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Flexible Co-Living

Advancing a New Housing Model for
Office-to-Residential Conversions in NYC



5BORO is a cutting-edge think tank that advances fiscally responsible, equitable and creative solutions to NYC's most challenging problems.

From ideation to implementation, we speak directly to policymakers by producing digestible research to push NYC forward.

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- *21st Century SROs: Can Small Housing Units Help Meet the Need for Affordable Housing in New York City?*
NYU Furman Center. January 2018.
- *Making New York Work for Everyone Action Plan*
“New” New York Panel. December 2022.
- *NYC Office Adaptive Reuse Study*
NYC Department of City Planning. January 2023.
- *City of Yes for Housing Opportunity*
NYC Department of City Planning. September 2023.

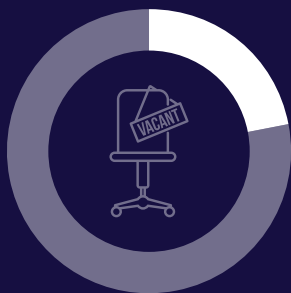
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EXECUTIVE SUMMARY

New York is tied for first place in a global ranking of the most expensive cities in the world, and half of working-age households in the city can't afford to live here.

Nowhere is the high cost of living more apparent than in the city's housing market, where an affordability crisis has resulted in record high rents, record low vacancies, and a severe lack of supply — pricing many New Yorkers out of the city.



At the same time, the growth in remote work has led to a spike in office vacancies — roughly 22% are empty.

There is a staggering

103 million

square feet of available office space in Manhattan, and vacancies are **expected to grow** as multi-year leases are not renewed.

The **economic threat** posed by these vacancies is significant.

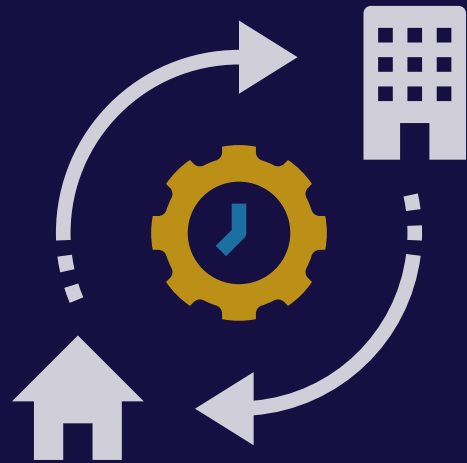
NYC's business areas have seen a roughly

\$12 billion

decline in economic activity, which is harming local small businesses and jeopardizing the job security of employees working in the retail and service sectors.

To address these compounding challenges and tackle the so-called “urban doom loop,” 5BORO has undergone extensive research to advance a new housing model we are calling **Flexible Co-Living Housing**.

This creative approach could add more housing — and **more affordable housing** — to the city and boost struggling business districts with an influx of new residents.



Given the flexibility required for this approach and the need to assess best practices, 5BORO believes this new housing model is a prime candidate for a **NYC government pilot** in partnership with the State.

What Is Flexible Co-Living Housing?

5BORO's proposal for Flexible Co-Living Housing combines three unique design elements:

1 Office to residential conversions

are the transformation of vacant or underutilized office space into residences. This is an obvious path forward to create critically needed housing and bring renewed life to struggling commercial neighborhoods with an influx of new residents.

However, as we detail in our report, the buildings with the highest vacancy rates often face the biggest challenges and construction costs to convert. The renovations required include expanding plumbing and ventilation systems and ensuring every bedroom and common room has exterior windows.

2 Co-living

means that renters are able to lease individual bedrooms and share communal spaces like bathrooms, kitchens, and lounges with other residents. Co-living has been a rapidly expanding housing model in the U.S., and similar housing models have a long history in NYC.

Co-living can help limit the high construction costs associated with office-to-residential conversions, by aligning the new layout of the housing units with the original office layout as much as possible (for example, clustering new kitchens and bathrooms around the existing plumbing).

3 Interior window flexibility

is a concept adopted from other cities and jurisdictions, including Philadelphia and Washington D.C. Instead of requiring exterior windows in every room, a portion of bedrooms or common areas could instead have windows that face an adjacent room with strong natural light to gain “borrowed light.”

This can help limit the highest costs of an office-to-residential conversion, which are associated with exterior window compliance — especially in office buildings with a particularly deep floorplate. Meeting these requirements typically involve drilling cores and lightwells into a building to add new exterior windows.

With millions of square feet of office space sitting empty and hundreds of thousands of new residences needed, now is the time to innovate and test out new approaches to housing. Flexible Co-Living provides a viable path to make office-to-residential conversions more affordable for both tenants and developers.

Our pilot proposal is not a silver bullet solution to address the housing crisis, but it can be a tool within a broader housing strategy to create tens of thousands of new places for people to live. This is one potential pathway forward for the struggling commercial office sector as well, in addition to other uses such as healthcare, higher education, arts and culture, and other types of housing.

Innovative policy changes are needed to make Flexible Co-Living happen. Office-to-residential conversions face a number of architectural, regulatory, and financial barriers, as outlined in Governor Kathy Hochul and Mayor Eric Adam's [*Making New York Work for Everyone*](#) action plan to renew the region's economy and the City's corresponding [*Office Adaptive Reuse Study*](#). The NYC Department of City Planning has [*committed to advance office-to-residential conversions*](#), and is currently working to [*ease zoning restrictions*](#) and accelerate permitting timelines. However, the City is limited in what it can do within its own authority without State legislative changes. Albany must step up to meet the moment and fully leverage the opportunity to build more housing and support affordability.

5BORO supports the State legislative changes necessary to spur office-to-residential conversions in general, including expanding the "floor area ratio" cap, allowing for commercial-to-residential changes below 96th Street, and providing a tax incentive to create affordable housing more broadly. As described in both New York City and State reports, we need a wide variety of housing solutions in order to address the two converging crises of housing and struggling business districts.

