

Office to Residential Conversions Across Cities

John Damstra

NYU Stern School of Business

Hop Mathews

NYU Stern School of Business

Glucksman Institute for Research in Securities Markets

Arpit Gupta, PhD

Faculty Advisor

Theresa Kuchler, PhD

Research Director, Glucksman Institute

May 1, 2026

Abstract

This paper investigates office-to-residential (O2R) conversions as a solution to both the decline in post-pandemic commercial real estate values and the national housing shortage. While remote work has left Class-B and Class-C office buildings with record vacancies, significant architectural and financial barriers often stall private redevelopment. Our research categorizes general policy approaches and shares a survey of recent local-level reforms and entitlements to provide an overview of the ways in which major US metropolitan areas have encouraged development. We then present a comparative case study approach for five cities to analyze how financing tools, regulatory reforms, and public private partnerships specifically support. We conclude by recognizing that while O2R is not a complete for the housing crisis, both city-wide and tailored interventions can effectively repurpose obsolete office stock and revitalize transit-oriented downtown cores.

1 Introduction

America is facing an acute housing crisis. Since the start of 2019, home prices have grown by 60%. Goldman Sachs research states that the home price to income ratio is at the highest level since the 2000s housing boom.¹ Aggressive rate increases from the Federal Reserve in 2022 saw mortgage rates increase – the average monthly mortgage payment as a share of potential buyers’ income increased from below 20% before the pandemic to above 30%. These dynamics are less pronounced in the rental market. However, Goldman’s research discussed that the rent-to-income ratio is the highest it has been since the 1980s. The latest annual Rental Housing Report from Harvard’s Joint Center for Housing Studies showed a record 22.7 million households were rent burdened (spending more than 30% of their income on rent and utilities), nearly half of all renter households.

A dearth of housing supply is arguably the biggest contributor to this affordability crunch. Following the Great Financial Crisis, housing supply growth slowed precipitously, leading to an imbalance once demand returned. Freddie Mac economists have quantified this shortfall at 3.7 million homes,² or around 2.5% of the total housing stock and roughly 2-3 years of average completions.

Several factors have led to the choking of the pipeline post-crisis, including a shortage of skilled labor, a lack of low-cost financing, and the shuttering of numerous developers and contractor firms. However, arguably the most significant bottleneck is structural: the unavailability of urban land. The supply of land is essentially inelastic, and much of the low hanging fruit in dense transit hubs and downtowns have long been developed. Many lots suitable for development are made artificially scarce by regulation. For example, zoning codes prohibit building anything other than single-family detached houses on three-quarters of land zoned for residential use in most U.S. cities.³ Building height limits and minimum lot sizes limit the financial viability of many projects even further.

One potential solution to urban land scarcity is “active infill,” or converting or “densifying” properties or land parcels in use: particularly those that are vacant, dilapidated, or at risk of becoming so. Commercial office space has emerged as a natural option for developers and policy makers looking to bring about a new supply of housing.

¹Jan Hatzius, Elsie Peng, and Pierfrancesco Mei. *The State of Housing (Un)Affordability in the US*. Sept. 2025. URL: <https://www.gspublishing.com/content/research/en/reports/2025/10/01/532d47b5-b67c-4428-a2fa-95f1ceacb419.html>.

²Sam Khater et al. *Housing Supply: Still Undersupplied by Millions of Units*. Nov. 2024. URL: <https://www.freddiemac.com/research/insight/housing-supply-still-undersupplied>.

³Jenny Schuetz. “To Improve Housing Affordability, We Need Better Alignment of Zoning, Taxes, and Subsidies”. In: *Brookings Institution* (Dec. 2019). URL: <https://www.brookings.edu/articles/to-improve-housing-affordability-we-need-better-alignment-of-zoning-taxes-and-subsidies/>.

The Struggling Office Market as a Source for Housing Development

The COVID-19 pandemic precipitated a secular shift in office space demand. Almost overnight, America's white-collar workforce: the analysts, administrators, and software engineers who form the backbone of the knowledge economy—transitioned into remote or hybrid roles. The fact that firms were able to execute this pivot successfully demonstrated that the need for almost every corporate function to be housed in a centralized, physical location was somewhat of an anachronism.

The effects on the commercial real estate market have been profound. The Kastle back-to-work barometer, a weekly index that tracks office occupancy from anonymous key-card swipes in ten major U.S. metro areas, has demonstrated that cities are having difficulty breaking the 50-60% occupancy barrier. Even as many companies are executing return to office strategies, they are densifying their physical office space and employing a hoteling or "hot desk" model, breaking the 1:1 seat per employee ratio.

The fundamentals of the office market have deteriorated sharply. The January 2026 delinquency rate for office loans (CMBS) has reached an all-time high of 12.3%.⁴ Sector-wide, the vacancy rate is elevated to around 20%.⁵ Even studying aggregate figures masks a severe bifurcation of the office real estate market. There has been a flight to quality, and Class-A assets - highly amenitized spaces that offer hospitality-driven ecosystems - are flourishing and commanding premium prices. Class-B and Class-C buildings are struggling, with 90% of vacancies contained in the bottom 30% of buildings.⁶

For some, adaptive reuse, or office-to-residential conversion, has the potential to serve as a panacea to address both the housing shortage and the excess of outmoded office space. Unfortunately, conversion projects face many logistical and financial hurdles. Architectural feasibility is a major barrier. Many office buildings built in the second half of the 20th century have deep floor plates and were designed to maximize desk space in their use as cubicle farms. They have a "dark core" that is typically only employable as elevators, hallways, and storage, not commercializable as rental space. Similarly, office building utilities were constructed for centralized use and not individual control. As such, the HVAC and plumbing infrastructure needs to be redesigned or overhauled. Other constraints include adding operable windows to conform with building code requirements and reinforcing the floor slabs to ensure that they can support the weight of additional residential partitions and appliances (like stoves and washing machines). All of these issues require custom solutions for each project, and design and construction costs alone are often steep enough to discourage conversion attempts.

Many of the buildings most suitable for reuse are older, pre-war towers. These buildings were home to numerous small suites rather than large single-floor corporate tenants and

⁴I. Valerija. "Office Loans Delinquency Hits Record High". In: *CRE Daily* (Feb. 2026). URL: <https://www.credaily.com/briefs/office-loans-delinquency-hits-record-high/>.

⁵Marketbeat. *United States Office Q4 2025*. 2026.

⁶Brookfield. *The Misunderstood U.S. Office Market*. Feb. 2024. URL: <https://www.brookfield.com/views-news/insights/misunderstood-us-office-market>.

had shallower floor-plates with copious natural light as they were constructed before the ubiquity of fluorescent lighting. In addition, they were constructed with “overengineered” steel and cinder-fill slab flooring that has ample structural integrity to support the “live load” of modern apartment life and are relatively easy to carve and tranche compared to the post-tensioned concrete used in modern office towers. As the *New York Times* has written: “The very qualities that have made these buildings outdated as offices now make them ideal candidates for apartments.”⁷

To coax adaptive reuse projects, local governments have introduced numerous policy solutions to either relax regulatory hurdles or provide fiscal support. These are critical in terms of actually getting developers interested and conversions to be attempted and completed. As Aaron Krauss, Managing Director of Nuveen Green Capital shared: “a conversion project with a vanilla capital stack of 65% senior debt and 35% equity likely would not pencil without the public purse.”⁸

In the United States, housing policy has typically been left to states and cities. For this reason, Table 1 presents a selection of municipal policies enabling adaptive reuse. The cities selected are adapted from Table 3 from Gupta, Martinez, and Van Nieuwerburgh, “Converting Brown Offices to Green Apartments”⁹ which highlights the top 20 Metropolitan Statistical Areas by conversion candidates. In particular, the data below only include the specific policies that cities have pursued – not state or national level reforms or interventions. Often, city programs work in concert with broader state-level initiatives, such as California’s AB 2079, which allows ministerial approval for residential conversions in commercial zones, the Massachusetts Underutilized Properties Program, which provides targeted gap financing, or Ohio’s Transformational Mixed-Use Development Program, a tax credit to incentivize large-scale mixed-use conversions.

⁷Emily Badger and Larry Buchanan. “Here’s How to Solve a 25-story Rubik’s Cube”. In: *New York Times* (Mar. 2023). URL: <https://www.nytimes.com/interactive/2023/03/11/upshot/office-conversions.html>.

⁸Propmodo. *Evaluating the Economics and Capital Stack of Office-to-Residential Conversions*. Webinar. Produced in partnership with Gensler and Nuveen Green Capital. Mar. 2026. URL: <https://propmodo.com/evaluating-the-economics-and-capital-stack-of-office-to-residential-conversions/>.

⁹Arpit Gupta, Candy Martinez, and Stijn Van Nieuwerburgh. *Converting Brown Offices to Green Apartments*. Working Paper. Aug. 2023. URL: <https://ssrn.com/abstract=4533244>.

