Research Report

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Supporting Housing Affordability in New York City Through Increased Housing Production

A Policy Brief

New York City's persistent crisis of housing affordability has reached unprecedented levels. As of 2021, a majority of renters in New York City spend more than 30 percent of their incomes on housing. The overall ratio of median rent to median household income in New York City is the second-highest among the 25 largest cities in the country.[1] Additionally, the number of single adults experiencing homelessness in New York City has more than doubled in the past ten years (Coalition for the Homeless, 2023).

These conditions arose despite concentrated policy efforts at the state and local levels to control the growth of rents and increase the supply of income-restricted affordable housing units. From 2014 to 2019, capital expenditures on affordable housing quadrupled from $428 million to $1.7 billion annually (Kober, 2023). Roughly 44 percent of the city's rental housing stock is rent stabilized (New York City Department of Housing Preservation and Development, undated), and, in 2019, the state legislature passed permanent reforms to the city's rent stabilization program that dramatically reduced the ability of landlords to raise rents or pass through costs for repairs and renovations to tenants (Otterman and Haag, 2019). Developers seeking to take advantage of the city's generous property tax–relief programs increasingly have been required to include greater numbers of deed-restricted affordable housing units in their projects over time (Raetz and Murphy, 2022). Why, then, has housing affordability in New York only continued to worsen?

Fundamentally, existing state and local policies—particularly those solely aimed at limiting rent increases—largely fail to address the root problem behind the city's affordability crisis: **Housing production has not kept pace with the growing demand to live in New York City**. From 2010 to 2020, the city's population increased by approximately 630,000 residents, while its housing stock increased by 200,000 units (New York City Department of City Planning, undated-b; U.S. Census Bureau, undated). Over the same period, New York City gained nearly 1 million new jobs, far outpacing

KEY FINDINGS AND RECOMMENDATIONS

- New York City faces a near-perfect storm of housing unaffordability: record-high rents; increasing levels of physical and financial distress in the older, rent-stabilized housing stock; the expiration of a tax relief program that supported roughly 70 percent of multifamily housing production; the rapid growth of homelessness crowding out other housing priorities; and a collapsing office real estate sector potentially placing a higher future property tax–funding burden on the housing sector.
- State and local policymakers have failed to address systematic cost drivers in housing production that hobble the city's beneficial system of as-of-right construction. Instead, recent housing policy has focused primarily on price controls and direct public financing of affordable housing production.
- We find that a small number of high-impact policy reforms, many of which already have active support from some in local and state government, could lead to the production of roughly 300,000 additional new housing units over a decade. We caution, however, that the estimated effectiveness of these reforms depends on the adoption of a policy to replace the recently expired 421-a tax relief program for multifamily construction.
- The additional housing units that we estimate these reforms would stimulate represent more than a 160-percent increase over recent annual housing production levels in the city. The surge in housing supply would likely lead to increased affordability through greater competition among landlords for tenants in the short term and an increase in naturally occurring affordable housing over the longer term.
- These reforms would also directly enhance the effectiveness of public funding for the production of new, deed-restricted affordable housing development.

population and housing growth within the city (Federal Reserve Economic Data, undated). Standard indicators of housing underproduction that measure the gap between regional population and housing supply indicate that the New York City metropolitan area faced an undersupply of 245,000 housing units in 2012, which grew to 342,000 by 2019, the second-largest underproduction gap in the country (Baum-Snow, 2023; Kingsella and MacArthur, 2022). As job growth in the city continues to outpace housing production, rents within the city have soared, particularly among low-income households that experienced rent increases of more than 25 percent between 2005 and 2021.[2] Prospective residents have increasingly sought housing outside the city, placing additional housing price pressure on surrounding regions.

The idea that increases in the housing supply cause greater housing affordability is not without controversy. Such controversy has been reflected in housing policy choices by both New York City and other high-cost cities (Friedrich, 2023; Mays, 2018). However, a growing body of high-quality causal research that disentangles the causal effect of housing production from confounding factors consistently finds that new, market rate housing tends to reduce upward price pressure (Asquith, Mast, and Reed, 2023; Li, 2022; Mast, 2023; Pennington, 2021). The literature broadly suggests that expanding the housing supply is a necessary, if not always sufficient, requirement for housing affordability. More housing production could also have important synergies with existing efforts to increase affordability; for example, while housing vouchers are considered a more cost-effective and better-targeted way to extend affordability to low-income tenants than subsidizing developers to carve out and maintain affordable units (Armlovich, 2022; DiPasquale, Fricke, and Garcia-Diez, 2003), less than one-quarter of voucher recipients in the city have been able to successfully use their vouchers because of housing scarcity, which drives up competition among prospective tenants and provides landlords with enormous discretion to choose the tenants that they prefer (Gartland, 2022; Zaveri, 2023).

In this report, we present a set of policy reforms that we identified as the most promising from among a large set of proposals put forth by researchers and government and nongovernmental organizations, as well as discussions with local affordable housing developers, city and state government officials (both

past and present), academic researchers, practitioners in land use and property tax law, and regional and state planning organizations. In some cases, policies were taken verbatim from preexisting proposals. In other cases, we adapted a broader policy idea into a more specific proposal. We clarify the source of each policy in the report, either in the text or footnotes.

The key contribution of this report is to combine exposition that describes promising housing production policies with quantitative estimates of the potential level of additional housing production that could result from their adoption. If the six reforms presented in this report were adopted, we estimate that roughly 300,000 additional housing units could be produced over the course of ten years. These estimates were informed by the best quantitative evidence that we could identify from existing research. When feasible, we used evidence specific to New York City. When not available, we relied on the most relevant evidence from other settings. We caveat that many of the estimates we present are descriptive, non-causal approximations based on a variety of simplifying assumptions and a mix of causal and non-causal literature from different contexts. Given this, we have aimed to clearly state the assumptions underlying the estimates and also to provide estimates that are conservative where a range of estimates were available.

Evidence Linking Housing Production and Housing Affordability

Before introducing the policy reforms, we briefly review some key evidence on the connection between housing production and housing affordability (see Box 1). This review and related evidence are key factors that motivate our decision to focus on the lever of housing production in this report.

Filtering and Naturally Occurring Affordable Housing

Newly constructed market-rate housing units tend to have more amenities and therefore attract higher-income residents (Morawetz and Klaiber, 2022). This can have immediate, positive effects on affordability by expanding the local supply of housing while reducing the relative level of competition for lower-priced units by attracting higher-income residents away from these units. An abundance of recent peer-reviewed research finds that new market-rate rental developments reduce rents of nearby units by between 1 and 6 percent (Asquith, Mast, and Reed, 2023; Li, 2022; Mast, 2023).

How much can filtering contribute to affordability? Research suggests that filtering can lead to substantial increases in naturally occurring affordable housing (NOAH) over multiple years. One recent study using national data on occupants of the same set of housing units over the course of more than 25 years found that a new unit is gradually occupied over time by households with substantially lower incomes than the household that initially occupied the unit (Rosenthal, 2014). In Table 1, we apply the estimates from this study to HUD's 2022 AMI level of $120,100 for a three-person household in the New York City metropolitan area to estimate how long it would take for newly constructed units to be become affordable over

TABLE 1
Estimated Filtering Effects for Market Rate Rental Prices over Time

	Renter Household Annual Income (in 2022 dollars)	
Property Age (years)	Smallest Regional Estimate	National Average Estimate
0	100 percent of AMI ($120,100)	100 percent of AMI ($120,100)
10	81 percent of AMI ($97,800)	78 percent of AMI ($93,700)
20	63 percent of AMI ($75,500)	56 percent of AMI ($67,250)

SOURCE: Authors' calculations using estimates from Rosenthal (2014). The smallest (in magnitude) estimated annual filtering rate, –1.86, is for the New England census region. The estimated national average rate is –2.20. The estimated rate for the census region that includes New York City, Middle Atlantic, is –2.05, roughly in between these two estimates. The 100 percent of AMI amount is from U.S. Department of Housing and Urban Development (HUD) calculations for the New York City metropolitan area.
NOTE: AMI = area median income.

Box 1

Tokyo, Japan: A Case Study in Housing Production and Affordability

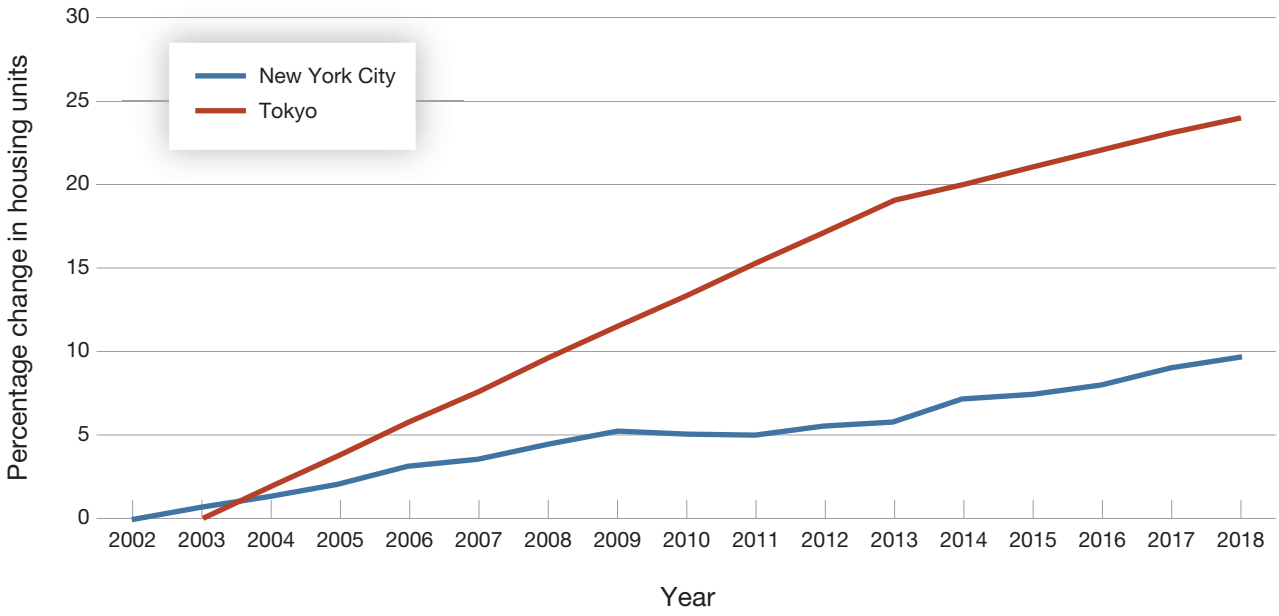
Tokyo provides a modern example of how strong housing production can lead to natural affordability. Tokyo has nearly twice the population of New York City, but the average rent for a two-bedroom apartment across Tokyo is roughly $1,300 per month and has been around this level for more than a decade (Davis, 2019; Real Estate Japan, 2021). To put this in context, such an apartment would be affordable to a three-person family in New York earning between 40 and 50 percent of the AMI in 2022 (Association for Neighborhood and Housing Development, 2022).