Benefits of Flexible Co-Living Housing

- **Creates housing at more affordable rents:** On average across the nation, co-living provides a 30% discount to renters' housing costs, relative to comparable traditional apartments. Flexible Co-Living units are expected to rent for less than a studio apartment, providing significant relief to the average New Yorker.
- **Addresses the housing shortage by producing more units:** Due to the design and layout flexibility, this model has the potential to add double the number of housing units to the market compared to a traditional residential conversion. The creation of tens of thousands of new housing units would increase the supply of housing and help mitigate the competition driving up rents.
- **Provides opportunity to cost-effectively subsidize low-income units:** As baseline market-rate rents would already be lower than studios or one-bedrooms, fewer government incentives would be necessary per unit to bring deeply affordable options to low-income renters.
- **Boosts struggling commercial districts:** New residents in these districts would bring additional foot traffic to surrounding small businesses that have faced steep declines in patrons due to remote work. With a broader effort to build more housing in these areas, new businesses geared toward residents could also be established. This will increase employment and economic activity.
- **Lowers construction costs:** This housing model lowers construction costs by maximizing adherence with the original office layout and infrastructure. The conversion of offices to Flexible Co-Living is estimated to cost approximately half of the [\\$300-500 per square foot](#) typically spent to convert offices to traditional apartments.
- **Increases diversity of housing options:** With its affordability, location, and potential amenities, Flexible Co-Living could provide an ideal housing alternative to the many New Yorkers and newcomers who split multi-bedroom units with roommates to keep housing costs affordable. This could reduce the competition for multi-bedroom homes and leave them open to the families and groups that need them.
- **Brings new life to at-risk and underutilized buildings:** Higher-end office buildings, known as Trophy and Class A buildings, are maintaining fairly high office occupancy, while older Class B and C buildings are struggling to find tenants. This model could bring renewed life and activity to Class B and C office buildings and reduce the risk of these buildings becoming stranded assets.
- **Provides sustainability and climate benefits:** Building new housing in transit-dense commercial areas would not only increase the quality of life for residents, but also reduce the need for private cars and avoid vehicle pollution. Adaptively reusing office buildings would also reduce the need for major new construction, lowering the embodied carbon impacts associated with these activities.



Image Source: Adobe Stock

Bringing Ideas to Action with a Pilot

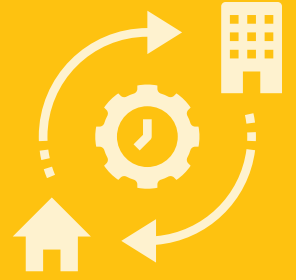
As the combination of the three design elements in Flexible Co-Living Housing is new, it is well-suited for a City-led pilot. NYC government has experience using pilots to test new models and types of housing, including for [co-living](#) and [basement conversions](#). A well-designed pilot could test the market for the model, assess the affordability it can achieve for renters, and inform best practices. It could also be used to test a variety of layouts, providing residents with a range of exterior and interior window configurations and a variety of choices for shared common spaces and amenities. The City should also ensure that the project is evaluated to assess the effectiveness and impact of the pilot program and help determine best practices.

To facilitate the pilot, the City must work closely with a broad swath of partners. The City has already kicked off the process, working to ease zoning restrictions through the [City of Yes proposed zoning text amendments](#) and convene City agencies [in an Office Conversion Accelerator to expedite permitting](#). Taking a collaborative approach, this Accelerator — which includes the Department of Housing Preservation and Development, Department of City Planning, Department of Buildings, and Fire Department — should also have input and oversight of the pilot. Additionally, scientists, engineers and health practitioners should advise on criteria that must be met to maintain lighting and health standards. Tenants should be surveyed and invited to participate in focus groups throughout the course of the pilot to gather data to produce co-living arrangements that are safe, enjoyable, and vibrant.



As it has with past pilots, the City should solicit proposals from housing developers to develop and fund the proposed conversions, while the City provides technical assistance and regulatory relief. State collaboration is also necessary given the reasonable legal and regulatory flexibility needed to pilot this new type of housing. The State Legislature would also need to implement property tax incentives to achieve deeper affordability for low-income New Yorkers. Given the State involvement required, 5BORO recommends the City incorporate the pilot project into its broader housing agenda in Albany.

5BORO will continue to support the long-term reforms needed to pave the way for office-to-residential conversions and affordable housing development more broadly. At the same time, the City must explore and test new innovative housing models to address our current crisis. This pilot proposal is meant to be a meaningful tool to study what we expect could be a long-term approach to adding more desperately needed housing to our city. It is imperative that we create more affordable housing for New Yorkers and renew the vibrancy of our office-dense neighborhoods.



About

Office to Residential Conversions

Office-to-residential conversions are an obvious path to help the city solve two converging crises: the need for more housing and the rise in office vacancies.

And it's a strategy NYC has already used successfully in recent decades.

Demand for office space in Lower Manhattan sharply declined through the economic downturn of the 90's and plummeted again following the terrorist attacks on the World Trade Center in 2001. In an effort to revive Lower Manhattan and local small businesses, city, state, and federal governments rallied to facilitate and accelerate the development of housing in what were formerly office buildings.

In the mid-90s, State legislators passed [421-g](#), granting incentives — including a 14-year property tax break — to developers that converted downtown office buildings to apartments over the next decade. The New York City Council and Mayor Giuliani [eased regulations](#) on rent stabilization for large portions of the buildings. The federal government provided special tax exempt bonds known as [Liberty Bonds](#) in the early 2000s, enabling developers to access tax-exempt financing.

Measured on the governments' goals to jumpstart Lower Manhattan, these efforts were a success. Thousands of office-to-residential units were added to the market, and these numbers continue to grow.

The area's [residential population](#) grew from 25,000 in 2001 to 64,000 in 2019. The infusion of residents [reinvigorated the neighborhood](#) and [strengthened the economy in the area](#).

The Lower Manhattan conversions also taught us several lessons. First, it gave us a greater understanding of many of the challenges and high costs associated with office-to-residential conversions, which are in part driven by the major construction needed to transform an office into a traditional apartment. Second, these conversions primarily yielded luxury apartments, largely because of the aforementioned high costs and because the government incentives and policies were not designed to incentivize affordability.

In August 2023, the City announced that it is embarking on [plans to accelerate office-to-residential conversions](#). This effort includes making a text amendment to the City's zoning resolution within the "[City of Yes](#)" process to expand the number of offices that are eligible to convert to housing. This is a critical initial step to advance this new form of housing. The State and City must build on this further to ensure we fully incorporate lessons learned from the Lower Manhattan conversions.

Challenges with Office Conversions to Traditional Housing

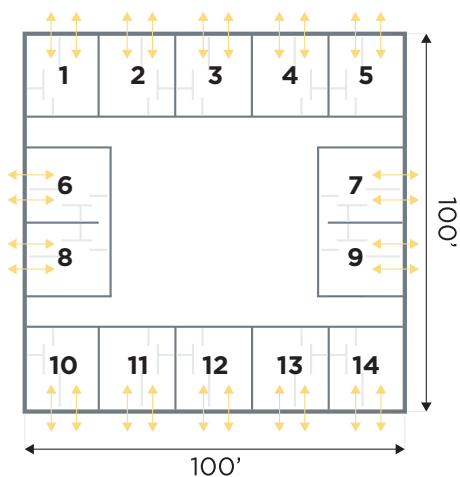
Office buildings have layouts, configurations, and regulatory requirements that are vastly different from those in residential buildings. To comply with existing housing regulations, office conversions typically require the installation of costly architectural interventions with long construction timelines. An innovative solution like Flexible Co-Living Housing can help mitigate many of these challenges.

