantly increased production. However, similar to California, Austin and Minneapolis, the scale of “missing middle” housing is not sufficient to drive down overall pricing pressures given a large unmet demand. But Oregon is unique. Even with these deregulation-based policies focused on missing middle, the state is actually losing ground due to numerous significant policies that increase the cost of development of apartments (at scale to entice capital inflow). Oregon has restricted all development to designated Urban Growth Boundaries, so that for example the Portland Metro UGB has expanded only 15 percent in acreage while the population grew 80 percent, pushing land prices to approximately 20 times higher inside the UGB than outside it. Portland also became one of the first US cities to mandate inclusionary housing when it required all development of 20 or more units to include below market-rate rents on a portion of units, referred to as “a tax on developers to fund social benefits”. These two factors, in combination with statewide rent control (SB 608), relocation assistance mandates and compounding taxes all have the predictable effect of driving up housing costs beyond what is feasible to construct.¹³¹

¹²⁵ Gray, 2024.

¹²⁶ Bhatt, 2023; Gray, 2024.

¹²⁷ UCLA Lewis Center, 2026.

¹²⁸ City of Portland Bureau of Planning and Sustainability. (2025, February 4).

¹²⁹ Mildner, 2025.

¹³⁰ City of Portland Bureau of Planning and Sustainability. (2025, February 4).

¹³¹ Ibid.

Other Notable Deregulation Examples

There are multiple other examples of successful deregulation policy.

- **Buffalo, NY** increased its housing stock by eliminating all parking minimums citywide in 2017, among the earliest policies in the U.S. Following reform, 68 percent of Buffalo projects included fewer parking spaces than previously required. Buffalo joins Austin, Minneapolis, Portland, San Francisco, San Jose, Denver, New York City and Dallas as cities that have now formally eliminated or substantially curtailed parking requirements, reducing project costs by \$30,000+ per parking space reduced.¹³²
- **Seattle** has a deregulation story best understood by separating three housing typologies, each with distinct affordability outcomes.
 - ADUs grew from under 300 permits annually pre-reform to 987 in 2023 (which exceeded single-family permits) and rent well below market, with a significant share under \$1,000/month. However, ADUs are not income-restricted and skew toward higher-income owner-builders, limiting reach to the lowest-income households.¹³³
 - Middle housing (townhouses, low-rise multifamily) is Seattle's weakest link. In large-format (5+ unit) buildings, MHA affordability fees can be absorbed through additional height. But these fees are economically prohibitive for smaller low-rise typologies, suppressing new construction of the unit type most likely to deliver moderate price points without subsidy.¹³⁴
 - Large-scale multifamily (5+ units) drove Seattle's headline result: 14,290 income-restricted affordable apartments produced metro-wide from 2020–2024. MHA committed 5,100 income-restricted units by end of 2024, which was 85 percent of its 10-year goal. But MHA fee revenue is procyclical: as market-rate multifamily slows—down 14 percent statewide in 2024—fee revenue falls precisely when affordability need intensifies.¹³⁵
- **Houston, Texas** The AEI Housing Center presented updated Houston lot-size reform case study maps at its April 2025 conference, confirming that the 2013 citywide extension of lot-size reduction (from 5,000 sq ft to 1,400 sq ft) generated a dramatic, spatially visible change in development patterns across the entire city and not just in the urban core. California YIMBY (2025) highlights Houston as the primary evidence base for the argument that minimum lot size reduction directly suppresses land prices and home sale prices, noting that Houston's approach of reducing lot size rather than rezoning for missing middle multifamily achieved comparable density outcomes with significantly less political resistance than conventional upzoning campaigns. Houston Landing (2025) identifies an important institutional caveat for policymakers. Houston's private deed restriction system allows neighborhoods to collectively impose and maintain their own land use rules for 40-year terms. This system effectively recreates much of what public zoning does elsewhere, meaning Houston's model cannot be straightforwardly exported to cities governed by traditional zoning codes.¹³⁶

Cross-Case Lessons—Land-Use vs. Process Deregulation

- Land-use reform delivers scale by expanding the range of feasible sites and lowering land cost per unit. This creates a direct gain to project feasibility through the capital budget. But scale of legalized typology does not equal scale of production or rent impact: upzoning that enables large multifamily (5+ units) has consistently produced more units, at lower per-unit cost, with stronger measurable effects on market-wide rents than duplex, triplex or ADU legalization alone.
- Process reform delivers speed by reducing entitlement timelines and uncertainty. Reduced timelines and uncertainty shrink soft costs, limiting exposure to market shifts and improve returns through faster cycle times. Speed gains are largest for the projects most sensitive to carrying costs: large multifamily developments with complex capital stacks gain the most from by-right approvals; ADU and missing middle projects benefit more from simplified one-stop permitting and fee reductions.
- ADUs and missing middle housing serve a distinct and valuable function by expanding housing options in supply-constrained, exclusionary neighborhoods and delivering naturally affordable units at no taxpayer cost. However, peer-reviewed evidence does not support the claim that these typologies, at current production volumes, suppress market-wide rents. Their affordability contribution is real but operates at the unit level, not the market level. Policymakers should set expectations accordingly and not substitute missing middle legalization for the broader upzoning and process reforms needed to enable 5+ unit production at scale.
- The most powerful outcomes occur when both land-use and process reforms work in tandem (e.g., California's layered ADU legalization + SB 35/423 ministerial streamlining + SB 79 transit upzoning; Austin's Affordability Unlocked + HOME-1 + SB 840) and when contradictory constraints such as rent caps, inclusionary mandates and compounding taxes are avoided. Oregon illustrates the limiting case: where RIP and HB 2001 expanded legal capacity for missing middle housing, a simultaneous accumulation of cost-raising regulations (inclusionary zoning, statewide rent control, relocation mandates, UGB land constraints) suppressed the large-scale multifamily production needed to materially reduce housing costs. This drove large-scale multifamily production to a 12-year low by 2025.
- Preservation must be integrated into deregulation efforts to avoid the unnecessary loss of NOAH units. Clear anti-displacement and replacement standards are particularly important where deregulation enables redevelopment of sites occupied by existing lower-cost housing. This risk is highest where land-cost savings from upzoning are large enough to incentivize teardown of NOAH (see [NOAH](#)).

¹³² Sightline Institute, 2023; Innowave Studio, 2025; Mercatus Center, 2025; New York Times, 2025; Bush Center, 2026.

¹³³ Northwest Realtor, 2024; City of Seattle OPCD, 2022;

¹³⁴ DJC, 2024; AEI, 2025.

¹³⁵ The Urbanist, 2026; City of Seattle, 2024; Washington State AHAB, 2025. Note that *The Urbanist* reports only apartments in 100% affordable buildings, leaving out data from mixed-income buildings, and only counts apartments.

¹³⁶ AEI Housing Center, 2025; California YIMBY, 2025;

Conclusion

Deregulation is the by-right, supply-side counterpart to discretionary subsidy. But the case studies in this section reveal that not all deregulation produces the same affordability outcomes. Moreover, conflating reform types may produce unintended consequences which lead to overpromising and underdelivering on affordability policy objectives.

ADUs and missing middle housing (duplexes, triplexes, fourplexes) expand supply incrementally and deliver units that individually rent below comparable new construction. Measurable results can be seen in California, where roughly two-thirds of California ADUs qualify as affordable at or below 80 percent AMI, and in Portland, where fourplexes sold for \$250k–\$300k below new detached homes. These are meaningful neighborhood-level gains, and they reach exclusionary suburbs where no other housing typology has penetrated. But at current production volumes, peer-reviewed evidence does not support the claim that ADUs or missing middle legalization alone suppresses market-wide rents.¹³⁷ As the California and Minneapolis case studies show, even leading ADU and missing middle programs have not yet reached volumes sufficient to reduce market wide rents; they remain important but unit scale tools. The scale gap is fundamental, not incidental.

Large-scale multifamily reforms (upzoning for 5+ units, ministerial approvals, parking elimination, process streamlining) are where measurable rent suppression and income-restricted affordability outcomes are primarily generated. Austin's post-2020 permitting surge averaged 3,400–4,300 units monthly and drove a documented 20 percent rent decline by 2025. Seattle's MHA program committed 5,100 income-restricted units by end of 2024. Minneapolis' corridor and transit-oriented upzoning, not its duplex legalization, drove 87 percent of new housing production. California's SB 35 cut approval timelines from seven months to 2.7 months for qualifying multifamily projects. These outcomes depend on reforms that activate institutional capital and professional development pipelines at scale—conditions that ADU and missing middle reforms do not reliably create.

Deregulation can increase market-driven supply at attainable levels for the middle class and also promote NOAH. But deregulation has firm limits when it comes to addressing subsidy-dependent households. It activates dormant private capacity but cannot guarantee depth of affordability: without income-targeting, new supply enters at moderate and market-rate price points. Conversely, deregulation can incentivize teardown of NOAH unless it is paired with policy measures aimed at preservation. Most notably, deregulation is neutralized by contradictory regulations—rent control, inclusionary mandates, compounding taxes—that raise costs and suppress returns on the same projects deregulation sought to enable. Oregon offers a cautionary example of how simultaneous cost-raising policies can neutralize missing-middle reforms; the Deregulation case study discusses this in detail.¹³⁸

In the pipeline context, a complete deregulation strategy therefore requires both tracks working in parallel: incremental reforms (ADUs, missing middle) to expand options in constrained neighborhoods and produce naturally affordable infill at no public cost; and large-scale reforms (multifamily upzoning, process streamlining, parking elimination, fee reduction) to generate the production volumes needed to bend the market-wide rent curve. Neither track substitutes for Capital A Affordable programs serving subsidy-dependent households. But pairing incremental reforms and large-scale reforms can lower the baseline cost of every unit built, making each public dollar go further and accelerating progress toward TTA goals within a generation.

¹³⁷ Bhatt, 2023; Hembre et al., 2025

¹³⁸ Willamette Week, 2026; Mildner, 2025

Policy Case Study—Tax Incentives

Earlier chapters showed that certain [Cost Drivers](#) (such as regulatory requirements and soft costs) push many projects beyond affordable rent levels, and in some cases beyond feasibility altogether ([Housing 101: Feasibility](#)). When that happens, otherwise buildable sites and willing capital sit idle—what we call dormant development capacity.

By-right tax incentives are the fiscal complement to deregulation: rather than negotiating one off subsidies, jurisdictions lower specific taxes and fees by rule so that private capital can pencil new [supply](#) or preserve at risk stock at lower cost. When structured as open-eligibility programs, these tax incentives are available to any qualifying project rather than awarded through a competitive queue. This certainty for housing providers allows the by-right incentives to operate at market scale, accelerating the pipeline and shortening Time-to-Address horizons without requiring per-project legislative action.

Property tax incentives such as abatements, exemptions and payment in lieu of taxes (PILOTs) reduce a project's operating expenses, raising [NOI](#). That, in turn, supports larger debt proceeds (or lower equity requirements) in the capital budget. This difference can often be the difference between “nearly feasible” and “buildable” for a housing provider's project. Because these programs are by-right, developers can underwrite them at concept stage, avoiding the time and uncertainty of discretionary awards. In practice, jurisdictions use three groups of tools:

1. **New construction abatements**—time-limited property tax relief tied to on site affordability in mixed income rentals.
2. **Preservation/operating cost reductions**—recurring rate/assessment breaks for owners who record affordability (e.g., reclassification or partial exemptions).
3. **Public purpose ownership structures**—where state law permits, public entities hold title (often through an authority or corporation) so that projects meeting affordability tests qualify for a statutory exemption; owners typically make a PILOT to the partner agency.

Illustrative example: at a 2.0 percent effective property tax rate, a development that costs \$300,000 per unit faces roughly \$6,000 in taxes per unit per year (about \$500/month). An 80 percent tax abatement could reduce costs by about \$400/month per unit, creating room to lower rents, increase affordability set asides, or both, while keeping the project financially feasible. As a more specific example, New York City's effective tax rate on rental housing is approximately 4-5 times higher than on comparable owner-occupied properties. This illustrates why tax abatement can be the single most decisive feasibility lever in high-tax urban markets such as New York City.¹³⁹

Evidence & Case Studies

New Construction Abatements—New York City—421 a and 485-x

Program. With these programs, new multifamily developments that meet affordability and location standards receive multi-year property tax relief. Once a sponsor chooses a defined option and satisfies program requirements, the benefit is programmatic (by-right) and can be underwritten at acquisition. At its peak, 421-a covered approximately 150,000 rental units in New York City—over 80 percent of all rental housing built in the city between 2010 and 2022. The program expired in June 2022, immediately producing a measurable collapse in permit filings. Its successor, 485-x (Affordable Neighborhoods for New Yorkers), was enacted by the New York State Legislature in April 2024, offering a property tax exemption for new multifamily construction commenced after June 15, 2022 and completed by June 15, 2038. The program is tied to affordability requirements. For buildings over 150 units in designated wage zones a \$40/hour minimum construction wage requirement is added.¹⁴⁰

Impacts. At its peak, 421-a underwrote over 80 percent of all rental housing built in New York City between 2010 and 2022, with the exemption increasing stabilized returns by several percentage points. This increase was often the decisive margin in a market where effective property tax rates on rentals are 4–5 times higher than on comparable owner-occupied properties.¹⁴¹ Approximately 25–30 percent of units in 421-a projects were reserved for middle- or moderate-income households, with market-rate units carrying rent stabilization for the abatement period as a tradeoff. Following the program's June 2022 expiration, NYC housing permit filings collapsed. The NY State Comptroller documented a sharp decline in filings directly corresponding to the expiration, with net housing production falling in 2022–2023 before recovering to a record 38,000 net units in 2024 as legacy 421-a pipeline projects completed.¹⁴² The 485-x successor, enacted April 2024, is showing early but limited uptake: as of Q3 2025, only 3 percent of NYC's development pipeline can be attributed to 485-x,¹⁴³ though residential permit filings jumped 43 percent year-over-year in mid-2025 as developers adjusted to the new program. The critical constraint is the \$40/hour construction wage requirement triggered for buildings over 150 units in designated wage zones. This has resulted in a pronounced clustering of 485-x projects at 99 units, just below the threshold, limiting the program's ability to produce large-scale mixed-income development at the pace 421-a did.¹⁴⁴ This again showcases the trade-off between housing affordability and other public benefits such as supporting wage requirements.

¹⁴⁰ NY NYU Furman Center, 2023; RPTL §485-x; NYC HPD, 2025.

¹⁴¹ NYU Furman Center, 2023.

¹⁴² NYS Comptroller, 2025.

¹⁴³ REBNY, 2025.

¹⁴⁴ City & State NY, 2025; REBNY, 2025.

Report Pipeline takeaway. In high-tax, high-cost markets, a predictable, time-limited abatement is often the lowest-friction lever to unlock mixed-income new construction at scale. New York's post-421-a experience adds a critical design lesson: wage mandates and compliance complexity attached to abatement programs can effectively cap project scale, converting what should be a broad-based market tool into a program most useful for mid-size projects only. Program design matters as much as program existence.

NYC—467-m Office-to-Residential Conversion Abatement

Program. Enacted as part of New York State's April 2024 budget, 467-m (Affordable Housing from Commercial Conversions, AHCC) provides a property tax exemption of 90 percent for 25–35 years for non-residential buildings converted to rental housing in Manhattan below 96th Street (65 percent elsewhere citywide), contingent on 25 percent of units being rented at a weighted average of 80 percent AMI or below.¹⁴⁵ Final HPD rules went into effect January 2025. The program is available citywide and requires project completion by December 31, 2039.

Impacts. The post-pandemic NYC office-to-residential conversion pipeline through March 2025 totals an estimated 44 buildings, 15.3 million gross square feet and approximately 17,400 units. Of these 17,400 units, 14,500 units in Manhattan are potentially 467-m eligible, including approximately 3,600 income-restricted units (NYC Comptroller, 2025). The program's largest completed project is at 25 Water Street and consists of 1,320 units in the Financial District. The project, rebranded SoMA, is the largest office-to-residential conversion in U.S. history; 330 of its units are income-restricted, and leasing began in late 2025.¹⁴⁶

However, honest attribution requires caution on two points. First, the largest projects in the current pipeline—including 25 Water Street and 55 Broad Street—were underwritten and commenced before 467-m existed, and both received the exemption retroactively. The NYC Comptroller explicitly notes that these projects “plainly prove that the tax benefits exceed the rent discounts on income-restricted units” without having been necessary to initiate them.¹⁴⁷ Second, the post-pandemic office conversion wave is meaningfully driven by a structural collapse in office valuations: Manhattan downtown office vacancy reached 22.3 percent before conversions began absorbing supply, and buildings like 25 Water Street sold at approximately \$240/gsf in 2022—a fraction of typical Manhattan commercial values—making conversion financially viable at acquisition costs well below historical norms.¹⁴⁸ 467-m lowers the ongoing tax burden on converted residential use, but depressed acquisition pricing is a co-equal driver of conversion feasibility and cannot be attributed to the program.

Pipeline takeaway. 467-m demonstrates that abatement tools can be precisely calibrated to activate a specific supply typology—stranded commercial stock—that no other tool in this section addresses. With nearly 11,000 units in the active NYC conversion pipeline as of late 2025 (NY Post, 2025), the model is producing at meaningful scale. Its replicability beyond New York depends on two local conditions that may not generalize: a stock of large, underperforming commercial buildings with floor plates and structural characteristics suitable for residential conversion, and a property tax regime distorted enough that the abatement is decisive to residential feasibility. Cities without both conditions will find the 467-m model of limited applicability. This case study should be revisited as the 2026–2028 cohort of 467-m projects completes, since these are early-stage programs, and no long-term performance data as of yet exists.