How did the world's most populous metropolitan area achieve average prices that New York City has been unable to achieve without deep public subsidies? In short: a decades-long process by the central government to actively rein in local governments' ability to limit land use and building density and the implementation of creative solutions to limit bureaucratic delays, such as authorizing private firms to review applications and issue building permits (Sorensen, Okata, and Fujii, 2010). Tokyo's regime of renter protections is comparatively sparse, and the property tax system privileges rental residential properties through assessment reductions. The city currently faces the emerging problem of a surplus of housing relative to population, further holding down prices. In 2018, the vacancy rate for residential rental properties reached 18.5 percent (Yoshida, 2021).

How much more housing is produced in Tokyo versus New York? As shown in Figure 1, between 2002 and 2018, New York City's housing supply grew by 9.7 percent. Over roughly the same period, Tokyo's housing supply grew by 24 percent. In recent years, annual housing starts in Tokyo have roughly equaled the number of housing starts in New York, Los Angeles, Boston, and Houston combined (Davis, 2019).

FIGURE 1

Growth Rates in the Housing Supplies of New York and Tokyo



SOURCE: Data from the Statistics Bureau of Japan, undated; and New York University (NYU) Furman Center, undated.

time to progressively lower-income earners. A new unit constructed today that is affordable to a household making 100 percent of the AMI would, in ten years, command a rent affordable to households earning 80 percent of AMI, the top of the range of what HUD calls *low income*. In 20 years, we project the same unit would be affordable to a household making around 60 percent of AMI, the top of the income range for what HUD deems very low income.

Research has similarly found that new, market-rate housing produces more direct socioeconomic mobility effects through *migration chains*, in which households occupying new, higher-cost housing units vacate prior housing that is occupied by households who previously resided in lower-income areas (Bratu, Harjunen, and Saarimaa, 2023; Mast, 2023). One study found that in large U.S. metropolitan areas, the construction of a new, market-rate building that houses 100 people creates a migration chain that, on average, ultimately results in 45 to 70 people moving out of below–median-income neighborhoods into the units vacated by households moving into these new units (Mast, 2023).

Consequences of Rent Stabilization Policies in the Absence of Adequate Housing Supply

Rent regulation has been a major part of New York City's overall housing policy since at least the late 1960s, and it has been a recurring source of debate and controversy (Chen, 2003; Goodwin, 1979) At the state level, the 2022–2023 legislative session began with hopes of passing an ambitious package of pro-housing production legislation. By the session's end, new rules to further regulate rent-stabilized housing appeared likely to be the only notable accomplishment concerning housing (Whitford, 2023).

New York City's rent-stabilization laws—particularly following the passage of 2019's Housing Stability and Tenant Protection Act (HSTPA)—represent far and away the strongest rental restrictions in the United States. Although rent stabilization protects many economically vulnerable tenants from unaffordable rent increases and related displacement, it also explicitly prioritizes existing tenants over future tenants.

Figure 2 presents estimates of annual rates of moves among low-income renters in the six largest metropolitan areas in the United States (in terms of the number of such renter observations in U.S. Census Bureau data). Two of these metropolitan areas have rent stabilization laws (New York City and Los Angeles, California) and the other four do not (Boston, Massachusetts; Chicago, Illinois; Philadelphia, Pennsylvania; and Phoenix, Arizona). Across the 17 years of data in this figure, we observe that between roughly 15 and 50 percent of tenants move in a given year. However, the mobility rate in New York City historically has been the lowest of all of these metropolitan areas: It has annual mobility rates that are less than half the average rate of the other cities in the analysis. Los Angeles, which has relatively strong rent-control laws as well, is the only city with a mobility rate near the rate of New York City, and the rate in Los Angeles is still generally around 50 to 100 percent higher than the New York City rate.[3]

This descriptive evidence suggests that rent control is effective in keeping existing tenants in their housing. However, this low mobility rate also effectively reduces the supply of available housing units, leading directly to lower vacancy rates (the criterion that motivates the city's rent-control program) and fewer units, driving up the rent of vacant units and resulting in a large rental price gap between incumbent renters in rent-stabilized units and all other renters in the city, including both new resi-

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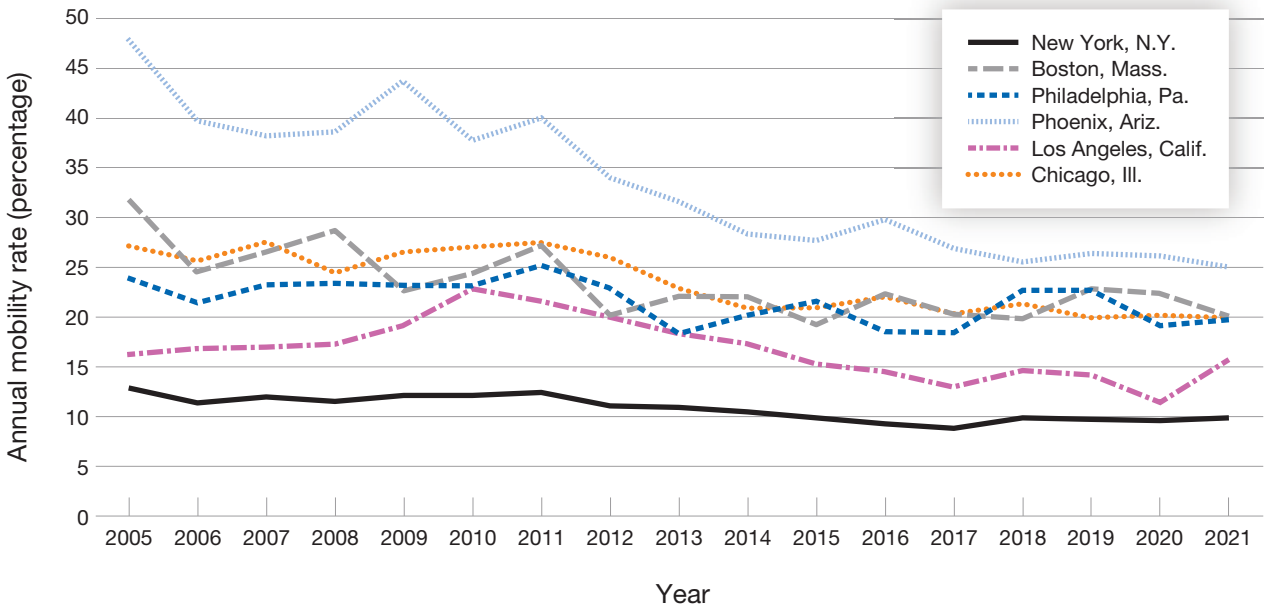
FIGURE 2

Residential Mobility Rates of Low-Income Renters by City, 2005 to 2021



SOURCE: Authors' calculations from one-year American Community Survey microdata from IPUMS (Ruggles et al., 2023). *Mobility* rate is measured as incidence of households earning less than 80 percent of AMI reporting living in a different PUMA in the prior year (averaged at the city-by-year level using household survey weights).

dents and younger New Yorkers seeking to start new households.[4]

The HSTPA also appears to be playing a role in negatively affecting the quality of the rent-stabilized housing stock. Data show that enactment of the new law, which significantly limited the ability of landlords to pass on maintenance and improvement costs to tenants, has coincided with a large increase in the incidence of measures indicating physical and financial distress in this housing stock in a citywide database maintained by a local community housing organization (University Neighborhood Housing Program [UNHP], 2022).[5]

Multiple studies further establish a causal link between rent-control laws and reductions in the supply of affordable rental housing. A 2019 study of a significant 1994 expansion of rent stabilization in San Francisco concluded that the expansion led to a roughly 20-percent increase in the share of tenants in rent-stabilized buildings living at the same address five to ten years after the policy change. But the study concluded that the effects of negative financial incentives on landlords overwhelmed this reduction in tenant-specific displacement, leading to the supply of rental housing initially covered by the expansion declining by 15 percent and the overall number of renters living in rent-stabilized units declining by 25 percent over the 20 years after the policy change (Diamond, McQuade, and Qian, 2019). New research that studied very recently adopted rent-control policies in Berlin, Germany, and Barcelona, Spain, finds that these policies quickly led to measurable declines in the supply of rental housing (Monràs and García-Montalvo, 2022) and rapid upward price pressure on the unregulated portion of the rental market (Dolls et al., 2021; Hahn et al., 2023).[6]

Both evidence from the research literature and developments in New York City highlight the limitations of restrictive rent policies in the absence of an adequate supply of housing. Stringent rent regulation might help prevent the worst cases of tenant abuse, but these protections have important costs that negatively affect broader affordability goals. The evidence suggests that both the need for rent regulation and the most problematic consequences of such policies can be attenuated with a sufficiently robust housing supply.

The Role of Housing Supply Increases in the Broader Landscape of Housing Affordability in New York

Readers might ask why we concentrated so specifically on housing production in this report. What of other critical efforts to achieve housing affordability, including the production of publicly subsidized, income-restricted affordable multifamily housing, the expansion of rental assistance through housing vouchers, or the preservation or even expansion of the New York City Housing Authority (NYCHA) public housing stock, among other efforts? We readily concede that these programs and efforts are important pieces of any overall strategy to improve long-term housing affordability in New York City. In fact, one key motivation of our limited focus on housing production is that such production can directly and indirectly enhance the effectiveness of these other important programs.