Floor plate depth

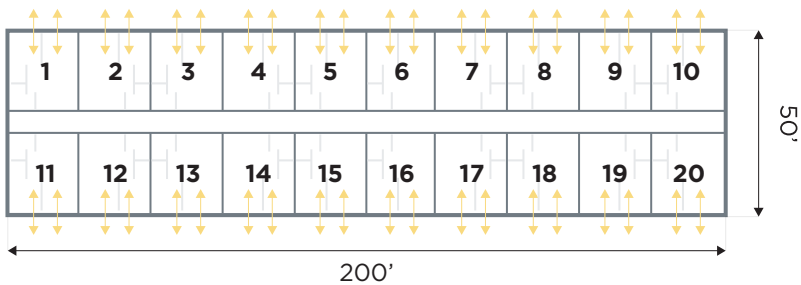
Most office buildings do not contain the [ratio of interior space to operable windows](#) that are required for residential buildings. This is an issue with the office’s “[floor plate](#)” in which the size and shape of an office footprint is often not conducive to achieving high window access.

A deep or square floor plate will have [less exposure](#) to exterior windows compared to a narrower or more rectangular floor plate. The average residential floor plate is roughly [60-70 feet deep](#), while older office buildings are 120 feet deep. Newer office buildings can have [even deeper floor plates](#).


Both of the floorplates depicted in this figure have the same square footage. However, the left square floorplate (which resembles many office buildings) has a smaller perimeter than the right rectangular floorplate (which resembles many residential buildings), meaning there are fewer exterior windows per square foot. In this example, there are 20% fewer exterior windows.



FLOOR PLATE A
AREA: 10,000 SQ FT
PERIMETER: 400 FT



FLOOR PLATE B
AREA: 10,000 SQ FT
PERIMETER: 500 FT



Example of lightwells in residential buildings. Some office-to-residential developers have drilled cores into buildings to create lightwells to comply with residential exterior window requirements.

Image source:
[Rafael Garcin, Unsplash](#)

Window construction

Many architects agree that the [most expensive portion](#) of an office conversion is creating new windows to comply with regulations for residential developments. In order to add windows, developers have often resorted to [cutting a core](#) in the center of buildings to [create light wells](#), an architectural feature that [brings in light](#). These costly features take significant construction time, and also reduce the square footage available for residential units.

While New York has strict requirements mandating windows in each room in a residence, cities with more relaxed window standards, such as Washington, D.C. and Philadelphia, have been able to dramatically [outpace New York](#) on office-to-residential conversions. Additionally, many offices in NYC have windows that do not open. Residential units are required to have at least some operable windows, though the [City may potentially be able to grant flexibility](#) in meeting these requirements for office-to-residential conversions.

Internal system configuration

Differences in the uses of commercial and residential buildings have typically resulted in distinct configurations of buildings' internal systems. For example, residential units are required to have [individual bathrooms](#), while offices have communal facilities that are shared amongst employees. Offices typically have basic kitchenettes or a microwave and sink, while residential kitchens [require ventilation](#) to dilute or remove gasses, odors, and other by-products from cooking on appliances. This typically results in very different plumbing and ductwork configurations across office and residential buildings. These systems tend to be clustered together in offices, while they are more spread out across each floor of a residential apartment building.

To create individual bathrooms and kitchens for traditional apartments, office building owners must undertake major renovations to [reconfigure plumbing](#) and add [vertical ducting](#). [Mechanical and electrical system replacements](#) may be necessary as well.

High renovation costs

The major renovations needed for traditional office-to-residential conversions, particularly to increase access to windows and to build individual bathrooms and kitchens for apartment units, can result in expensive construction. While highly dependent on the building, it is estimated to cost approximately [\\$300 to \\$500 per square foot](#) to convert an office building into an apartment building that meets existing housing regulations. For a 100,000 square foot office space (a 10-story Class C commercial building with a 10,000 square foot floor plate), this could mean renovation costs of up to \$50 million.

In Lower Manhattan, One Wall Street, a former office that was converted to 566 luxury apartments, cost more than [\\$1.5 billion to renovate](#). Rents for studio apartments in the building start at \$4,600 per month. Over at 25 Water Street, 1.1 million square feet of former office space is being converted into more than 1,300 apartments at a cost of [hundreds of millions of dollars](#).

Long timelines

Given the extensive construction required, conversions of offices to traditional housing typically takes longer than a standard renovation. There is no exact formula for how long it takes to complete a conversion, because it is highly dependent on the physical structure. The [extensive land use](#) and building permitting process in NYC can also add significant delays to the timeline. One Wall Street, the city's largest conversion of offices to condominiums to date, is finally leasing apartments after roughly [eight years of construction](#). The longer the construction project, the more time a building is not in use — providing no relief to tenants or building owners.

It is estimated to cost approximately \$300 to \$500 per square foot to convert an office building into an apartment building that meets existing housing regulations



About

Co-Living

“Communal living” or “co-living” is defined as a group of people occupying individually-leased bedrooms and sharing common spaces with other residents.

Shared common spaces include bathrooms, kitchens, and often other amenities like work spaces, gyms, and cleaning services.

There can be flexibility around their design configuration to achieve varying levels of privacy for individual residents.

Given the use of shared spaces, units in a co-living model have the potential to rent for much less than a studio apartment or one-bedroom — at levels New Yorkers can more easily afford. With additional incentives or subsidies, even more deeply affordable housing for low-income New Yorkers could be achieved through this model.

Co-living can have a wide range of space configurations, and does not necessarily mean that every space is shared. For example, [Roost in Tampa, Florida](#) offers bathrooms in units, while other co-living residences limit each bathroom to a certain number of residents. Some provide small-scale kitchenettes in each unit, while others designate dedicated space in the kitchens for each resident. Some arrangements may better align with an individual’s lifestyle and preferences, like quiet or single-sex communal spaces or facilities to the extent allowed within the confines of the law.

In recent years, major real estate and housing companies have embraced formal co-living arrangements across the nation. Real estate firm Cushman & Wakefield estimates that the housing model has expanded from fewer than

100 co-living units across the nation in 2014 to [nearly 8,000 in mid-2020](#), with demand significantly outpacing supply. Despite its recent growth, co-living has existed for hundreds of years all over the world, including in NYC.

History of Co-Living in NYC

Co-living is not a new concept in NYC, and similar models were at one point a heavily relied upon housing option in our city. In recent years, it has reemerged due to the severe housing shortage and demand from tenants for new approaches to traditional housing.

Single-room occupancy housing (SROs), which is similar to co-living, was [common for much of NYC’s history](#) and played an important role in balancing housing supply and demand. [SRO buildings](#) rented personal living quarters with shared bathrooms and kitchens. Some SROs, like the [Barbizon](#), were glamorous landing pads for new arrivals in New York, like writers Joan Didion and Sylvia Plath and actresses Nancy Reagan and Grace Kelly. The construction of new SROs were later banned due to a [complex political history](#) and perceived association with poor health and unsafe conditions. Over time, many shuttered and the model comprised a diminishing share of the city’s housing stock.

However, some legacy SROs are [still in operation](#) today. The 92nd Street Y (92Y) is a beloved New York City institution that has been successfully operating dorm-style or co-living for young professionals for decades. Market-rate rooms rent between [\\$1,400 and \\$2,500 per month](#). The 92Y demonstrates that housing like this can work in New York City and can serve as a model of what an office-to-residential conversion could potentially offer.