Table 1: Office-to-Residential Conversion Policy Database

City	Policy Name	Date	Mechanism	Description
New York	Office Conversion Accelerator	08/23	Task Force	A "concierge" service led by the Mayor's Office to fast-track permits and coordinate departments for projects adding 50+ units.
New York	467-M(2)	01/15/25	Tax Exemption	Provides a tax break for up to 35 years. Projects must commence by June 30, 2026.
New York	City of Yes	12/05/24	Zoning	Moved conversion eligibility date to Dec 31, 1990 citywide, unlocking 80s-era stock.
New York	Midtown Mixed-Use Plan	08/14/25	Rezoning	Rezoned 42 blocks of M1-6 districts to allow high-density residential by-right.
San Francisco	Adaptive Reuse Program	07/25/23	Regulation	Flexible rear yards and light requirements; permits downtown conversions "by right."
San Francisco	Downtown Financing Dist.	02/12/26	TIF	Up to 30 years of partial tax reimbursement; impact fees waived.
San Francisco	Proposition C	03/11/24	Fee Waiver	First sale of a converted property exempt from the city's Transfer Tax (6%).
Los Angeles	Citywide Ordinance	02/01/26	Zoning	Buildings 15+ years old eligible for "by right" conversion; grants density bonuses.

Table 1: Office-to-Residential Conversion Policy Database

City	Policy Name	Date	Mechanism	Description
Washington, DC	Housing in Downtown	03/22/24	Abatement	20 year tax abatement for conversions in specified downtown neighborhoods.
Chicago	LaSalle Street Reimagined	03/28/23	TIF/Zoning	TIF Grants and building code modifications applicable to downtown office towers.
Seattle	Ordinance 127181	02/14/25	Tax Deferral	Defer 10.3% sales tax for 10 years; exempt if property remains eligible housing.
Seattle	Ordinance 127316	11/14/25	Tax Exemption	12 year property tax exemption on residential improvements.
Portland	Seismic Design	01/01/23	Regulation	Shifts requirement to ASCE 41-BPOE standard (Life Safety vs. Immediate Occupancy).
Portland	Embodied Carbon Loan	10/24/25	Debt	Loans at 2% interest, forgivable after 10 years if carbon savings are demonstrated.
Dallas	Econ. Dev. Policy	06/11/25	TIF	TIF funded gap financing grants to offset hard costs of tower conversion.
San Diego	Complete Communities	09/07/22	Zoning	Developers may use Floor Area Ratios (FAR) rather than density limits.
San Diego	Bridge to Home	05/07/21	Financing	Gap financing to acquire and renovate for 100% affordable buildings.

Table 1: Office-to-Residential Conversion Policy Database

City	Policy Name	Date	Mechanism	Description
Boston	Conversion Program	10/23	PiLOT	29 year PiLOT agreement with average discount of 75% of residential value.
Denver	Adaptive Reuse Pilot	08/13/26	Zoning/TIF	Performance-based compliance; project coordinators; approved pool of TIF funding.
San Jose	Multifamily Incentive	01/27/26	Fee/Tax	100% waiver of construction taxes, 50% park fee reduction, no inclusionary fee.
Houston	Chapter 380 Programs	07/01/24	Grant	Reimbursement of property tax increment based on performance milestones.
Philadelphia	Conversion Abatement	06/26 (Est.)	Abatement	90% tax abatement on value of improvements for 20 years.
Austin	Density Bonus 90	02/29/24	Zoning	Permits developers to build up to 90 feet in height.
Phoenix	Section 711	05/28/25	Zoning	Adopt density of highest multifamily within 1 mile; bypass zoning hearings.
Phoenix	ARM Overlay	11/13/24	Zoning	Conversion permitted by right in areas within 1/2 mile of light rail.
San Antonio	SB 840/2477	09/01/25	Zoning	Permits rezoning of office to residential buildings by right.
San Antonio	SHIP Bond	05/07/22	Financing	Low interest loans or gap financing for deep affordability targets.

Many entitlement programs – whether they include financial subsidies, bonus density or volume allowances, or building permits – come with requirements for developers to set aside a certain proportion of units as affordable housing for individuals or families who make a specific fraction of the area’s median income (AMI). Developers and investors usually approach these requirements as “table stakes” to access the public purse. The following table details several of the affordability requirements related to adaptive reuse initiatives across different municipalities.

Table 2: Affordability Requirements for Select Incentive Programs

City	Policy	Percent of Units	Income Limit
New York	467-M Tax Abatement	25%	80% AMI (average) 5% must be set aside at 40% AMI
Washington	Housing in Downtown Abatement	10% ; 18%	60% ; 80%
Chicago	LaSalle Street Reimagined	30%	60% (average value)
San Francisco	Commercial to Residential Adaptive Reuse Program	5% ; 10%	50% ; 80%
Seattle	Ordinances 127181/127316	25%	50%–90% (scales with size of unit)
Boston	Inclusionary Development Policy	17%	60%
Denver	EHA ordinance compliance	10%; 15%	60%; 70%
Portland	Inclusionary Housing and Affordability	10%; 20%	60%; 80%

The above survey demonstrates that while affordability requirements are a requirement, specific implementation can vary widely. At a basic level, developers can choose between two different compliance paths, such as Washington, which allows developers to choose either 10% of units at 60% AMI or 18% at 80% AMI. For others, such as New York, developers have more discretion. For their required allotment they must reach a blended average of 80% AMI, but otherwise have the ability to price units however they like within given parameters. There is typically a ceiling (in New York it is 100% AMI) that developers cannot exceed in their affordability set-aside, and usually some proportion needs to be deeply discounted for very low income tenants. Even more permissive approaches involve developers paying a fee per unit, or building off-site affordable units, which allows developers to access additional subsidies, such as the Low-Income Housing Tax Credits (LIHTC), for buildings with 100% affordable units.

2 Categorizing Policy Approaches

Policymakers face a variety of options as they look to shape development in their local markets. In theory, the simplest, or at least cheapest, manner of inducing development would be to reduce the non-financial barriers to new development or adaptive reuse. Although it may be simple relative to other alternatives, which require greater outlays from local governments or forgoing future revenues, zoning reform or programs for expediting project reviews can still be politically fraught. In recent years, states and municipalities have sought zoning reform to encourage housing development of all types. In December 2024, New York's City Council approved City of Yes for Housing Opportunity, a comprehensive zoning reform package aimed at expanding the stock of housing. Among other changes, the measure expanded the area in which buildings would be eligible for conversion by right and updated the eligibility for potential conversions to buildings built before 1991. For example, an office building built in the Upper East Side of Manhattan in 1978 was previously ineligible for a conversion even if there was a clear economic case for a developer to retrofit the property. Although exceptions to the previous system could be made by going through the uniform land use review procedure (ULURP), conversion-related rezoning helps reduce the cost and uncertainty related to potential O2R conversions

Some cities across the country have also taken more targeted approaches to zoning reform in order to address office vacancies or detrimentally one-dimensional office districts. In the summer of 2023, San Francisco passed the Commercial to Residential Adaptive Reuse and Downtown Economic Revitalization. The program aimed to improve the viability of conversions in the downtown and union square neighborhoods, which had been particularly affected by the increase in office vacancies. Within the program, the Board of Supervisors and the Department of Building Inspection relaxed inclusionary zoning mandates as well as planning standards, including dropping rear yard requirements, and streamlined permitting, allowing potential conversions to forgo section 309 hearings, which could often take months.

These changes can be immensely beneficial in saving time and reducing uncertainty related to inherently risky development projects. While this can translate into financial savings particularly for pre-development costs, zoning reforms do less to address directly the financial gap between a profitable and unprofitable investment. As illustrated in Gupta, Martinez, and Nieuwerburgh (2023), office to residential can be profitable for developers without subsidies, but in areas where the economic factors affecting redevelopment, such as the cost of financing and the cost basis of the existing office building, cities can and have stepped in to help bridge the gap. This is particularly true in cases where legislators look to shape the nature of potential redevelopments to include particular features, most notably set-asides for affordable housing.

The three primary tools that policymakers use to address this financing gap are debt subsidies, property tax abatements, and tax increment financing. These policies are often used in conjunction with each other or, more commonly, zoning reform.

Subsidized debt programs, such as Portland's Office to Residential Loan Program, offer financing at below market interest rates. This tool is common across housing and development agencies and is often reliant on tax-exempt municipal bond proceeds, housing agency programs, or other structures to lower the cost of capital when proceeds are used to deliver on specific goals. In the case of Portland, the loan is forgivable after 10-years if certain affordability and sustainability targets are met. Additionally, because the funding comes from the Clean Energy Community Benefits Fund of the city, it is based on dollars per unit to reuse an existing structure (and the associated embodied carbon savings) with bonuses for energy efficient or electrification upgrades.

Subsidized loan programs can be a valuable tool in the public-private partnership toolkit, particularly in recent years when the cost of capital has increased materially and presented a meaningful headwind for potential projects. However, these programs often require set-aside funds or the approval of financing agencies, where new initiatives might compete with existing priorities for limited pools of capital.

Tax abatements can serve as a partial solution to these concerns by instead utilizing the expected increase in property tax as a source for incentivizing new developments. These programs, such as Boston's Office to Residential Conversion Program, allow developers and the city to negotiate specified payments in lieu of taxes (PILOTs) instead of the property tax that would otherwise be assessed on the building. In the case of Boston, developers receive an average discount of 75% relative to the full property tax over 29 years, so long as the project meets certain affordability targets. This reduction in operational expenses can make it easier for projects to pencil, particularly when owners will have to set aside a certain portion of future apartments to be leased at below market rents.

Although these abatements make operations more economical once the conversion is finished, potential projects can still often face funding shortfalls in the capital intensive construction phase. To address these upfront cost concerns, policymakers can also turn to tax increment financing (TIFs). TIF programs, such as LaSalle Street Reimagined in Chicago, often target specific areas of cities for redevelopment. Traditionally, TIF revenue bonds would be issued to fund infrastructure in the area with the aim of inducing additional development nearby. The increase in property taxes associated with the development would in turn be used to pay back the initial capital and interest. In Chicago and increasingly across TIF structures, the increase in property taxes above a base amount is sent back to the developer to reimburse them for eligible project costs. Although in practice it may look like the developer is essentially paying themselves, this future stream of payments can be taken to a lender to unlock additional upfront financing, a TIF note. This helps shift some of the risk associated with the investment toward the developer and away from the local government.