In the absence of an adequate, persistent supply of new housing, higher-income renters increasingly compete for lower-cost housing, a pattern that has become increasingly evident in New York in recent decades (Guerrieri, Hartley, and Hurst, 2013; Small, 2017). Reducing upward price pressure on the lower-cost end of housing stock can reduce the need for substantial spending on preservation activities, potentially allowing for the reallocation of such funding to other uses, such as greater production of publicly funded, deeply affordable housing, or addressing the profound financial problems facing the NYCHA housing stock (Campion, 2023; Goodwin, 2022). Alternatively, in a more competitive rental market, the city could reprogram funding from housing production toward providing more housing vouchers, which would be easier to use in a housing market that features greater competition for tenants (Gartland, 2022; Zaveri, 2023).

Importantly, reforms that broadly lower the costs of housing production would lower the costs of producing publicly funded deeply affordable housing, which directly increases the efficacy of these substantial public expenditures. Equitable increases in housing production are also a fundamental goal of the recently released *Where We Live NYC Plan* (Where We Live NYC, undated). Many of the policies we propose in this report heavily overlap with policy recommendations from this community-based plan.

In summary, we focus on increasing the housing supply as a *necessary*, although not *sufficient*, condition to achieve long-term housing affordability. But we also suggest that a significant increase in the housing supply—combined with other existing programs and policies aimed at fostering affordability in New York—may, together, be sufficient to do so.

Six Promising Reforms to Increase Housing Production in New York City

Motivation: Unlocking Housing Production in New York City

We motivate these reforms by first spotlighting the core strength of the city's development landscape: the prevalence of *as-of-right construction*, which allows property owners to build or renovate structures without needing any special permissions or variances as long as the construction project adheres to the zoning and building codes already in place. This means that if a project meets the established rules for such factors as height, floor area, land use, density, and setback requirements, it can proceed as-of-right with minimal bureaucratic hurdles. Since 2010, 90 percent of private residential construction in the city has

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been conducted as-of-right (New York City Department of City Planning, 2019).

Given the ease and prevalence of as-of-right construction, why has housing production failed to keep pace with demand? We identified two core issues—both products of decades of accumulated policy decisions—which have locked up housing production in spite of the city's as-of-right framework.

First, zoning policies, which define what type and size of housing can be constructed as-of-right, represent a critical constraint on housing production. Increasing housing density is effectively illegal in many parts of the city, particularly where housing demand is high. Since the implementation of housing growth controls in 1961 (involving significant downzoning and statutory reductions in allowable land use, building density, or both), many parcels in the city are already built out to their full allowable capacity or even overbuilt, restricting further as-of-right development in those places (Barr, 2022). Capacity can be increased through upzoning (statutory increases in allowable land uses, building density, or both), but in recent decades in New York City, downzoned parcels have outnumbered upzoned parcels, resulting in a net decrease in overall zoned capacity (Pietrzak, 2019).

Additionally, area rezonings are complex, multiyear processes often fraught with political conflict (Mays, 2018; Williams, 2008).[7] Rezonings must first undergo the City Environmental Quality Review (CEQR) process, which measures the impact that the proposed project will have on 19 environmental criteria, including socioeconomic conditions, shadows, air quality, transportation, and sewer infrastructure. New York State is among only seven U.S. states that continue to require environmental review for land use actions. The average CEQR process among successful proposals spans 23 months (Campion, 2022b). The second step in non-as-of-right development, the Uniform Land Use Review Procedure (ULURP), is designed to take 6 to 8 months to complete but requires the proposal to successfully navigate numerous veto points through the multi-stage approval process. The first two steps, community board review (60 days) and borough president review (30 days), are both advisory in nature, providing recommendations to be used during subsequent reviews. The following two steps, City Planning Commission review (60 days) and city council review (50 days), are both binding votes that make or break the approval. The mayor finally reserves the right to veto council decisions (within five days of such decisions' arrival on the mayor's desk), though veto decisions can be overridden by a two-thirds vote from the city council.

Council review is typically the most consequential bottleneck for the ULURP process. New York City is one of the few cities that requires approval from a city council comprising district representatives (as opposed to councils with citywide representatives). The council almost always defers to the discretion of the councilmember who represents the area affected by the proposed rezoning—a practice informally known as member deference.[8] These multiple veto points have slowed many rezoning efforts in New York City and have likely deterred many more proposals from being formally submitted in the first place.

Even if zoning were not an issue, the second core issue is that the costs of producing, operating, and paying taxes on multifamily housing remain prohibitively high for most prospective developments. Construction costs in New York City are fourth highest internationally and second highest in the United States (Landes, 2022). The property tax system is deeply inequitable toward multifamily housing production relative to single-family and condominium or co-op production (see Appendix C for a detailed breakdown). Consequently, rents in many parts of

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the city are not high enough to meet the expected return needed for housing development to occur (Campion, 2022a; Madar and Willis, 2015). Because of this, nearly all multifamily rental developments in New York City rely on significant property tax incentives to achieve financial viability; only 10 percent of units in the city were built without a property tax break (Raetz and Murphy, 2022). The largest and most ubiquitous of these incentives was the 421-a tax abatement program, which, for several decades, provided new multifamily developments with decades of property tax relief conditional on setting aside a portion of the building's units for rent-restricted affordable housing. This property tax relief has been crucial for bringing development to minimal levels of financial viability, although many areas in the city still require additional subsidy for multifamily development to be financially viable (Campion, 2022a).

An additional barrier to housing production is the city's Mandatory Inclusionary Housing (MIH) program. MIH requires new multifamily developments in newly upzoned areas of the city to set aside a certain percentage of units (typically 20 to 30 percent) for affordable housing, even in areas where market rents were insufficient to justify new construction. Given the lower return of building in newly upzoned areas, virtually all MIH projects require public funding to proceed, increasing costs to the city and deterring potential development (Kober, 2020. In practice, too few areas have been upzoned for MIH to have made a material difference since its inception. However, MIH will undoubtedly play an important role should the city more aggressively pursue zoning reform—including some of the policies we propose—in the future.

Based on these two core frictions, we assert that (1) increasing the ease of rezoning and (2) increasing the financial viability of development by lowering costs of construction and operation could potentially unlock a substantial wave of housing production. The key purpose of this report is to present a slate of policy reforms that directly address these barriers to unlock and accelerate new development in the city.

Methodology: Selecting the Reforms

We began our process of identifying promising housing strategies by conducting a series of semi-structured interviews with more than a dozen local experts on New York City housing policy. This group included academics focused on housing policy, individuals with past leadership experience in city or state housing-related departments, researchers and policy experts at think tanks and regional policy organizations, nonprofit housing developers, individuals working in real estate financing, and land use and property tax lawyers. In many cases, individuals overlapped in these categories (for example, people who formally worked in city or state government but who worked in academia or policy analysis at the time of our interview). We informally coded the frequency and nature of comments by these experts on various policies and used this ranking of policies as our primary guide. Appendix B provides further detail on how interviews were conducted, as well as how policies were tallied to inform our policy scan.

We then conducted a search for relevant empirical evidence on these policies in the existing academic research literature and policy reports from government-affiliated entities or nongovernmental organizations. In certain cases in which the topic was indicated as important but the evidence from other sources was sparse, we also relied on evidence from gray literature, such as non–peer-reviewed academic articles, white papers, and reports from various stakeholder or advocacy groups. In these latter cases, we reviewed the assumptions, methodology, and other aspects of these sources for credibility and transparency as feasible before deciding to make use of these documents.

This process led us to focus on six policies that stood out as meritorious with respect to boosting housing production, either based on our interviews or compelling empirical evidence. In the sections that follow, we summarize these policies and present estimates of the additional housing production that each would induce. Whenever possible, we made assumptions that would lead to a conservative estimate of housing production (for example, choosing the lower estimate from a range of estimated causal effects).

Experts repeatedly asserted that the top of the priority list would be reinstating a tax relief program similar to 421-a or the governor's proposed substitute program, 485-w, and that other reforms would be substantially handicapped without some form of this policy. All of the New York City–based studies that we reference in this report were also conducted with the presence of a multifamily production tax relief program, and we cannot know how estimates of the efficacy of other programs would change in a world without such a policy. Given these considerations, our first proposed reform is to reintroduce a tax relief program for multifamily housing production, returning to a baseline pre-expiration housing landscape. We do not present a housing production estimate for this policy recommendation (for reasons discussed in the follow section), and we assume that some effective version of such a policy exists when presenting estimates for each of the remaining five reforms.

We note that we did *not* explicitly attempt to anticipate the political environment when selecting these six policies that we believe are most promising.[9] Instead, we identified those policies that seemed conceptually feasible and would produce the most additional housing units for New York City without requiring direct public funding. Additionally, we eschewed policies requiring explicit sources of public funding (outside recommendations for tax relief programs for new construction and for adaptive reuse modeled off past successful programs) given the city's existing fiscal constraints and the vulnerability of policies that require significant funding to periods of fiscal and political turbulence.

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The Six Reforms

1. Establish a tax relief program for new multifamily development that is tied to geography-specific affordability requirements (production estimates for the policies that we outline were made with the assumption of such a program being in effect).
   - Nonluxury multifamily development is largely infeasible without substantial tax relief; without a replacement for the expired 421-a program, the subsequent policies enumerated in this report would have a much smaller (and possibly negligible) impact.
   - The 485-w program proposed by Governor Hochul addressed aspects of the affordability requirements in 421-a that drove criticism of the program, but 485-w's more stringent requirements would leave multifamily development mostly financially nonviable outside prime development areas of the city. Providing greater flexibility in these areas that cannot support high market rents could return housing production to recent levels while still meeting affordability goals in high-resource parts of the city.
2. Increase floor-area ratio (FAR) limits within walking distance of subway and rail stops (estimated additional housing production: 122,000 units).
   - This policy would mandate a loosening of zoning density restrictions in areas within 1 kilometer of Metropolitan Transit Authority (MTA) rail stations—locations where the demand for housing is typically greatest. This policy has the added benefit of incentivizing greater use of a transit system in urgent need of ridership following the coronavirus disease 2019 (COVID-19) pandemic.
3. Incentivize office-to-residential conversions in Manhattan through temporary tax relief (estimated additional housing production: 53,000 units, including more than 10,000 units

that would be affordable to low-income households).
   - The city has a successful history of using tax abatements and tax exemptions through the 421-g tax incentive program to spur office-to-housing conversions in lower Manhattan (Campion, 2022c). This program should be restarted and expanded and should include meaningful affordability requirements to support the conversion of a modest share of New York City's more than 600 million square feet of office space. Doing so could boost housing production and stave off consequential declines in the city's fiscal health.