Public Ownership and PILOT: Texas—Public Facility Corporations

Program. State statute (Texas Local Government Code, Chapter 303) allows projects owned by a qualified public facility corporation (PFC) and meeting income restrictions to receive a property tax exemption. Housing providers enter into a ground lease or partnership with a PFC, record affordability and make a negotiated PILOT payment. The Texas Legislature substantially reformed the PFC program in 2023 (HB 2071, 88th Legislature), adding mandatory affordability floors (10 percent of units at ≤60 percent AMI; 40 percent at ≤80 percent AMI), annual compliance audit requirements submitted to the Texas Department of Housing and Community Affairs (TDHCA), 30-day notice to all impacted taxing entities and a feasibility test for new construction deals that requires housing providers to demonstrate the project would not be viable without the PFC structure.¹⁴⁹

Impacts. The model scaled quickly across Texas's fast-growth metros. In the Houston MSA alone, 33,797 PFC units represent 4.4 percent of the total multifamily housing stock as of Q4 2024, with three additional projects under construction.¹⁵⁰ The Texas Legislative Budget Board (2024) confirmed the program has generated tens of thousands of workforce-tier (60–80 percent AMI) units across the state. Its speed stemmed from programmatic certainty. Housing providers can price land, financing and affordability commitments upfront. The 2023 HB 2071 reforms added accountability without fundamentally disrupting this speed advantage, though the new annual reporting requirements created a compliance transition period: most PFCs missed the June 2024 audit deadline for 2023 reports, prompting TDHCA to extend the deadline to December 2024.¹⁵¹ The University of Texas (2020) and Texas Housers (2023) identified the program's primary limitation as concentrating affordability in the 60–80 percent AMI workforce tier, with no requirement to reserve units for households at or below 50 percent AMI. This means the PFC tool does not independently serve the deepest affordability need.

¹⁴⁵ NYC HPD, 2025; NYC Comptroller, 2025.

¹⁴⁶ Arch Paper, 2025; Business Insider, 2025.

¹⁴⁷ NYC Comptroller, 2025.

¹⁴⁸ Ibid.

¹⁴⁹ Texas Housers, 2023; Novogradac, 2025.

¹⁵⁰ Newmark, 2025.

¹⁵¹ Novogradac, 2025.

Report pipeline takeaway. Where property taxes constitute a primary operating cost barrier, a well-designed statutory exemption can redirect that expense into lower rents at scale and speed. Texas's PFC program is the clearest national proof of concept for public-purpose ownership structures at scale. The production of nearly 34,000 workforce units in the Houston MSA alone demonstrates that the model activates private capital effectively. The 2023 HB 2071 reforms demonstrate that accountability guardrails and by-right speed are not mutually exclusive, though the compliance transition underscores that even well-designed program changes require market absorption time. The Texas PFC program also shows the limits of a market-based and market-scaled program to achieve rents that serve subsidy-dependent households. Project economics show that the tax exemption savings are not deep enough to underwrite rents at the lowest level of the AMI spectrum.

Preservation Through Operating Cost Reduction: Minneapolis 4d

Program. Owners who commit a portion of units at affordable rent levels qualify for a preferential property tax classification (Low-Income Rental Classification) that lowers annual property taxes. As of November 2024, Minneapolis revised program terms: studio and one-bedroom units enrolled must now be rented at ≤50 percent AMI (tightened from 60 percent), while two-bedroom and larger units remain at ≤60 percent AMI. The city also expanded the program in 2024 to include buildings converting to residential use. A concurrent 2023 Minnesota state legislative change further reduced the tax rate for enrolled properties, making the program more attractive to housing providers and triggering a surge in participation.¹⁵²

Impact. In 2024, the number of units enrolled in Minneapolis's 4d program reached 2,338, which is more than five times the previous annual average. This immediately followed the 2023 state tax rate reduction that made the program significantly more attractive to housing providers.¹⁵³ Owners report that lower taxes offset rising insurance, utilities and maintenance costs, enabling them to hold rents stable, avoid NOAH conversion to market-rate and fund basic capital maintenance. The program's rapid 2024 growth confirms that when the tax benefit is calibrated to actual NOI pressure, NOAH preservation participation responds quickly. The program's scale remains constrained by annual enrollment caps: the 2025 cycle limited new enrollment to approximately 400 units statewide.¹⁵⁴ This suggests that demand for the program now exceeds the funding envelope, which is a design limitation worth monitoring as a model for other cities.

Report pipeline takeaway. For at-risk NOAH, ongoing tax relief is often the most cost-effective preservation tool because it directly reduces the operating cost line-item driving NOI stress and conversion risk. The 5x enrollment surge following Minneapolis's 4d program enhancement provides a replicable model. When benefit levels are calibrated to actual operating cost pressure and program rules are simple, NOAH owners opt in at scale. The binding constraint shifts from demand (owner willingness) to program capacity (funding envelope), which is a policy-solvable problem.

Evidence of Impact—Other Local Abatements

Tax exemption programs have emerged as an effective tool to support housing affordability by reducing operating costs for projects. By lowering annual property taxes, these incentives improve project feasibility by improving Net Operating Income ([Housing 101: Feasibility](#)).

A study by RCLCO for the NMHC Research Foundation (with chart reproduced on the following page)¹⁵⁵ found that tax-based incentive programs help increase housing supply across a variety of markets. These programs either directly support the production of housing affordability in markets in which [NOAH](#) would not occur, or indirectly support it by increasing the overall [supply of housing](#) and maintaining a supply-and-demand balance of housing at a rental rate that would otherwise be more elevated without this housing production.

¹⁵² Minneapolis City Council, November 2024; Streets.mn, 2025.

¹⁵³ Streets.mn, 2025.

¹⁵⁴ Waseca County, 2024.

¹⁵⁵ Hewlett, C., Flax Ganz, C., & Browning, J. (2024).

Selected Tax Incentive Housing Programs

CHART 9

GEOGRAPHY	MINNEAPOLIS	PORTLAND	ST. LOUIS	BUFFALO	SEATTLE	LOS ANGELES	MANHATTAN	SAN ANTONIO
Program Type	Abatement	Exemption	Abatement	PILOT	Exemption	Partial Exemption	Abatement with cap	PFC Exemption
Avg. % of Annual Deliveries Utilizing Program	1.9%	19.0%	34.8%	39.2%	44.5%	N/A	37.6%	16.9%
% of 2023 Inventory Utilizing Program	2.5%	4.8%	4.6%	17.4%	18.9%	1.0%	14.6%	3.8%
Avg. Year Built of Buildings Utilizing Program	1949	2015	1973	1985	2016	1933	2008	2017
Avg. Number of Units in Buildings Utilizing Program	17	118	115	96	114	49	149	251
Avg. % Affordable In Buildings Utilizing Program	68.1%	33.8%	23.3%	Minimum 60%	20.8%	N/A	Minimum 25%	80.7%

Source: Hewlett, C., Flax Ganz, C., & Browning, J. (2024)

The RCLCO study analyzed eight markets—Minneapolis, Portland, St. Louis, Buffalo, Seattle, Los Angeles, Manhattan and San Antonio—and concluded that in every case, these programs increased housing production and generated affordable units. When programs are simple, transparent and predictable, uptake is strong and the time to obtain permits shortens. When rules become opaque or value is diluted, participation collapses.

Tax abatement programs consistently face “subsidy per unit” critiques: the NYC Comptroller¹⁵⁶ argued that 421-a’s per-affordable-unit subsidy cost was too high relative to affordability depth; the University of Texas¹⁵⁷ made a parallel argument about PFC deals, noting that affordable-unit cost calculations improved when the full feasibility test (market-rate cross-subsidy) was applied. Both critiques share the same analytical flaw: these evaluations isolate the cost of affordable units without accounting for the cross-subsidy structure of mixed-income development or the induced tax revenues generated by projects that would not otherwise be built.¹⁵⁸

Most of the projects produced are mixed-income, meaning that they have both affordable units and market-rate-units. This has impact on the overall subsidy in two ways.

- As development costs rise (or rent control limits revenue on market-rate units), the required subsidy increases to maintain project viability. Evaluating subsidies only on the affordable units inflates the perceived costs. The NYU Furman Center points out increased costs of rent regulation and carbon reduction goals as two of those factors implemented since the 421-a program was created.¹⁵⁹
- Additionally, mixed-income developments generate greater economic impact than purely affordable projects. This broader fiscal benefit should be considered in cost evaluations. Indeed, the NMHC study found that in all affordable housing tax incentive programs studied, the net fiscal benefit of the tax incentives was positive. That is, the tax expenditure was paid for by the increased tax revenues generated by development that would not otherwise have occurred but for the tax incentive program. By just measuring the subsidy on the affordable units, this impact is ignored, and the subsidy is inflated.

¹⁵⁶ New York City Office of the Comptroller, 2022.

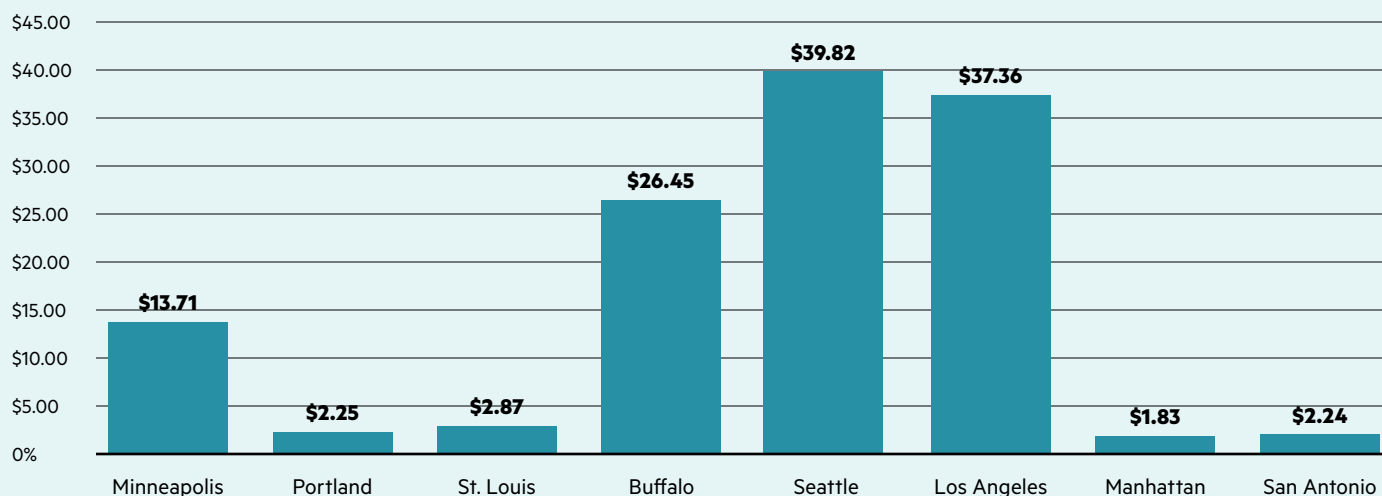
¹⁵⁷ Way, H. K. (2020, November).

¹⁵⁸ NMHC, 2023; NYU Furman Center, 2023.

¹⁵⁹ Raetz, H., & Murphy, M. (2022).

Annual Tax Benefit for Every Dollar Spent on a Tax Incentive

FIGURE 19



Source: Hewlett, C., Flax Ganz, C., & Browning, J. (2024)

Tax Incentive Report Card

Using the report's grading described in the [Policy Research Report Card](#)—scale, speed, budget impact, targeting, execution risk, preservation and other factors—by-right tax tools score high on scale/speed and budget leverage, moderate on targeting (by design) and manageable on execution risk when paired with proper oversight.

- **Scale & Speed.** Open eligibility allows any qualifying project to participate, enabling the program to achieve market wide scale. Because benefits are codified, sponsors can underwrite them upfront. This is typically faster than discretionary awards, and that shortened timeline lowers overall costs of the project.
- **Capital & Operating Budgets.** The abatement directly lowers operating expenses, improving NOI and closing feasibility gaps without the need for cash subsidies.
- **Net Fiscal & Economic Effects.** Foregone taxes can be substantial in the short-term if they would occur absent the benefit. However, induced development has two positive economic impacts which improve fiscal returns. First, it expands the tax base and adds jobs. Second, induced development creates more housing which puts downward pressure on rents, thereby easing rent pressure and the corresponding need for subsidy.
- **Targeting & Preservation.** Tax abatement policy can strongly impact middle/moderate incomes and also work to stabilize NOAH (via preservation variants). However, it is not a substitute for serving subsidy-dependent households.
- **Execution Risk.** Execution risk on by-right programs is lower for housing providers than discretionary programs which can include long queues and annual negotiations that are subject to political risk. Instead, risks concentrate in program design when benefits can be too broad, or compliance mechanisms too weak. These issues can be mitigated with modern guardrails such as audits, public dashboards, claw backs for non-performance and geographic targeting.

Pipeline Connection & Conclusion

In the balanced pipeline, preservation focused tax relief (Minneapolis 4d and equivalents) is the fastest and lowest cost near term contributor: the 2024 enrollment surge in Minneapolis demonstrates that well-calibrated NOAH preservation programs can activate at scale within a single application cycle. New construction abatements are next: when functioning as intended (as in 421-a's peak years) they can underwrite most of the rental production in a high-tax market. However, when new construction abatements are burdened with wage mandates or compliance complexity (as in 485-x's early experience) they produce at reduced scale and skew toward smaller projects. The Texas PFC model demonstrates that public-purpose ownership structures can produce workforce-tier units at the greatest absolute scale of any tool examined here— nearly 34,000 units in a single metro. Even with this documented success, the programs do not independently reach the deepest affordability levels (≤ 50 percent AMI), which remain dependent on Capital A Affordable subsidy.

By-right tax incentives translate public purpose into private feasibility with minimal administrative friction. They lower the rent needed to pencil, accelerate delivery and attract private capital, all while preserving the public benefits embedded in modern building codes. They are not a cure all, but they are often the only immediately scalable lever for the middle income segment.

Programs using tax incentives need guardrails: simple rules, clear targeting, transparency and periodic recalibration to market conditions. The 485-x experience adds a specific warning regarding attaching non-housing-related policy objectives. The prevailing wage mandate converts a market-scale supply tool into a project-size-constrained niche instrument. The 99-unit clustering emerging in New York's 485-x pipeline is a direct and predictable consequence of this design choice and represents foregone units at scale.¹⁶⁰ Done well, by-right tax incentives shorten the Time-to-Address horizon by converting idle sites and sidelined capital into real units more quickly than other tools in the Toolkit's balanced pipeline.

¹⁶⁰ REBNY, 2025; City & State NY, 2025

Policy Case Study—Revive & Retain: NOAH Through Public-Private Partnerships

Introduction: Why NOAH Preservation Matters

Naturally Occurring Affordable Housing (NOAH) accounts for the majority of affordable rental homes in many U.S. markets. This study estimates that roughly 62 percent of the total affordable rental stock is unsubsidized, compared to just 10 percent delivered through Capital A Affordable programs such as LIHTC, PBRA and public housing (See [Supply](#)). Unlike Capital A Affordable housing, NOAH achieves affordability without direct subsidy, which means it can be lost without triggering any regulatory protection. Losses to demolition, condo conversion or upper-market repositioning increase rent pressure and lengthen the [Time-to-Address \(TTA\) horizons discussed in this report](#). Data from Harvard's Joint Center for Housing Studies imply that the U.S. has been losing on the order of 100,000 naturally occurring affordable housing (NOAH) units per year, by this report's definition of NOAH.¹⁶¹ This underscores the urgency of large-scale preservation strategies, as this annual loss exceeds the 89,000 per year average LIHTC production. It therefore represents a structural leak in the affordability pipeline for subsidy-dependent households that new construction alone cannot offset.

Preservation is also a key feasibility lever: it avoids the [cost drivers](#) associated with new construction (land, hard/soft costs, entitlement delays), protects [Net Operating Income \(NOI\)](#) by stabilizing operating costs and maintains the debt-service and equity returns required to keep properties solvent. In short, every preserved unit is one less unit that must be built—and one more unit supporting the [moonshot](#) TTA timeline. Per-unit costs for NOAH preservation consistently run 30–70 percent below new affordable construction. In Los Angeles, public preservation loans average \$50,000/unit versus \$300,000 or more per unit for new construction in the same submarkets. In New York City, Neighborhood Pillars subsidies average \$380,000/unit versus \$500,000+ for new construction affordable units.¹⁶² In the Toolkit's balanced pipeline (see [Chart 1](#)), the Revive and Retain model contributes 437,500 preserved units per year. This is the single largest line item, ahead of dormant development, LIHTC expansion and income assistance combined.

Preservation strategies fall into three categories that together form a complete toolkit:

- **Fund-based strategies:** Public or mixed public/private funds operating at the local or state level, providing discretionary acquisition and bridge capital targeted at the deepest affordability and most at-risk stock;
- **Private-market capital:** Impact funds, institutional workforce housing vehicles and CDFIs that assemble preservation equity at scale, often outcompeting speculative buyers in high-demand metros;
- **Government-Sponsored Enterprises (GSEs):** Fannie Mae and Freddie Mac—national-scale public-private entities channeling private capital under Federal Housing Finance Agency (FHFA) oversight, providing the permanent financing exit that makes preservation transactions bankable at scale.

These three tool types are most effective when layered.

- Local funds fill affordability gaps where GSE underwriting cannot reach;
- Private capital provides speed and competitive acquisition capacity;
- GSE permanent debt provides the exit financing that makes preservation economics durable rather than one-time.

In 2026, FHFA set combined GSE multifamily purchase caps at \$176 billion (\$88 billion each), up 20.5 percent from 2025, with at least 50 percent required to meet mission-driven affordable housing standards and workforce housing executions remaining entirely uncapped. This made GSE platforms the largest single source of mission-aligned multifamily capital in the U.S.¹⁶³

Each strategy has its advantages. Fund-based tools deliver depth and local targeting. Private capital adds speed and flexibility. The GSE platforms provide durable, scalable financing. This chapter integrates all three and ties them back to earlier chapters on [Cost Drivers](#), [Local Policy](#) and [NOAH](#) to show how preservation shortens TTA and complements the affordability strategies involving new construction, called dormant development in this report.

¹⁶¹ This approximation is derived from Joint Center for Housing Studies of Harvard University estimates showing a loss of 2.1 million low-rent units between 2012 and 2022 and more than 500,000 low-rent units lost between 2019 and 2022, as detailed in the [Naturally Occurring Affordable Housing section](#) and its accompanying notes 83 and 88.

¹⁶² LA County, 2021; NYC HPD, 2022.

¹⁶³ FHFA, 2025; Greystone, 2025.