In the case of both tax abatement and TIF structures, the local government performs an initial "but-for" analysis to assess whether the project would otherwise not be viable if not for financial incentives. This analysis, along with affordability requirements, can help cities ensure that the forgone revenue is used to drive investment to meet local policy goals.

3 Case Studies

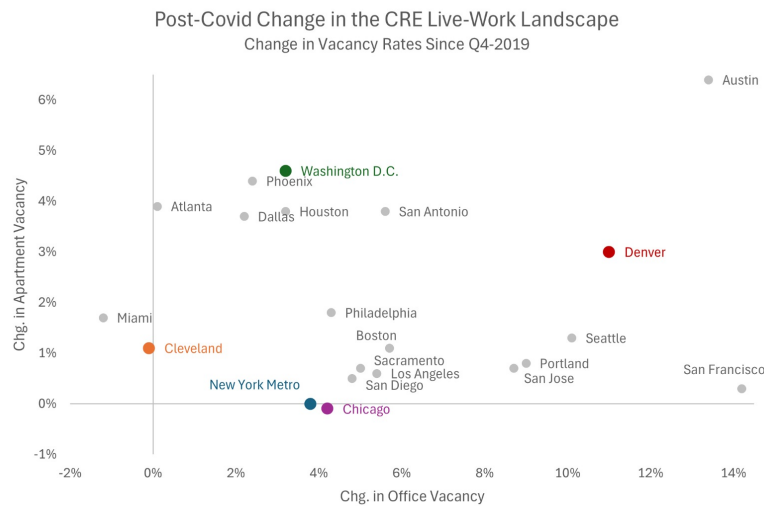


Figure 1: Commercial Real Estate

The scatter plot above illustrates the divergent conditions that motivate cities to pursue adaptive reuse and underscores why no single policy blueprint fits all markets. This report examines five cities that reflect a range of program structures and local market contexts, with the goal of drawing lessons that can be applied elsewhere. Denver serves as a stand-in for the Sun Belt and Sun Belt-adjacent growth markets that have expanded rapidly in recent years and are now looking to reposition their downtowns after a wave of new rental supply. Cleveland offers a model for smaller legacy markets seeking to build on their historic urban fabric as they chart a new path for growth. Washington, D.C., illustrates the challenge of reviving an office-centric downtown that has lost daytime activity and demand. Chicago confronts a similar problem through a different incentive structure, shaped by the burdens of its historic skyline, slower growth, and strained municipal finances. New York, by contrast, shows what is possible through a more hands-off framework in a market where housing scarcity and land constraints are especially acute.

New York City

New York presents a unique lens to examine office to residential conversions after the pandemic. The city has a long history of adaptive reuse. Many storied neighborhoods have shapeshifted over time, with the transformation of the Meatpacking District from a gritty, industrial zone to a wealthy hub for technology development, art and luxury retail being perhaps the most dramatic example in recent memory. For office to residential initiatives specifically, New York already had experience redefining office districts specifically with its 421-g program (1995-2006), which offered abatements to incentivize conversions in the financial district. The city also boasts a large office market, even relative to its size. New

York represents 2.5% of the country's population, but 8.5% and 20% of its office space by size and value, respectively.¹⁰ For the city, the office sector accounts for one third of jobs in the city, two thirds of the city's economic output, and serves as a meaningful tax base.¹¹ The office sector brings in more than a fifth of the city's property tax revenue and roughly 10% of the city's overall tax revenue.¹²

This crucial economic engine came to a halt in the pandemic. Even as restrictions slowly lifted, average weekday subway ridership failed to eclipse 50% of its pre-pandemic baseline until 2022, while swipes into office buildings failed to eclipse 40% of their baseline until the second half of 2022.¹³ Manhattan office vacancy rates rose from less than 8% in early 2020 to more than 14% in 2023.¹⁴

With questions lingering over the viability of the office sector, the city's housing market quickly returned to its competitive pre-covid baseline, marked by low vacancy rates and elevated rents. The city's triennial survey suggests that the apartment vacancy rate was as low as 1.4% throughout the first half of 2023, its lowest level on record.¹⁵

The acute housing shortage and the looming questions regarding the office sector motivated policy makers to establish an office to residential task force in 2022 to examine the opportunity for policy prescriptions to address these issues. In January 2023, the task force released its Office Adaptive Reuse Study, which recommended updating the zoning rules to expand the range of buildings eligible for more flexible conversion regulations and providing financial incentives to ensure greater affordability in converted units. Additionally, the administration of Mayor Eric Adams launched the conversion accelerator in August 2023, with the goal of providing a single touch point between O2R developers and the city. These city policies helped lay the groundwork for further expansion amid the broader City of Yes zoning reform process and took steps towards what would become the Midtown South Mixed-Use Plan. In 2024, these efforts went beyond zoning reform and other pre-development support to financial incentives with the passage of 467-m as part of the state's 2024 budget. The Affordable Housing from Commercial Conversions Tax Incentive Benefits program, or 467-m, offers a full property tax exemption during three years of construction as

¹⁰Office of the New York City Comptroller. *NYC's Office Market: Doom Loop or Boom Loop?* Nov. 2025. URL: <https://comptroller.nyc.gov/reports/nycs-office-market-doom-loop-or-boom-loop/>.

¹¹Office of the New York State Comptroller. *Office Real Estate in New York City: A Review of Market Valuation Shifts*. Aug. 2024. URL: <https://www.osc.ny.gov/osdc/reports/nyc-sectors/office>.

¹²Office of the New York City Comptroller. *Spotlight: What Risks Does the Office Market Pose for the City's Finances?* June 2023. URL: <https://comptroller.nyc.gov/reports/spotlight-what-risks-does-the-office-market-pose-for-the-citys-finances/>.

¹³Metropolitan Transportation Authority. *MTA Daily Ridership Data: 2020–2025*. New York State Open Data. Jan. 2025. URL: https://data.ny.gov/Transportation/MTA-Daily-Ridership-Data-2020-2025/vxuj-8kew/about_data.

¹⁴Office of the New York City Comptroller. *Office-to-Residential Conversions in NYC: Economics and Fiscal Estimates*. July 2025. URL: <https://comptroller.nyc.gov/reports/office-to-residential-conversions-in-nyc-economics-and-fiscal-estimates/>.

¹⁵E. Gaumer. *The 2023 New York City Housing and Vacancy Survey: Selected Initial Findings*. New York, NY, May 2024.

well as a 90% exemption for conversion projects in the Manhattan Prime Development Area (Manhattan south of 96th St.) where 25% of the units are affordable with AMI not exceeding 80%. For projects started between year-end 2022 and June 30th 2026, the exemption remains for 30 years before stepping down by 10 percentage points each year and phasing out after 35 years. The exemption will run for 30 years for projects started between July 2026 through June 2028 and then 25-years for projects started from July 2028 through June 2031, with a similar step down in the last five years for both periods. Projects outside the MPDA are also eligible for exemptions, but only for 65% of property taxes instead of 90%.

To contextualize the magnitude of these savings, the NYC Comptroller's Office modeled the financial impact of 467-m on a hypothetical conversion in Manhattan south of 59th Street. Under the exemption, property taxes fall from roughly \$21 per gross square foot to just \$2. This more than offsets the income loss associated with reserving 25% of units for affordable tenants, which amounts to approximately \$11 per gross square foot. The net effect is a 21% increase in net operating income compared to a fully market-rate building without the benefit, and between a 90% and 106% increase in the residual value of the land, depending on the valuation method employed.¹⁶

Through these changes, the city looked to accelerate the pace of new conversions and, with 467-m, ensure that a portion of the new housing stock would be affordable. This aspect separates 467-m from 421-g, the original financial district conversion abatement, which was focused on reinvigorating the fledgling office district, and places 467-m with more recent affordable housing amendments, such as 421-a and 485-x. Since the passage of 467-m, the city has seen an unprecedented level of conversion activity. The city comptroller places the proposed conversions in Manhattan through Q1 of 2025 at 14.7 m gross square footage, which would eclipse the entire total converted square footage under the 10-year 421-g program of 13.1 million square feet.¹⁷ Although the addition of 14,500 proposed units is relatively small compared to the more than 900,000 housing units in Manhattan, it would reflect a material uptick compared to the anemic pace of housing production in Manhattan. Census estimates of the housing stock put the average net new housing units in Manhattan at around 4,500 between 2020 and 2024, meaning that, if delivered, proposed conversions could result in an additional three years of average production.¹⁸ Analysis of the Department of Buildings permit databases shows that a smaller, but still meaningful, number of projects have been issued permits for construction. Since the passage of 467-m, through February 2026, permits have been issued for the creation of 5,800 residential units from the conversion of commercial properties. This demonstrates that the program has been

¹⁶Office of the New York City Comptroller, *Office-to-Residential Conversions in NYC: Economics and Fiscal Estimates*.

¹⁷Ibid.