4. Eliminate inefficiencies in environmental review, land use approval, and permitting by implementing recommendations from the city's Buildings and Land Use Approval Streamlining Taskforce (BLAST) (estimated additional housing production: 50,000 units).
   - This taskforce report identifies 111 features of the city's current development landscape, including the City Environmental Quality Review (CEQR) process, the land use approval process, and the Department of Buildings' permitting process. While these processes may have all been created with good intentions, they have resulted in a complex, time-consuming, and duplicative system that is a national outlier in terms of time to final approval. Many of these features increase the cost and uncertainty of housing development with little clear benefit (BLAST, 2022).

5. Reform the Scaffold Law to fall in line with nationwide standards, replacing absolute liability for workplace injuries on property owners with the comparative negligence standard used across the rest of the United States (estimated additional housing production: 38,000 units).
   - The Scaffold Law doubles insurance costs for construction contractors in New York State, further reducing the already precarious financial viability of multifamily housing production. Unlike in most states, the law holds employers liable even when workers knowingly violate safety rules. The financial awards from lawsuits under the Scaffold Law far exceed those of workers' compensation, often stretching into the millions for individual cases, which significantly increases the financial burden for building owners and developers who attempt to produce housing, and these costs drive insurance providers out of the New York market, further increasing insurance costs. Multiple studies suggest that the law may have even *increased* worker accidents because of moral hazard, further strengthening the case for the law's repeal.

6. Establish automatic triggers for area upzoning using a data-driven approach that targets areas with the greatest undersupply of housing (estimated additional housing production: 30,000 units).
   - Automatic rezonings can direct new housing supply where it is most needed on the basis of clear and observable affordability metrics. The algorithmic nature of this proposed policy would apply zoning changes using objective affordability standards. In areas with the greatest undersupply of housing, we propose a modest level of automatic upzoning to the highest allowable FAR for each zoning type currently allowed under either existing inclusionary housing programs or through the community facilities allowances.

For each of these reforms, we provide a brief description of the specific issue that the reform aims to address and an estimate of how much housing would be produced over the course of a decade were the reform to be enacted (with the exception of re-establishing 421-a, which is needed at baseline to unlock housing production in New York City). As discussed previously, these estimates were primarily informed by existing quantitative studies that we identified over the course of our investigation. Each estimate reflects the housing production associated with each reform alone, although there may

be important synergies in implementing multiple reforms at once that would unlock additional housing production potential.

Policy 1: Establish a Tax Relief Program for New Multifamily Development

The issue: The need for financial relief in light of sky-high construction costs (General Contractors Association of New York, 2018) and an inequitable property tax system (see Appendix C for specific details) ultimately led 70 percent of all multifamily development constructed between 2010 and 2020 to rely on the 421-a tax exemption. The program has been amended several times over its decades-long existence; in the most recent iteration prior to its expiration, new developments receive property tax relief for three years during construction and for 35 years after construction (100 percent tax exemption for the first 20 years, with a phase-out schedule for the remaining years), conditional on setting aside 25 to 30 percent of units for rent-restricted housing (affordable housing) reserved for low- to moderate-income residents.

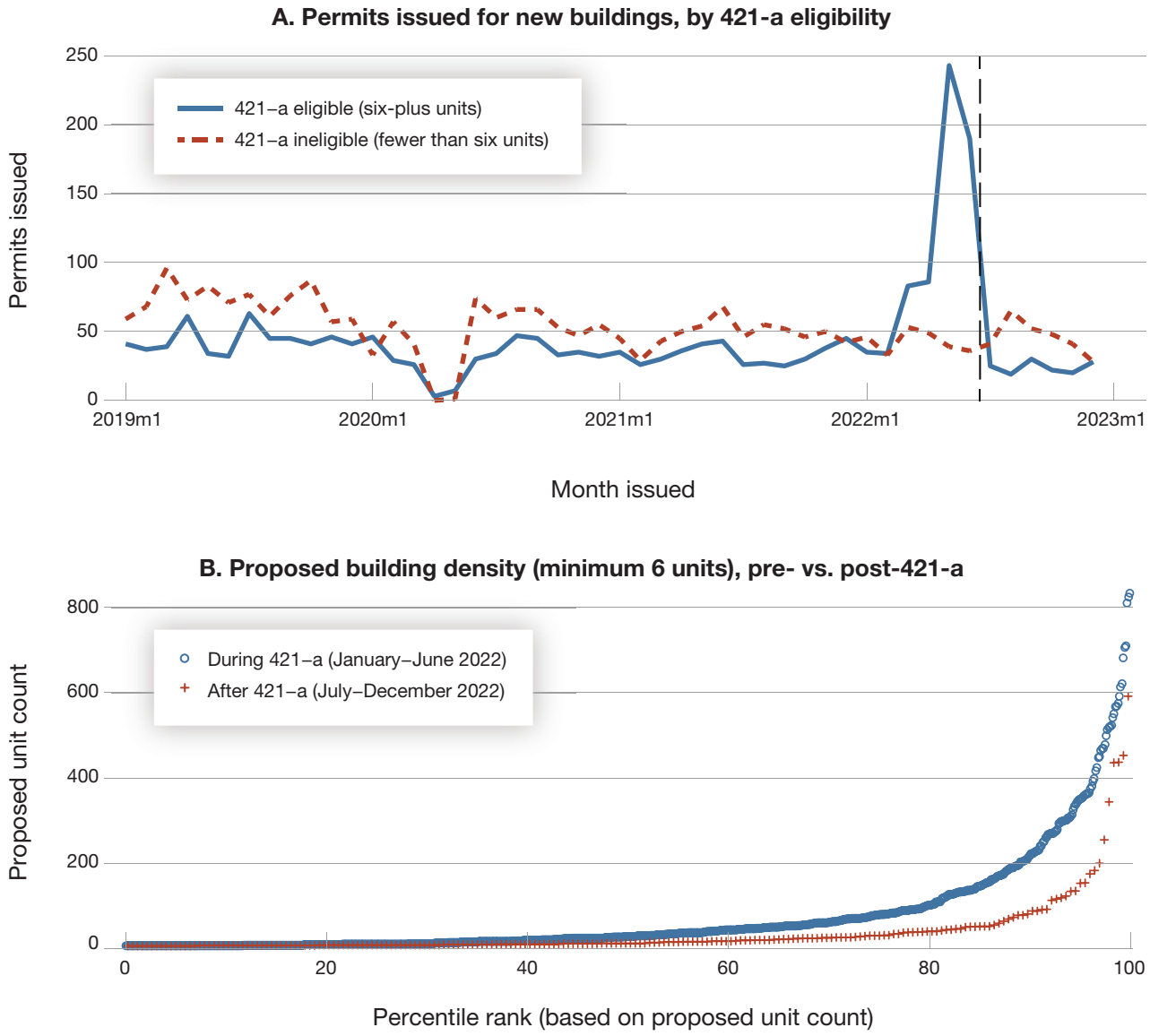
The program has long been a source of contention: Critics argue that the steep cost of the program was not justified by the limited amount of affordable housing that was produced. The city forewent approximately $1.77 billion in tax revenue annually, equivalent to nearly a third of the total $5 billion tax levy collected on large multifamily rentals in 2022 (Haag, 2022; New York City Department of Finance, 2021). In 421-a's most recent form, developers had the option to choose an affordability option requiring a set-aside of 30 percent of units for households earning less than 130 percent of AMI. For a family of three seeking a one-bedroom apartment, this would translate to an income limit of $165,230 and an allowable monthly rent of $3,443 based on the city's guidelines for 130 percent AMI households (New York City Department of Housing Preservation and Development, undated). Ninety-four percent of developments using 421-a have chosen to use this questionably affordable option since its introduction in 2017, a key factor leading to calls for the program's end (Lander, 2022). Many of these subsidized higher-end units have even gone unclaimed during the Department of Housing Preservation and Development's affordable housing lottery because of their high rents, leading the city to mandate in 2020 that these vacant units be filled with shelter residents, with the city reimbursing landlords for the rental costs (Carmiel, 2020).

The 421-a provision expired in June 2022 without a replacement, leading a surge of developers to rush in their applications before the expiration date. Panel A of Figure 3, which depicts permits for new construction of residential buildings over time, illustrates how important this program was for developers. The pre-June 2022 spike was then followed by a six-month lull in permits. From July 2022 to December 2023, 1,086 units were permitted monthly—a 30- to 50-percent decrease relative to permit counts during the same six-month period in each of the preceding three years (2,050 in 2019, 1,557 in 2020, and 1,786 in 2021).[10] Panel B shows that proposed building densities also fell sharply after 421-a's expiration. During the last months of 421-a—from January 2022 to June 2022—newly permitted buildings averaged 80 proposed units (with a median of 28 units). In the months immediately following 421-a's expiration from July 2022 to December 2022, newly permitted buildings averaged just 38 units (with a median of 12 units), suggesting that proposed building densities more than halved after 421-a's expiration. Although the data suggest that 421-a's expiration will have substantial effects on the housing pipeline, we caveat that several confounding factors make it difficult to causally isolate the underlying impact of losing 421-a, including (1) developers pulling their projects forward in time to meet the expiration deadline, (2) anticipation that 421-a will return in some form and provide retroactive coverage, and (3) recent economic turbulence with respect to interest rates, inflation, and supply chain issues.

There are other factors that make it difficult to generate a plausible estimate of the causal effect of the expiration of the 421-a program or of the reintroduction of a similar program on housing production. These include the lack of any long period without the 421-a program in recent decades and the citywide nature of the program, as well as the fact that the particulars of 421-a changed in a substantive way

FIGURE 3

New Multifamily Permit Counts and Density, Before and After 421-a's Expiration



SOURCE: Authors' calculations from the New York City Department of City Planning, undated-b.

multiple times over recent decades, and the fact that the recently proposed replacement program, 485-w, involves further changes.