The City has also revisited other co-living models as the housing supply in NYC has dwindled. In 2013, Mayor Bloomberg announced a [“microunit” pilot](#), where tenants rented individual apartments as small as 250 square feet with compact kitchens and



View of the Barbizon from
62nd Street and Lexington Avenue

Image source: [Wikimedia](#)

bathrooms and shared common dens and lounges. In 2018, Mayor de Blasio launched the [ShareNYC pilot](#), which will create 300 new co-living housing units with shared communal facilities like kitchens and bathrooms. In spring 2023, Mayor Adams suggested that the city should consider a “[modern-day, almost-SRO concept](#).”

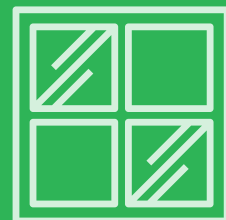
Co-Living Today

For Millennials and members of Gen Z [who are getting priced out of NYC or cannot afford to move to the city](#), co-living could be a particularly appealing model. That’s the same for [single New Yorkers](#), who pay a premium to live here in one-bedroom apartments.

Even without new SRO development, co-living still exists in NYC today. There are unofficial, naturally-occurring co-living arrangements among adult roommates, who occupy two-, three-, or four-bedroom apartments. These roommates can often start out as strangers who link up through “[matchmaking](#)” sites for roommates.

Modern co-living companies have also entered the market, but [operate with some limitations](#). Housing codes and anti-SRO regulations outlaw the renting of individual rooms, require tenants to share liability on leases, prohibit locks on bedroom doors, and permit no more than four unrelated individuals to reside together. Despite the challenges, there is a high demand for these co-living arrangements. Common, one of the largest co-living property managers in the U.S., rents units in NYC and would receive [300 applications](#) for its rooms in a typical week pre-pandemic. Co-living experienced a surge in [popularity](#) post-pandemic.

The City is also taking note. In its August 2023 announcement about [advancing office-to-residential conversions](#), the City shared that it is seeking to enable conversions to a wider variety of housing types, including supportive housing, shared housing, and dorms — recognizing the need to adapt to housing trends and provide diverse housing options to New Yorkers.



About

Interior Window Flexibility

Interior windows are an architectural feature in which a room has a glass or semi-transparent pane that looks out into an adjacent room, allowing natural light to flow through while still maintaining a separation of spaces.

These windows can be placed at the top of a wall along the ceiling to maintain privacy, have adjustable curtains, and be designed to limit noise flow. Interior windows have become an increasingly popular architectural feature, with [numerous publications and firms](#) highlighting their use.

For office-to-residential conversions to be feasible without significant construction, interior windows would likely need to be deployed in either bedrooms or in common areas, which is not possible under current regulations. As we explore further later in the report, New York City's Building Code and New York State's Multiple Dwelling Law generally require "occupiable and habitable spaces" (including bedrooms, living rooms, kitchens, dining rooms, and other spaces) to have at least one operable exterior window — though there are exemptions as long as other criteria are met for certain room types.

However, this has not outright prevented windowless bedrooms from being used as housing in NYC. Many of these rooms are being marketed online as "dens" or "offices," if not explicitly as a bedroom. Because there are no window standards for these rooms, many of them do not have interior windows for borrowed light and instead are completely "windowless."



Interior windows were used to bring "borrowed natural light" to a bedroom in a new warehouse-to-residential conversion in Philadelphia.

Top: Image of the interior window from the common room facing into the bedroom.

Bottom: Image of the interior windows from the bedroom facing into the common room.



Though New York has outlawed interior window use, that is not the case in other cities. There are no federal government codes mandating exterior windows, and requirements vary vastly state-to-state.

Other cities that have existing exterior window requirements are also reconsidering these regulations. [San Francisco](#), which is similarly facing a crisis in its commercial districts, and [Honolulu](#) are both considering changing their building codes to pave the way for bedrooms without exterior windows.

There are [numerous examples of interior windows](#) being used to bring borrowed light into bedrooms in new developments and housing conversions in cities like Washington, D.C. and Philadelphia. Due in part to flexibility on exterior window requirements, Washington, D.C. and Philadelphia are [massively outpacing New York City on office-to-residential conversions](#). Combined, these cities have about a quarter of the population of NYC, yet created more than 3,600 residential units from offices in 2020 and 2021, versus just 614 in New York City. This equates to nearly 22 times more conversions per capita than New York City. The extra flexibility has given room for architects and developers to come up with [creative designs](#) for unconventional spaces, a practice that has been long used in NYC for loft conversions.



This NYC apartment is listed online as a studio, but includes two windowless home offices.



This 2-bedroom apartment in Washington, D.C. uses an interior window to bring “borrowed” natural light to a bedroom.

Flexible Co-Living Housing

A  Model



Image source: Adobe Stock

Flexible Co-Living Housing is an innovative model that brings together three tried-and-tested strategies — office-to-residential conversions, co-living, and interior window flexibility — that have yet to be combined in New York City.

The model provides an opportunity to diversify the rental stock in NYC and add thousands of housing units to the market relatively quickly and cost-effectively, while boosting the economies of struggling commercial districts and giving renewed life to underutilized office building stock.

Properly designed Flexible Co-Living Housing can provide significant benefits, but also faces significant regulatory barriers — as we explore further in this chapter.

Visualizing Flexible Co-Living

The 5BORO Institute worked with a team of architects to analyze the Flexible Co-Living concept and produce renderings. Using the floorplan of a typical Midtown office, we modeled two potential co-living housing styles. First, we designed a suite-style housing concept, in which residents of 3-6 bedroom apartments share common spaces like kitchens and bathrooms. Second, we designed a dorm-style housing concept, in which residents share common spaces across the entire floor. These different layouts demonstrate the flexibility of the co-living model and its ability to add new options to the market to meet the varying priorities of tenants.

Both of the models rendered in this concept yielded significantly more housing units for New Yorkers than office conversions to traditional apartments. Across the 15,500 square-foot floor, the suite-style concept allowed for 25 housing units and the dorm-style concept yielded 31 housing units — double the roughly 14 studio apartments that could be developed in the same space.