¹⁸U.S. Census Bureau. *Annual Estimates of Housing Units for Counties in New York: April 1, 2020 to July 1, 2024 (CO-EST2024-HU-36)*. National, State, and County Housing Unit Totals: 2020–2024. 2024. URL: <https://www.census.gov/data/datasets/time-series/demo/popest/2020s-total-housing-units.html>.

successful in incentivizing the creation of additional housing. This is particularly true in Midtown, which had seen relatively few conversions prior to the enactment of 467-m or the passage of the midtown-south mixed use plan. In the financial district, the financial viability of these conversions had been established prior to the passage of 467-m. Major development projects such as 25 Water Street and 55 Broad Street were retroactively included in the abatement. For these buildings, the city is effectively paying to add to its affordable housing stock in downtown by foregoing additional property tax revenue.

The conversion of the former Pfizer headquarters at 219 and 235 East 42nd street is perhaps the clearest example of the collective set of policy changes working as intended. The project will yield over 1,600 apartments upon its expected completion in 2027, making it the largest office-to-residential conversion project in the country to date. The renovation of the Pfizer buildings is the product of the full policy stack, including the FAR cap removal that allowed 19 new floors to be added atop the lower annex building and 467-m provided the tax relief that makes the 25% affordability obligation financially viable. While the building would have been narrowly eligible prior to the City of Yes eligibility extension (it was built in 1961), it reflects the type of 1960s-era towers that would have been ineligible under prior zoning. The project also reflects the shifting nature of conversions in New York towards Midtown. Since many of the pre-war, ‘easier’ building stock in the financial districts have been converted, developers are now taking on the challenge of newer office towers with more difficult floorplates.

Washington DC

Washington DC has long had one of the most robust office markets in the country. The city is home to numerous attorneys, analysts, administrators, consultants, and lobbyists, anchored by the work of the Federal Government and its sprawling network of contractors. The average asking price for office space in 2019 was approximately \$55 per square foot,¹⁹ selling at a premium to the national average of roughly \$32 per square foot but below the top markets of Manhattan and San Francisco. What made the market unique was the fact that the federal government was the single largest tenant,²⁰ providing an almost bond-like risk profile to real estate investments in the city. However, this skew towards knowledge and government work made the district highly susceptible to both the shift to hybrid work and the reduction in the Federal workforce. Consequently, office vacancies are elevated above 20%.²¹ What were safe-haven assets merely a decade ago became liabilities. In response to this depleted daytime population, DC leadership has pursued an aggressive city-led pivot toward converting these distressed properties into residential and mixed-use hubs.

¹⁹Cushman & Wakefield. *MarketBeat: U.S. Office Q2 2018*. 2018. URL: https://trerc.tamu.edu/wp-content/uploads/files/PDFs/MktResearch/US_Office_CushmanWakefield.pdf.

²⁰Lincoln Property Company. “Recent Trends and Key Insights in the Federal Real Estate Sector”. In: (Jan. 2025). URL: <https://lpc.com/insights-research/recent-trends-and-key-insights-in-the-federal-real-estate-sector/>.

²¹CBRE. *Washington, D.C. Office Figures Q4 2025*. 2025.

Housing in Downtown (HID) is the city’s centerpiece to encourage adaptive reuse and add a target of 15,000 residents to downtown Washington. Its principal entitlement lever is a 20-year tax abatement. Eligible buildings must be former offices (as verified by the Certificate of Occupancy) and located in a specified area: which largely coincides with Northwest Washington (which includes the central business district), as well as a few other residential neighborhoods surrounding the National Mall. As with other municipal entitlement programs, the abatement comes with affordability requirements. Developers must choose between two compliance paths: setting aside 10% of units for households earning 60% of the Median Family Income or setting aside 18% of units for households earning 80% of the Median Family Income.²²

From the perspective of developers, an abatement can serve as gap financing even if the benefits accrue over a longer time horizon. Increasing the building’s operating income can both expand their debt capacity and reduce required equity contributions. From the perspective of the city, the abatement trades revenue in the near term for the possibility of securing the downtown population and stabilizing the tax base.²³

Critically, unlike other financing vehicles such as subsidized debt or TIF grants, the city does not need to disburse any of the money upfront. This is particularly important because DC’s hybrid legal status means that it cannot borrow from a parent state and is required by Federal law to run a balanced budget. The abatement vehicle therefore allows the city to incentivize office conversions without large upfront cash expenditures, which would have stressed the city’s finances. This also informed the decision to gradually phase in the Housing in Downtown Subsidy. There is a limited pool of entitlement benefits in the first few years that will substantially ramp up over time.

Fiscal Year (FY)	Annual Funding Cap	Remaining Funds
2024 – 2026	\$2.5 Million (Total)	\$1.725 Million
2027	\$5.0 Million	\$.96 Million
2028	\$41.0 Million	\$22.9 Million
2029 and Beyond	104% of Prior Year	Annual 4% Escalation

Table 4: Annual caps for the 20-year residential tax abatement program.

Beyond financial incentives, policymakers have made significant progress in addressing regulatory bottlenecks that have previously derailed ambitious building projects in the district. A significant reform involves the First Source requirements, which require that projects

²²Office of the Deputy Mayor for Planning and Economic Development. *Housing in Downtown Tax Abatement Program: Program Rules and Guidelines*. 2024.

²³Ritvik Chennupati. “Obsolete to Opportunity? Why Office-to-Residential Conversions Rarely Work in Washington, DC”. In: *Steers Global Real Assets* (Mar. 2026). URL: <https://globalrealassets.georgetown.edu/insight/why-office-to-residential-conversions-rarely-work-in-dc/>.

receiving city funding hire 51% of their construction employees as builders. According to the DC Policy Center, there are only roughly 1,350 construction workers residing in the District. Strict adherence to traditional First Source rules would require that federally subsidized projects employ 61% of the entire local construction workforce continuously²⁴—a functional impossibility. HID shifts this requirement to the operational phase, where the labor pool is deeper and less-specialized, to mitigate construction-phase stagnation.

The city also passed the RENTAL (Rebalancing Expectations for Neighbors, Tenants, and Landlords) Act, which, among other measures, waives the Tenant Opportunity to Purchase Act (TOPA) requirements for completed conversions. TOPA gave tenants the right of first refusal to purchase the building. There is now a blanket 15-year exemption and the law clarified that capital money transfers (bringing in new equity partners or shifting minority interests) do not trigger an alert to residents. This has long been a pain point for developers and makes adaptive reuse projects more attractive to institutional investors, allowing them to clean up their capital stack and exit their investments with fewer frictions.

The adaptive reuse of housing in Downtown has already achieved several early victories. As of early 2026, 11 renovations have been completed and 1,904 units have been delivered. Ten buildings are under construction, and 34 conversions are in the pipeline.²⁵

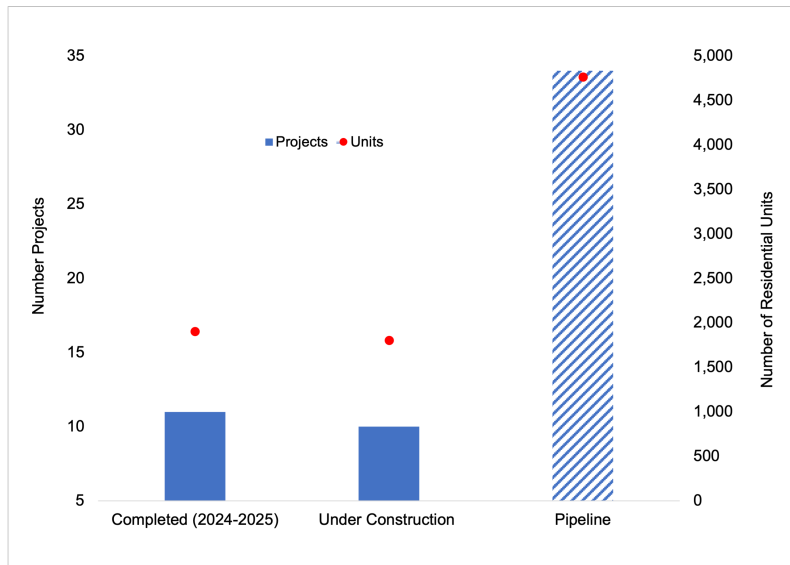


Figure 2: Washington DC: Office Conversion Deliveries

²⁴Emilia Calma. *Alternative Workforce Plans Can Help Grow Local Talent, Especially in Construction Where Workers Are Lacking*. Written testimony to the Executive Administration & Labor Public Roundtable on the District’s First Source Program and Alternative Workforce Plans. Available at D.C. Policy Center. Washington, D.C.: D.C. Policy Center, Nov. 2023.

²⁵Washington DC Economic Partnership. *DC Development Report (2025/2026)*. Annual analysis of development and construction activity. Washington, D.C., Dec. 2025. URL: <https://wdcep.com/>.

If all of these conversions were completed, Washington would add 8,467 residential units to its total inventory. Assuming an average of 2 residents per unit and an occupancy rate of 90%, there is enough pipeline to achieve the city’s target of 15,000 residents.

One of the most significant projects in the pipeline is The Geneva, the conversion of two Class-B office buildings at the northern end of the Dupont Circle neighborhood. Slated to open in 2028, The Geneva will contain 532 units (61 affordable), making it one of the largest residential conversion projects in the country outside of New York. The Geneva is notable for receiving roughly \$465M C-PACE financing from Nuveen Green Capital.²⁶ PACE loans are a private market loan to fund energy efficiency improvements that is repaid as an assessment on the property bill. Unlike a standard construction loan, C-PACE financing is unique because it stays with the land rather than the owner, and this super lien offers lenders greater security, which often affords borrowers cheaper rates compared to private mezzanine debt and potentially senior bank debt. C-PACE has been traditionally employed to fund energy modifications: solar panel installation, LED retrofits, more efficient mechanical appliances, and has traditionally been marketed to the “MUSH” market: Municipalities, Universities, Schools, and Hospitals.²⁷ The Geneva has received the largest PACE loan to date, which demonstrates the District’s commitment to supporting innovative financing mechanisms to fund adaptive reuse.