While 485-w ultimately did not pass the state legislative process. Still, it provides an important baseline for assessing what a potential replacement would look like and the priorities for amending 421-a. The 485-w program ultimately diverged from 421-a in several important ways. First, it reduced the number of menu options in terms of rental affordability set-asides from six to two—including outright elimination of the maligned Option C, which allowed 30 percent of units be set aside at 130 percent of AMI. In practice, all developments are locked to a single option because the two options are stratified by size: one for buildings with 30-plus units (Option A) and one for buildings with six to 29 units (Option B). Second, both options reflect deeper affordability requirements than 421-a. Option A specifies the provision of affordable units that effectively requires 25 percent of units reserved for 56 percent of AMI households on average, and Option B requires that

20 percent of units be set aside for 90 percent of AMI households. Third, whereas 421-a allowed affordable units to convert to market rate after 35 years, 485-w requires permanent affordability for Option A. Option B retains 421-a's original affordability duration of 35 years before converting to market rate.

An in-depth analysis by Campion (2022a) explored how the viability of multifamily development differs across three scenarios: 421-a, the proposed 485-w, and having no tax abatement program. Without 421-a or a similar program and the associated combination of tax relief and affordability requirements, the monthly rent needed to generate a 5-percent yield on cost (the target yield for most developments) would increase from $3,500 to $6,125 for the typical development in Brooklyn, and from $5,600 to $9,800 for the typical development in Manhattan. These increases would make development infeasible even in the most sought-after areas of the city. Under Option A, development would only be feasible in New York City's prime development area (PDA), which encompasses Manhattan south of 96th Street and portions of Community Boards 1 and 2 in Brooklyn and Queens. Under Option B, many projects in middle-income neighborhoods would be feasible.

The policy: Re-establish a tax relief program for new multifamily construction, using 421-a's recently proposed successor (485-w) as a baseline. **Following the recommendation from Campion (2022a)**, 485-w would be amended to allow buildings with 30-plus units outside Manhattan and the Brooklyn and Queens waterfronts to access the more lenient Option B, which would otherwise be restricted to buildings with between six and 29 units. Ideally, the replacement program would have further stratification for low-rent neighborhoods where development would still be difficult, given market conditions, even with Option B available.

The impact: Campion (2022a) argues that offering Option B to all non-PDAs—although far more promising than Option A—would still generate lower yields than 421-a did. Were 485-w to add the more flexible affordability options for development in lower-rent locations proposed in Campion (2022a) and discussed previously, development could reach a similar level of viability as the status quo before 421-a's expiration. At the same time, the core changes in the proposed 485-w program as opposed to the expired 421-a program would greatly improve the targeting of the city's efforts to expand the stock of affordable housing. As a simplification, we assume that such a program would result in no *additional* housing units but would create the conditions necessary for the estimated additional housing production in our subsequent reform proposals to occur.

Policy 2: Increase Floor-Area Ratio Limits Within Walking Distance of Subway and Rail Stops

The issue: In districts where residential development is allowed, zoning guidelines primarily restrict building sizes through caps on FARs—the ratio of a building's total floor area to the size of the piece of land on which it is built—thereby limiting the maximum square footage that can be built on a building lot. For example, a FAR cap of four allows a four-story building covering the entire lot or an eight-story building covering half the lot. Sixty-three percent of residential buildings in New York City exceed (because of grandfathering) or are within 25 percent of their permissible FAR (Barr, 2022).[11] Many residential districts impose further *contextual* zoning regulations, which either impose height limits or architectural requirements that would not allow a building to reach the maximum FAR cap for a given base zoning. Thirty percent of parcels within the city are subject to these contextual zoning restrictions (New York City Department of City Planning, undated-a).

Outside Manhattan, 2 million housing units are located within 1 kilometer of a subway stop, and 63 percent have a maximum allowable FAR of 1.35 or less (Barr, 2023b). Two-thirds of properties near public transit—places where demand for housing is often highest—are therefore constrained to be one- to three-family homes. For reference, a ten-story apartment building typically requires a FAR of at least six. Fifty-six percent of these transit-adjacent properties either exceed or are within 25 percent of their allowable FAR limit.

The proposal: Following a proposal first made by Barr (2023b), this reform would mandate a one-

time increase to FAR limits within 1 kilometer of subway or rail stops. Specifically, this proposal for transit-oriented development (TOD) would increase the FAR cap to four in locations within 1 kilometer of a subway or rail stop. Areas where the FAR already exceeds four would remain unchanged. This proposal could potentially be paired with subsidies to encourage development in these upzoned transit areas or other regulatory relief.

Our estimate of the impact: 122,000 housing units over ten years. A geospatial analysis by Barr (2023a) quantified how much housing and land exists within 1 kilometer of all subway stops outside Manhattan (where FAR caps are usually already above four). Seventy-five percent of lots in these 1-kilometer zones (450,000 lots in total, accounting for 2.03 million housing units) have an FAR of two or less; 97 percent have an FAR of less than four. In practice, most upzoned lots may not be developed to the new FAR limit. To quantify the effects of this hypothetical upzoning, we rely on the results of two recent analyses estimating the effects of neighborhood upzonings under Mayor Michael Bloomberg's administration (Liao, 2022; Peng, 2023).[12] Both studies found that these upzonings caused a modest increase in new development—an approximately 6-percent increase in the number of residential units over ten years. Applying this estimated causal effect to the baseline 2.03 million housing units on parcels that would be rezoned, we derive an estimated output of approximately 122,000 housing units over ten years.

Policy 3: Incentivize Mixed Affordability Office-to-Residential Conversions

The issue: In the wake of the COVID-19 pandemic, many businesses have taken extensive strides to reduce their physical footprints. In May 2023, the office vacancy rate in Manhattan was estimated to be 17.4 percent, a record high for at least the past 40 years (Wallach et al., 2023). Recent analyses of the future of the market for office real estate in New York City estimate that the valuation of the sector will decline by between 40 and 60 percent over the next five to seven years (Callanan, 2023; Gupta, Mittal, and Van Nieuwerburgh, 2022). These changes suggest that there may be a critical opportunity for converting office space to residential use to increase the stock of housing in desirable areas of New York City while also potentially averting a major downturn in the economic health of the city that could arise from a collapse in office demand.

New York City has an existing system of zoning and regulatory flexibility that already applies to residential conversions for a large stock of older office buildings. This system provides exceptions to typical restrictions, including exceptions for the FAR cap of 12 for any residential projects and exceptions to normal yard and set-back requirements for residential uses. A 2022 task force convened by the city to develop a plan to increase the adaptive reuse of office buildings recommended that this same regulatory forbearance be expanded to apply to buildings constructed prior to 1991 in any high-intensity commercial districts (Office Adaptive Reuse Task Force, 2023).

Table 2 shows the distribution of office space, both in terms of the number of buildings and total square footage that would qualify for these more-flexible regulatory pathways under the expanded eligibility criteria recommended by the task force. In Manhattan alone, there are more than 2,600 buildings—totaling more than 400 million square feet—that fall into this category. Figure 4 shows the distribution of these properties by borough in terms of both number of buildings and square footage. We divide this stock into buildings built before and after 1945 for reasons we discuss in the following section.

The proposal: Introduce a new property tax relief program for mixed affordability office-to-housing conversions and expand the stock of buildings eligible to use the program.[13] New York City already has a successful blueprint for financially incentivizing office conversions. From 1995 to 2006, the city provided tax benefits through the 421-g program to support office-to-residential conversions in lower Manhattan. The program comprised a combination of tax exemptions and abatements for eligible projects that phased out over a 14-year period.[14]

The motivation behind 421-g is that providing relatively long-term but temporary tax relief for housing production will decrease the costs for a new project, thus raising net operating income (revenue minus

TABLE 2

New York City Office Stock Eligible for Maximum Flexibility for Residential Reuse

	Square Footage		Number of Buildings	
Borough	Pre-1946	1946–1990	Pre-1946	1946–1990
Manhattan	217,044,048	186,853,648	2,206	400
Brooklyn	14,739,562	8,173,789	402	70
Bronx	2,104,781	791,196	68	9
Queens	10,148,667	7,781,120	281	144
Staten Island	473,715	599,734	35	10
Total	244,510,772	204,199,133	2,992	633

SOURCE: Authors' calculations using New York City Primary Land Use Tax Lot Output data (New York City Department of City Planning, undated-a). We defined buildings as eligible for the provisions of Article 1, Chapter 5, of the New York City Zoning Resolution and the New York State Multiple Dwelling Law according to the criteria found in Appendix 3 of Garodnick et al. (2023). We operationalize the proposed expansion of this eligibility by including all office buildings in areas previously eligible that were built before 1990 and all other office buildings citywide in land parcels with zoning designations C4, C5, or C6.

costs) and making more projects financially feasible. The 421-g program was motivated by a downturn in the office sector, echoing the current climate of falling valuations and high vacancy rates in Manhattan. Over roughly 12 years, 421-g was used to convert 98 office buildings to residential use, leading to the creation of 12,865 new residential units—more than 40 percent of the total housing production in lower Manhattan from 1990 to 2020 (Campion, 2022c). Around 90 percent of the buildings converted under 421-g were built before 1946, likely because of physical characteristics of these buildings that make them amenable to residential conversion, including shallow, rectangular floor plates and plentiful, operable windows, both characteristics that reduce costs and complexity for residential use relative to buildings with larger floor plates and plate glass exteriors that are common in newer buildings (Campion, 2022c).