Before and after renderings of an office conversion to dorm-style co-living





Before and after renderings
of an office conversion to dorm-style co-living





Before and after renderings of an office conversion to suite-style co-living





Before and after renderings of an office conversion to suite-style co-living



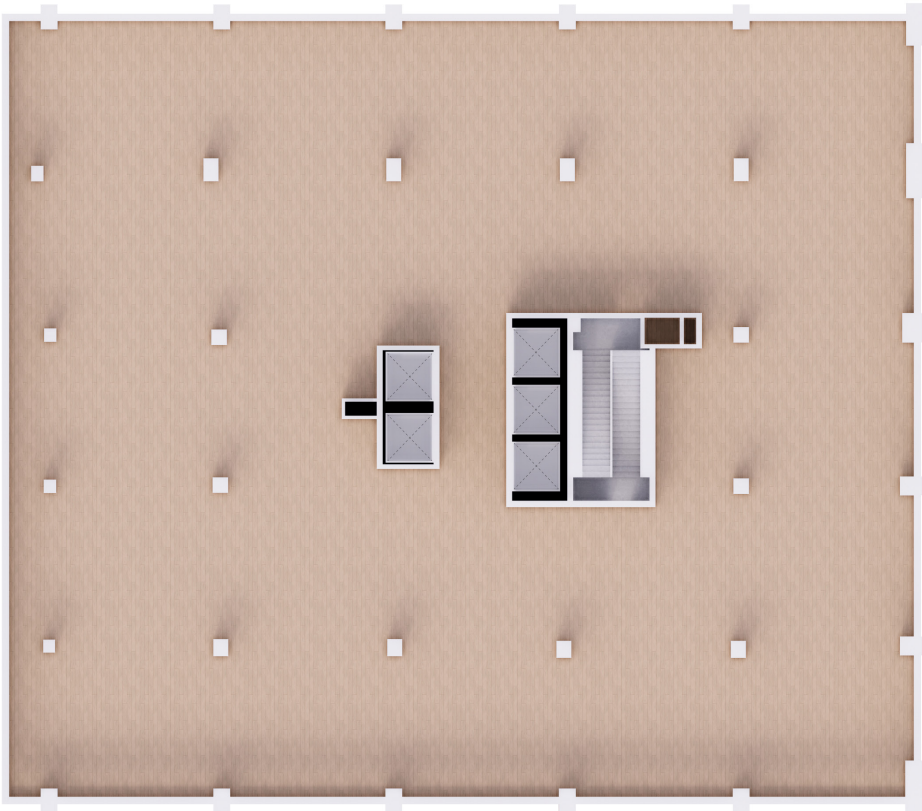


Renderings of a Flexible
Co-Living bedroom with interior windows





Floorplans of a typical office building (top) and of its core (bottom).



Floorplan of an office conversion to dorm-style (top) and suite-style (bottom) co-living apartments. The dorm-style co-living entails 31 bedrooms, and the suite-style co-living entails 25 bedrooms across five apartments.



Benefits of Office Conversions to Flexible Co-Living Housing

Creates housing at more affordable rents

Flexible Co-Living has the potential to add thousands of units to the market at more affordable rents. According to an analysis by real estate firm Cushman & Wakefield, co-living provides a [30% average discount](#) to gross housing costs per lease for renters nationwide, relative to comparable traditional apartments.

The rent for a market rate Flexible Co-Living Housing unit can be highly variable, depending on factors such as the demand for the unit, the construction costs of the conversion, and the level of amenities provided. However, it is anticipated that these co-living units would add housing at rents that are more within reach for the average New Yorkers. The median rent for a studio apartment in NYC is [over \\$3,400](#) as of May 2023, and just 2% of Manhattan housing rents for [under \\$2,000](#) per month.

Just 2% of Manhattan housing rents for under \$2,000 per month

Addresses the housing shortage by producing more units

Flexible Co-Living could help address the City's dire housing shortage. The NYC Department of City Planning found in 2019 that the city was [not creating nearly enough housing](#) to keep pace with the rate of job growth, with hundreds of thousands of additional units needed.

The City estimates that office-to-residential conversions could [produce 20,000 new homes over the coming decade](#), and this number can

be even higher with Flexible Co-Living. A 5BORO analysis found that Flexible Co-Living has the potential to double the number of housing units created from an office conversion, compared to conversions to studio apartments. The addition of tens of thousands of units to the market would help spur further affordability across the board by increasing the supply of housing and helping mitigate the competition driving up rents.

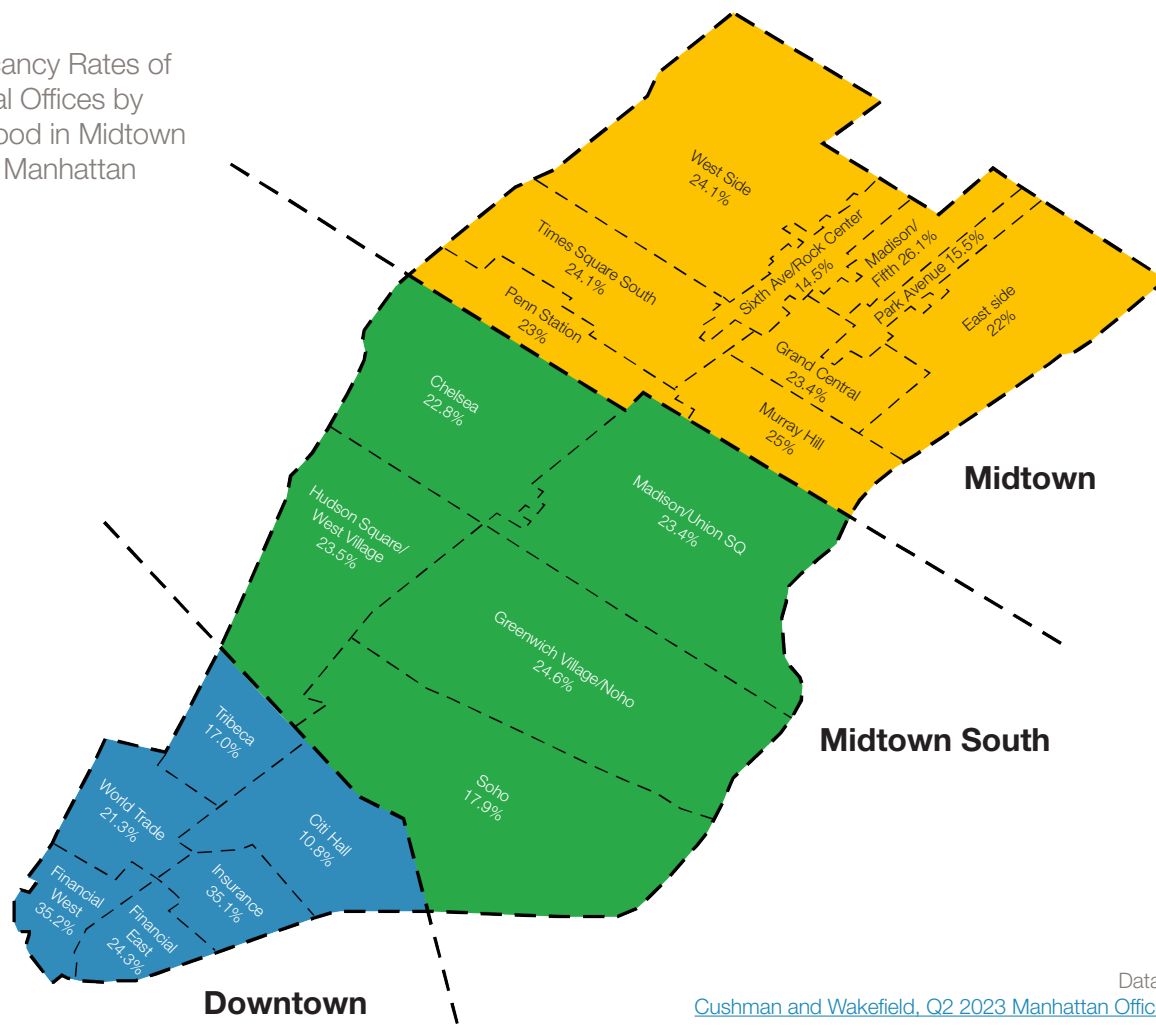
Office-to-residential conversions could produce 20,000 new homes over the coming decade

Provides opportunity to cost-effectively subsidize low-income units

Preliminary analysis and conversations with housing experts indicate that government intervention may not be required to develop market-rate units for Flexible Co-Living Housing, a concept that can be tested through 5BORO's proposed pilot. However, government incentives, such as state property tax relief, would ensure more deeply affordable units at rents below market rate are available for low-income renters.