Chicago

At the center of the nation’s third largest metro area, Chicago’s central business district, the Loop, boasts the second largest concentration of office space outside of midtown Manhattan.²⁸ Yet, the city has long grappled with structural headwinds that predate the pandemic shock. Population growth in the Chicago MSA has stagnated for over a decade, driven by persistent domestic out-migration. Population flows have been even more severe for Cook County and the city of Chicago.²⁹ Since 2020, the metro area has lost nearly 46,000 residents, with more than 347,000 residents leaving during that period, even as an influx of international arrivals partially offset the losses.³⁰ Economically, Chicago’s real GDP grew at only 0.92% annually over 2019–2024, roughly a quarter of the average of the top-25 cities (3.2%). Chicago ranked 24th among the 25 largest metros in 2024 with GDP growth of just

²⁶DC Green Bank. *DC PACE Program and Nuveen Green Capital Announce Largest C-PACE Deal in the United States*. Jan. 2026. URL: <https://dcgreenbank.com/news/geneva-pace/>.

²⁷Jake Berlin. *Driving Market Solutions for Clean Energy: Energy Efficiency*. Lecture at the New York University Stern School of Business. Presentation on market-driven energy solutions. New York, NY, Oct. 2025.

²⁸Chicago Loop Alliance. *State of the Chicago Loop: 2018 Economic Profile*. Accessed: 2024-05-20. Chicago, IL, 2018. URL: <https://loopchicago.com/economic-profile>.

²⁹Jones Lang LaSalle Research. *Chicago Office Market Dynamics 2023*. Market Report. Chicago, IL, 2023.

³⁰Bryce Hill. *Nearly All Illinois Communities Smaller Since 2020; Chicago Loses Nearly 30K*. May 2025. URL: <https://www.illinoispolicy.org/nearly-all-illinois-communities-smaller-since-2020-chicago-loses-nearly-30k/>.

1.28%. Corporate departures, including Boeing, Caterpillar and Citadel, have further eroded the city's business base.

From a real estate standpoint, Chicago's market for downtown office space entered the pandemic in a disquieting equilibrium, never having fully healed from the two prior recessions. Vacancy in the central business district hovered around 14% in late 2019, reflecting lackluster absorption and a gradual erosion of the Loop's status as the region's dominant employment hub.³¹ In the late 2010's, several new developments attempted to revitalize downtown with the help of government subsidies, including The 78 and Lincoln Yards, but most were never realized. Additionally, the West Loop's rise as a competing office submarket compounded the challenges of the Central Loop, pulling tenants to newer, amenity-rich buildings and further concentrating vacancy in the older, historic stock along LaSalle Street, Chicago's answer to Wall Street and the main hub of the Midwestern Financial Industry.

The onset of COVID-19 accelerated a slow-moving structural shift into a near-term crisis. Physical office occupancy collapsed as remote and hybrid work took hold. After a brief rebound in 2022, downtown vacancies have hit a record high for twelve straight quarters, with vacancy rates nearly doubling from their pre-pandemic level to 27%.³² The collapse in downtown office values also began to ripple through Chicago's already-strained public finances. In 2024, residential property assessments in Cook County increased at a record 16.4%, resulting in a 11.6% increase in homeowner tax bills.³³ By contrast, taxes on commercial properties rose only 0.9% overall, dragged lower by a 7.2% decline for Loop commercial properties. This dynamic reflects the potential to precipitate an urban "doom loop", where declining commercial valuations erode the tax base, pressuring municipalities to shift the burden to residents, which in turn risks accelerating out-migration that weakens demand for office and retail space.

During this disruption, the City of Chicago launched an ambitious initiative, LaSalle Street Reimagined, aiming to transition the historic downtown office corridor from Wacker Drive and Jackson Boulevard into a sustainable, mixed-use neighborhood. A key aim of this initiative is the adaptive reuse of the area's office buildings into affordable housing. An initial invitation for proposal in September 2022 presented developers with the opportunity to apply for project cost subsidies from a \$300M pool of TIF financing. The city included a number of requirements and judgment criteria. Most important is affordability. Each project is required to provide at least 30% affordable units at 60% AMI with an equivalent unit mix to the market rate units. The second is labor requirements, with at least 26% of project costs paid to

³¹Cushman & Wakefield. *MarketBeat: Chicago CBD Office Q4 2019*. Chicago, IL, Jan. 2020. URL: https://www.cushmanwakefield.com/-/media/cw/marketbeat-pdfs/2019/q4/chicago_americas_marketbeat_office_cbd_q42019.pdf.

³²City of Chicago Council Office of Financial Analysis. *State of the Economy: City of Chicago August 2025*. Chicago, IL, Aug. 2025. URL: https://www.chicago.gov/content/dam/city/depts/COFA/StateoftheEconomy/State%20of%20Economy_2025_COFA.pdf.

³³Cook County Treasurer's Office. *2024 Tax Year Bill Analysis*. Chicago, IL: Cook County Treasurer's Office, Nov. 2025. URL: <https://www.cookcountytreasurer.com/pdfs/taxbillanalysisandstatistics/taxyear2024analysisenglishversion.pdf> (visited on 04/23/2026).

minority-owned business enterprises and at least 6% to woman-owned business enterprises, as well as meeting prevailing wage requirements and 50% Chicago based construction labor mandates, in line with requirements for any projects receiving city assistance. In addition, beyond reporting on Environmental Site Assessments, projects are evaluated on strategies to maximize the environmental and social impact of the project in addition to economic value and resilience.

The tax increment financing available to developers is structured as a reimbursement for eligible development costs, specifically those going to the creation of new residential units and their associated share of building costs. Additionally, in line with the city's goal of transitioning the LaSalle district to a "15-Minute" neighborhood, TIF financing can also be used to cover the costs associated with the retail and 'large, historic, grand spaces' that are open to the public. From the developers' perspective, the cadence of reimbursements is defined in the final redevelopment agreement with the city. In the case of 79 W. Monroe St., this included \$12 million after hitting each 30%, 60%, and 90% construction completion benchmark, as well as \$4 million upon issuance of the certificate of occupancy.

So far, the city has approved six projects since the initial request for proposals in 2022, totaling 1,765 units of which 538 are affordable.³⁴ However, there was a significant delay between the start of the initiative and the first groundbreaking. Following the initial selection of five projects in March and May of 2023, the initiative went dormant as Lori Lightfoot lost her re-election bid to Mayor Brandon Johnson and rising interest rates tempered appetite for development. However, the program was ultimately revived in April 2024.³⁵ Since the restart, six projects have been approved by the Chicago Development Commission, four have received full approval from the city council, and at least two are currently under construction including 79 W. Monroe St, which was the first project to break ground last year.³⁶

Of the approved projects, 135 S. LaSalle St. stands out as the largest TIF recipient, with \$98 million in support from the city through the LaSalle St. initiative. This project involves converting the Field building, a 1.2M square foot office building built in 1933. Bank of America vacated the bottom 19 floors, contributing to an 83% vacancy rate. The developers, Riverside Development, AmTrust RE, and DL3 Realty, are converting floors 5-14 (362,000 sf) into apartments, floors 3 & 4 into a parking garage, and the bottom two floors into retail, with the remaining square footage continuing to be used as office space. The project is not alone in maintaining a significant share of square footage in its original use, such as 30 N. LaSalle St., or in working around active users, as is also the case for 79 Monroe St. Similarly,

³⁴City of Chicago. *Exhibit E: Form of Redevelopment Agreement. In Ordinance for LaSalle Street Reimagined*. Chicago, IL: City of Chicago, 2024. URL: <https://www.chicago.gov/city/en/sites/lasalle-street/home.html> (visited on 04/23/2026).

³⁵Miranda Davis. "Chicago to Go Ahead With Plan to Revamp Empty Downtown Towers". In: *Bloomberg* (Mar. 2024). URL: <https://www.bloomberg.com/news/articles/2024-03-04/chicago-to-go-ahead-with-plan-to-revamp-empty-downtown-towers>.

³⁶Melody Mercado. "On LaSalle Street, City Breaks Ground On First Office-To-Apartments Development". In: *Block Club Chicago* (Mar. 2025). URL: <https://blockclubchicago.org/2025/03/27/on-lasalle-street-city-breaks-ground-on-first-office-to-apartments-development/>.

135 S. LaSalle St. is using a \$26 million historic tax credit, reflecting the incentive stacking that is common across active Chicago conversion projects.

Chicago's experience thus far has shown that a narrow geographic focus does not necessarily translate into faster results. Despite the city's comparatively numerous requirements, the invitation for proposal (IFP) attracted sufficient interest to deploy roughly \$260 million in TIF financing across five projects, with the original call for proposals oversubscribed. The largest source of delay was not developer appetite but the shelving of approvals for nearly 18 months. This reflects the broader political sensitivity around attempting to transform the character of an entire neighborhood rather than incentivize isolated projects. Because LaSalle Street Reimagined is ultimately asking the Loop to become something it has never been, its success will take years to properly evaluate.