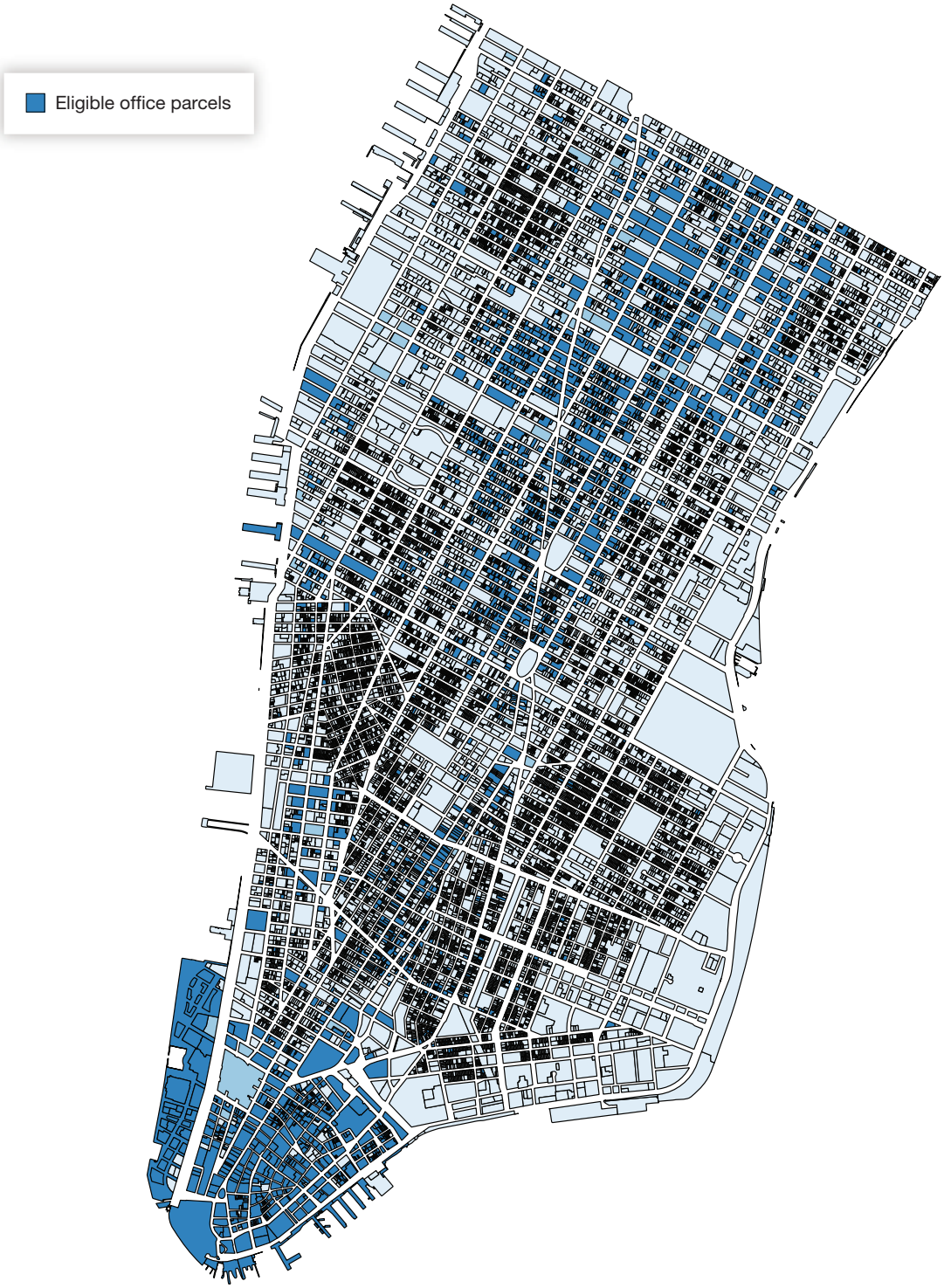
We propose that policymakers create a new version of the successful 421-g program to provide temporary tax abatements and exemptions for all buildings that are eligible for maximum flexibility for residential conversion under existing city and state law, as well as additional office buildings in high-intensity commercial districts that were built prior to 1991, as called for in the city's 2022 Office Adaptive Reuse Task Force report (Office Adaptive Reuse Task Force, 2023). The proposed program would use the same 14-year schedule of tax exemption and abatement from the original program. In exchange for this generous tax relief, eligible projects should be required to set aside 20 percent of the resulting units for families earning no more than 60 percent of the AMI for the period of the abatement, then these units would become subject to the city's rent-stabilization program.

It is worth asking why, if office valuations are falling and there are existing examples of large-scale adaptive reuse (Brand, 2023) happening without additional incentives, a program should subsidize such conversions. First, there is a significant risk to the city in leaving this process to chance. Large declines in office valuations might not be enough to spur all but the most high-end luxury developments. A glut of moribund office buildings could well become a cost to the city in terms of declines in associated service businesses that depend on foot traffic, transit ridership, and other factors. The 421-g program was a relatively low-cost program. The combined costs of 421-g abatements and exemptions averaged around $132,000 per unit, less than 35 percent of the average cost of tax reductions provided under the much larger 421-a program.[15] In an environment of potentially large declines in tax revenue from a crash in office sector valuations, this appears to be a sound investment.[16] Second, office buildings are primarily located in relatively high-amenity areas of the city. Creating thousands of truly affordable units in such areas is consistent with the Where We Live NYC Plan (Where We Live NYC, undated) and most other general notions of furthering fair housing goals.

The impact: 53,000 housing units over ten years, including 10,600 units affordable to low-income

FIGURE 4

Geographic Distribution of Parcels with Office Properties Eligible for Maximum Flexibility in Manhattan



SOURCE: Author calculations using NYC Primary Land Use Tax Lot Output data. Dark blue areas indicate parcels with pre-1991 office buildings eligible for maximum zoning flexibility as described in report text.

households. Table 2 documents that there would be approximately 450 million square feet of office space in New York eligible for maximum regulatory flexibility for conversion to residential use under the rules proposed by the mayoral task force. Because we do not have an exact benchmark for the potential use of a tax relief program for adaptive reuse that includes a requirement to include cross-subsidized affordable units, we make a simple assumption that such a program would be only 75 percent as effective as the original 421-g program, which did not include such a requirement. Under 421-g, 24 percent of the eligible pre-1946 building stock and 6 percent of the eligible post-1946 building stock was converted over the program's roughly decade-long lifespan (Campion, 2022b). Therefore, we assume that under the proposed program, 18 percent of the available pre-1946 stock and 5 percent of the eligible post-1946 stock would be converted into residential over a decade. This would result in approximately 53,000 new housing units.[17]

Policy 4: Eliminate Inefficiencies in Environmental Review, Land Use Approval, and Permitting

The issue: The slow speed of the project approval process is a product of numerous inefficiencies that have accumulated over decades (BLAST, 2022; Campion, 2022b). Many of these inefficiencies can be addressed unilaterally by city agencies.

The proposal: We propose fully adopting changes detailed in a recent report released by BLAST, which highlights 111 ways to streamline CEQR, ULURP, and the building permitting process (BLAST, 2022). This report was largely limited to policy changes that the city could make unilaterally without the need for state policymakers. Of the improvements, 91 can be made internally by city agencies, 18 require external approval through city processes (which often include city council approval), and two require action by a state agency.

The impact: 50,000 housing units over ten years. BLAST estimates that adoption of its proposals would unlock at least 50,000 units of additional housing production over the next ten years. These estimates were based on city data on housing projects, estimates of project costs from the Citizens Budget Commission's estimates of project costs attributed to CEQR and ULURP (Campion, 2022b), financing costs, and recent estimates of per-unit mid-rise housing production costs. We present these estimates without conducting our own analysis of them, which is well beyond the scope of this study.

Policy 5: Reform the Scaffold Law to Fall in Line with Nationwide Standards

The issue: New York City's Scaffold Law is a unique piece of legislation that holds property owners and contractors strictly liable for gravity-related injuries sustained by construction workers, regardless of any contributing negligence by the worker (Harris, 2022). This law is designed to protect construction workers from height-related accidents, ensuring that property owners and contractors provide appropriate safety equipment and implement measures to minimize the risk of falls and other gravity-related injuries, but the law substantially increases construction costs with little apparent benefit to worker safety (Harris, 2022).

The law has made liability insurance prices for construction projects in New York higher than anywhere else in the country because of the potential for million-dollar liability judgments and the fact that liability under the law is untethered from actual fault (Harris, 2022). These factors have made most insurers reluctant to write policies for New York City construction projects, leading to fewer options for contractors and developers (UNHP, 2022). Estimates suggest that the Scaffold Law doubles the total cost of insurance and increases overall construction costs by 10 percent (General Contractors Association of New York, 2018; Harris, 2022). A working paper by Arluck et al. (2015) finds that the law *increased* fatal and nonfatal construction accidents because of moral hazard (i.e., fewer precautions taken by workers). Similarly, in Illinois, the 1995 repeal of a similar law led insurance costs to decline by 75 percent between 1995 and 1996 (Hattery, Geddes, and Kay, 2013). Nonfatal injuries also appeared to *decline* in Illinois relative to New York State after the law's repeal and fatal injuries remained unchanged (Hattery, Geddes, and Kay, 2013). The Scaffold Law therefore potentially leads to *higher* rates of worker injury, further

driving up insurance costs beyond differences in liability alone.

Insurance costs in New York City have now risen in 11 consecutive years (New York City Rent Guidelines Board, 2022). There are three forms of insurance coverage for building and maintaining residential property: property coverage (covering damage to buildings from, e.g., weather events, fire damage, vandalism), liability coverage (covering bodily injury or property damage from somebody's actions), and umbrella coverage (excess coverage should the former two forms of coverage be insufficient). A recent survey of insurance costs for roughly 6,000 units across the city finds that, while the cost of property and liability coverage moderately increased since 2018, the cost of umbrella coverage has more than tripled, pushing up total insurance costs by nearly 50 percent (UNHP, 2022). Jury awards from liability claims have grown exponentially in recent years, leading insurance carriers to significantly increase prices or exit the market entirely (Morris, 2021). The vast majority of developers do not use this excess umbrella coverage, yet it remains a common requirement for public financing (UNHP, 2022).

The proposal: Bring New York City's liability standards in line with the rest of the country. Instead of absolute liability, establish the national standard of *comparative negligence*, assigning liability to parties in proportion to how their actions contributed to accidents.[18]

The impact: 38,000 new housing units. Amending the Scaffold Law likely would bring insurance costs closer in line with national averages. At the time of this writing, insurance costs for construction in New York City comprise roughly 10 percent of total construction expenses, compared with 5 percent elsewhere (Harris, 2022). Our calculations therefore assume that reforming the Scaffold Law would bring these costs in line with the national average.

Manhattan-specific estimates of the relationship between construction costs and development from Barr (2010) suggest that a 1-percent increase in construction costs is associated with a 2.71 percent decrease in the number of completions in Manhattan. Using data from the New York City Department of City Planning's Housing Database, we document that over the past five years, approximately 25,000 housing units have been constructed annually in new buildings (New York City Department of City Planning, undated-b). Decreasing construction costs by 5 percent would result in an increase of 13.55 percent in new housing starts, or roughly **34,000 new housing units**.

Relatedly, Barr (2010) estimates that a 1-percent increase in construction costs is linked to a 4.6-percent decrease in average building height. The New York City Department of City Planning data show that approximately 19,000 new units were constructed annually across roughly 1,800 alterations, and the average alteration increased building heights by 3.62 floors. A 5-percent decrease in construction costs would lead to a 23-percent increase in height among alterations, or an additional 0.83 floors per alteration project. At approximately 2.9 units per new floor constructed, this would result in an additional **4,300 housing units in altered buildings**.