Comparative Overview of Preservation Mechanisms

CATEGORY	EXAMPLES	CAPITAL SOURCE	STRENGTHS	LIMITATIONS
Fund-Based (Public or Mixed)	DC Housing Preservation Fund; Boston Acquisition Opportunity Program	City/state allocations, philanthropy, leveraged private debt	Deep affordability; targets at-risk stock; aligned with local policy priorities	Budget-limited; discretionary processes can slow execution; scale constrained by program capacity, not market demand
Private-Market Capital	GMHF NOAH Impact Fund (Twin Cities); Workforce housing/impact funds; CDFIs	ESG/impact investors, pensions, insurance cos., mission-driven capital	Flexible and responsive; can operate across metros; scalable in strong markets; competitive at acquisition	Affordability depth varies by fund; investor appetite may shift with market cycles
GSEs (Public-Private System)	Fannie Mae MAH/Affordable Housing Preservation; Freddie Mac TAH/NOAH Preservation Loan	National bond markets with FHFA oversight	Large-scale, permanent programs; affordability mandates; standardized execution; lower capital cost; workforce executions uncapped in 2026	Depth tied to underwriting standards; typically targets ≤80% AMI without local gap fillers

Case Studies: Mechanisms in Practice

A. Fund-Based Strategies (Public or Mixed Public/Private)

Local and state preservation funds provide low-cost acquisition and bridge capital to purchase at-risk NOAH properties, stabilize operations and secure long-term affordability through recorded covenants. These are discretionary (not by-right) and excel at targeting small-to-midscale properties and deeply affordable units where purely private capital would otherwise reposition up-market. Their principal limitation is program capacity: as the cases below demonstrate, demand for these programs now consistently exceeds available funding.

Case A1: Washington, DC—Housing Preservation Fund (HPF).

Launched in 2017 as a partnership between DC DHCD and CDFI intermediaries, the HPF has financed the preservation of 5,104 units through \$44 million in expenditures across 41 projects as of FY2024. The program has produced approximately 730 units per year since inception, well above early projections.¹⁶⁴ A FY2024 Stabilization RFP opened in August 2024 and closed December 2024, continuing the program's revolving deployment cycle. Income targeting is generally ≤80 percent AMI, with deeper targeting in select projects. HPF demonstrates the compounding power of revolving fund structures: as capital is redeployed from completed transactions, annual production accelerates over time. This design principle is directly applicable to other localities seeking to scale preservation without proportionally increasing annual appropriations.

Case A2: Boston—Acquisition Opportunity Program (AOP).

Since its 2016 launch, AOP has preserved 1,394 homes through December 2025. This includes 789 units preserved under Mayor Wu alone. The City launched the Boston Acquisition Fund (BAF) in 2024 as a \$13 million revolving loan complement to AOP, subsequently capitalized to \$14 million with a \$1 million private bank contribution in December 2025.¹⁶⁵ Income targeting is typically ≤60–80 percent AMI, with operating subsidies layered to serve deeper affordability in select transactions. The most recent AOP acquisition is The Hillcrest in Roslindale, where rents were running 35 percent below neighborhood averages. The Hillcrest illustrates the program's core mechanism: acquiring buildings at below-market prices when they surface for sale before speculative repositioning occurs. AOP demonstrates that targeted acquisition plus light rehabilitation can lock in affordability quickly and permanently, complementing longer-lead new-construction pipelines.

¹⁶⁴ DC DHCD, 2026.

¹⁶⁵ City of Boston, 2025; Boston Real Estate Times, 2025.

Case A3: Los Angeles County—Housing Innovation Fund II

The Los Angeles County Housing Innovation Fund II (LACHIF II) is a \$70 million revolving loan fund administered by the Los Angeles County Development Authority (LACDA) in partnership with community lenders, providing acquisition and predevelopment financing for affordable housing across LA County. Since its inception, LACHIF II has lent approximately \$70 million to affordable housing providers, resulting in close to 2,100 units of preserved or produced affordable housing.¹⁶⁶ A McKinsey Global Institute analysis of the LA County NOAH market (2021) provides the most-cited per-unit cost comparison for the region and argues that preservation of existing NOAH units costs a fraction of new construction. The report identifies 541,000 total NOAH units in LA County (80 percent of all affordable units) and finds that owner-intervention tools such as low-interest acquisition loans can stabilize properties at costs well below the \$300,000+ per-unit cost of new subsidized construction in the same submarkets.¹⁶⁷ The \$50,000–\$70,000 vs. \$300,000+ differential is consistent across the programs in this section and reflects the fundamental preservation arithmetic: reusing existing structures avoids the land, entitlement and hard construction costs that dominate new-build feasibility in high-cost metros.

Case: New York City—Neighborhood Pillars

NYC's Neighborhood Pillars (2018) provides low-interest loans and tax exemptions to facilitate acquisition. The program's maximum subsidy is approximately \$380,000/unit which compares favorably to over \$500,000/unit for new affordable construction in the city. About 400 apartments were preserved before the program's capital was exhausted in 2022. The program was replenished and continued as part of former Mayor Adams' broader housing plan, which committed to 10,000 preserved units annually through 2032. NYC's preservation tools as a whole—spanning Neighborhood Pillars, loans for refinancing and repairs and expiring subsidy extensions—collectively preserved over 100,000 affordable units between 2014 and 2021 at costs consistently 30–50 percent below new affordable construction.¹⁶⁸

B. Private-Market Capital (Impact/Institutional/CDFI)

Mission-oriented and institutional investors assemble preservation capital at scale for Class B/C portfolios, typically combining moderate rent growth caps with operational improvements. These vehicles can act quickly when NOAH assets come to market, and their competitive speed is often decisive in preventing speculative acquisition and up market repositioning. Affordability is ensured through recorded covenants or lender requirements rather than ongoing public subsidy.

Case B1: Greater Minnesota Housing Fund (GMHF)—NOAH Impact Fund (Twin Cities).

NOAH Pool I was established in 2017 with \$32.5 million from seven impact investors and deployed in full, preserving 701 units of unsubsidized rental housing. Pool II closed in May 2024 with \$33.5 million in social impact capital and is actively deploying toward a target of 550 additional NOAH units.¹⁶⁹ Income targets are ≤60–80 percent AMI. Aeon partnership portfolios, for example, reserved more than half of units at ≤60 percent AMI. The GMHF model has proven that impact capital can out-compete speculative buyers and maintain affordability at scale in a high-demand metro. The launch of Pool II on the heels of Pool I's full deployment is itself evidence of proof of concept: impact investors returned to the vehicle because the first fund demonstrated both financial performance and mission delivery.

Case B2: Chicago—Community Investment Corporation (CIC) & Preservation Capital.

CIC's preservation focus expanded after 2014 with acquisition and rehabilitation lending for small-to-midscale rental properties (including the 1-to-4 unit segment) and a dedicated Opportunity Investment Fund. CIC has preserved 67,000 units through 2,700 loans totaling \$1.6 billion since 1974, and in December 2025 announced a \$322 million new loan pool from 37 investor banks to support thousands of additional affordable units over the next five years.¹⁷⁰ Income targets are generally ≤60–80 percent AMI, with some projects serving deeper affordability. CIC illustrates that preservation capital can effectively stabilize small buildings that are too granular for GSE underwriting and too small for most institutional capital vehicles. This is the backbone of urban NOAH stock.

C. GSEs as a National Public-Private System (Fannie Mae & Freddie Mac)

Fannie Mae and Freddie Mac operate under federal charters with FHFA oversight to provide liquidity and stability in multifamily finance. Their affordable housing products include Fannie Mae's Multifamily Affordable Housing (MAH) and Affordable Housing Preservation programs, and Freddie Mac's Targeted Affordable Housing (TAH) and NOAH Preservation Loan. These programs standardize preservation underwriting and pricing nationwide, link transactions to affordability covenants and leverage the agencies' balance-sheet scale to crowd in private capital. While these programs typically target ≤80 percent AMI, GSE executions work effectively alongside city and state preservation funds to achieve deeper affordability when layered with local gap financing. With \$176 billion in combined 2026 purchase capacity and workforce housing executions uncapped, the GSEs represent the preservation pipeline's most scalable permanent financing engine.

¹⁶⁶ D LACDA, 2019.

¹⁶⁷ McKinsey Global Institute, 2021.

¹⁶⁸ NYC HPD, 2022.

¹⁶⁹ GMHF, 2024 Annual Report.

¹⁷⁰ CIC, 2025; HAI Group, 2022.

Case C1: Minneapolis (Twin Cities)—Agency Preservation in a NOAH Market.

The Twin Cities preservation ecosystem is the strongest documented example of all three tool types operating in combination. Fannie Mae's MAH programs and Freddie Mac's senior debt have been active in the market for over a decade. In the landmark transaction establishing the model, Aeon, GMHF's NOAH Impact Fund and Enterprise Community Investment completed the acquisition of 768 apartment homes across 10 properties in Bloomington, Brooklyn Center, New Hope and St. Paul, which was the largest acquisition in Aeon's history at the time.¹⁷¹ The portfolio was financed with \$60 million in Freddie Mac loans provided by Bellwether Enterprise, \$12.65 million in equity from GMHF and Enterprise and a \$4 million direct investment from BMO Harris Bank (Aeon, 2017).¹⁷² The ecosystem operates as a reinforcing loop: GMHF's NOAH Impact Fund provides competitive acquisition equity; Freddie Mac TAH/NOAH Preservation Loan provides permanent debt exit; and Minneapolis's 4d program (see Tax Incentives section) reduces operating costs post-acquisition. Together, these improve long-run NOI and make the preservation economics sustainable over time rather than dependent on ongoing public subsidy.¹⁷³ No single tool achieves this alone; it is the layering that produces durable outcomes.

Case C2: Atlanta: Freddie Mac TAH within a Citywide Preservation Push.

Freddie Mac's TAH and dedicated NOAH Preservation Loan offer underwriting flexibilities, fee reductions and rehabilitation allowances for nonprofits preserving NOAH. At the city level, Invest Atlanta has closed financing to create or preserve 4,581 affordable housing units since the start of 2022. This represents a \$1.5 billion total capital investment in support of Mayor Dickens' goal of 20,000 affordable units created or preserved by 2030.¹⁷⁴ In FY2025, Atlanta Housing approved a \$158.7 million budget which is \$46 million above the FY2024 allocation. The program targets 1,350 new units and preservation of up to 1,114 existing units.¹⁷⁵ TAH generally targets ≤60–80 percent AMI, with deeper affordability achieved through layered subsidies. Atlanta illustrates how GSE executions paired with local public finance enable preservation to scale quickly in a rapidly growing Sunbelt metro where demand pressure on NOAH is acute.

Why Preservation Shortens TTA and Improves Feasibility

Preservation reduces the total capital required per unit compared with ground-up construction, avoids extended entitlement timelines and stabilizes operating costs. The lower capitalized cost means the same NOI can support feasible debt service and equity returns at lower rent levels. This effectively keeps units in the affordable stock rather than accelerating their transition to higher-rent use. Per-unit costs for preservation are consistently 30–70 percent below new affordable construction across every case study in this section: DC (~\$8,600/unit in fund expenditures vs. \$400,000+ for new subsidized production), Boston (acquisition at below-market prices with light rehabilitation), LA (~\$50,000/unit vs. \$300,000+) and NYC (~\$380,000/unit vs. \$500,000+).¹⁷⁶

The cross-case evidence also shows that preservation programs compound. DC's HPF grew from an estimated 2,500 units to a verified 5,104 units as its revolving structure redeployed capital across successive cycles. Boston's AOP has nearly tripled output under Mayor Wu. GMHF's Pool II was launched immediately upon Pool I's full deployment—itsself evidence that impact investors found both financial and mission returns sufficient to re-up. This compounding dynamic means that early investment in preservation fund infrastructure pays dividends disproportionate to initial capitalization.

Preservation also supports reverse-filtering: retaining moderate-rent housing stock that would otherwise filter upward into higher price tiers. This is the exact dynamic that lengthens TTA horizons in supply-constrained markets. Every NOAH unit lost to up-market repositioning is a unit that must be replaced, not just preserved. In markets where rent regulation means that operating costs outpace allowed rent growth, pairing preservation tools with tax-class relief or operating-expense offsets (see [Policy Case Study—Tax Incentives](#)) is critical to maintaining NOI and preventing unit loss.

¹⁷¹ Aeon, 2025. Aeon, a Minneapolis-based nonprofit developer, owner and manager of affordable housing serving approximately 6,000 Twin Cities residents annually, functions as the operating anchor of the Twin Cities preservation ecosystem—identifying at-risk NOAH portfolios, leading acquisitions and managing properties long-term while GMHF, GSEs and bank partners provide the capital stack.

¹⁷² Aeon, 2025.

¹⁷³ Freddie Mac Multifamily, 2014; GMHF 2024 Annual Report.

¹⁷⁴ Invest Atlanta, November 2024.

¹⁷⁵ Atlanta Housing, 2024.

¹⁷⁶ DC DHCD, 2026; City of Boston, 2025; LA County, 2021; NYC HPD, 2022.

Policy Report Card: Preservation Mechanisms (NOAH)

MECHANISM	SCALE	SPEED	TARGETING	NET FISCAL/ECONOMIC BENEFIT	EXECUTION RISK	PRESERVATION IMPACT
Fund-Based (Public Mixed)	Moderate — constrained by program capitalization	Moderate — discretionary processes add time	Strong — deep affordability, small buildings, anti-displacement	High social return; moderate fiscal leverage via revolving structure	Low	High
Private-Market Capital	High in strong metros	High — can close quickly when assets surface	Moderate — workforce 60–120% AMI typical	Moderate-High via leverage and neighborhood reinvestment	Moderate — investor-cycle sensitivity	High for Class B/C portfolios
GSE Programs	Very High — \$176B combined 2026 cap; workforce uncapped	Moderate-High — standardized underwriting	Moderate-High — ≤80% AMI; deeper with local gap layers	High — private capital unit crowd-in; low public cost per preserved	Low — federal oversight and standardized structure	Very High

Pipeline Connection & Conclusion

Preservation is the fastest and most capital-efficient tool in the Toolkit's affordability pipeline (see [Chart 1](#)). The case studies in this section document consistent per-unit cost advantages of 30–70 percent below new construction, with execution timelines measured in months rather than years. In the balanced pipeline, the Revive and Retain model contributes more than any other tool, delivering a projected 437,500 units per year. This provides the critical early-stage pipeline volume while dormant development reforms and LIHTC expansion ramp up over time.

The three preservation tool types are not substitutes for each other but serve distinct functions and work best in combination. Fund-based tools (DC HPF, Boston AOP) reach the deepest affordability and most at-risk stock, but their scale is constrained by program capitalization rather than market demand. This is because the binding constraint is public investment, not housing provider willingness to participate. Private-market capital (GMHF NOAH Impact Fund) demonstrates that mission-driven equity can out-compete speculative buyers at scale when the fund structure is properly designed, and the compounding record of Pool I followed by Pool II confirms its replicability. GSE platforms (Fannie Mae MAH, Freddie Mac TAH/NOAH) provide the permanent financing exit that makes preservation transactions bankable. With \$176 billion in 2026 combined purchase capacity and workforce executions uncapped, the GSE platforms represent the largest single source of mission-aligned multifamily capital in the country.

The Twin Cities ecosystem of GMHF impact equity, Freddie Mac permanent debt and Minneapolis's 4d operating cost relief operate as a reinforcing system. This is the clearest proof of concept that preservation economics can be made sustainable rather than subsidy-dependent. Every preserved unit is one less unit that must be built. In a pipeline where Time-to-Address is the binding constraint, that arithmetic is decisive.



Conclusion: An Executable Path to Affordability

The U.S. housing affordability problem [is not a single failure](#) but the interaction of a housing [supply](#) deficit, [rising costs](#), rent increases outpacing household income growth and variations in [local policy](#) response.

This report attempts to be comprehensive, briefly covering [the full spectrum of housing types](#) including private, public/private and public housing. It divides affordability into two types: Capital A Affordable housing and “lowercase a”, including [NOAH](#). It grounds the analysis in the economic law governing private housing production: [rent must cover the cost of building and operating housing](#). In public housing, public/private housing and Capital A Affordable housing, the analysis is anchored by [the Brooke Amendment \(the 30 percent standard\) and Area Median Income \(AMI\) benchmarks](#). Implicit in today’s affordable housing policy is the assumption that the private market can reliably supply homes affordable at or above ~81 percent of AMI. Yet in many metros, [cost drivers](#)—regulation, time, soft costs, financing conditions and taxes—have pushed new-development costs beyond the rents many households can pay. When costs outpace ability to pay (See [Demand: How Many Housing Units Are Needed to Solve the Rental Affordability Crisis](#)), the Brooke/AMI logic fails—and no single tool or ideology can solve the problem on its own.

To evaluate feasible paths forward, the [Time-to-Address \(TTA\)](#) metric was introduced as a common rough yardstick: how long, at current or policy adjusted production rates, would it take to close the affordability gap with each different proposed pathway forward? TTA varies widely across places. [Local policy](#) matters. The [state and MSA TTA maps](#) showed that some places can achieve meaningful progress within a generation, while others, under the same federal rules, require two generations or more. Those differences are not random. The most common policies in public discourse around housing affordability since 2019 (this report’s last publication) were evaluated and ranked in a [Policy Report Card](#) as to whether they reflect local choices about land use, process, operating costs and whether public resources are deployed to lower the cost of feasibility or simply to shift costs onto renters.

Across the report three categories of housing affordability interventions were defined:

- **Capital A Affordable Housing:** Discretionary, publicly supported housing (LIHTC supported supply and income assistance such as HCV and PBRA) for subsidy dependent households.
- **“Lowercase a” affordability (NOAH):** Unsubsidized private rentals that remain affordable because of naturally lower costs, representing the largest source of affordable rentals today.
- **Middle income (by-right) affordability:** Programs that reduce costs through deregulation and tax incentives, activating dormant and preserving at-risk stock.

This framing led to a central conclusion echoed in the [Executive Summary](#): no single tool can reach the moonshot goal on a generational timeline. The only credible strategy is a balanced pipeline that uses each tool for what it does best, in the sequence and at the scale it can truly deliver.

The Balanced Pipeline—What Each Lane Delivers

Preserve what we have (Revive & Retain).

Preservation is the fastest, least expensive way to reduce rent burden and prevent displacement. [Case studies](#) (Minneapolis, D.C., Boston, Atlanta, NYC, Chicago, L.A. County, Austin) show preservation costs 30–80 percent less per unit than new construction and can close in months rather than years. In the pipeline, preservation carries the heaviest load early: it stops unit loss and buys time for new supply to scale.

Activate dormant development (by-right supply side).

Two levers dominate as the best tools to activate dormant development:

- [Deregulation](#): Land use (upzoning, ADUs, parking reform) and process reforms (ministerial, time certain approvals) reduce soft costs, spread land cost per unit and increase capacity. Local case studies (California ADUs/SB 35, Portland RIP/Oregon HB 2001, Austin streamlining, Minneapolis 2040) show how faster approvals and predictable standards translate into real units, and how contradictory signals (e.g., broad rent caps) can blunt results.
- [By-right tax incentives](#): Property tax relief for new construction and classification discounts tied to affordability covenants for preserved units improve NOI without discretionary delay. Evidence from NYC (421 a lineage/485-x successor design), Texas (PFC model with modern guardrails), Minneapolis (4d) and other local abatements shows rapid uptake when programs are simple, targeted and predictable.