Cleveland

The mid-sized Midwestern city of Cleveland, Ohio, has long been a leader in adaptive reuse. Between 2016 and 2024, Cleveland is the top market for office conversion, with approximately 11% of total inventory converted or planned for renovation. This outpaces other major metro areas, including: San Francisco and Houston. As of late 2025, there is an additional 6.6M square feet of conversion projects in the pipeline, making Cleveland one of the most active markets for office conversions.³⁷

Cleveland's leadership in this area stems in part from its endowment of high quality historic buildings. In the late 19th and early 20th century, Cleveland was one of the wealthiest and most populated cities in the United States. John D. Rockefeller incorporated Standard Oil in Downtown Cleveland in 1870. The city subsequently developed into a hub of advanced and precision manufacturing as well as textile production; a robust commercial and financial infrastructure was developed, and with the boom came office buildings, warehouses, and department stores.

Cleveland's population declined precipitously in the latter half of the 20th century. Suburbanization and White Flight decimated the city's tax base. Other trends, such as the migration of manufacturing to lower cost, non-union states, and the China shock battered the regional economy, which was skewed towards heavy industry. Recent years have seen the city slowly transition to an "eds-and-meds" economy—anchored by the Cleveland Clinic, University Hospitals System, and Case Western Reserve University. This pivot initially left its legacy infrastructure of office buildings, manufacturing plants, and warehouses largely untouched.

A shrinking population does not mean that the city has a housing surplus. Cleveland has a shortfall of 15,000 homes.³⁸ The city is burdened by 25,000 vacant lots, representing

³⁷CBRE. *U.S. Office Adaptivity Report: Converting Office to New Uses*. 2024.

³⁸City of Cleveland Department of Community Development. *Request for Proposals: Modular Home Manufacturing Facility*. Joint initiative with the Site Readiness for Good Jobs Fund. Cleveland, OH: City of Cleveland, Dec. 2, 2024. URL: <https://sitereadycle.org/news/press-releases/> (visited on 04/23/2026).

21% of all city parcels.³⁹ Given the high costs of both assembling these fragmented parcels and greenfield construction, adaptive reuse has emerged as the most viable strategy to close the shortfall gap. This is especially critical in a market where construction costs remain high while rents remain low.⁴⁰ Consequently, Cleveland has developed significant expertise in executing conversion projects, specifically in structuring complex capital stacks and navigating the technical challenges of transforming legacy infrastructure.

Cleveland has established robust policy scaffolding to incentivize urban development. An important financial lever has been the city’s tax abatement program. Since 2004, Cleveland has offered a blanket 15-year, 100% tax abatement for renovations and new buildings meeting green standards. As of 2024, this has evolved into a tiered system that incorporates new affordability mandates to ensure equitable growth, channeling the majority of the benefits to poorer, blighted neighborhoods, and ensuring that subsidies do not accrue to developers in already gentrified areas.⁴¹

Category	Market Rate	Middle Market	Opportunity
Abatement %	85%	100%	100%
Affordable Set-Aside	25% of units	15% of units	5% of units
MWBE Set-Aside	15% Contracting	7% Contracting	8% Contracting

Table 6: Tiered Abatement and Community Benefit Requirements for Multi-Family Projects.

A transformative shift is underway regarding Tax Increment Financing (TIF). While the city has previously used project-specific TIFs, Mayor Justin Bibb instituted a massive "Shore-to-Core-to-Shore" TIF district in early 2024. Covering most of downtown and certain neighborhoods immediately west of the Cuyahoga River, the program is projected to generate between \$3 billion and \$7.5 billion over 30 years.⁴² Much of this revenue is earmarked for large-scale public infrastructure, such as a riverfront boardwalk and improved pedestrian walkways. With this ambitious redevelopment plan, Cleveland is attempting to repurpose legacy infrastructure into a vibrant residential and recreational corridor. Much like Chicago’s celebrated lakefront, this cohesive network of public amenities is designed to spark a new

³⁹Western Reserve Land Conservancy. *Cleveland Property Inventory: Data on 162,000 City Parcels*. 2023.

⁴⁰Nick Pipitone. *How Cleveland Cracked the Code on Office Conversion Projects*. LinkedIn News. May 2024. URL: <https://www.linkedin.com/pulse/how-cleveland-cracked-code-office-conversion-projects-nick-pipitone-hkwp/>.

⁴¹City of Cleveland. *Ordinance No. 544-2022. Amending the Residential Tax Abatement Program*. Implementation began January 1, 2024. Cleveland, OH: Cleveland City Council, June 6, 2022. URL: <https://www.clevelandohio.gov/city-hall/departments/community-development/programs-services/tax-abatement> (visited on 04/23/2026).

⁴²City of Cleveland. *Shore-to-Core-to-Shore TIF District seeks to transform waterfronts, strengthen city core and Cleveland neighborhoods*. City of Cleveland News. Jan. 2024. URL: <https://www.clevelandohio.gov/news/shore-core-shore-tif-district-seeks-transform-waterfronts-strengthen-city-core-and-cleveland>.

wave of in-migration, ensuring the long-term viability of the urban core's transition from office-centric to residential-driven.

Furthermore, the city is modernizing its land-use policy through zoning reform to stimulate development outside of its downtown neighborhood. Cleveland is currently piloting "form-based" zoning, to override the classical "Euclidian zoning" model.⁴³ In this model, approval for renovations is guaranteed "by right" if a project meets specific design standards, almost always the case for existing buildings, and parking restrictions and restrictions are effectively eliminated. Associated with this change was the release of a digital permit portal to streamline the process and reduce administrative approval delays. This pilot originated in the Detroit Shoreway neighborhood, which is already seeing a wave of new construction thanks to this relaxed regulatory environment, including the transformation of a 1915 eight story electrical manufacturing plant into an all-residential neighborhood anchor. This pilot has spread to other opportunity corridors citywide, and the hope is that it will eventually be widely adopted. Developers and community stakeholders have welcomed it as a sensible evolution of an outdated zoning model that once protected residents from industrial pollution at home, but now unnecessarily slows development and neighborhood revitalization.

Finally, state-level initiatives have provided a critical secondary layer of support. Ohio's Transformational Mixed-Use Development (TMUD) program offers tax credit of up to 10% of TDC for high-impact projects. Additionally, the Ohio Historic Preservation Tax Credit, which provides a state tax credit of 25% of qualified expenditures, up to \$5 million, remains a vital tool to make Cleveland's historic housing stock even more attractive as a pool for conversions.

The \$218M transformation of the Erieview Tower (1301 East 9th Street), a landmark of the Midwestern International Style, into a mixed-use complex—including 227 apartments, a 210-room luxury hotel, is one of Cleveland's most high profile reuse project in years.

The numerous blended incentives employed include federal and state historic tax credits, C-PACE financing (provided by Nuveen Green Capital and authorized by the City of Cleveland), Transformational Mixed-Use Development (TMUD) credits, and a project-specific non-school TIF. These are supplemented by tax-exempt bond financing from the Port of Cleveland, Brownfield Remediation grants, and a 10-year property tax abatement.⁴⁴

⁴³Thanks to Edward Peppers of MidTown Cleveland for discussing Cleveland's TIF and zoning reform

⁴⁴Kohrman Jackson & Krantz. *KJK Finalizes Closing of Erieview Tower Redevelopment*. KJK News. Jan. 2025. URL: <https://kjk.com/2025/01/06/kjk-finalizes-closing-of-erieview-tower-redevelopment/>.

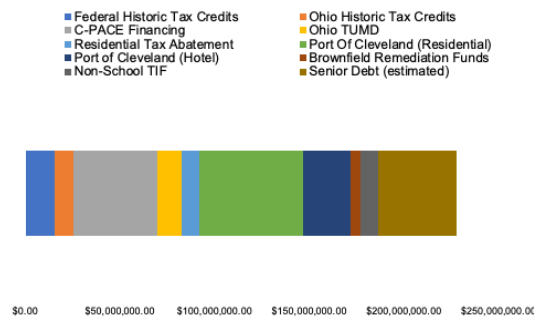


Table 7: Erieview Tower Funding Mix

Funding Source	Amount (USD)
Port Of Cleveland (Residential)	\$55,000,000.00
C-PACE Financing	\$43,881,864.00
Senior Debt (estimated)	\$41,758,136.00
Port of Cleveland (Hotel)	\$25,000,000.00
Federal Historic Tax Credits	\$15,000,000.00
Ohio TUMD	\$13,000,000.00
Ohio Historic Tax Credits	\$10,000,000.00
Non-School TIF	\$9,460,000.00
Residential Tax Abatement	\$9,260,000.00
Brownfield Remediation Funds	\$5,100,000.00
Total	\$227,460,000.00

A similar precedent is the transformation of the Warner & Swasey Building, an early twentieth century precision manufacturing plant located in Cleveland’s midtown corridor between the and Case Western University, into affordable housing. This three story 19th century revival style building sat vacant and blighted for 40 years. To rescue the structure, Pennrose and nonprofit MidTown Cleveland assembled a "herculean" portfolio of 24 fundraising sources.⁴⁵ They employed LIHTC (Low-Income Housing Tax Credits) and repurposed leftover federal recovery funds such as ARPA (American Rescue Plan Act) and ERA2 (Emergency Rental Assistance) for gap financing. Additionally, a sale-leaseback agreement with the Port of Cleveland afforded the developers sales tax exemptions on construction materials.