Higher development costs not only translate to depressed levels of housing production, but can also be passed through to renters. Eriksen and Orlando (2022) document that the elasticity of break-even rents with respect to construction costs is at 0.954 for a 12-story apartment building. This means that a 1-percent increase in construction costs leads to a 0.954-percent increase in rents required for the developer to maintain financial viability. Consequently, reducing construction costs from insurance by 5 percent in a competitive rental market would potentially result in a 4.77-percent decrease in rents in newly constructed buildings relative to the status quo.

Policy 6: Establish Automatic Triggers for Upzoning

The issue: Rezoning efforts might not typically occur in the municipalities where unmet demand for housing is greatest (Freemark, 2022). Additionally, many rezonings involve substantial downzoning of parcels, which sometimes results in a net reduction in an area's capacity for housing, especially in more-affluent and less dense areas (Laskow, 2014). Between 2009 and 2018, for every parcel that was upzoned, 1.7 were downzoned and FAR declined citywide; the largest decline was of approximately 0.5 FAR in Manhattan (Pietrzak, 2019). New York City needs

to achieve substantial net upzoning to overcome the many other barriers to housing production that exist.

The proposal: Implement a data-driven program of automatic upzoning using a measure of the undersupply of housing in an area, as measured by housing cost burden among both renter and owner households in these areas. **Our proposal is a variation of an idea proposed by Barr** (2021), where areas with the highest levels of undersupply would automatically have FAR increased on all residential parcels. This applies upzoning in a nondiscretionary fashion in areas where a set of clear metrics indicate that demand for additional housing is highest.

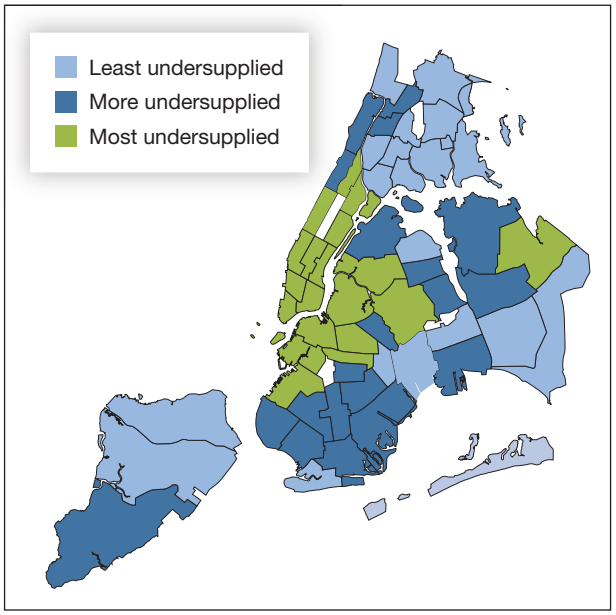
For initial implementation, we propose simply raising the FAR for all as-of-right residential housing production to the highest allowable FAR for each zoning type allowed under either existing inclusionary housing programs or through the community facilities allowance, which permits higher FAR for building projects associated with educational, religious, or nonprofit organizations. We propose these increases be used because they have some basis in existing policy and presumably incorporate area-specific considerations in their magnitudes.

As a corollary, we also recommend that new, substantially larger FAR increases be assigned to existing inclusionary housing programs, so that a positive incentive for affordable housing production relative to market rate production will be maintained (or even enhanced). We propose that the results of these changes be measured, using the same metric, after ten years and, if necessary, raised again by an amount at least as large as the first increase.

Our proposed measure is a simple index of housing undersupply in New York City's 56 SBAs that is a function of two metrics: the ratio of annual rent to median income and the ratio of home price to median income.[19] We generate a SBA-level estimate of each of these measures and then combine them to generate an overall ranking of areas according to their relative level of housing undersupply (see the online appendix for details on this formula and discussion on its motivation as well as a table ranking all of the city's SBAs by this index). In Figure 5, we present a map of the city showing the division of SBAs into terciles of our undersupply index: least undersupplied, more undersupplied, and most undersupplied. We propose

FIGURE 5

New York City Sub-Borough Areas Ranked by Level of Housing Undersupply



SOURCE: Author calculations using 2021 American Community Survey one-year microdata from IPUMS (Ruggles et al., 2023). We also use a crosswalk for public use microdata areas to New York City sub-borough areas (SBAs) graciously shared with us by the NYU Furman Center for Real Estate and Urban Policy.

that the top one-third of SBAs in terms of the magnitude of housing undersupply, according to this index, be subject to an automatic upzoning policy. The SBAs targeted for upzoning by this approach are in Manhattan, Brooklyn, and Queens.

Estimated additional housing output: 30,000 housing units over ten years. Using results from two recent quasi-experimental studies on the effects of recent upzonings in New York City (Liao, 2022; Peng, 2023), we estimate that upzoning the most undersupplied SBAs identified in Figure 5 at the levels specified in Table 3 would result in the production of an additional 30,000 housing units over a ten-year period. We note that our proposed approach of upzoning the highest third of SBAs in our ranking is an arbitrary choice, and this upzoning could theoretically be applied more broadly, even citywide without regard to the level of undersupply, presumably to greater effect.

TABLE 3

Proposed Changes in Floor-Area Ratio for the Most Undersupplied Sub-Borough Areas and Estimates of Change in Housing Units

	FAR Limits			Most Undersupplied SBAs Using Index Measure			
Zoning	Current	New	New FAR Limit Source	Current Built FAR (average)	Parcels Below Current FAR	Current Housing Units	Estimated Additional New Units (10 years)
R6	2.43	4.80	MIH/VIH	2.03	8,468	91,322	6,393
R6A	3.00	3.60	MIH/VIH	2.15	4,133	28,639	229
R6B	2.00	2.20	MIH/VIH	1.62	20,302	96,316	1,926
R7-1	3.44	4.80	Community facility	3.01	308	11,390	797
R7-2	3.44	6.50	Community facility	2.85	3,229	114,484	8,014
R7A	4.00	4.60	MIH/VIH	2.65	3,583	42,737	342
R7D	4.20	5.60	MIH/VIH	2.21	14	592	41
R7X	5.00	6.00	MIH/VIH	5.16	142	3,082	216
R8	6.02	7.20	MIH	3.96	1,613	67,567	4,730
R8A	6.02	7.20	MIH/VIH	3.83	677	17,496	1,225
R9	7.52	10.00	MIH	4.46	92	4,423	310
R9A	7.52	8.50	MIH/VIH	6.07	84	4,879	342
R10	10.00	12.00	MIH	7.08	669	48,626	3,404
R10A	10.00	12.00	MIH/VIH	6.97	549	38,105	2,667
R10H	10.00	12.00	MIH	13.81	3	1,470	103
				Total	43,866	571,128	30,738

SOURCE: Authors' calculations using Primary Land Use Tax Lot Output data and New York City zoning data and estimates from Peng (2023) and Liao (2022). Note that we omit zoning districts R7B and R8B because current zoning code does not allow for increased density under the MIH/VIH programs or for community facilities.
NOTE: VIH = voluntary inclusionary housing.

Discussion

In this report, we have argued that expanding the multifamily housing supply in New York City is a critical ingredient for increasing housing affordability there. We highlighted six policy reforms that we estimate would most effectively increase the stock of new multifamily housing.

There are many other reforms highlighted by the experts with whom we spoke that are worthy of mention, but that did not have enough direct evidence for us to generate plausible estimates of their effects on the housing supply and housing affordability. Addressing these issues would likely contribute positively to these goals. These include the following.

Mandate district-specific growth targets, backed by legal remedies in cases of noncompliance. In Appendix D, we analyze a proposal from Governor Hochul's Housing Compact, which requires 3 percent housing growth throughout the city, backed by a Builder's Remedy for noncompliant districts that unlocks a state-mandated fast-track approval process allowing private developers to receive approval for their development projects from a new State Housing Approval Board, even for projects that do not adhere to existing local zoning. We estimate that implementing this reform on its own (independent of our largely overlapping proposal for transit-oriented rezoning) could lead to approximately 70,000 additional housing units.[20]

Take a proactive role in both planning for and funding infrastructure, such as sewerage needed to support construction of new housing—costs currently borne largely by private developers, despite the public nature of these investments.

Legalize accessory dwelling units (e.g., basement units, carriage houses) to boost the housing stock and improve living conditions for many New Yorkers.

Reform the MIH program to make the program more financially feasible to use in newly upzoned locations that cannot support rents high enough to cross-subsidize affordable units.

Addressing the growing prevalence of the historical district designation, which restricts housing production and has seen increasing usage.

Amend the state Multiple Dwelling Law, which limits the density and other aspects of new housing production in New York City.

Expand and preserve public housing through NYCHA, which is an important source of affordable housing and a potential source for additional housing density given that many NYCHA developments are not built to their allowable limits (New York City Housing Authority, 2023).

We estimate that the six reforms proposed in this study, if fully adopted, would lead to the production of approximately 300,000 additional housing units over a decade. There is, of course, a great deal of uncertainty in any exercise of this type. For one thing, we assume that these reforms could be adopted as proposed without any consideration of local politics. Additionally, our estimates are generally quite simple, although we have used the highest-quality evidence available, such as studies employing modern, quasi-experimental studies focused on New York City. In cases where this kind of high-quality evidence is not available, we have tried to clearly and conservatively outline our approach, occasionally incorporating what we believe to be reasonable estimates from subject-matter experts and stakeholder groups or evidence from analogous policies adopted elsewhere. Furthermore, many factors influence the feasibility of housing development, including financing costs, labor and materials costs, and changes in housing demand. Changes in these factors could all affect the efficacy of the policies we outline in either direction. We also do not attempt to estimate the size of potential synergies across our proposed reforms.

One prediction that we are certain of, however, is that failing to find a way to foster a large, sustained increase in housing production at costs that allow market-rate projects to achieve financial feasibility without large public subsidies will limit any path toward meaningful housing affordability in New York.