These levers can most efficiently serve the 81–120 percent AMI band, easing pressure on low cost stock and enabling filtering.

Target Deep Subsidy Where Only Subsidy Works (Capital A Affordable).

For rental households <50 percent AMI, income assistance (HCV/PBRA) and LIHTC supported supply are indispensable. Scaling LIHTC [to reasonable higher levels](#) and doubling income assistance over time could reach five million additional households, split between preserved units (including vacant stock brought in) and new units. Capital A Affordable production is vital to serve the lowest incomes. While these Capital A Affordable programs are slower to produce, they cannot be replaced by market-based solutions divorced from public subsidy.

The TTA Moonshot—A Realistic Way to Reach a Generational Horizon

This is the moonshot: a realistic, staged path to restore affordability within a generation, measured against TTA and governed with transparency and discipline. As an illustrative ramp-up pipeline, the proposed tools can be allocated across the initial years of implementation as follows:

- **Years 0–3:** Close gaps quickly through preservation and process reform; enact operating cost relief; begin LIHTC and voucher expansion, focusing on units that can be occupied quickly (such as vacant units).
- **Years 3–10:** Scale land use reforms and by-right programs to push middle income production toward historic highs; continue preservation at pace; steadily expand income assistance.
- **Years 10–30:** Sustain throughput, recalibrate incentives; prevent affordability cliffs as covenants mature.

Two cost-cutting conditions are essential to enable this illustrative pipeline to work:

1. **Policy coherence:** Strategies around activating dormant development only work if they are not in conflict. Revenue frameworks—particularly rent regulation—can constrain new production.
2. **Target discipline:** Benefits must be calibrated to the amount of affordability delivered as measured by the number of units provided as well as the depth of affordability (incomes targeted) of those units. Targets should be publicly audited and geographically tuned to [local production and policy conditions](#).

What the Policy Report Card Showed

A common grading rubric was created to rank various policies in a [Policy Report Card](#). This rubric was based on achieving the moonshot goal within the boundaries of reasonable estimates of resources used. It included scalability, speed to implementation, fiscal and economic impact, AMI targeting depth, execution/abuse risk and preservation effectiveness. The report card surfaced a practical division of labor:

- **Fastest relief and displacement prevention:** Preservation
- **Largest scalable supply gains:** Rule-driven land use and tax reform
- **Non replaceable support for lowest incomes:** Income assistance + LIHTC

No single tool excels across all criteria, but a balanced portfolio of tools can effectively address the various barriers to achieving the moonshot goal.

Implementation Roadmap and Next Steps

Based on the conclusions of this toolkit, an illustrative implementation roadmap can be created. This roadmap is focused on execution, whether that is at the local, state and/or national level.

Phase 1: Launch (0–12 months)

During Phase 1, policy targets are established, reporting mechanisms are put in place, and infrastructure is set up to achieve the moonshot goal.

- **Set TTA targets and publish metrics:** These reporting targets should be made public and can include units preserved/produced, households assisted, rent burden share target to be achieved, public cost per unit and permitting time goals.
- **Stand up revolving NOAH funds** with public seed capital and CDFI and mission driven operator partnerships.
- **Codify ministerial approvals and** time certain reviews.
- **Enact by-right tax relief** with recorded affordability covenants.
- **Implement guardrails:** public dashboards, audits and claw back of public resources if public goals are not achieved.
- **Commit to increased Capital A Affordable subsidy:** near term LIHTC expansion and the first tranche of additional income assistance.

Phase 2: Scale (Years 1–3)

During Phase 2, certainty is created for housing providers. Effective policies are scaled as they are established reliably for the long term.

- **Scale land use reforms:** ADUs, smallplexes, transit corridors and right sized parking requirements.
- **Broaden participation** in rule-driven programs such as by-right incentives. Refine geographic targeting to match incentives with local cost structures and demand requirements.
- **Recycle preservation funds and** pair support with existing long covenant lending programs.
- **Grow income assistance** in line with administrative capacity and market absorption to avoid price distortion and maximize stability.

Phase 3: Sustain and Recalibrate (Years 3–10 and beyond)

During Phase 3, monitoring of outcomes is essential as market conditions change.

- **Monitor for contradictory policies** undermining feasibility.
- **Recalibrate incentives** to maintain affordability depth as supply and demand interact to change requirements.
- **Plan for covenant tails** to avoid affordability cliffs.
- **Upgrade tax structures** as broad reforms reduce the need for programmatic relief.

Governance is required to support the roadmap's success:

- **A single accountable owner** is recommended per jurisdiction level, with a public dashboard.
- **Cross functional delivery teams** should be put in place to monitor permitting, preservation finance and compliance (measured on time to permit and unit throughput).
- **An annual pipeline reset** must occur, keyed to TTA: the jurisdiction should adjust targets based on throughput performance.

Final Thoughts

Affordability is ultimately about cost relative to what a household can pay. Markets alone cannot bridge gaps where costs are misaligned. But evidence shows that, sequenced correctly:

- The naturally affordable homes that exist must be preserved (Revive and Retain) because this is the fastest, least costly way to protect households and buy time.
- Dormant development should be activated through the coordinated dual policy tools of deregulation (for time and capacity) and by-right tax incentives (for operating and capital feasibility), so the market can once again deliver affordability for middle incomes and ease pressure on NOAH.
- Deep subsidy must be increased where only subsidy works, expanding income assistance and LIHTC supported supply for subsidy dependent households.

Done together—and measured against TTA, with a clear implementation roadmap—this portfolio shortens the path from a problem counted in decades to a plan executed within a generation. The moonshot is not rhetoric—it is a schedule: launch preservation and process reforms now, scale by right production and sustain Capital A Affordable housing for the lowest incomes. With discipline, transparency and calibration, the pipeline can deliver balanced, achievable affordability across incomes and places.

Housing 101



Housing 101: Definitions

Introduction

Housing policy debates often collapse into shorthand—“affordable housing,” “market-rate,” “workforce housing.” Yet these terms carry different meanings for different audiences. To analyze affordability consistently, this report distinguishes three categories: Private Housing, Public/Private Housing and Public Housing. Within Public/Private Housing we further divide between discretionary programs and by-right programs, and between supply-side and demand-side tools. This framework helps us interpret both the current system and the reforms proposed.

Private Housing

Private housing refers to homes developed, owned and operated without direct government subsidy. It spans Class A condominiums, single-family rentals, workforce housing and naturally occurring affordable housing ([NOAH](#)). Throughout this report, NOAH housing is referred to as “lowercase a” housing.

As defined in the [section above](#), NOAH/“lowercase a” affordable refers to unsubsidized housing that rents at levels affordable to households earning 80 percent or less of area median income. This definition is broader than the common view that NOAH means only older or “Class B/C” properties. In many markets, NOAH also includes new construction and single-family rentals where cost drivers allow affordability.

Private housing can contribute to affordability when development costs are close to marginal construction prices, allowing rents to filter down over time.¹⁷⁷ But in high-cost, highly regulated metros, new private housing overwhelmingly targets high-income households, leaving middle- and moderate-income renters unserved.

Public/Private Housing

Most of the housing policy debate occurs in this middle category, where private developers and public policy intersect. Public/Private Housing divides into two broad approaches: discretionary programs (negotiated case-by-case) and by-right programs (automatic if eligibility is met). Both include supply-side production and demand-side income support.

Discretionary Programs—Supply-Side (Capital A Affordable)

Discretionary programs provide subsidies to make new rental units affordable, but each project requires negotiation and approval. This slows production and increases cost.

- LIHTC (Low-Income Housing Tax Credit): The primary source of new subsidized rental housing, producing ~89,000 units per year.¹⁷⁸
- Project Based Income Assistance (Project-Based Rental Assistance and PBV): Link subsidies to specific units. Long-term contracts that create (through new construction) new units or preserve existing stock, often requiring case-by-case recapitalization.

¹⁷⁷ See Myers, D., & Park, J. (2020), for evidence on how new construction enables filtering to expand low income housing opportunities.

¹⁷⁸ As noted earlier in the Executive Summary, the LIHTC program was increased in 2025. Novogradac estimates that the combination of a permanent 12% increase in 9% allocations and the reduction of the bond “50% test” to 25% could finance 1.22 million additional affordable rental homes over 2026–2035, which we have simplified to a doubling of average production given political uncertainty and time for industry ramp-up. See Lawrence, P. (2025, July 2).

These programs are vital for deep affordability but limited in scale.

Discretionary Programs—Demand-Side (Capital A Affordable)

Discretionary demand-side tools subsidize households rather than units.

- Housing Choice Vouchers (HCV): Resident-based subsidies for residents to rent market-rate units but only spend 30 percent of their own household income on rent.

Together, these programs serve about 4.2 million households nationwide, as noted earlier in our section on [Demand](#). They reduce rent burdens for extremely low-income households but depend on congressional appropriations and housing provider participation.

By-Right Programs—Supply-Side (Third Path)

By-right programs reduce costs automatically, without negotiation. By offsetting property taxes, fees or regulatory burdens, they allow private developers to build or preserve affordable units at scale.

Examples include:

- New York 421a (now replaced by 485-x): grants tax abatements for new rental housing including affordable set-asides.
- Texas Public Facility Corporations (PFCs): allow local governments to exempt property taxes in exchange for affordability commitments.
- Minneapolis 4d program: provides a property tax reduction for owners who keep units affordable.

These programs typically target moderate-income affordability or offset the cost of “good” regulation. Their strength lies in speed, predictability and lower per-unit cost. See our detailed [Policy Case Study—Tax Incentives](#) for further discussion.

By-Right Programs—Demand-Side

Less common, but possible. Portable tax credits or automatic voucher expansions could function as demand-side entitlements without annual appropriations. Such tools remain rare in U.S. practice, but the concept illustrates the potential of scaling demand assistance with less friction.

Public Housing

Public housing is directly developed, owned and managed by government entities such as NYCHA (New York City Housing Authority) or the Chicago Housing Authority. Once the dominant form of subsidized/Capital A Affordable housing, it now represents a shrinking share of the stock. Unlike in Public/Private Housing, the government is the housing provider rather than a partner. Public housing plays an essential role for extremely low-income households but has been underfunded for decades. We discuss public housing more in the [Supply](#) and [Affordable Housing Glossary](#) sections of this report.

A Framework: 2x2 of Public/Private Housing Tools		
	SUPPLY-SIDE (UNITS)	DEMAND-SIDE (HOUSEHOLDS)
Discretionary	LIHTC, PBRA, PBV, PILOT, Ground Lease	Section 8 Housing Choice Vouchers
By-Right	Tax Abatement (NYC 421a, TX PFC, Minneapolis 4D)	Rare

Conclusion: Why These Definitions Matter

Understanding the distinctions between Private, Public/Private and Public housing is foundational. Within Public/Private, recognizing the difference between discretionary subsidies and by-right incentives clarifies why some programs struggle to scale and others unlock dormant development. Distinguishing supply-side and demand-side strategies helps explain both the limits of today’s system and the opportunities for reform.

This definitional framework sets the stage for the next [Housing 101](#) sections, which detail how [sources and uses](#), [operating budgets](#) and [feasibility analysis](#) interact with these categories.

Housing 101: Sources and Uses

Introduction: Why Sources and Uses Matter

Every housing project begins with a budget. Housing providers must account for both uses (what the money is spent on) and sources (where the money comes from). This simple framework underpins real estate finance. Understanding sources and uses for private housing projects provides the foundation for analyzing how operating budgets (see [Housing 101: Operating Budgets](#)) and affordable housing projects (see [Affordable Housing 101: Capital Budgets](#)) differ from market-rate development.

Ways Multifamily Housing Is Created

There are two basic ways multifamily rental housing is created: development (new construction) and preservation (acquisition and rehabilitation of existing units). Development adds to the physical housing stock, while preservation maintains affordability or extends the useful life of existing structures. Both approaches require careful alignment of costs and revenues to ensure financial feasibility. Preservation is often faster and less expensive than new development, but it may yield fewer long-term units unless supported by appropriate public policies.

How Rental Housing Is Financed

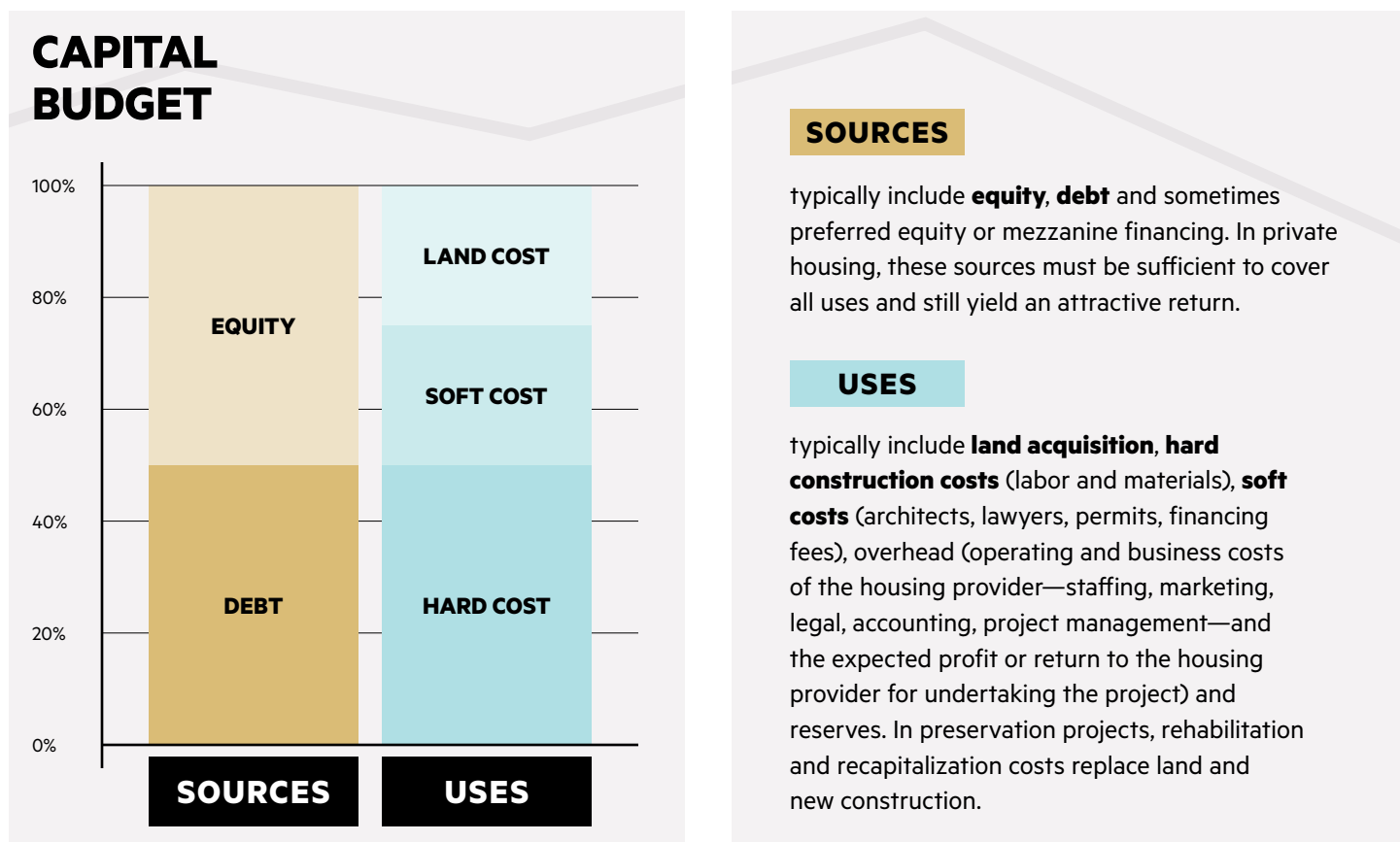
At its core, rental housing finance depends on cash flow. Residents pay rent; rents generate net operating income (NOI); and that NOI supports debt service and provides returns to equity investors. Financing comes primarily from two sources:

- Equity—capital invested by owners or outside investors who take risk in exchange for future profits.
- Debt—capital provided by lenders, secured by the property and repaid from operating cash flow.

Global capital markets increasingly shape these flows. Multifamily housing is largely financed by long-term institutional capital sources such as pension funds, insurance companies and real estate investment trusts (REITs), with other private capital sources also participating on a more limited basis. Across these investors, decisions are generally driven by expected risk-adjusted returns, making stable and predictable rental income important to both new development and preservation activity.

Capital Budgets: Uses vs. Sources

Every development or preservation project organizes its capital budget into two columns: uses and sources.



If projected rents cannot generate enough NOI to cover debt service and equity returns, the project does not move forward. In later chapters (see [Affordable Housing 101: Capital Budgets](#)), we explore how subsidies and incentives change this balance; here, the focus remains on private financing.

Preservation vs. Development Budgets

While both preservation and development projects use the same sources-and-uses framework, the proportions differ. Development projects tend to have higher land and hard construction costs, longer permitting and predevelopment timelines and higher exposure to regulatory costs. Preservation projects often require substantial rehabilitation or recapitalization but avoid the largest cost driver—new construction.

This difference makes preservation an attractive strategy where feasible: it can deliver affordability more quickly, with lower capital intensity and with less exposure to entitlement delays. However, preservation depends on the availability of at-risk properties and may be constrained by rising operating costs, as discussed in earlier chapters on [NOAH](#) and [cost drivers](#).

Bridge to Operating and Affordable Housing Analysis

Understanding private sources and uses sets the stage for two critical extensions. First, the operating budget (see [Housing 101: Operating Budgets](#)) determines whether projected NOI is sufficient to support debt and equity expectations. Second, affordable housing projects (see [Affordable Housing 101: Capital Budgets](#)) incorporate subsidies, income assistance or by-right incentives that alter both sources and uses.

For private housing, the equation remains straightforward: the cost of land, construction, soft costs, overhead and financing must be matched by the combined contributions of equity and debt, supported by projected rental income. For affordable housing, the equation becomes more complex—but the foundation is the same. By grounding the analysis in private housing, we establish the benchmark against which all later interventions are measured.