The public cost of producing deeply affordable units in the Flexible Co-Living model is anticipated to be far lower than what might be required to convert offices to traditional residential units, since the market-rate units in this pilot are expected to rent for less than a traditional studio or one-bedroom apartment. An analysis by the [Furman Center at New York University](#) found that the break-even rent necessary to develop a small housing unit with shared common facilities like kitchens and bathrooms would be 40% lower than the break-even rent to develop a small studio apartment.

Overall Vacancy Rates of Commercial Offices by Neighborhood in Midtown and Lower Manhattan



Data source:
Cushman and Wakefield, Q2 2023 Manhattan Office Report

Boosts struggling commercial districts

The ripple effect of remote work and growing office vacancies has yielded a [\\$12.4 billion decline](#) in economic activity in NYC's commercial areas compared to before the pandemic. With a little more than half of Manhattan employees going into the office on a typical weekday, commercial area establishments like restaurants, bars, gyms, and nail salons have seen a [steep drop in customers](#) and are facing [significant financial hurdles](#). The retail, food, and hospitality industries are [down nearly 100,000 jobs citywide](#), disproportionately impacting New Yorkers of color and workers who are younger or less educated.

Adding new residents to struggling commercial areas would bring renewed vibrancy and economic activity. Occupants of new co-living residences would add foot traffic and alleviate

some of the decline in spending in commercial areas. With a broader effort to build more housing in these areas, new businesses geared toward residents could also be established, introducing new opportunities for employment and economic activity.

Lowers construction costs

As we explored earlier, office to residential conversions can carry steep price tags. Housing experts and developers consulted by 5BORO estimate that office conversions to Flexible Co-Living could be roughly \$100 to \$200 per square foot — a fraction of the [\\$300-\\$500 per square foot](#) estimated for conversions to traditional apartments.

The biggest potential cost savings come from interior window flexibility. Building new exterior windows is the most expensive component of a conversion, typically requiring

the drilling of new cores and lightwells into the building. These costs can be avoided through the use of “borrowed natural lighting” and other innovations to increase lighting and ventilation. To further save costs, housing units in the Flexible Co-Living model can be built around the existing configuration of an office. The bathroom and kitchen areas could be clustered around the existing office plumbing network, since tenants would be sharing these communal facilities instead of using individual facilities in each unit.

Operating expenses for co-living housing are [typically 5% higher](#) than traditional multi-family buildings, due to the need for more active management. However, these marginally higher costs are not anticipated to be a major factor inhibiting office to residential conversions relative to the other financial, architectural, and regulatory barriers.

Office conversions to Flexible Co-Living could be roughly \$100 to \$200 per square foot — a fraction of the \$300-\$500 per square foot estimated for conversions to traditional apartments

Opportunity to cost-effectively subsidize low-income units

Preliminary analysis and conversations with housing experts indicate that government intervention would likely not be required to develop market-rate units for Flexible Co-Living Housing, a concept that can be tested through 5BORO’s proposed pilot. However,

tax incentives or subsidies would likely be necessary to ensure more deeply affordable units are available for low-income renters.

The public cost of producing deeply affordable units in the Flexible Co-Living model is anticipated to be far lower than what might be required to convert offices to traditional residential units, since the market-rate units in this pilot are expected to rent for less than a traditional studio or one-bedroom apartment.

An analysis by the [Furman Center at New York University](#) found that the break-even rents to develop a 160 square foot housing unit with shared common facilities like kitchens and bathrooms are much lower than to develop a small studio apartment. The estimated monthly break-even rents can be over 40% lower, a significant potential savings for tenants.

Increases diversity of housing options

Flexible Co-Living would add to the diversity of housing options available to tenants. This housing could especially appeal to the roughly 40 percent of adult renters in NYC who are [living with roommates](#) and sharing multi-bedroom apartments, which are [ideal for families](#). Flexible Co-Living could reduce the competition for multi-bedroom apartments, helping free them up for families and groups that need them.

This housing type could also appeal to New Yorkers seeking to build a sense of community. For example, the co-living community [Vindmøllebakken](#) in Norway offers more than 20 groups organized around shared interests and activities. Residents maintain communal spaces, which are designed to facilitate both social and solo activities. Much of Vindmøllebakken’s design was centered around the concept of [preventing social isolation](#).

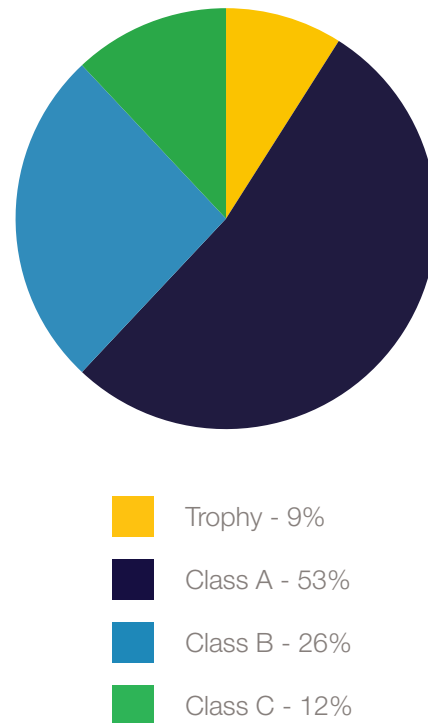
Brings new life to at-risk and underutilized buildings

Flexible Co-Living Housing provides a potential pathway to bring renewed life to Class C and B commercial buildings, which are at greater risk of becoming stranded or underutilized compared to their premium counterparts. Premium Trophy and Class A offices comprise only the top 25% of office inventory, but represented [72.6% of leasing activity](#) across Manhattan in the first half of 2023.

Owners and managers of Class C and B buildings, on the other hand, have struggled to find tenants. These offices were commanding commercial rents at rates between [\\$51 and \\$62 per square foot](#) on average before the pandemic, and many are currently offering steep discounts to attract tenants. This is below the [\\$76 to \\$87 per square foot](#) that Manhattan rental apartments are fetching — implying that even if a portion of the total area of a former office is rentable, there may be a potential path forward for these buildings as residences after accounting for renovation costs and common spaces.