⁴⁵Karin Connelly Rice. “The Wait Is Over: Warner & Swasey Redevelopment Secures Full Funding, Set For January Groundbreaking”. In: *FreshWater Cleveland* (Dec. 2025). URL: https://www.freshwatercleveland.com/features/The-Wait-Is-Over-Warner-Swasey-Redevelopment-Secures-Full-Funding-Set-For-January-Groundbreaking_120825.aspx.

These sophisticated capital stacks exemplify how cities can help developers absorb the steep design and construction costs involved in re-engineering a modernist skyscraper or a long-defunct industrial factory into low-income housing. Cleveland has refined this approach over years. Erieview Tower and the Warner & Swasey Building are among the latest impressive examples demonstrating how multiple stakeholders can leverage public-private partnerships to successfully bridge financial gaps, even in an expensive and restrictive capital market environment.

Denver

For the past two decades, the Mountain West has served as a key escape valve for tech companies and workers seeking to avoid the high costs of San Francisco and Seattle. Denver led this trend: it was one of the fastest-growing cities in the United States in the 2000's. The city added roughly 115,000 residents between 2010 and 2020: a 20% increase in population.⁴⁶ Denver's market is unique as its relatively permissive development environment (compared to its coastal peers) has allowed housing stock to grow alongside this demand. Nearly 20,000 units were delivered in 2024, which has driven apartment vacancy rates to a 16-year high⁴⁷ and caused a rare 4.6% year-over-year average per unit rent decrease in 2025.⁴⁸ This growth eventually bumped up against natural barriers. The Rocky Mountains to the west of the city and the prior appropriation of water rights by Colorado ensure that the MSA is horizontally contained due to these senior rights claimed for agriculture in the great plains and physical limitations. As a result, real estate prices have risen sharply, the median close price in January 2026 is \$559.9K, up from \$350K in 2017.⁴⁹ Furthermore, high interest rate environments have led to a collapse in new permits issued and have frozen the future pipeline. Policy makers expect the current inventory to be absorbed by 2027. Denver therefore risks returning to the supply-constrained residential market and undoing recent affordability gains.

The city and developers are now looking to the major office towers in downtown to introduce a new wave of housing supply and revitalize the urban core. Denver's office vacancy rate has more than tripled since 2019. It is 38%, the highest level since 1990⁵⁰ when the city emerged from a severe localized recession driven by a collapse in oil prices.⁵¹ To encapsulate this trend, in April 2025 LA based developer Asher Luzzatto acquired two joined office

⁴⁶Denver Department of Transportation and Infrastructure. *Denver Moves Everyone 2050: State of the System*. Mar. 2022.

⁴⁷Jennifer Brown. "Apartments in Metro Denver Reach Highest Vacancy Rate in 16 Years, Pushing Down Rents Again". In: *The Colorado Sun* (Jan. 2026). URL: <https://coloradosun.com/2026/01/21/apartments-in-metro-denver-reach-highest-vacancy-rate-in-16-years-pushing-down-rents-again/>.

⁴⁸CBRE, Inc. *Denver Multifamily Figures | Q4 2025*. Market Report. Denver, CO, Jan. 2026.

⁴⁹Denver Metro Association of Realtors. *Market Trends Report: January 2026*. Jan. 2026.

⁵⁰Greeley Tribune. "Colorado Commercial Real Estate Office Space Economic Outlook". In: (Jan. 2024). URL: <https://www.greeleytribune.com/2024/01/05/colorado-commercial-real-estate-office-space-economic-outlook/>.

⁵¹Donald Blount. "80s Downturn Spurred State to Scale New Peaks". In: *Denver Post* (Apr. 1998). URL: <https://extras.denverpost.com/snapshot/part1g.htm>.

towers: 621 and 633 17th Street (28 and 32 stories, respectively), for \$3.2 million, a steep discount from their 2019 value of \$200 million.

Even with these low entry prices, public support is required to bridge significant financial barriers and inaugurate this new wave of adaptive reuse projects in downtown. The Denver Downtown Development Authority (DDDA) has established a \$570 million funding pool leveraged through Tax Increment Financing.⁵² Because Colorado's regulatory framework prohibits the advance distribution of tax abatements—restricting them only to post-performance reimbursement—the TIF serves as an important front-end loan mechanism and allows the municipality to directly inject capital for high-ROI projects. The city's confidence in this model is based on the Union Station transit hub project, where TIF obligations were refunded 14 years earlier than the schedule,⁵³ both demonstrating the effectiveness of the instrument in catalyzing urban renewal and directly providing the DDDA with the financial resources to channel towards downtown revitalization.

These funds are competitive to access: they are distributed by application and review of the project proposal. The TIF pot is intended to fund not only tower conversions, but investments in parks, public spaces, or downtown activation events. For adaptive reuse projects, the finding is capped at 20% of the total development costs. As in other municipalities, there are affordability requirements. For rental properties, the set-aside is 10% at 60% AMI or 15% at 70% AMI. To date, more than \$100 million have already been allocated to active conversion projects, providing a foundational layer of capital that is often complemented by other public incentives, including the Denver Urban Renewal Authority (DURA) assistance, LIHTC for affordable units. The state of Colorado recently introduced a refundable tax credit of up to \$3M per project, which is another potential entitlement that developers can access.⁵⁴

In addition to direct financial support, the City of Denver has focused on streamlining regulatory approval and enabling conversions through partnership by introducing the Adaptive Reuse Pilot Program.⁵⁵ This program provides a single application portal and pairs developers with "process champions"—specialized project managers with public sector and architectural expertise who both help to shepherd the project over the requisite

⁵²Downtown Denver Partnership. *Catalytic Downtown Investments Advanced by Downtown Development Authority Board*. July 2025. URL: <https://www.downtowndenver.com/post/catalytic-downtown-investments-approved-by-downtown-development-authority-board>.

⁵³Lodona. "Expanding the Downtown Development Authority: What You Should Know". In: (Sept. 2024). URL: <https://lodona.org/community-news/expanding-the-downtown-development-authority-what-you-should-know/>.

⁵⁴Colorado General Assembly. *House Bill 24-1125: Tax Credit Commercial Building Conversion*. 74th General Assembly, 2nd Regular Session. Accessed: 2026-04-30. 2024. URL: <https://leg.colorado.gov/bills/hb24-1125>.

⁵⁵City and County of Denver. *Denver Adaptive Reuse Study Outlines Housing Potential for Downtown Office Buildings*. Community Planning and Development News. Accessed: April 30, 2024. Aug. 2023. URL: <https://denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Community-Planning-and-Development/CPD-News-and-Events/CPD-News/2023/Denver-Adaptive-Reuse-Study-Outlines-Housing-Potential-for-Downtown-Office-Buildings>.

regulatory hurdles, from pre-concept to permit issuance to inspections, and identify also flag any potential structural or regulatory issues early in the process⁵⁶ This administrative streamlining includes an expedited timeline for any project incorporating more than 51% affordable housing, with the entire municipal approval timeline capped at 180 days. For other conversion projects with fewer affordable units, the review process has a six month shot clock. Jennifer Ramsey, Adaptive Reuse Project Champion for Denver, has shared that this has compressed the total timeline by roughly three to nine months. The support of Denver's mayor's office has also been used to fast track issues – particularly for catalytic sites and near major commercial arteries in Downtown. Denver intentionally avoids codifying reuse policies in legislation because the city recognizes that adaptive reuse is a moving target, and that bespoke approaches can be more effective.

Denver's approach to tower renovation is in keeping with the spirit of the city. Denver was founded as a frontier town in the 19th century, and therefore its reliance on the Tax Increment Financing mechanism, which is not a subsidy or a handout, but a loan intended to be paid back, aligns with the self-sufficient, individualistic character of the town. Denver's strong mayor system has allowed interventions to be carried out without needing to change legislation, and ensures project support is adaptable to different contexts. Finally, the dual function of Denver as the most important economic and population center and the state capital of Colorado allows project champions and other city representatives to coordinate with state leadership.

The two towers purchased by Luzzatto: 621 and 633 17th Street, have been renamed High Fidelity Plaza. With the partnership of the DDDA, Luzzatto intends to transform them into mixed-use “vertical villages”, including 700 apartment units (70 affordable), hotel suites, a full-service grocery store, restaurants and bars, a childcare center and a public plaza at street-level with retail at ground level. To support this project, the city is issuing \$63M in subsidized debt, against a total project cost of \$315 million, with a 3% interest in a subordinate position to senior bank loans. Denver will also fund The Downtown Safety Action Plan, which creates a dedicated downtown police unit and will fund 10 patrol officers through 2027.⁵⁷

High Fidelity is an ambitious moonshot. The city is making a significant financial commitment and serving as a partner to ensure the neighborhood is attractive to prospective tenants and community members. The project is now progressing to the review of site development, where the Adaptive Reuse Project champions will assist with matters related to zoning alignment, infrastructure capacity, and building code transitions. However, it promises not only to serve as a major lynchpin in downtown revitalization, but to demonstrate proof of

⁵⁶Thanks to Jennifer Ramsey for her availability in explaining the role of process champions.

⁵⁷City and County of Denver. *DDDA Approves Funding for High-Fidelity Plaza Downtown Safety Action Plan*. DenverGov.org. Accessed: 2026-04-30. Apr. 2026. URL: <https://www.denvergov.org/News-articles/2026/DDDA-Approves-Funding-for-High-Fidelity-Plaza-Downtown-Safety-Action-Plan>.

concept for other cities that aim to transform office towers into not only residential anchors, but social hubs and public gathering points.