Housing 101: Operating Budgets

Introduction: Why Operating Budgets Matter

Once a property is acquired—or constructed on acquired land if it is a development project—it enters a lease-up and stabilization period. During this time, vacant apartments are rented until the property reaches its planned occupancy level. At that point, the property generates income primarily from rent, along with fees to help cover the costs of amenities such as parking, laundry or storage. These revenues make up the **operating income**.

Operating a property also generates costs. Property management, maintenance, utilities, insurance and taxes (which are largely uncontrollable by the housing provider) are all **operating expenses**. Subtracting expenses from income produces **Net Operating Income (NOI)**. A positive NOI is essential: without it, the property loses money every month, jeopardizing its long-term feasibility.

From NOI to Debt and Equity

NOI is not simply profit. In most cases, the property was financed with borrowed money—debt and equity. Debt has contractual repayment requirements; equity expects a return for its risk. The housing provider agrees, as a condition of financing, that NOI will first go toward repaying debt. Only after debt service is covered does any remaining income flow to equity. If there is a surplus after both are paid, it can be used for overhead and profit.

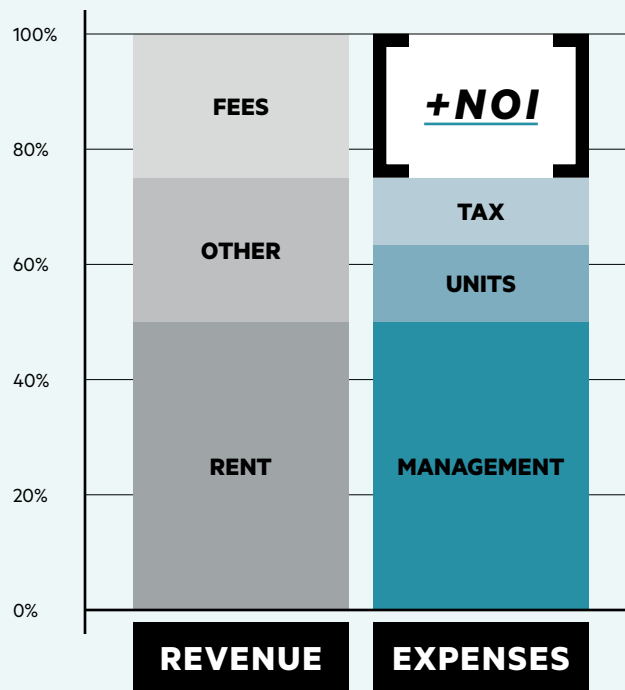
- Debt typically provides a fixed return (through an interest rate) and is secured by the property. If NOI is insufficient to cover debt service, the lender can take control of the property.
- Equity is not secured, making it riskier. Equity investors stand last in line; if NOI is insufficient, they can lose their entire investment. However, if the property performs well, they share in profits beyond debt repayment, giving equity the potential for higher returns.

Risk, Return and Capital Markets

Debt and equity do not exist in isolation. Both compete with other global investment opportunities: office buildings, hotels, logistics or even non-real estate assets. For housing providers to attract financing, they must offer competitive risk-adjusted returns. If returns from housing projects fall short relative to other asset classes, investors will place their capital elsewhere, and new development or preservation will stall.

This linkage to global capital markets explains why operating budgets matter far beyond an individual property. If operating expenses rise faster than rents, NOI shrinks. When NOI shrinks, debt and equity returns fall, making rental housing less attractive to capital providers. Without adequate capital, supply growth slows, feeding the broader affordability challenge.

OPERATING BUDGET



Overhead and Profit

Beyond debt and equity, housing providers must cover overhead: the ongoing business costs of running an enterprise, including staffing, marketing, accounting, legal and project management. Overhead also includes the expected profit or return to the housing provider for undertaking the project. Profit is not a “bonus”—it is the incentive that brings providers into the market. If projects do not reliably generate overhead and profit, housing providers will exit, further constraining supply.

Connection to Policy and Cost Drivers

As the [Sources and Uses](#) and [Cost Drivers](#) chapters make clear, feasibility depends on whether rents can cover all costs—operating expenses, debt service, equity returns and overhead. If costs rise due to regulatory burdens or entitlement delays, NOI may no longer be sufficient to meet investor expectations. Conversely, when costs are reduced—through preservation, efficient operations or by-right incentives—NOI improves and projects become financeable.

Bridge to Affordable Housing Analysis

This chapter focuses on private housing operating budgets. Affordable housing introduces additional complexity: subsidies, income assistance and regulatory restrictions reshape both income and expenses. Those distinctions are addressed in [Affordable Housing 101: Capital Budgets and NOI](#). But the underlying logic remains the same: NOI is the fulcrum of feasibility. Whether financed privately or with subsidy, every housing provider must balance income against expenses, debt, equity and overhead.

Conclusion

Operating budgets are the engine room of real estate finance. They determine whether a property can sustain itself month to month and whether capital providers will continue to fund housing supply. A property that generates positive NOI rewards lenders, investors and operators, ensuring continued participation in housing markets. A property with negative NOI risks foreclosure, investor losses and withdrawal of capital from the sector. Understanding NOI is thus essential not only to property performance but also to the broader affordability pipeline.

Housing 101: Cost Impacts to Feasibility

Introduction

The financial feasibility of any housing project depends on balancing four interrelated factors: capital sources, capital uses, operating expenses and operating income. Each represents a different part of the project's financial equation, but all converge in determining whether Net Operating Income (NOI) is sufficient to cover debt, repay equity and allow the project to move forward. If any one side of the equation shifts unfavorably, the project may require higher rents, additional subsidy or may fail to proceed at all.

Capital Sources (Funding)

Capital sources are the funds used to finance housing projects, typically a mix of debt and equity. The cost of capital can rise for several reasons:

- **Interest rate increases** driven by Federal Reserve policy can sharply raise borrowing costs.
- **Regulatory or market uncertainty** around a project can increase the return expectations of both debt and equity providers, as they are taking on more of a risk.

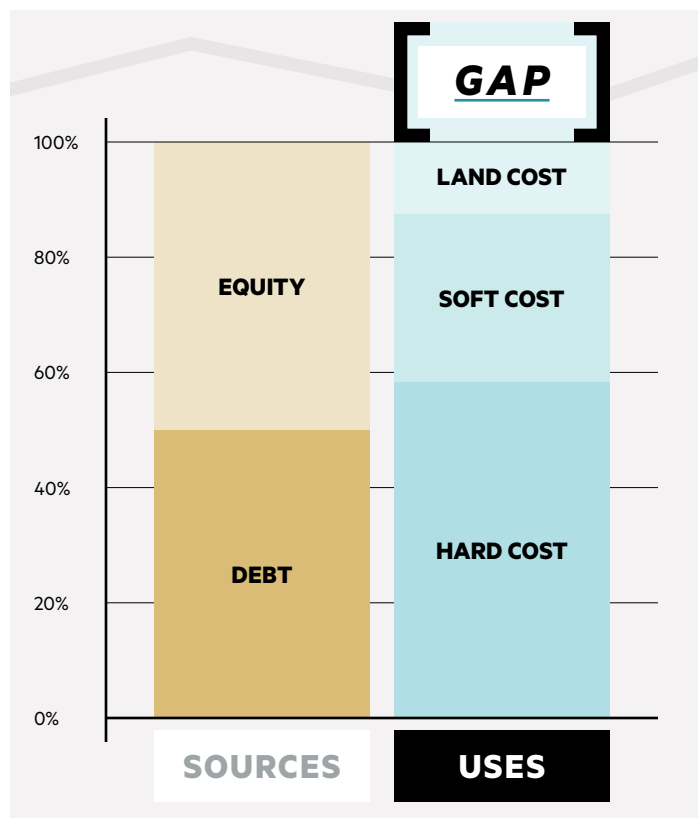
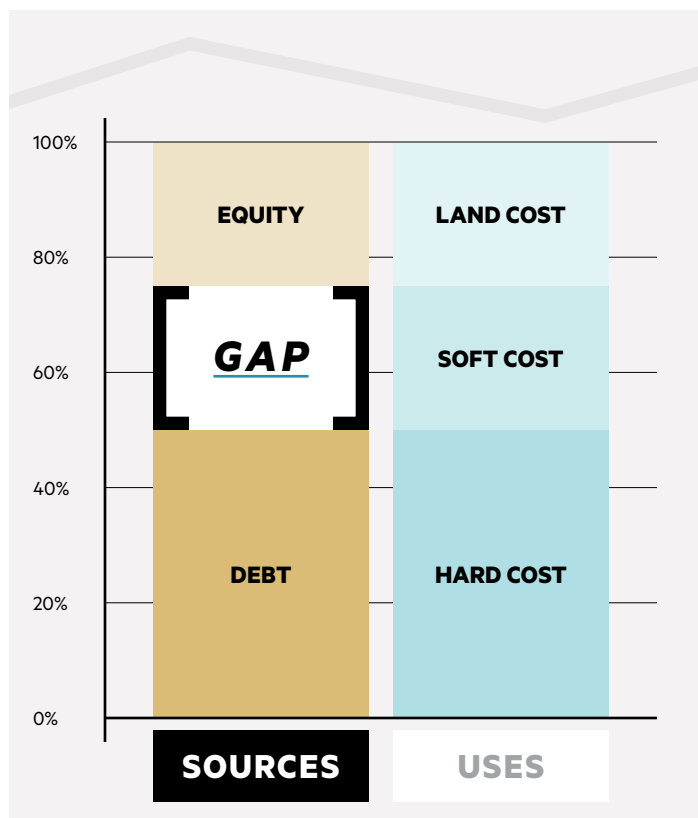
Because debt service is paid first from NOI, higher interest costs reduce the amount available for equity. If projected rents cannot cover these increased costs, developers may be forced to raise rents or abandon the project. In this way, the rising cost of capital directly threatens affordability and feasibility.

Capital Uses

The “uses” side of a project's capital budget covers how funds are spent: land acquisition, hard construction costs, soft costs, reserves and financing during development. These can escalate due to:

- **Hard cost increases**, such as higher prices for steel, lumber or concrete.
- **Soft cost increases**, including architecture, engineering and regulatory approvals.
- **Financing carry costs** during delays,¹⁷⁹ when interest accrues before rental income begins.

When total uses rise, the project requires larger loans and more equity, which in turn increases the burden on NOI. Unless operating income grows to match, feasibility collapses.



¹⁷⁹ See Emrath, P., & Walter, C. S. (2022, June 9) for an extensive discussion of the financial costs of delays.

Operating Expenses

While capital costs are the money that needs to be raised to produce (acquire/preserve and or build) rental housing, operating expenses are the ongoing costs of running a property once it is built or preserved. In understanding the feasibility of production, we must take into account not only the money raised to produce the project (capital costs) but the ongoing money needed to run the project (operating expenses). Upon project inception, these operating expenses are planned to be covered by operating income. The operating expenses include:

- Insurance premiums
- Maintenance and repair costs
- Property taxes
- Utility expenses and sustainability contributions

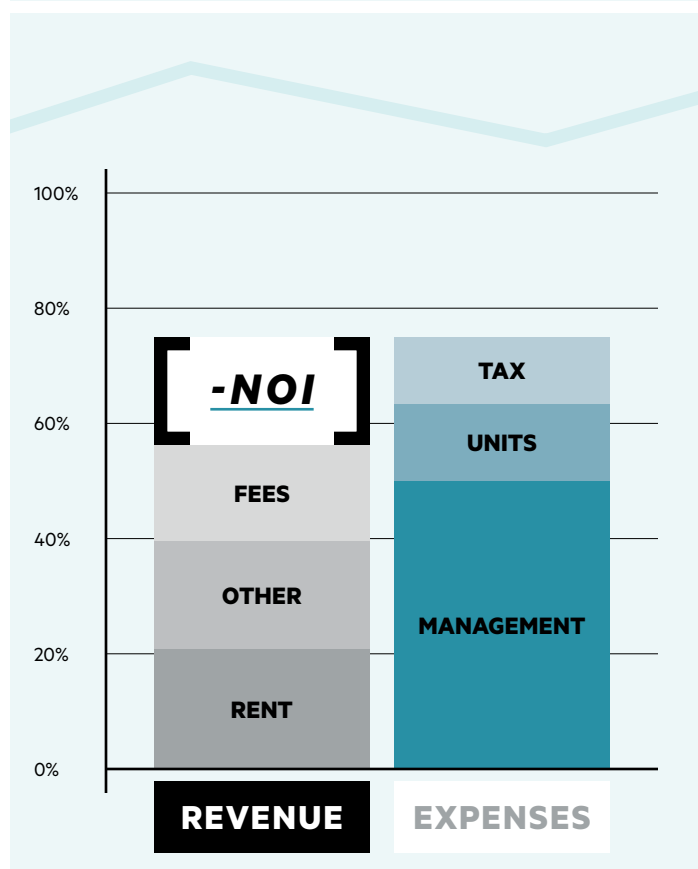
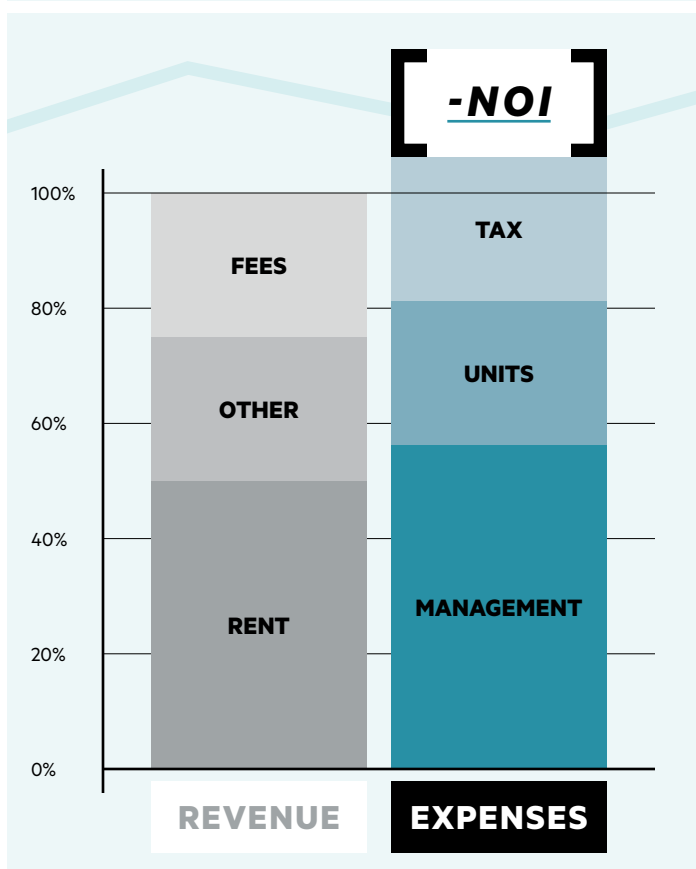
If operating expenses rise, NOI shrinks. Without the ability to raise rents proportionally, the property may fail to cover debt service and equity returns. Rising expenses can also deter future investment in similar projects. For more detail on these expense categories, see [Housing 101: Operating Budgets](#).

Operating Income

Operating income comes primarily from rent and, in some cases, ancillary charges such as parking or laundry. It is vulnerable to two main risks:

- **Market forces:** In oversupplied markets, rents may decline relative to fixed expenses.
- **Rent regulation:** Even in strong markets, regulation may prevent rents from keeping pace with rising expenses.

When income stagnates while costs climb, NOI is squeezed. If it falls below debt and equity requirements, the project is either foreclosed, sold or never built in the first place. For this reason, rent regulation can act as a powerful deterrent to housing production in markets where costs are rising.



Conclusion: Feasibility as a Balancing Act

Feasibility rests on maintaining equilibrium between sources, uses, expenses and income. Shifts in any one of these factors can unravel the project's economics. Rising capital costs, escalating construction uses, higher operating expenses or constrained income each threaten NOI and thus feasibility. To address these often uncontrollable pressures, projects often require some combination of higher rents, preservation strategies or public/private interventions.

This framework illustrates the mechanics of feasibility in private housing. Later chapters on ([Affordable Housing 101: Capital Budget and NOI](#)) explore how subsidies and by-right incentives can offset these pressures, allowing projects to proceed at affordable levels.

Affordable Housing 101: Income Limits and Rent Standards

Introduction: Why Income Limits Matter

The concept of housing affordability in the United States rests on two longstanding measures: the Brooke Amendment and Area Median Income (AMI). They determine who qualifies for assistance, the amount of rent households are expected to pay and how “affordable housing” is defined. These standards shape both supply (what developers can finance and build) and demand (what households can access without being rent-burdened). Yet while these benchmarks create consistency across markets, they also carry implicit assumptions that can introduce unintended consequences.

The Brooke Amendment and the 30 Percent Rule

The Brooke Amendment, passed in 1969, established that households receiving federal rental assistance should contribute no more than 25 percent of their income toward rent; it was later changed to 30 percent. This “30 percent rule” was originally intended as a household-level test: a way to ensure that an individual family would not be asked to pay more than it could afford for a specific unit. It was a policy benchmark of whether a fixed rent was affordable to a given household, rather than a precise mathematical determination.¹⁸⁰

Over time, HUD broadened the use of the 30 percent rule by tying it to Area Median Income (AMI) benchmarks—setting affordability at 30 percent of household income for families earning up to 80 percent of AMI, or averaging up to 60 percent of AMI in mixed-income developments supported by LIHTC. Many of the federal frameworks now implicitly rely on the unsubsidized market to serve households above the assisted income bands. If units existed at those rent levels, then drawing affordability thresholds downward from 80 percent AMI would ensure a continuum of affordable options.

The problem is that in many markets, cost drivers have pushed development costs so high that even households at 100 percent of AMI struggle to afford newly built units. This breaks the logic of the Brooke-to-AMI framework. If the private market cannot supply units affordable at 100 percent AMI, then pegging subsidies at 60 percent or 80 percent AMI can create larger financing gaps and requires deeper subsidy layers in high-cost markets.

This is precisely why this report develops two complementary approaches:

- **Time-to-Address (TTA) analysis** ([see earlier TTA section](#)) quantifies how long it would take to close affordability gaps given current production rates, making visible the limits of the Brooke/AMI framework when cost drivers are ignored.
- **The expanded definition of NOAH** ([see earlier section on NOAH](#)) acknowledges unsubsidized units that remain affordable at or below 100 percent AMI, closing the gap between what HUD definitions assume and what the market actually produces.