Class C and B buildings were commanding commercial rents at rates between \$51 and \$62 per square foot on average before the pandemic, and many are currently offering steep discounts to attract tenants.

Breakdown of Commercial Office Classes in the Manhattan Market



Source: Data from [The NY Times](#)

Provides sustainability and climate benefits

Commercial areas in NYC that are best suited for housing conversions — such as Midtown Manhattan — are dense, walkable, mixed-use areas with excellent access to public transportation. Households in these areas have among the [lowest carbon footprints](#) of any in the nation. Building dense housing around transit also reduces vehicle use and their associated pollution that harms human health and the environment. Encouraging new housing in dense, transit-accessible areas also increases quality of life and access to jobs, restaurants, shops and cultural activities.

Flexible Co-Living further reduces climate impacts by repurposing and adaptively reusing existing infrastructure. This reduces the need for new building materials and the [embodied carbon](#) associated with new construction and major renovations.

Regulatory Barriers to the Model and the Path Forward

A number of regulatory changes are necessary to facilitate the development of Flexible Co-Living Housing or other similar housing models. Housing development in NYC is dictated by manifold laws, codes, and amendments that have compounded over centuries. As we explore further in the following sections, New York State's Multiple Dwelling Law and New York City's codes and Zoning Resolution have stringent criteria guiding the construction, configurations, and uses of residential buildings. Variances, amendments, or waivers must be made to these regulations to proceed with the pilot.

Given the state of our housing crisis and the significant vacancy rate in our office buildings, we believe it is essential to permit reasonable exemptions for pilot projects to test innovative housing models like Flexible Co-Living to meet the housing demands of New Yorkers.

NYS Multiple Dwelling Law

New York State's [Multiple Dwelling Law](#) (MDL) guides the construction and habitability of NYC apartments. The MDL includes provisions that either directly or indirectly prohibit office-to-residential conversions, co-living, or the use of interior windows. For example, residential [floor area ratio \(FAR\) requirements](#) within the MDL effectively prevent many commercial buildings from being transformed into housing.

The MDL also has [highly detailed provisions](#) around operable exterior windows, including general requirements mandating them in most rooms. In practice, this means that bedrooms, living rooms, and kitchens generally must have operable exterior windows, making it infeasible for housing units to have exterior windows in just a portion of the rooms and using interior windows for light and ventilation for the remainder.

New York State's Multiple Dwelling Law (MDL) includes provisions that either directly or indirectly prohibit office-to-residential conversions, co-living, or the use of interior windows

To enable office-to-residential conversions broadly, 5BORO and other housing advocates have been [pressing the State Legislature](#) to allow existing commercial buildings across New York City to convert to residential use and to lift the residential floor area ratio cap to allow the local government to determine where higher density housing can be built.

Amendments or variances to the MDL would also be necessary to proceed with other components of Flexible Co-Living, such as interior window flexibility. A pilot would likely need to be authorized via legislation by the New York State Legislature. Therefore, 5BORO proposes that the City adopt these efforts as part of its overall housing agenda.

There has been precedent for legal changes to the MDL for narrowly-defined residential conversions. A [1982 amendment](#) known as the Loft Law loosened requirements for conversions of commercial and manufacturing buildings to create loft housing for artists. This added thousands of safe, legal, and rent-stabilized loft apartments that were converted from buildings that were challenging to transform into traditional residences.

NYC Codes

New York City provides additional regulation on the construction, configuration, and habitability of apartments through a [series of codes](#), such as the building code, fire code, and energy code. There are a number of requirements throughout these codes that inhibit the use of communal spaces as required for co-living. NYC codes reflect the antiquated notion that housing is primarily intended for nuclear families, making it difficult to develop housing in line with emerging demographic trends and for non-traditional families as well as the large population of single adults in NYC.

For example, the [Housing Maintenance Code](#), [Building Code](#) and [Administrative Code](#) all put into practice the [Multiple Dwelling Law](#) requirements prohibiting more than four unrelated individuals from living together. Under these codes, [no locks are permitted](#) on interior bedroom doors, making it challenging for individuals to cohabitate in co-living arrangements. Landlords are also prohibited from offering leases on individual bedrooms within a larger residence, because this is considered the equivalent of multiple “families” occupying one dwelling.

In order to proceed with a Flexible Co-Living pilot, NYC Council would need to pass legislation allowing code-issuing City agencies the discretion to grant reasonable regulatory flexibility for the pilot. There has been precedent for this. The Commissioner of the Department of Buildings has the [ability to grant flexibility to the Building Code](#) for experimental or demonstration pilots to obtain knowledge and information. This authority has been critical for the City to test innovative concepts, such as through the [Basement Apartment Conversion Pilot Program](#), which allowed eligible low- and middle-income homeowners in East New York and Cypress Hills to convert their basements into safe, legal, and rentable apartments.

In order to ensure enabling Council legislation is passed, 5BORO proposes that the City adopt the Flexible Co-Living pilot into its overall housing agenda. The agencies in the City’s Office Conversion Accelerator should also be directed to identify pathways for Flexible Co-Living to advance the model while still providing safe housing.

NYC Zoning Resolution

NYC’s Zoning Resolution further dictates how buildings can be used across the city, adding further challenges inhibiting the conversion of commercial buildings to co-living residences. [First established in 1916](#), the Resolution divides land in NYC into [three main zoning districts](#): residential, commercial and manufacturing. Within each category, buildings are divided into separate “[use groups](#)” that determine how they may function and what rules, regulations, and codes that they are subject to.

In order to legalize a Flexible Co-Living pilot, the Zoning Resolution would need to be amended, a process the City has already jumpstarted. In August 2023, the NYC Department of City Planning [announced that it would seek to facilitate office conversions](#) as a part of its [City of Yes for Housing Opportunity zoning amendment process](#). The agency is looking to allow offices and other non-residential buildings to convert to housing anywhere in the city where housing is permitted under zoning, as well as to allow for conversions to diverse housing types such as shared housing and dorms. It also aims to allow commercial buildings built before 1990 to convert to housing — an update from the existing 1961 and 1977 cutoffs in various areas.

In order for the proposal to be adopted, it will need to go through a [public review process and vote](#), involving Community Boards, Borough Presidents, and the City Council. 5BORO will continue to engage with City agencies and elected leaders to ensure these much-needed zoning amendments are designed to permit innovative models and are adopted.

Achieving

Deeper Affordability

Though Flexible Co-Living is anticipated to yield housing that naturally falls within the lower range of Manhattan rents, government intervention would be necessary to produce below market-rate units for low-income New Yorkers.

Deeper affordability is needed across the city in order to provide housing options for all New Yorkers. Flexible Co-Living could help house the many low-income New Yorkers who are single adults and are struggling to find housing in the city. Though it would not be appropriate for families, Flexible Co-Living could help reduce the demand for other housing stock that is more suitable for larger groups.

