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 Some rules (safety, health, environmental) are essential; some are targeted taxation; others are outdated or duplicative.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)

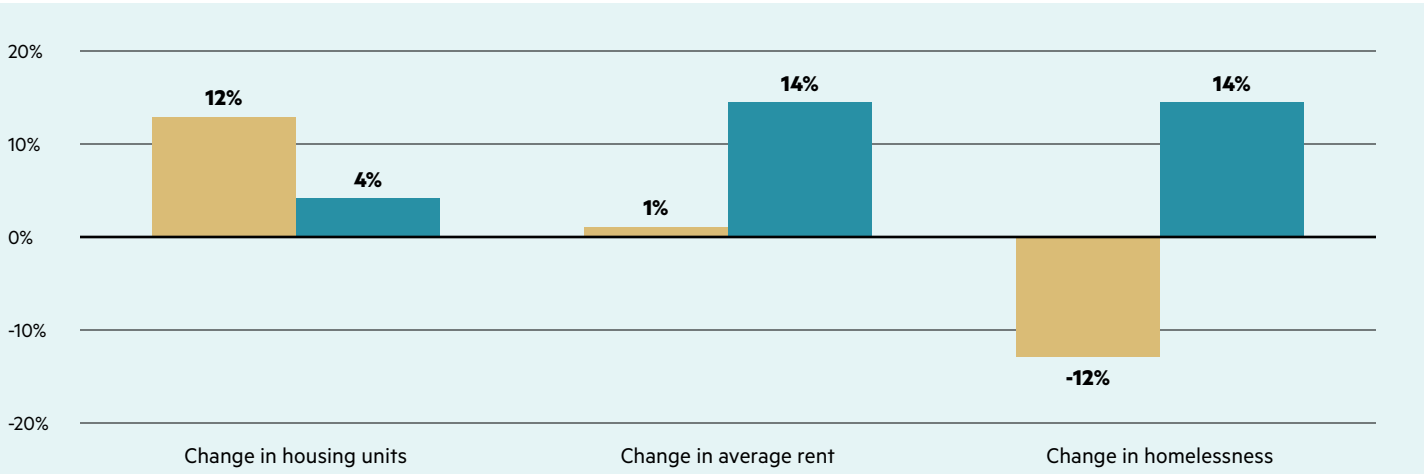
From 2015 to 2025, a growing number of U.S. jurisdictions have adopted one or more of these changes. Below, we examine four prominent cases—Minneapolis, Austin, California and Portland (Oregon)—along with supporting examples from other metros.

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



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.

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.

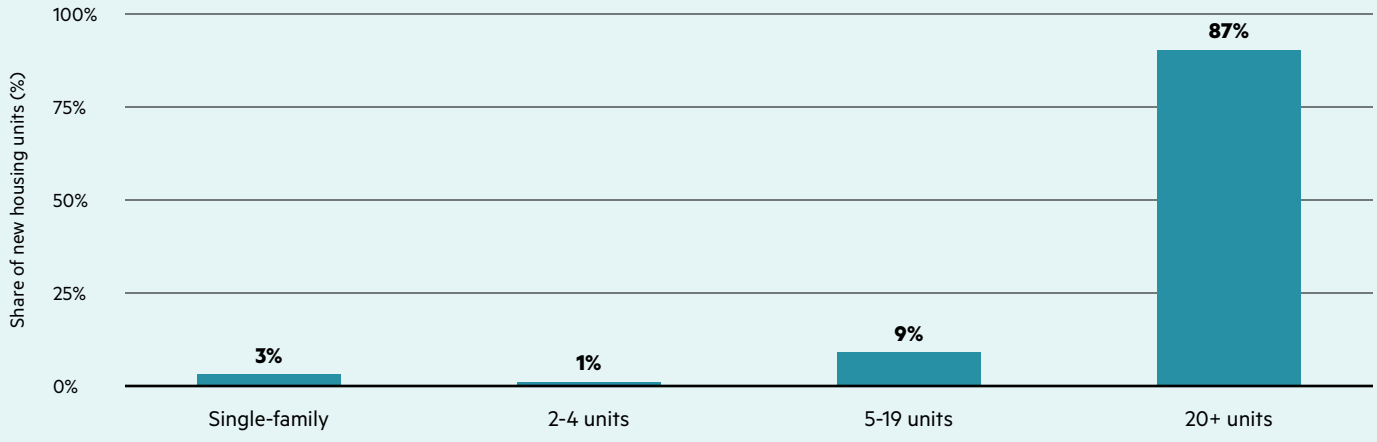
Impacts. After reform, Minneapolis saw multifamily permit growth outpace suburban peers (particularly in multifamily above 20 units). However, the 2040 Plan's legalization of duplexes and triplexes produced only modest missing-middle output: from 2020-2024, Minneapolis permitted just 87 new duplex, triplex 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.

Apartment Buildings Drive Housing Growth in Minneapolis
Share of the city's total housing units added, 2017-22

FIGURE 17



Source: Permit data is from the Department of Housing and Urban Development's State of the Cities Data Systems Building Permits Database. To estimate the share of permits in structures with more than 20 units. Pew used the U.S. Census Bureau's American Community Survey one-year population estimates for 2017 and 2022 to calculate new housing units added in buildings with more than 20 units and in buildings with five to 19 years.

[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's[114] 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.