By reconnecting affordability metrics to both feasible development costs and observed NOAH supply, this framework restores the original logic of the Brooke Amendment—ensuring that the affordability standard reflects what households can truly pay relative to the housing available in their markets.¹⁸¹

Area Median Income (AMI) as Benchmark

HUD calculates AMI annually for each metropolitan area and non-metropolitan county. Households are classified as:

- **Extremely low-income (ELI):** below 30 percent of AMI
- **Very low-income (VLI):** 31–50 percent of AMI
- **Low-income (LI):** 51–80 percent of AMI

These thresholds guide eligibility for Capital A Affordable programs including LIHTC, income assistance and public housing.¹⁸²

¹⁸⁰ Collinson and Ganong, 2018.

¹⁸¹ HUD, n.d.; NYC HPD, n.d. While most federal affordability programs cap eligibility at 80% AMI, exceptions exist: HUD's Enhanced Vouchers can cover households up to 95% AMI, and some state and local programs (e.g., NYC MIH, California Mixed-Income Program) target affordability for households up to 120–130% AMI. These remain exceptions but illustrate attempts to fill gaps for moderate- and middle-income households.

¹⁸² Schwartz, 2021.

Critiques of AMI as Benchmark

Despite its ubiquity, AMI has serious shortcomings.¹⁸³

- **Fixed percentage ignores real costs.** A family's budget also includes food, childcare, transportation, healthcare and taxes. In some markets, childcare alone can exceed 40 percent of AMI.
- **Regional averages mask local variation.** Moving farther from job centers may lower rent but raises transportation and childcare costs.
- **Wealth concentration distorts AMI.** In affluent areas, AMI-driven rents can remain unaffordable for moderate-income households.
- **Displacement inflates affordability.** When lower-income households leave, the average income rises, making affordability appear to improve when it has worsened.

Other criticisms include regional skew, lag in data updates, household-size variation and eligibility distortions.¹⁸⁴

Toward a More Complete Framework

To capture the full landscape of affordability, this report distinguishes three categories:

1. **Capital A Affordable Housing**—Subsidized programs such as LIHTC, income assistance and public housing, usually discretionary and competitive.
2. **“Lowercase a” affordability (NOAH)**—Unsubsidized housing affordable at prevailing incomes, including both older properties and new units in lower-cost markets.
3. **Middle-Income Housing via By-Right Incentives**—Tools such as tax abatements (See [Policy Case Study—Tax Incentives](#)) that support moderate- and middle-income units through predictable rules rather than negotiated subsidies.¹⁸⁵

This tripartite framework shows why subsidized production alone is insufficient, NOAH must be preserved and middle-income by-right programs are vital to restoring affordability.

Conclusion

Income limits and rent standards remain foundational but embed assumptions that no longer hold. The Brooke Amendment's resident safeguard was stretched into an AMI-based continuum that fails when markets cannot produce units affordable at 100 percent AMI. AMI thresholds are useful for program design, but they distort the bigger picture of affordability.

By combining **Capital A Affordable subsidies, NOAH preservation and production** and **by-right middle-income tools**, policymakers can bridge the structural gaps left by Brooke and AMI. This approach aligns with TTA analysis, shortens timelines to affordability and grounds affordability standards in what households can truly pay.

¹⁸³ Numerous studies find that AMI based affordability measures can misstate need by ignoring variation in non housing costs, overstating typical renter incomes in many markets and inflating 'affordable' rent thresholds above what low income households can pay (Herbert, Hermann, & McCue 2018; Pelletiere 2005; Urban Institute 2020; Community Service Society 2020).

¹⁸⁴ For example, critics have noted that AMI can skew results in metro areas with large income disparities, relies on lagged data from Census and ACS surveys and can distort eligibility by including households that may not actually face affordability challenges.

¹⁸⁵ HUD defines "moderate income" households as those earning roughly 80–120% of AMI. By contrast, "middle income" is a broader, policy-driven term that can extend from 100% up to 140% (or more) of AMI. This report uses "middle-income" to describe housing supported through by-right incentives, not HUD's moderate-income category.

Affordable Housing 101: Capital Budget & NOI

Introduction

In [Housing 101: Definitions](#) we defined all housing as private, public/private or public. The Housing 101 chapters on [capital budgets](#), [operating budgets](#) and [feasibility](#) showed the economics of private housing. In [Affordable Housing 101: Income Limits](#) we then introduced a fuller framework for affordability: Capital A Affordable Housing, “lowercase a” affordability and middle-income housing via by-right incentives.

In this framework, “lowercase a” affordability (NOAH) is treated as private housing and addressed in earlier chapters. Public housing, as government-managed stock, is also not the focus here. Instead, this chapter examines the public/private category—where government and housing providers partner to deliver affordability. Within public/private, there are two distinct paths: Capital A Affordable subsidies (discretionary, negotiated programs) and middle-income by-right incentives (rule-based, time-sensitive programs that offset regulatory costs and help activate dormant development capacity).

Capital Budget Impacts

At the development stage, the capital budget must balance sources (debt, equity, subsidy) with uses (land, hard costs, soft costs, financing, overhead and profit). Affordable rents reduce NOI, which reduces the amount of debt the project can support. This creates a financing gap that must be filled before construction can proceed.

- **Discretionary, Supply-Side:** Tools such as LIHTC, tax-exempt bonds and soft loans (HOME, CDBG) fill this gap directly. They add equity or reduce financing costs, enabling projects to move forward. But they are slow: applications, competitions and review cycles are designed to prevent distortion and misuse of scarce public dollars.
- **By-Right, Supply-Side:** Property tax abatements, density bonuses and fee waivers reduce costs built into pro formas. Lenders capitalize these savings into higher debt capacity, improving feasibility without direct cash subsidy. Because they are rule-based, they can activate dormant development quickly. They also support preservation, helping owners of vacant or at-risk NOAH units reinvest and maintain affordability instead of converting to rentals targeted at higher incomes or Class A condominiums.

Operating Budget Impacts

Once stabilized, the operating budget must balance operating income (rents and ancillary fees) against operating expenses (management, maintenance, insurance, taxes, utilities). NOI must cover expenses, service debt, return equity and provide overhead/profit.

- **Discretionary, Supply- and Demand-Side:** Income Assistance on the supply-side (PBRA and PBV) and demand-side (Housing Choice Vouchers) supplement resident payments, filling the gap between what households can pay and what operating costs require. These tools are fast and responsive—they stabilize income for owners immediately and reach subsidy-dependent households that no other tool can. Funding, however, depends on annual federal appropriations.
- **By-Right, Supply-Side:** Property tax abatements lower the largest single operating expense line item for many projects. Expedited permitting and automatic fee waivers reduce recurring compliance costs. These savings improve NOI, strengthening long-term feasibility by improving the ability to service debt and equity.

Table: Public/Private Subsidy and Incentive Impacts

CATEGORY	TOOL / EXAMPLE	CAPITAL BUDGET EFFECT	OPERATING BUDGET EFFECT
Discretionary—Supply-Side	LIHTC, PBRA, PBV	Adds equity or reduces financing costs; closes capital gap	PBRA and PBV boost income stability by filling gap between rent and costs.
Discretionary—Demand-Side	Housing Choice Vouchers	Improves underwriting by guaranteeing resident income	Boosts income stability; fills gap between rent & costs
By-Right—Supply-Side	Tax abatements, density bonuses, fee waivers	Lenders can capitalize savings to create more debt capacity; lower upfront costs	Lower taxes and fees reduce annual expenses; raise NOI

Conclusion

Public/private tools shape both capital feasibility and operating stability. Discretionary subsidies are indispensable for subsidy-dependent households, but their slow timelines and limited funding constrain scale. By-right incentives, by contrast, are faster and better suited to activating dormant development or preserving at-risk stock—but cannot reach the lowest-income households on their own.

A balanced pipeline therefore requires both categories. Discretionary programs guarantee affordability for those most in need, while by-right incentives expand feasibility in cost-burdened markets by offsetting regulatory expenses and reducing risk. Together, they form the toolkit that connects policy to feasibility—ensuring that affordable housing is not just defined in law, but delivered in practice.

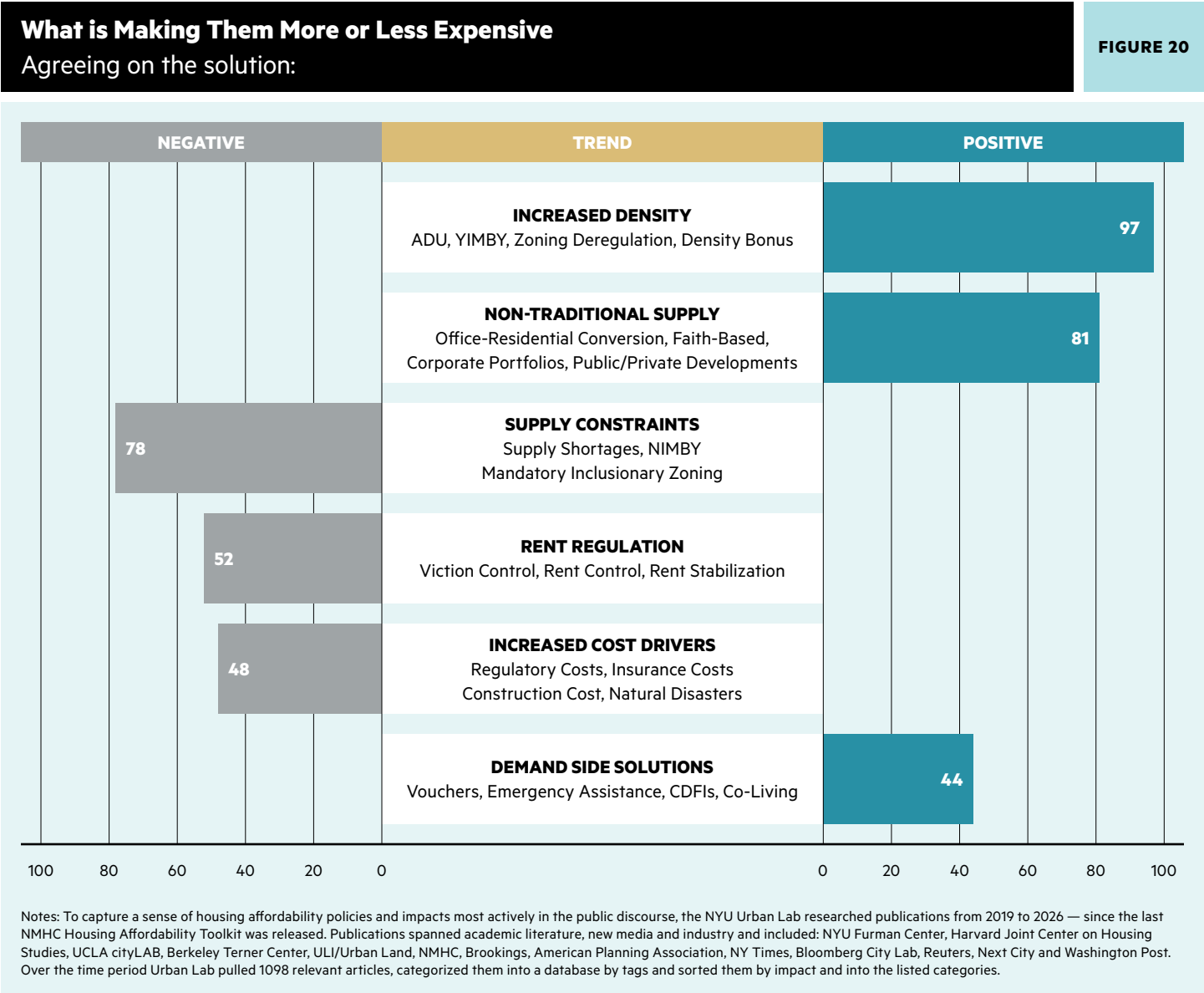
Policy Research Report Card

The “Policy Research Report Card” is a scan of publications that discussed housing affordability policies and issues in the public discourse. The report card focuses attention on policies that are supportive (positive) for increased housing affordability and policies that undermine (negative) housing affordability.

To capture a sense of the impact of the housing affordability policies that are most actively discussed since the publication of the first NMHC Housing Affordability Toolkit, the NYU Urban Lab researched publications from 2019 to January 2026. Publications spanned academic literature, news media and industry and included: NYU Furman Center, Harvard Joint Center on Housing Studies, UCLA cityLAB, Berkeley Turner Center, ULI/Urban Land, NMHC, Brookings, American Planning Association, NY Times, Bloomberg City Lab, Reuters, Next City and Washington Post.

- NYU Urban Lab pulled 1,098 potentially relevant articles to housing affordability;
- Categorized all articles into a database by tags;
- Discarded articles we evaluated as irrelevant to policy decision-making; and
- Sorted the remainder by impact into the categories listed in the Report Card and described below.

Figure 20 shows which programs or policies received the most attention.



Positive Impacts most often cited in the literature:

- **Increased density** lowers the cost per buildable square foot at the same land price, which leaves potential for lowering rents. Such policies include ADU, YIMBY, zoning deregulation and voluntary density bonuses.
- **Non-traditional supply creation** increases overall stock and puts downward pressure on rents. It includes office-residential conversions, institutional and employer partnerships (corporate housing programs, non-profit and faith-based portfolios) and public/private developments (including by-right tax abatement programs and LIHTC).
- **Demand-side solutions** expand access to private housing stock. This includes Housing Choice Vouchers (HCV), Project-Based Rental Assistance (PBRA), local income assistance, emergency assistance, Community Development Fund Institution (CDFI)-supported capital stacks and co-living. Articles discussing demand-side solutions had the highest percentage increase from 2024 to present.
- **Deregulation** reduces approval timelines and soft costs, lowering overall capital budgets and providing room for reduced rents.

Negative Impacts most often cited in the literature:

- **Supply constraints/shortages** with the same demand drive up pricing. These include supply shortages (due to cost drivers or restrictive policy), NIMBY-ism and mandatory inclusionary zoning.
- **Rent regulation** discourages investment, limiting supply and putting upward pressure on all non-regulated apartments. This includes rent control, as well as most forms of rent stabilization and some forms of eviction moratoria.
- **Increased cost drivers** require increased rents to pay back capital sources. This includes costs from increased regulatory hurdles, insurance, construction and repairs from natural disasters.

From Literature to Evaluation

This Policy Report Card highlights not performance, but attention: how often tools like LIHTC, vouchers or rent regulation appear in policy debates. To move from discourse to outcomes, we need a grounded framework for evaluation. As established in [Housing 101](#) and [Affordable Housing 101](#), tools/solutions must be assessed against the economics of feasibility: capital budgets (sources and uses), operating budgets (income vs. expenses) and NOI's role in servicing debt, returning equity and sustaining preservation.

From our [TTA analysis](#), we learned that achieving affordability within a generation requires a balanced pipeline. Neither Capital A Affordable programs nor market-only solutions suffice.

We need:

- Subsidy-dependent tools for deeply affordable households.
- By-right tools for middle-income feasibility.
- Preservation to maintain [NOAH](#) and avoid losing stock faster than we build it.

The Grading Framework

We grade the policy tools that were most mentioned against 10 weighted criteria:

- Scale (25 percent)—ability to meaningfully impact capital/operating budgets & inspire development.
- Speed (15 percent)—how quickly the tool produces affordability once enacted.
- Net Fiscal Benefit & Economic Impact (15 percent)—after externalities and multipliers.
- Execution Risk & Risk of Abuse (15 percent)—feasibility, administrative capacity and misuse potential.
- Targeting (10 percent)—alignment with income bands and need.
- Preservation (10 percent)—contribution to sustaining NOAH.
- Other Factors (10 percent)—discourages supply, political feasibility and stakeholder support.

Grades (A–F) reflect performance across these weighted factors.

Report Card: Primary Tools

TOOL	GRADE	COMMENTARY
LIHTC	B	Impacts both capital and operating budgets by injecting equity and reducing debt load, but compliance requirements add cost and limited scale relative to need. Strong targeting at ≤60% AMI.
Income Assistance—Supply (PBRA, PBV)	B	Provides operating revenue certainty that preserves affordability for deeply low-income residents. Scale limited by appropriations; execution strong but inflexible.
Income Assistance—Demand (Housing Choice Vouchers)	B	Strengthens operating budgets by supplementing resident rents, stabilizing NOI quickly. Limited by housing provider participation and local supply. High demand-side efficiency, but weaker on preservation.
Tax Abatements (By-right)	A-	Improves operating feasibility by reducing property tax burden, offsetting regulatory costs and unlocking dormant development. Fast implementation. Requires compliance guardrails to ensure targeting.
Deregulation (By-right)	B+	Reduces soft costs and entitlement delays, making capital budgets more viable. Strong for speed and scale. Risks arise if poorly designed or politically weakened.

Report Card: Supplemental Tools

TOOL	GRADE	COMMENTARY
Adaptive Reuse / Conversions	C+	Can lower capital costs by repurposing structures, saving embodied carbon. Feasible mainly in markets with soft commercial demand. Grade is low due to scale—at best scale is episodic, tied to cycles.
Accessory Dwelling Units (ADUs)	C	Incremental additions to operating revenue at the household scale. Pricing power may be less subject to market forces. Low overall scale but politically popular. Diffuse but important impact.
Institutional & Employer Partnerships	C+	Directly affect capital feasibility when employers/institutions subsidize housing (land or funding). Historic and modern examples (Amazon, Apple, Google, Microsoft, Tesla). Scale depends on employer incentives.
Density Reform / Upzoning	B-	Expands capital feasibility by lowering land costs per unit. Grade reflects the requirement for complementary financing or tax tools. Politically contentious but long-run effective. Density reform from single family to multifamily has limited impact. Upzoning in commercial districts most applicable to high cost cities.
Rent Regulation	F	Provides immediate relief for incumbents but reduces capital feasibility for new projects and undermines operating budgets via capped rents against rising costs. Long-run affordability and preservation harmed.

Strengths and Limits

No single policy tool can solve the housing affordability challenge on its own. Each mechanism—from deeply subsidized programs to market-based incentives—serves a distinct role within the broader housing ecosystem. Understanding their strengths and limitations is critical for designing a balanced, effective policy mix that can reach different income groups, respond to market conditions and sustain production over time.

- **Capital A Affordable tools (LIHTC, PBRA, HCV):** These tools offer the most precise targeting for deeply income-restricted households. However, they are highly subsidy-dependent, making them slow, costly and limited by funding caps.
- **By-right tools (Tax abatements, deregulation):** These approaches emphasize scale and speed, making them best for activating dormant development and supporting middle-income affordability. They require strong compliance and monitoring to prevent unintended benefits—or “leakage”—from reaching higher-income households.
- **Supplemental Tools:** These can be valuable but are often episodic or narrow in scope. For example, adaptive reuse shines in economic downturns, when underused buildings can be repurposed; employer or institutional housing can relieve pressure in tight labor markets; ADUs and upzoning incrementally add supply in established neighborhoods. But none can substitute for large-scale strategies.
- **Rent regulation:** While intended to protect residents, rent control has negative long-term impacts on both production and preservation, which ultimately undermines affordability goals—hence its low policy grade.