The most straightforward path forward to incentivize affordability would be through a State property tax incentive, which would need to be passed by the State Legislature. As a part of her [January 2023 agenda](#) (Part P), Governor Hochul proposed a property tax incentive for office-to-residential conversions that meet affordability requirements. This failed to pass the State Legislature as part of the State budget process in 2023. 5BORO and housing advocates are continuing to urge the State to provide a tax incentive to ensure converted office buildings include affordable apartments that rent below market rates.

The City could also support affordability on its own. Though tax incentives would need to come from the State, the City could offer low-interest loans to developers for committing to add affordable units. The City has offered these to past pilot participants, such as to homeowners participating in the [Basement Apartment Conversion Pilot Program](#). However, City loan programs can face certain [caveats or restrictions](#), as well as budgetary challenges. As a result, the greatest opportunity for adding deeper affordability to both Flexible Co-Living and office-to-residential conversions more broadly is through State intervention.



Flexible Co-Living Pilot

Bringing Ideas to Action



Flexible Co-Living Housing has the potential to deliver thousands of housing units that rent below the median price for Manhattan, while also bringing new life to struggling commercial districts and underutilized office buildings.

Given the innovation of the model, the necessary regulatory flexibility needed, and the need to test the model and glean best practices, the concept is well suited for a pilot program led by the City government.

The pilot should include several components to ensure its success: Government Partnership; Housing Developer Participation; Community Involvement and Knowledge Building; and Testing and Evaluation. We explore each of these recommendations in the following sections.

Government Partnership

5BORO recommends that the proposed Flexible Co-Living pilot be co-facilitated by a group of City agencies in close partnership with the State. City government is well-equipped to lead this pilot, as it already frequently uses

pilots to test innovative solutions across fields including housing, [energy](#), [food deliveries](#), [grease](#), [rats](#), or other challenges. The NYC Housing and Preservation Department has been involved in a [number of housing pilot projects](#), examining varying innovations including [micro-units](#), [prefabrication](#), [basement apartments](#), and [co-living](#) to leverage creativity to expand housing supply.

The complex landscape of City and State codes, laws, and regulations that residences must comply with, makes State collaboration essential. State legislators have [issued bills](#) in the past that, if passed, would have granted City commissioners more flexibility in meeting State regulatory requirements under specific circumstances. The [Board of Standards and Appeals](#) also issues variances to the MDL, though this typically has been for individual parcels of land instead of groups of buildings. To enable the pilot, the City must work with its counterparts in the State, and therefore should include Flexible Co-Living in its broader State legislative agenda.

Given the many bodies involved with setting housing regulations, the City should assemble a multi-agency task force to facilitate and guide the Flexible Co-Living pilot. The [Office Conversions Accelerator](#), announced by the City in August 2023, is in a strong position to oversee the pilot. This group of NYC agencies — which includes the Department of Housing Preservation and Development, Department of City Planning, Department of Buildings, and



Image source: Adobe Stock

Fire Department — are already tasked with ensuring existing office conversions receive timely permits and can help identify solutions to barriers in the codes and regulations they oversee.

Housing Developer Participation

The City should bring on private sector developers to participate in the pilot, as it has done with past housing pilots. Developers can submit project proposals for consideration which, if selected, they would be permitted to fund and build. The City would provide support in the form of regulatory relief and technical assistance.

This is a model the City often uses for housing pilots. In 2018, the NYC Department of Housing Preservation and Development (HPD) launched the [ShareNYC pilot](#), which tested the concept of co-living housing in which residents share communal facilities like kitchens and bathrooms. Interested housing developers and non-profit organizations were invited to submit proposals to build co-living housing on their privately-owned land through a [Request for Expressions of Interest](#) (RFEI). The proposals [included details](#) such as “a formal management plan, tenant-friendly layouts and design, and financing structures that allow for deep affordability.”

The City then reviewed proposals to identify projects optimal to meet the goals of the pilot. The three selected developers, which were

groups of private companies and non-profit organizations, received support from HPD in the form of expedited pre-development processes and technical assistance. The City should use this and other prior pilots as a framework for the Flexible Co-Living pilot.

Community Involvement and Knowledge Building

To ensure the pilot is informed by community knowledge and expert feedback, the City should seek input from the public. This could involve establishing formal structures, as the City has done in past pilot programs.

Before HPD selected any proposals in the 2018 ShareNYC pilot, it released a [Request for Information](#) (RFI), [seeking input](#) from a wide range of organizations to help shape the standards for this type of housing. Building upon this precedent for the Flexible Co-Living pilot, the City and participating developers should seek out counterparts in other cities that have successfully implemented office-to-residential conversions, co-living housing, and borrowed lighting through interior windows. Scientists, engineers and health practitioners should advise on criteria that must be met to maintain lighting and health standards.

Lastly, developers of selected proposals should hold focus groups and surveys to ensure that the housing developed is appealing to tenants. Tenants should be surveyed and invited to participate in focus groups throughout the

course of the pilot to gather data to produce co-living arrangements that are safe, enjoyable, and vibrant.

Testing and Evaluation

The City and pilot partners should design the projects to test various elements and configurations. One of the key goals of the pilot is to identify ways to scale the most effective components of the Flexible Co-Living model to add desirable and lower cost housing options.

The pilot should test for:

- Market Appeal: Co-living has enjoyed success in areas around the world, including in New York City; however, we need to better understand the market's appetite for this type of housing model. The pilot should gather data on how many people, and at what income levels, would be interested in homes with shared communal spaces, as well as with interior windows.
- Lay-Out Preference and Design: The pilot is an opportunity to pressure test different co-living lay-outs. Tenants should be provided with options on features such as the placement of interior windows and the degree of shared communal spacing. For example, some tenants may prefer interior windows within bedrooms, while others may prefer them in common rooms. Some may prefer to share a greater number of bathrooms with more residents, while others may prefer a facility limited to just a few individuals
- Conversion Financials: To explore the viability of this model and test whether it could be a cost-effective pathway for commercial building owners, this pilot should pursue co-living with as much adherence to original office infrastructure as possible, reducing the cost of conversion and maximizing housing supply. The pilot would help refine construction and property management costs, and give insights into the market-rate rents these units may yield. It could also help inform projections on the level or format of City incentives to facilitate the development of deeply affordable units.

CONCLUSION

New York, like many cities across the world, is currently facing a **lopsided real estate market.**

There are millions of square feet of office space sitting empty, while tenants face a **severe housing shortage and record-breaking rents.**

To solve these converging crises, our City and State governments must advance a comprehensive housing strategy, with common-sense and innovative policy solutions. Flexible Co-Living Housing could be a powerful tool within a broader strategy to bring new units online, provide a new type of housing model with lower rents, add a new style of housing to the limited array of options available to tenants, and boost commercial districts that have suffered from high office vacancies.

Times of crisis and challenge in our city demand bold and innovative ideas. The 5BORO Institute believes Flexible Co-Living Housing should be adopted as part of the City's housing agenda and advanced as a pilot to test the viability of this model and its potential to transform vacant offices into housing for New Yorkers and newcomers alike. Our city has long been a beacon of opportunity. We can't let the high cost of housing be a barrier to entry.



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