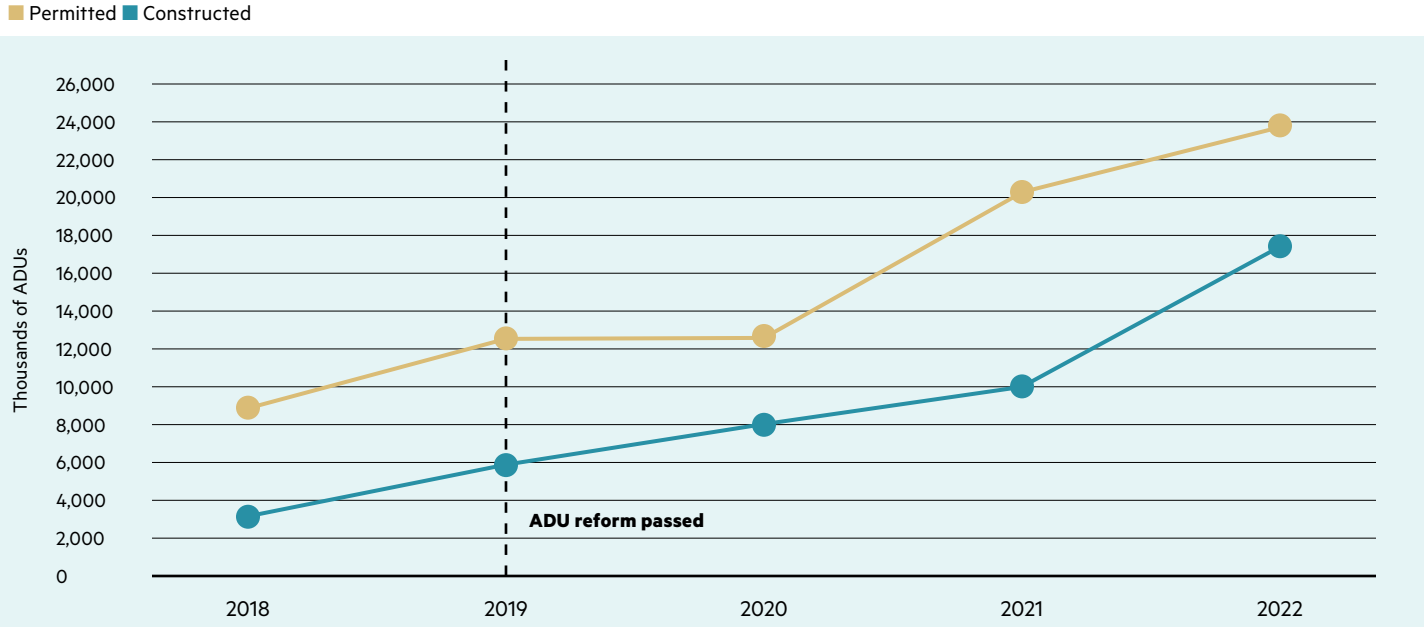
California

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 Jornal*, 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



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-implementation[117] 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 pro-cyclical: 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 Insitute, 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 Comptroller[156] argued that 421-a's per-affordable-unit subsidy cost was too high relative to affordability depth; the University of Texas[157] 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]

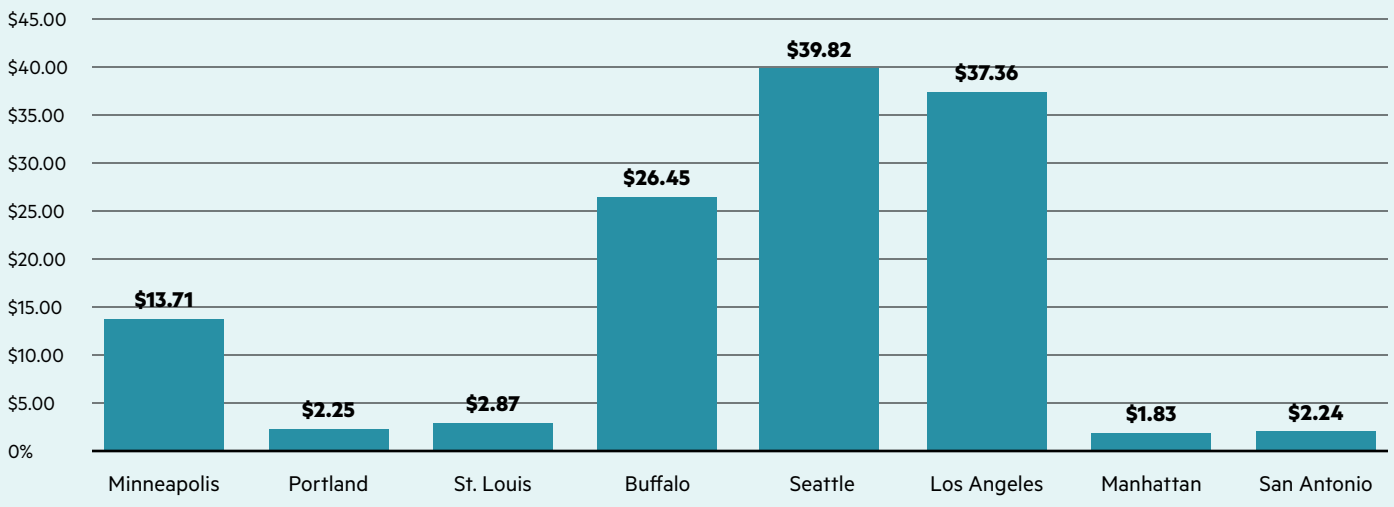
Most of the projects produced are mixed-income, meaning that they have both affordable units and market-rate-units. This has impact on the overall subsidy in two ways.

- 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—itself 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.