Pipeline Connection

A balanced housing pipeline, as outlined in the TTA chapter, depends on aligning tools by function:

- Capital A Affordable subsidies to serve the most vulnerable, subsidy-dependent populations.
- By-right, supply-side tools to accelerate production, expand middle-income affordability and offset regulatory costs.
- Preservation strategies to maintain NOAH and prevent erosion of gains.

Policy tools must be judged not in isolation but by how effectively they contribute to the overall to this pipeline. Grades highlight how each fit: some are indispensable but inherently limited (PBRA, HCV, LIHTC), while others are scalable and time-sensitive (tax abatements, deregulation).

Conclusion

The policy report card shows that no single tool solves affordability. LIHTC and income assistance remain essential but cannot achieve moonshot scale alone. Tax abatements and deregulation stand out as underutilized levers capable of unlocking dormant development capacity quickly. Supplemental strategies add resilience but are niche. Rent regulation undermines the very pipeline we seek to balance.

To achieve affordability in a generation, the U.S. must rebalance its policy toolkit, amplifying fast, scalable tools while sustaining targeted subsidies. This requires political courage to shift from over-reliance on slow, subsidy-dependent programs toward a diversified affordability pipeline.

Appendix Chart 1: Annual Housing Completions By Purpose

New Privately-Owned Housing Units Completed, by Intent and Design—United States
(Thousands of units. Detail may not add to total because of rounding.)

YEAR	TOTAL UNITS COMPLETED	SINGLE-FAMILY UNITS									UNITS IN BUILDINGS WITH 2 UNITS OR MORE								TOTAL HOUSING UNITS			
		TOTAL	BUILT FOR SALE		CONTRACTOR BUILT	OWNER BUILT	DETACHED	ATTACHED	SQUARE FEET OF FLOOR AREA		TOTAL	FOR SALE	FOR RENT	2 TO 4 UNITS	5 TO 9 UNITS	10 TO 19 UNITS	20 OR MORE UNITS	SQUARE FEET PER UNIT		(SF AND MF)		
			TOTAL	FEE SIMPLE					MEDIAN	AVERAGE								MEDIAN	AVERAGE	BUILT FOR SALE	BUILT FOR RENT	UNKNOWN
1974	1,728	940	542	(NA)	214	171	(NA)	(NA)	1,560	1,695	788	192	596	96	158	181	353	922	1,021	42%	34%	23%
1975	1,317	875	498	(NA)	175	190	(NA)	(NA)	1,535	1,645	442	121	321	61	87	95	199	942	1,000	47%	24%	29%
1976	1,377	1,034	615	(NA)	211	198	(NA)	(NA)	1,590	1,700	343	75	268	77	66	75	125	894	940	50%	19%	30%
1977	1,657	1,258	756	(NA)	253	234	(NA)	(NA)	1,610	1,720	399	77	322	95	81	102	120	881	938	50%	19%	30%
1978	1,867	1,369	839	(NA)	268	246	(NA)	(NA)	1,655	1,755	498	91	408	116	111	126	145	863	902	50%	22%	28%
1979	1,871	1,301	799	(NA)	231	244	(NA)	(NA)	1,645	1,760	570	135	434	125	120	142	183	893	938	50%	23%	27%
1980	1,502	957	583	(NA)	161	194	(NA)	(NA)	1,595	1,740	545	174	371	119	122	132	172	915	979	50%	25%	25%
1981	1,266	819	484	(NA)	137	174	(NA)	(NA)	1,550	1,720	447	164	283	112	93	93	150	930	980	51%	22%	26%
1982	1,006	632	366	(NA)	110	138	(NA)	(NA)	1,520	1,710	374	148	226	81	72	83	138	925	990	51%	22%	26%
1983	1,391	924	603	(NA)	130	164	(NA)	(NA)	1,565	1,725	467	152	314	92	109	125	141	893	942	54%	23%	23%
1984	1,652	1,025	669	(NA)	150	168	(NA)	(NA)	1,605	1,780	627	197	430	112	142	189	184	871	914	52%	26%	22%
1985	1,703	1,072	698	(NA)	163	168	(NA)	(NA)	1,605	1,785	631	184	447	97	137	198	200	882	922	52%	26%	22%
1986	1,756	1,120	724	(NA)	190	172	(NA)	(NA)	1,660	1,825	636	133	503	86	146	211	193	876	911	49%	29%	23%
1987	1,669	1,123	706	(NA)	203	176	(NA)	(NA)	1,755	1,905	546	134	412	71	113	161	201	920	980	50%	25%	25%
1988	1,530	1,085	688	(NA)	199	164	(NA)	(NA)	1,810	1,995	445	117	329	57	90	132	166	940	990	53%	22%	26%
1989	1,423	1,026	661	(NA)	188	147	(NA)	(NA)	1,850	2,035	397	90	307	59	73	112	152	940	1,000	53%	22%	26%
1990	1,308	966	594	(NA)	199	147	(NA)	(NA)	1,905	2,080	342	76	266	45	72	109	117	955	1,005	51%	20%	28%
1991	1,091	838	481	(NA)	192	143	(NA)	(NA)	1,890	2,075	253	56	197	37	51	67	99	980	1,020	49%	18%	33%
1992	1,158	964	577	(NA)	213	155	(NA)	(NA)	1,920	2,095	194	44	150	36	43	40	74	985	1,040	54%	13%	33%
1993	1,192	1,039	642	(NA)	216	159	(NA)	(NA)	1,945	2,095	153	44	109	26	38	37	53	1,005	1,065	58%	9%	33%
1994	1,347	1,160	740	(NA)	238	160	(NA)	(NA)	1,940	2,100	187	49	138	32	42	49	63	1,015	1,035	59%	10%	31%
1995	1,313	1,066	682	(NA)	204	146	(NA)	(NA)	1,920	2,095	247	51	196	35	46	69	97	1,040	1,080	56%	15%	29%
1996	1,413	1,129	746	(NA)	214	136	(NA)	(NA)	1,950	2,120	284	50	234	33	51	88	113	1,030	1,070	56%	17%	27%
1997	1,400	1,116	757	(NA)	192	138	(NA)	(NA)	1,975	2,150	284	54	230	37	54	86	107	1,050	1,095	58%	16%	26%
1998	1,474	1,160	815	(NA)	186	127	(NA)	(NA)	2,000	2,190	314	55	260	41	46	88	140	1,020	1,065	59%	18%	23%
1999	1,604	1,270	885	828	204	139	1,148	122	2,028	2,223	334	55	279	35	56	91	152	1,041	1,104	59%	17%	24%
2000	1,574	1,242	883	830	192	126	1,115	127	2,057	2,266	332	60	272	27	50	93	161	1,039	1,114	60%	17%	23%
2001	1,571	1,256	906	848	189	122	1,121	135	2,103	2,324	315	75	240	34	44	80	157	1,104	1,171	62%	15%	22%
2002	1,648	1,325	967	905	195	123	1,176	149	2,114	2,320	323	63	260	35	36	80	172	1,070	1,166	63%	16%	22%
2003	1,678	1,386	1,038	962	185	119	1,218	168	2,137	2,330	292	56	236	32	43	62	155	1,092	1,173	65%	14%	21%
2004	1,842	1,532	1,170	1,078	191	125	1,330	202	2,140	2,349	310	72	238	23	35	78	173	1,105	1,173	67%	13%	20%
2005	1,932	1,636	1,288	1,175	190	118	1,423	213	2,227	2,434	296	97	199	38	38	59	161	1,143	1,247	72%	10%	18%
2006	1,979	1,654	1,293	1,189	198	124	1,427	228	2,248	2,469	325	127	198	41	42	57	185	1,172	1,277	72%	10%	18%
2007	1,502	1,218	900	830	171	108	1,047	172	2,277	2,521	284	116	169	31	33	47	173	1,197	1,300	68%	11%	21%
2008	1,120	819	550	507	127	93	694	124	2,215	2,519	301	101	200	24	21	46	210	1,122	1,250	58%	18%	24%
2009	794	520	331	305	94	66	449	71	2,135	2,438	274	66	208	15	14	33	213	1,113	1,227	50%	26%	24%
2010	651	496	330	307	87	53	435	61	2,169	2,392	155	30	125	9	10	19	117	1,110	1,172	55%	19%	25%
2011	585	447	291	271	75	49	392	54	2,233	2,480	138	16	123	8	10	18	102	1,124	1,159	52%	21%	27%
2012	649	483	327	308	78	47	425	58	2,306	2,505	166	11	155	9	12	32	113	1,098	1,138	52%	24%	24%
2013	764	569	414	388	81	42	498	71	2,384	2,598	195	11	184	9	11	31	144	1,059	1,107	56%	24%	20%
2014	884	620	450	424	99	43	555	65	2,453	2,657	264	13	252	9	11	26	219	1,073	1,151	52%	29%	19%
2015	968	648	477	457	97	45	574	74	2,467	2,687	320	16	304	10	21	39	251	1,074	1,132	51%	31%	18%
2016	1,059	738	552	533	108	46	649	89	2,422	2,640	321	26	295	10	15	33	263	1,101	1,187	55%	28%	18%
2017	1,153	795	597	576	109	47	696	99	2,426	2,631	358	22	336	11	16	32	298	1,096	1,162	54%	29%	17%
2018	1,185	840	638	615	107	51	733	107	2,386	2,588	345	27	318	9	10	27	299	1,097	1,161	56%	27%	17%
2019	1,255	903	675	650	124	52	783	120	2,301	2,509	352	31	321	9	14	36	293	1,076	1,139	56%	26%	18%
2020	1,287	912	691	667	117	53	796	116	2,261	2,480	375	28	348	10	17	33	315	1,087	1,121	56%	27%	17%
2021	1,341	970	762	731	112	44	848	121	2,273	2,480	371	24	348	8	11	28	325	1,046	1,094	59%	26%	16%
2022	1,390	1,022	774	736	130	51	885	137	2,299	2,509	368	26	342	9	11	25	322	1,017	1,072	58%	25%	18%
2023	1,449	999	705	673	140	57	848	151	2,233	2,485	450	20	430	12	27	26	386	1,006	1,063	50%	30%	20%
2024	1,627	1,019	736	701	121	49	834	185	2,146	2,364	608	29	580	17	14	29	548	1,006	1,043	47%	36%	17%

Footnotes:
NA = Not Available
Z = Less than 500 units or less than 0.5 percent
Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development, Survey of Construction
Additional information on the survey methodology may be found at <https://www.census.gov/construction/soc/methodology.html>

Appendix Chart 2: State Level TTA Analysis

Subsidized Affordable Supply Deficit—Years to Address

RANK	STATE	2019 YTA	2020 YTA	2021 YTA	2022 YTA	2023 YTA	AVERAGE	GENERATIONS TO ADDRESS
1	North Carolina	40	33	35	53	41	40	Less Than a Generation
2	Utah	67	70	69	95	122	84	Three Generations
3	Indiana	75	81	119	75	108	91	Three Generations
4	Minnesota	93	127	80	80	82	92	Three Generations
5	Colorado	106	121	96	104	120	109	Three Generations
6	Washington	132	103	106	119	97	111	Three Generations
7	District of Columbia	82	104	168	100	123	115	Three Generations
8	Illinois	162	185	118	120	124	141	More Than a Century
9	Oregon	187	148	130	153	103	144	More Than a Century
10	New York	160	182	141	173	252	181	More Than a Century
11	Georgia	235	242	184	156	187	200	More Than a Century
12	Alaska	250	157	159	137	339	208	More Than a Century
13	Virginia	276	236	221	177	203	222	More Than a Century
14	Idaho	144	143	264	380	245	235	More Than a Century
15	Texas	376	235	266	189	199	253	More Than a Century
16	Nevada	147	217	300	322	298	256	More Than a Century
17	Tennessee	203	152	226	553	220	270	More Than a Century
18	California	380	298	322	260	178	287	More Than a Century
19	Florida	316	298	265	291	319	297	More Than a Century
20	Hawaii	205	89	837	341	87	311	More Than a Century
21	Arkansas	174	652	549	334	148	371	More Than a Century
22	New Jersey	341	319	506	364	382	382	More Than a Century
23	Arizona	381	455	318	410	460	404	More Than a Century
24	Wisconsin	551	176	949	175	183	406	More Than a Century
25	Maryland	465	396	512	535	332	447	More Than a Century
26	South Carolina	886	217	442	488	332	472	More Than a Century
27	Kentucky	281	304	252	1,379	166	476	More Than a Century
28	Massachusetts	671	341	568	440	622	528	More Than a Century
29	Ohio	832	381	800	402	675	618	More Than a Century
30	Oklahoma	484	780	1,308	586	327	696	More Than a Century
31	Connecticut	768	546	1,439	343	725	764	More Than a Century
32	Michigan	1,166	792	1,040	300	1,047	869	More Than a Century
33	Kansas	1,258	769	1,611	465	409	902	More Than a Century
34	Pennsylvania	604	974	1,177	582	1,211	909	More Than a Century
35	Alabama	1,082	705	1,400	496	891	914	More Than a Century
36	Missouri	230	1,576	1,292	752	1854	1,140	More Than a Century
37	Nebraska	613	285	3,784	1,358	155	1,239	More Than a Century
38	North Dakota	3,883	861	762	366	697	1,313	More Than a Century
39	Louisiana	4,531	270	1,779	225	248	1,410	More Than a Century
40	Wyoming	233	9,999	233	209	310	2,196	More Than a Century
41	South Dakota	716	122	9,999	131	401	2,273	More Than a Century
42	New Mexico	9,999	865	329	213	135	2,308	More Than a Century
43	Vermont	348	405	9,999	559	651	2,392	More Than a Century
44	Iowa	272	346	9,999	227	1,730	2,514	More Than a Century
45	Maine	9,999	1,123	1,123	1,202	676	2,824	More Than a Century
46	Montana	6,527	9,999	1,011	300	248	3,617	More Than a Century
47	New Hampshire	9,999	161	555	783	9,999	4,299	More Than a Century
48	Delaware	688	974	9,999	47	9,999	4,341	More Than a Century
49	Rhode Island	611	9,999	1,153	261	9,999	4,404	More Than a Century
50	West Virginia	1,536	9,999	2,150	9,999	761	4,889	More Than a Century
51	Mississippi	9,999	2,528	9,999	1,282	9,999	6,761	More Than a Century

Methodology

1. Collect absorption (YTA) for each State. $((\text{Rent-Burdened Households} \times \text{Factor reducing for } >80\% \text{ AMI Households}) / \text{Annual Subsidized Supply Production})$
2. Find the average absorption.
3. Quantify average absorption into generations (35 years).
4. Rank the averages.