The central point we hope that readers take away is that housing production is a critical part of any solution to housing affordability—in New York and elsewhere—and that there are many ways to increase housing production. New York is awash in excellent policy analysis on such solutions from the many thought leaders in the nonprofit sector, academic sector, and stakeholder communities in the city. We had the pleasure of speaking directly and extensively with many such individuals in conducting this research. Regrettably, achieving the needed level of housing production will require a level of cooperation and compromise that appears to be in short supply at both the municipal and state levels. One can only hope that this situation reverses quickly and that major policy reforms and subsequent increases in housing affordability can put making a home in New York back within reach of both existing and future residents for households across the entire spectrum of economic means.

Notes

[1] Rent burden and median income measures are from the authors' calculations using American Community Survey one-year microdata from IPUMS (Ruggles et al., 2023). A recent report by Moody's Analytics suggests that the ratio of rent to income in New York (68.5 percent) towers above that of any other metropolitan area in the country (Chen and Le, 2023). The metropolitan areas with the next-highest ratios were Miami (41.6 percent), Fort Lauderdale (36.7 percent), and Los Angeles (35.6 percent). We caveat that the report from which these numbers are drawn does not include a clear methodology explaining how these numbers were derived.

[2] Author calculations using American Community Survey one-year microdata from IPUMS (Ruggles et al., 2023).

[3] We note that our measure of moves, a respondent reporting that they lived in a different public use microdata area (PUMA) in the prior year will tend to understate mobility because there may be moves within a PUMA that are not counted. However, we note that the nature of PUMAs, which are created with population targets rather than geographic targets (they are geographies designed to capture between 100,000 and 200,000 people), will tend to bias the rate of moves downward in magnitude more in less dense metropolitan areas. Therefore, New York City, which is very dense and has many more PUMAs than a typical large metropolitan area, will likely have a relatively higher mobility rate using this measure than other metropolitan areas in our comparison, suggesting that the differences we capture here may actually understate the difference in mobility rates *across* these metropolitan areas.

[4] In the online appendixes to this report, we present additional results showing the rental price gaps among recent movers and nonmovers across the same metropolitan areas as in Figure 2.

[5] Data from the Building Indicator Project—a unique effort to track the health of the stock of multifamily housing in New York City, created and maintained by a Bronx-based community housing nonprofit, UNHP—have registered a 300-percent increase in the number of distressed multifamily buildings since 2017, but estimated a significantly higher increase in this rate (435 percent) over the same period for buildings with rent-stabilized units (UNHP, 2022). UNHP's analysis attributes a substantial part of this overall rise to an increase in speculative purchases and over-leveraged financing, trends that are related to a persistent under-supply of housing, but the analysis also suggests that the HSTPA likely plays a direct role in this increase.

[6] Berlin's rent-control law was declared unconstitutional around one year after it was enacted (Connolly, 2021).

[7] This process mirrors the process for parcel-specific, privately initiated rezoning actions. Of the 171 applications filed by private landlords between 2014 and 2017, 60 percent were ultimately approved, with a median application time of two years and six months (Campion, 2022a). This drawn-out, uncertain review process not only slows the development pipeline of projects that enter it but also likely deters many would-be developments from entering the pipeline.

[8] Member deference also can be an impediment to upzoning. Under this practice, council members defer land use or zoning changes to the judgment of the single member whose district is home to the proposed changes. This can lead to the rejection, scaling back, or stalling of housing development projects if the local council member opposes them, even when these projects could contribute substantially to meeting the city's housing needs.

[9] Although reasonable concerns exist about proposing policies that ignore political feasibility, both political feasibility and market conditions are rapidly moving targets; a report accommodating these conditions at any specific point in time could potentially become irrelevant in a short amount of time. Additionally, many policies passed with political feasibility in mind have led to future unintended consequences, necessitating additional policy changes to fix those new issues. The 421-a tax abatement program is an important example: It is a policy originally formulated to address 1970s urban disinvestment in the inner city and has become, over time, a critical counterweight for the city's deeply inequitable property tax system. Additionally, many prominent leaders, such as New York Governor Kathy Hochul, New York City Mayor Eric Adams, and other local policymakers, aspired for the fiscal 2024 state budget process to include substantial housing production policy (including some proposals highlighted in this report) but, because of political constraints, the budget was ultimately passed with no substantial changes made to housing policy. These considerations underscore our belief that analyzing the fundamental policy landscape that underlies housing production in New York beyond what appears feasible under the existing political landscape is a useful exercise to inform policymaking.

[10] This is the authors' calculation using the New York City Department of City Planning Housing Database Files (New York City Department of City Planning, undated-b). New York City continues to have other programs to provide property tax relief for publicly subsidized housing production, and our analysis indicates that much of the remaining multifamily production activity is related to these programs.

[11] Buildings that were grandfathered in under older regulations can continue to exceed the FAR cap.

[12] We note that these studies are both dissertation chapters by Ph.D. economics researchers. While they are not yet peer-reviewed publications, the authors of this report—Ph.D. economists who have experience conducting peer review of economic studies for academic journals—reviewed both studies and found their methodology and exposition to be sound. Additionally, because of the setting (New York City in the past two decades) and the use of modern quasi-experimental methodology, these studies are the most-relevant research that can be brought to bear on this question in our view. Finally, both authors arrived at remarkably similar estimated effects using broadly similar approaches, bolstering the validity of both sets of findings in our opinion.

[13] This policy is not directly attributable to any specific individual to whom we spoke or any specific research, though our analysis relies heavily on data in Campion (2022c).

[14] This is roughly one-half the total depreciation period for rental residential property under Internal Revenue Service rules (see Internal Revenue Service, 2023).

[15] This figure is from author calculations that extended the case study for 90 Washington Street in Campion (2022c) to consider the exemptions that would accrue had that building been purchased and demolished for a new construction project using Option C of the 421-a Affordable New York program. We calcu-

late an undiscounted sum of costs across the life of the program expressed in 2022 dollars. We believe that this estimate is conservative on three dimensions. First, Option C had an average per-unit cost that was around half the average cost of all projects using 421-a between 2017 and 2020 (see Table 2 of Lander [2022]) so that the ultimate average cost of 421-a across all of the program options is considerably higher. Second, we assume that a new construction building would have a property tax bill equal to a converted building originally constructed in 1969, although the amount for a comparable new construction project would almost certainly be higher. Third, we took the final taxable value of the 90 Washington Street property in 2023 ($4.3 million) and held it constant for the subsequent 21 years that 421-a exemptions would continue to apply rather than assuming any further increases in the tax bill, which would increase the foregone taxes and, thus, the cost of the exemption.

[16] These trends could significantly affect the net cost and housing production associated with our proposed reform. Specifically, the existing interest rate environment and concerns about the banking sector have led to a significant drying up of commercial credit, making refinancing of maturing commercial mortgage-backed securities (CMBS') increasingly difficult (Callanan, 2023). Maturity defaults on CMBS have nearly doubled, from more than $900 million in spring 2022 to nearly $1.8 billion in spring 2023 (Cred iQ, 2023). If this trend continues, many office properties could go into default and experience severe declines in valuation, leading to related declines in property tax revenue. Viewed through this lens, tax incentives for conversion of office stock to residential use may be forgoing much less tax revenue than simple estimates would suggest, leading to significantly lower net program costs.

[17] We estimate converted floor space at 53 million square feet and use 1,000 square feet as a conservative estimate of the average square footage required for an apartment. This is consistent with the floor area–to-units conversion rate from the original 421-g program (see Campion, 2022c). While we do not have detailed data on the distribution of apartment size under 421-g, an assumption of roughly 800–850 square feet for a two-bedroom apartment with approximately 20 percent of additional square footage for mechanical and storage space needs yields an average of 1,000 square feet. If, instead, smaller units were produced, then this estimate would be higher. We note that smaller units generally increase the financial feasibility of such projects because there is not a linear relationship between square footage and rent; thus, in practice, flexibility to produce smaller microunits could result in the creation of even more units.

[18] This proposal cannot be credited to a single source because the law has been criticized for its impacts on housing costs for decades (Salama, Schill, and Stark, 1999; Salama, Schill, and Springer, 2005).

[19] SBAs are groups of census tracts comprising at least 100,000 residents that are defined by New York's Department of Housing Preservation and Development.

[20] We opted not to include this policy reform in our final list, given that it in and of itself does not create housing capacity but requires individual municipalities to figure out how to increase housing capacity on their own. It likely would also largely overlap with our TOD reform.

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Acknowledgments

We are grateful to the many experts in various aspects of New York City housing policy who shared their insights with us to inform this report. New Yorkers are very fortunate to have a remarkable, diverse community of dedicated individuals and groups comprising researchers, advocates, current and former policymakers, and others who are focused on making the city a more livable, affordable, and equitable place. We also thank Swaptik Choudhury for early research assistance. Finally, we are grateful to our RAND Corporation colleague Heather Schwartz and an anonymous expert in New York City housing policy for peer review. The feedback and guidance from these colleagues greatly improved the report.

Abbreviations

AMI	area median income
BLAST	Building and Land Use Approval Streamlining Taskforce
CEQR	City Environmental Quality Review
CMBS	commercial mortgage-backed security
COVID-19	coronavirus disease 2019
FAR	floor-area ratio
HUD	Department of Housing and Urban Development
MIH	Mandatory Inclusionary Housing
MTA	Metropolitan Transportation Authority
NOAH	naturally occurring affordable housing
NYCHA	New York City Housing Authority
NYU	New York University
PDA	prime development area
PUMA	Public Use Microdata Area
SBA	sub-borough area
TOD	transit-oriented development
ULURP	Uniform Land Use Review Procedure
UNHP	University Neighborhood Housing Program
VIH	voluntary inclusionary housing

About This Report

In this report, we address the issue of housing affordability in New York City through a specific focus on the role that broadly expanding the supply of housing can play in increasing affordability. We first provide a summary of fundamental issues affecting housing affordability in the city and how increased housing supply can contribute to addressing those issues. We then present a set of policy reforms intended to increase the production of multifamily housing in New York City. Applying credible findings from existing empirical research to these policies, we also generate an estimate of the number of additional housing units associated with each proposed policy over a period of ten years. In total, we estimate that the policies proposed in this report, if fully enacted, could lead to approximately 300,000 units of housing more than the status quo level of production, a number that we believe would be large enough to have a meaningful impact on affordability in the city by reducing the strong upward pressure on rents that results from a persistent undersupply of housing.

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This report is sponsored by the Robin Hood Foundation.

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