Appendix Chart 3: MSA TTA Analysis & NOAH Market Identification

Subsidized Affordable Supply Deficit—Years to Address								Demand Side NOAH Test						
RANK	MSA	2019 YTA	2020 YTA*	2021 YTA	2022 YTA	2023 YTA	AVERAGE	GENERATIONS TO ADDRESS	2019 NOAH	2020 NOAH	2021 NOAH	2022 NOAH	2023 NOAH	2019-2023 TOTAL
1	Raleigh-Cary, NC MSA	33	0	29	76	42	45	Two Generations	No	No	No	Near	Near	No
1	Charlotte-Concord-Gastonia, NC-SC MSA	35	0	29	54	66	45	Two Generations	No	No	No	No	No	No
3	Cleveland, OH MSA	67	0	56	29	47	49	Two Generations	No	No	No	No	No	No
4	Salt Lake City-Murray, UT MSA	35	0	40	85	43	50	Two Generations	No	No	No	No	No	No
5	Buffalo-Cheektowaga, NY MSA	45	0	56	57	51	52	Two Generations	Near	Near	Near	Yes	Yes	Yes
6	Minneapolis-St. Paul-Bloomington, MN-WI MSA	62	0	59	53	60	58	Two Generations	No	No	No	Near	Near	No
7	Seattle-Tacoma-Bellevue, WA MSA	70	0	98	75	56	74	Two Generations	No	No	No	No	No	No
8	Pittsburgh, PA MSA	84	0	46	123	60	78	Two Generations	No	No	No	No	No	No
9	San Antonio-New Braunfels, TX MSA	145	0	97	58	52	88	Three Generations	No	No	No	No	No	No
10	Austin-Round Rock-San Marcos, TX MSA	166	0	81	46	70	90	Three Generations	No	No	No	No	No	No
11	Louisville/Jefferson County, KY-IN MSA	52	0	98	146	71	91	Three Generations	No	No	No	No	Near	No
12	Denver-Aurora-Centennial, CO MSA	93	0	104	90	88	93	Three Generations	No	No	No	No	No	No
13	Indianapolis-Carmel-Greenwood, IN MSA	55	0	175	88	78	98	Three Generations	No	No	No	Near	Near	No
14	Portland-Vancouver-Hillsboro, OR-WA MSA	124	0	95	107	77	100	Three Generations	No	No	No	No	No	No
15	Nashville-Davidson-Murfreesboro-Franklin, TN MSA	127	0	66	138	118	112	Three Generations	No	No	No	No	No	No
16	San Diego-Chula Vista-Carlsbad, CA MSA	103	0	113	141	97	113	Three Generations	No	No	No	No	No	No
17	Fresno, CA MSA	161	0	53	103	140	114	Three Generations	Near	Yes	Near	Yes	Yes	Yes
18	Atlanta-Sandy Springs-Roswell, GA MSA	133	0	130	109	107	119	Three Generations	No	No	No	No	No	No
19	Hartford-West Hartford-East Hartford, CT MSA	173	0	150	104	72	124	More Than a Century	Near	Yes	Yes	Yes	Yes	Yes
20	Chicago-Naperville-Elgin, IL-IN MSA	190	0	114	114	127	136	More Than a Century	No	No	No	No	No	No
21	Memphis, TN-MS-AR MSA	273	0	106	124	78	145	More Than a Century	No	No	No	No	No	No
22	Washington-Arlington-Alexandria, DC-VA-MD-WV MSA	144	0	168	149	136	149	More Than a Century	No	No	No	No	No	No
23	San Francisco-Oakland-Fremont, CA MSA	202	0	114	108	185	152	More Than a Century	No	No	No	No	No	No
24	Milwaukee-Waukesha, WI MSA	156	0	233	169	106	166	More Than a Century	No	No	No	No	No	No
25	New York-Newark-Jersey City, NY-NJ MSA	164	0	159	171	184	169	More Than a Century	No	No	No	No	No	No
26	San Jose-Sunnyvale-Santa Clara, CA MSA	172	0	317	114	94	174	More Than a Century	No	No	No	No	No	No
27	Virginia Beach-Chesapeake-Norfolk, VA-NC MSA	100	0	134	358	125	179	More Than a Century	Near	Near	Near	Near	Yes	Yes
28	Los Angeles-Long Beach-Anaheim, CA MSA	269	0	164	173	121	181	More Than a Century	No	No	No	No	No	No
29	Sacramento-Roseville-Folsom, CA MSA	98	0	354	244	135	207	More Than a Century	No	No	No	No	No	No
30	Phoenix-Mesa-Chandler, AZ MSA	133	0	132	486	92	210	More Than a Century	No	No	No	No	No	No
31	Miami-Fort Lauderdale-West Palm Beach, FL MSA	277	0	254	173	147	212	More Than a Century	No	No	No	No	No	No
32	Richmond, VA MSA	278	0	95	92	413	219	More Than a Century	Near	Near	No	Near	Near	No
33	Baltimore-Columbia-Towson, MD MSA	157	0	248	358	167	232	More Than a Century	No	No	No	No	Near	No
34	Jacksonville, FL MSA	418	0	178	209	177	245	More Than a Century	No	No	No	No	No	No
35	Orlando-Kissimmee-Sanford, FL MSA	392	0	160	212	258	255	More Than a Century	No	No	No	No	No	No
36	Riverside-San Bernardino-Ontario, CA MSA	138	0	349	286	253	256	More Than a Century	No	No	No	No	No	No
37	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA	212	0	361	173	376	280	More Than a Century	No	No	No	No	No	No
38	Las Vegas-Henderson-North Las Vegas, NV MSA	159	0	440	193	341	283	More Than a Century	No	No	No	No	No	No
39	Tampa-St. Petersburg-Clearwater, FL MSA	215	0	298	269	423	301	More Than a Century	No	No	No	No	No	No
40	Providence-Warwick, RI-MA MSA	118	0	476	348	412	338	More Than a Century	No	No	No	No	No	No
41	Cincinnati, OH-KY-IN MSA	365	0	153	394	529	360	More Than a Century	No	No	No	No	No	No
42	Boston-Cambridge-Newton, MA-NH MSA	350	0	429	283	393	363	More Than a Century	No	No	No	No	No	No
43	Columbus, OH MSA	579	0	731	144	106	389	More Than a Century	No	No	No	No	No	No
44	Oklahoma City, OK MSA	106	0	191	954	373	406	More Than a Century	No	Near	No	No	Near	No
45	Grand Rapids-Wyoming-Kentwood, MI MSA	632	0	213	116	693	413	More Than a Century	No	No	No	Near	Near	No
46	Dallas-Fort Worth-Arlington, TX MSA	497	0	778	219	405	474	More Than a Century	No	No	No	No	No	No
47	Houston-Pasadena-The Woodlands, TX MSA	649	0	480	627	265	505	More Than a Century	No	No	No	No	No	No
48	Detroit-Warren-Dearborn, MI MSA	604	0	500	223	760	521	More Than a Century	No	No	No	No	No	No
49	Birmingham, AL MSA	130	0	886	286	802	526	More Than a Century	No	No	No	No	No	No
50	Kansas City, MO-KS MSA	964	0	545	500	513	630	More Than a Century	Near	Near	Near	Near	Yes	Yes
51	St. Louis, MO-IL MSA	466	0	1123	438	1798	956	More Than a Century	No	No	No	No	No	No
Notes: Due to the COVID-19 pandemic, consistent, year-over-year metro renter ACS Census data for 2020 was unavailable in the standard format. This data is excluded from averages.								Methodology: 1. Based on 80% AMI income for a 4-person household (HUD). 2. Multiply by 30% to determine rent burden limit. 3. Divide by 12 to determine monthly Maximum Gross Rent. 4. Subtract average utilities to determine Maximum Net Rent. 5. Compare against average Market Rent (CoStar). 6a. If Maximum Net Rent is greater than Market Rent, then MSA produces NOAH. 6b. If Maximum Net Rent is up to 5% or less than Market Rent, then MSA is Near producing NOAH. 6c. If Maximum Net Rent is <5% of than Market Rent, then MSA does not produce NOAH.						
Methodology 1. Collect absorption (YTA) for each State. ((Rent-Burdened Households*Factor reducing for >80% AMI Households)/Annual Subsidized Supply Production) 2. Find the average absorption. 3. Quantify average absorption into generations (35 years). 4. Rank the averages.														

Affordable Housing Glossary

Private Housing

These categories represent typical segments of the private rental market, but they are not mutually exclusive. Properties can shift between categories as neighborhood conditions, property quality, resident income and capital investments change. The terms below therefore describe tendencies, not fixed designations.

Market-Rate Housing

Privately developed and operated housing priced by supply and demand, without direct public subsidy.

Class A

Market-rate housing with high-end amenities like gyms, concierge services, upgraded finishes, roof decks and secured parking, targeted at high-income households.

Naturally Occurring Affordable Housing (NOAH) (“Lowercase a”)

Market-rate units that are affordable without government subsidy, often in older, lower-quality buildings. NOAH typically serves moderate- and middle-income households, making it an important part of the housing supply in many urban areas.

Workforce, Moderate and Middle-Income Housing

Housing targeted at working-class or middle-income households. In some areas, NOAH fills this need; in others, subsidies are required to prevent rent burden, ensuring that low- and moderate-income households can afford to live in these areas.

Public/Private Housing

Not all housing is fully market-rate or fully government-funded. Many homes are developed and operated by private or nonprofit owners but include affordability requirements tied to public support. These programs bridge the private and public sectors, using incentives, tax credits, vouchers and regulatory agreements to maintain affordability. This section describes how those **Public/Private Housing** tools work.

Subsidized Affordable Housing (Capital “A”)

Housing under regulatory agreements that limit rents in exchange for government assistance. These units meet defined affordability criteria, often linked to Area Median Income (AMI). Subsidized Affordable housing is generally seen as essential for supporting low-income households, providing a stable and secure place to live.

By-Right Affordable Housing

Programs where subsidies or benefits are available automatically to any developer who meets set requirements, with little or no project-specific negotiation. Examples include:

- Property tax incentives for affordable projects
- Voluntary Inclusionary Housing with density bonuses

Discretionary Affordable Housing

Programs requiring project-specific applications and negotiations for funding. Awards are competitive and limited. Examples include:

- Low-Income Housing Tax Credits (LIHTC)
- Section 8 Project-Based Vouchers
- Community Development Block Grant (CDBG) or Housing Trust Funds
- Local Grants

Inclusionary Housing

Policies requiring or incentivizing housing developers to set aside a percentage of units in new developments as affordable. Inclusionary housing programs were originally intended to combat the abuses of exclusionary zoning which have long been an issue within the context of housing affordability discussions. Inclusionary housing can be voluntary (opt-in) or mandatory (required in certain areas). Most programs will offer developers the ability to offset the costs of providing affordable housing with such tax incentives, density increases or reductions in parking mandates. To receive these benefits the program will require the developer to allocate a certain percentage of new residential units in a development to be affordable to the household AMI levels specified (See [Affordable Housing 101: Income Limits and Rent Standards](#)). This is a key tool used in urban planning to integrate affordable housing into high-demand areas.

Low-Income Housing Tax Credit (LIHTC)

A federal program created in 1986 giving tax credits to producers building or preserving affordable housing. Housing producers sell these credits to investors to raise capital, lowering the debt burden to enable affordable housing projects to become financially feasible. LIHTC can be applied to various property types, including large apartment complexes, single-family homes and smaller multi-family buildings, supporting both new construction and the rehabilitation of existing properties. As a result, LIHTC is a vital tool for expanding and preserving affordable housing nationwide. The tax credit requires housing producers to comply with income and rent restrictions for at least 15 years, though many states extend this compliance period to 30 years. Once the LIHTC compliance period expires, the housing units are at risk of reverting to market-rate units. There are two types of LIHTC credits. The 4 percent credit requires the use of tax-exempt bonds, utilizing a state's limited "Bond Cap". The 9 percent credit does not require tax-exempt bonds. LIHTC is considered one of the most successful affordable housing programs in the U.S. and has financed the creation of over 3.7 million Affordable Housing units since its inception, making it the largest subsidized Affordable Housing program in the country for production.

Section 8 Vouchers and Rental Assistance Programs

Federal subsidies provided directly to residents (Housing Choice Vouchers) or tied to specific housing developments (Project-Based Vouchers) to make market-rate units affordable. Originally authorized in 1937, it is the largest federal income assistance program. Participants receive vouchers to cover the difference between 30 percent of their income and the cost of rent, up to a local limit. Housing providers receive direct payments from the government. These programs help low-income households find and afford decent housing in the private market. The program has been successful in providing housing stability for millions of low-income households, but faces challenges such as long waitlists, insufficient funding, housing provider discretion and limited availability of rental units. Some states offer rental assistance programs to complement federal programs like Section 8.

Public Housing

Public Housing

Housing built, owned and operated by government entities, primarily for low- and moderate-income households. Rent is often set at 30 percent of resident income, making it a crucial option for those struggling to afford market-rate housing.

Public Housing Agencies (PHAs)

Local, county or state agencies authorized to develop and manage public housing programs. These agencies are responsible for ensuring that public housing meets the needs of low-income households and is maintained to a reasonable standard.

Historical Context

Public housing in the U.S. expanded under New Deal programs in the 1930s. Today, much of the public housing stock is aging and underfunded, prompting mixed strategies like RAD (Rental Assistance Demonstration) to shift management to public-private partnerships. The New York City Housing Authority (NYCHA) is the largest PHA in the United States, managing over 175,000 public housing apartments and administering over 85,000 Section 8 vouchers. The next largest housing authorities in the U.S. are Puerto Rico Public Housing Administration (~55,000 units), Chicago Housing Authority (~25,000 units) and Philadelphia Housing Authority (~15,000 units).

Federal, State and Local Tools and Incentives

By-Right Development

Allows developers to proceed with construction without additional approvals if their project complies with existing zoning regulations. This approach streamlines the approval process by eliminating the need for special variances or public hearings, reducing delays and costs. It provides developers with predictability and encourages investment by ensuring that projects align with established zoning rules. While this method simplifies development, it still requires adherence to other regulations like building codes and environmental laws. By-Right Development helps promote growth and consistency with community planning goals, making it easier to undertake projects that fit within the current zoning framework.

Community Development Block Grants (CDBG)

Enacted through the Housing and Community Development Act of 1974, CDBG provides federal funding to local low- and moderate-income communities. The grants provided can be used to fund projects which may range from sanitary sewer and drinking water projects to home repair and senior and community center improvements. Funds are allocated to state and local governments, which then decide how to use them to support affordable housing projects, infrastructure improvements and public services. Governments must ensure at least 70 percent of CDBG funds benefit low- and moderate-income persons. For example, a city receiving \$1 million in CDBG funds might allocate \$400,000 to affordable housing, reducing the cost burden on local projects. This could translate to direct grants or low-interest loans to housing producers. CDBG has been effective in enabling local governments to address specific housing needs, though its impact varies by locality.

Community Development Corporations (CDCs)

CDCs are nonprofit organizations created to support and revitalize low-income communities, often through affordable housing development, economic development and social services. They are mission-driven and typically rooted in the neighborhoods they serve. They are typically 501(c)(3) nonprofits governed by a board that includes local residents, community leaders and other stakeholders. There are also national CDCs that can achieve economies of scale in financing, development and management. Notable examples include Enterprise Community Partners, Local Initiatives Support Corporation (LISC), NeighborWorks and Habitat for Humanity.

Community Development Financial Institutions (CDFIs)

CDFIs include nonprofit, for-profit and cooperative financial institutions certified by the U.S. Treasury. They have the primary mission of community development in a targeted market (underserved population or geographies) and provide financial products or development services in a community. The Low Income Investment Fund (LIIF) is an example of a national nonprofit CDFI focused on affordable housing.

Community Land Trusts (CLTs)

A specific type of nonprofit corporation that acquires and manages land to ensure long-term housing affordability. Governance is typically a tripartite structure representing residents, residents/businesses inside the CLTs designated area and public interest members (experts, academics and local officials). CLTs acquire land and lease it to homeowners or developers at affordable rates. This ensures that the housing remains affordable in perpetuity, as the land is held in trust and not sold on the open market. CLTs have been successful in providing long-term affordable housing and stabilizing communities. There are challenges such as scaling operations, securing funding for land acquisition and the limit on asset appreciation.

Density Bonuses

Density bonuses are a zoning tool that permits developers to build more housing units, taller buildings or more floor space than normally allowed in exchange for providing a defined public benefit, such as including affordable units in the development. During the approvals process, density bonuses provide developers with the right to build additional units or floor space beyond what is typically allowed under zoning laws in exchange for including affordable housing units in their projects. This incentive can make projects more financially viable by increasing the number of market-rate units that can subsidize the affordable units. These may be by-right or discretionary bonuses.

Expedited Permitting and Approvals

Expedited permitting and approvals for developers incorporating affordable housing refer to streamlined processes that local governments implement to facilitate and accelerate the development of affordable housing projects. Cities streamline the permitting process for affordable housing projects, reducing the time and cost associated with obtaining necessary approvals. This can include prioritizing affordable housing applications, reducing required paperwork and coordinating across departments to expedite reviews. Reducing permitting time on a multi-million dollar project could save hundreds of thousands of dollars from reduced financing costs, reducing the expenses in NOI and thereby allowing a housing project to have lower rents and still be feasible.

HOME Investment Partnerships Program

HOME was established in 1990 under the National Affordable Housing Act, aiming to empower localities with the resources to address housing challenges specific to their communities. It provides state and local governments flexibility to design housing strategies, including promoting public-private partnerships by leveraging federal funds with local and private investment. Federal grants are provided to localities, which can use the funds to build, buy and/or rehabilitate affordable housing for rent or homeownership, or provide direct income rental assistance. The program requires a 25 percent match from non-federal sources.

Housing Trust Fund (HTF)

The HTF was created in 2008 under the Housing and Economic Recovery Act to provide grants to states to increase and preserve the supply of rental housing for extremely low and very low-income families. The fund works by distributing annual funds to states based on a formula. Then, states allocate these funds to eligible projects. States can use the HTF funds for new construction, rehabilitation and operating cost assistance. Many states have also established their own housing trust funds to provide flexible funding for affordable housing development and preservation.

Parking Requirement Waivers

Many housing projects are mandated to build parking in order to obtain approval. Parking can be expensive, as much as \$50,000 or more per enclosed parking stall. By reducing or eliminating parking requirements. For example, eliminating 20 parking spaces at \$30,000 each can save \$600,000 on a project, reducing overall costs and supporting affordability. This is especially effective in areas with good public transportation options. Parking waivers have been successful in reducing development costs and increasing the number of affordable units.

Public Developers

Public developers are municipal corporations that are authorized to buy, operate, lease or sell property and/or to provide tax exemptions or financing for specifically approved development projects. Public Developers may also benefit from exemptions in the form of property tax and mortgage recording taxes. These organizations typically focus on addressing public needs, such as affordable housing, community redevelopment, infrastructure development and urban planning. They operate with a mandate to serve the public interest rather than seeking to maximize profits as private developers do. Public Real Estate Developers often spearhead the production of affordable housing projects, using local, state and/or federal funds to build or preserve housing units for low- and moderate-income residents. These developers may lead efforts to revitalize blighted or underutilized areas within cities and towns. While Public Developers are quasi-public entities, they often collaborate with private developers to leverage expertise, capital and efficiencies. Public-private partnerships (PPPs) are common in large-scale development projects. Notable examples include Invest Atlanta, Philadelphia Industrial Development Corporation and NYC Economic Development Corporation.

Revolving Loan Funds

Revolving loan funds are designed to provide ongoing financing for affordable housing projects, operating on the principle of recycling capital. Local governments often establish these funds to support the development of affordable housing by offering short-term, low-interest loans. The key mechanism behind these funds is the re-lending of money as initial loans are repaid, which allows the funds to continually support new projects, thus creating a sustainable financing model.

State Low-Income/Affordable Housing Tax Credit

State-level initiatives designed to encourage the development and rehabilitation of affordable housing by providing tax incentives to developers. Modeled after the federal LIHTC program, these state programs aim to address unique housing challenges within individual states by offering additional tax credits that can be used to supplement federal credits. This approach enhances the financial feasibility of affordable housing projects, making it easier for housing producers to secure financing and ultimately increasing the availability of affordable homes for low-income residents.

State Housing Finance Agencies (HFAs)

State Housing Finance Agencies (HFAs) deliver financing to make possible the purchase, development and rehabilitation of affordable homes and rental apartments for low- and middle-income households. At the center of HFA activity are Tax Exempt Bonds, Housing Tax Credits (Federal and State) and the HOME program.

State Tax-Exempt Bonds and Bond Cap

States issue tax-exempt bonds to finance affordable housing projects. These bonds often provide low-interest financing for producers of affordable housing. States sell tax-exempt bonds to investors and use the proceeds to provide low-interest loans to producers of affordable housing projects. This lowers the cost of borrowing for producers, making projects more financially feasible. The State Bond Cap refers to the federally imposed limit on the amount of Private Activity Bonds that a state can issue each year on a tax-exempt basis. This cap applies to bonds issued by or on behalf of local or state governments but used to finance private projects that serve a public purpose, such as affordable housing or infrastructure. Projects that use 4 percent LIHTC require the use of tax-exempt bond financing. Each state may issue up to \$130 per capita, or \$402.22 million, whichever is greater, and states must use their bond cap allocation within a certain time period or lose it.

State Preservation Programs

State Preservation Programs focus on preserving, protecting and revitalizing existing affordable housing stock, ensuring it remains affordable for the long term. The programs work through funding for the rehabilitation and maintenance of existing affordable housing units. They often target properties at risk of losing affordability restrictions within communities.

USDA Rural Housing Service

USDA RHS offers loans, grants and loan guarantee programs to construct, improve or purchase homes in rural areas. It also supports rental assistance programs. RHS programs include Section 502 Direct Loans, Section 502 Guaranteed Loans, section 404 Repair Loan and Grants and Section 515 Rural Housing Loans.

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