4 Conclusion

The unique market forces that emerged from the pandemic along with concerted efforts by policymakers have helped turn what was a relatively rare form of adaptive reuse into a practical tool in the development toolkit. Across the cities in this analysis, each took a unique approach based on local market fundamentals and policy goals, but their collective experience highlights aspects that make for successful policy.

Table 8: Office-to-Residential Conversion Programs: Scale and Cost (2026)

City	Units in Pipeline	% of City Housing	Cost per Unit	Subsidy per Unit	Convertible Stock (M GSF)
New York City	16,358	1.75%	\$730,000	\$310,000	68.4
Washington, DC	8,479	2.30%	\$790,000	\$120,000	11.6
Chicago	4,360	0.19%	\$520,000	\$180,000	14.0
Cleveland	2,991	0.49%	—	—	—
Denver	1,771	0.48%	\$450,000	\$90,000	5.9

In the above analysis, pipeline counts include conversions completed, under construction, planned, or prospective as of Q1 2026.⁵⁸ The percent of City Housing is computed as pipeline divided by Census housing units in the central county (New York County; District of Columbia; Cook; Cuyahoga; Denver). The Cost per Unit reflects the average total development cost across a sample of projects in each city based on reporting and public financing data. Subsidy per Unit reflects, for Denver and Chicago, direct DDDA and LaSalle Reimagined TIF allocations divided by units produced through each program (1,810 and 1,765, respectively); for New York and DC it reflects estimated forgone tax revenue divided by pipeline units.⁵⁹ Cleveland is omitted from cost columns due to insufficient publicly disclosed project-level financing data. Convertible Office Stock is from Gupta et al..⁶⁰

⁵⁸Florin Petrut. *Office-to-apartment conversions break records again*. Mar. 2026. URL: <https://www.rentcafe.com/blog/rental-market/market-snapshots/adaptive-reuse-office-to-apartments-2026/>.

⁵⁹Office of the New York City Comptroller, *Office-to-Residential Conversions in NYC: Economics and Fiscal Estimates*.

⁶⁰Gupta, Martinez, and Nieuwerburgh, *Converting Brown Offices to Green Apartments*.

Programs offering tax abatements, such as those in New York and Washington DC, rather than project-specific TIFs were able to generate much more new housing. While New York is a clear leader in total units in the pipeline, DC leads in terms of the pipeline's share of housing units for each city's central county. Washington DC has also taken the greatest advantage of its potential conversion candidates, highlighting the potential for further conversions across New York and Chicago. Overall, the greater number of converted units across New York and Washington DC is to be expected given tax abatements open up a much wider swath of potential conversions compared to the typical TIF district. In pursuing this route, however, these cities relinquished some control over which projects were taken up and left spending more open-ended. For New York, analysis by the city's Comptroller suggests that abatements could be subsidizing conversions in areas where some office-to-residential conversions were already financially feasible, with the city effectively inducing affordable units for an estimated \$1.7M per unit.⁶¹

Each city's use of policy stacking, combining financial incentives with zoning reform, suggests financial assistance alone may not be sufficient. Whether these are broader, city-wide rezonings alongside tax abatement programs or the reorientation of specific districts alongside project-specific financing, the combination of zoning and financing helps align planners and developers from the outset and lessen the potential for delays and uncertainties that can kill nascent redevelopments. Permitting fast tracking also served as a useful tool, particularly in the case of Denver, with developers and the city working together to address potential delays.

The political home of these initiatives can also be crucial. While strong executive backing can be critical to delivering on process improvement as in the case of Denver, it can also open up vulnerabilities for programs as we saw in Chicago. Office to residential conversions involve multi-year planning and construction processes with the aim of creating economic assets often using incentives that last decades. Thus, it can be difficult to expect much adoption when programs may be left to the whims of election cycles. Though governance of these programs can vary from state to state, their codification in legislation, as seen in New York and Washington DC, can help provide continuity that can enable greater redevelopment even if it does not define every aspect of implementation.

Beyond where these policies originate, there is considerable variation across their requirements that can impede greater scale in converting offices to residential uses across multiple geographies. Whether it is the structure of financial incentives or the affordability requirements, few policies across cities mirror each other. This is to be expected given variations across local markets and difference in policy aims. Further, such differences are not unique to office to residential conversions. In the case of the low-income housing tax credit, there are clear stipulations regarding affordability and financing at the national level, which are implemented by state financing authorities that are able to guide money to projects

⁶¹Office of the New York City Comptroller, *Office-to-Residential Conversions in NYC: Economics and Fiscal Estimates*.

that best fit their vision for affordable housing. Though this structure is the result of federal legislation, it reflects the potential benefits of more consistency and has helped create the most significant source of affordable housing in which local and national developers compete for new projects.

Finally, C-PACE lending could provide a scalable mechanism for unlocking conversions across jurisdictions. As seen in Washington DC's Geneva, C-PACE takes advantage of the considerable carbon savings in adaptive reuse to unlock reduced cost financing for developers. While the program requires local enabling legislation, it does not require fiscal space for its implementation, widening its potential reach.

Office-to-residential conversions will not, on their own, resolve the housing crisis outlined at the outset of this report. Even at the upper bound of current pipelines, the units produced represent a small fraction of the shortfall in any of the five cities studied. What conversions can do is help absorb a portion of structurally obsolete office stock, add housing in transit-rich downtowns, and build the regulatory and financial scaffolding for future adaptive reuse initiatives. Even several years on from the increased attention on conversions, it remains early to assert the success or failure of these policies. The next several years will test whether the programs surveyed here can mature beyond their initial project cohorts. New York's 467-m faces a 2031 sunset; Washington's Housing in Downtown subsidy is scheduled to ramp up sharply in 2028, although the city's budget crunch may shrink the total abatement cap, as has already happened in 2027;⁶² Chicago's LaSalle Street Reimagined awaits delivery on its first wave of approvals; and Denver's will show if they can repeat their success with the TIF and facilitate the construction of a "Vertical Village". Ultimately, the success of these programs hinges on a final, market-driven test: whether residents are as eager to inhabit these converted spaces as policymakers are to build them.

⁶²Shira Markoff. *The DC Budget Needs to Equitably Grow the Economy*. DC Fiscal Policy Institute. Accessed: 2026-04-30. June 2025. URL: <https://dcfpi.org/all/the-dc-budget-needs-to-prioritize-residents/>.

References

- Badger, Emily and Larry Buchanan. “Here’s How to Solve a 25-story Rubik’s Cube”. In: *New York Times* (Mar. 2023). URL: <https://www.nytimes.com/interactive/2023/03/11/upshot/office-conversions.html>.
- Berlin, Jake. *Driving Market Solutions for Clean Energy: Energy Efficiency*. Lecture at the New York University Stern School of Business. Presentation on market-driven energy solutions. New York, NY, Oct. 2025.
- Blount, Donald. “80s Downturn Spurred State to Scale New Peaks”. In: *Denver Post* (Apr. 1998). URL: <https://extras.denverpost.com/snapshot/part1g.htm>.
- Brookfield. *The Misunderstood U.S. Office Market*. Feb. 2024. URL: <https://www.brookfield.com/views-news/insights/misunderstood-us-office-market>.
- Brown, Jennifer. “Apartments in Metro Denver Reach Highest Vacancy Rate in 16 Years, Pushing Down Rents Again”. In: *The Colorado Sun* (Jan. 2026). URL: <https://coloradosun.com/2026/01/21/apartments-in-metro-denver-reach-highest-vacancy-rate-in-16-years-pushing-down-rents-again/>.
- Calma, Emilia. *Alternative Workforce Plans Can Help Grow Local Talent, Especially in Construction Where Workers Are Lacking*. Written testimony to the Executive Administration & Labor Public Roundtable on the District’s First Source Program and Alternative Workforce Plans. Available at D.C. Policy Center. Washington, D.C.: D.C. Policy Center, Nov. 2023.
- CBRE. *U.S. Office Adaptivity Report: Converting Office to New Uses*. 2024.
— *Washington, D.C. Office Figures Q4 2025*. 2025.
- CBRE, Inc. *Denver Multifamily Figures | Q4 2025*. Market Report. Denver, CO, Jan. 2026.
- Chennupati, Ritvik. “Obsolete to Opportunity? Why Office-to-Residential Conversions Rarely Work in Washington, DC”. In: *Steers Global Real Assets* (Mar. 2026). URL: <https://globalrealassets.georgetown.edu/insight/why-office-to-residential-conversions-rarely-work-in-dc/>.
- Chicago Loop Alliance. *State of the Chicago Loop: 2018 Economic Profile*. Accessed: 2024-05-20. Chicago, IL, 2018. URL: <https://loopchicago.com/economic-profile>.
- City and County of Denver. *DDDA Approves Funding for High-Fidelity Plaza Downtown Safety Action Plan*. DenverGov.org. Accessed: 2026-04-30. Apr. 2026. URL: <https://www.denvergov.org/News-articles/2026/DDDA-Approves-Funding-for-High-Fidelity-Plaza-Downtown-Safety-Action-Plan>.
- *Denver Adaptive Reuse Study Outlines Housing Potential for Downtown Office Buildings*. Community Planning and Development News. Accessed: April 30, 2024. Aug. 2023. URL: <https://denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Community-Planning-and-Development/CPD-News-and-Events/CPD-News/2023/Denver-Adaptive-Reuse-Study-Outlines-Housing-Potential-for-Downtown-Office-Buildings>.

- City of Chicago. *Exhibit E: Form of Redevelopment Agreement. In Ordinance for LaSalle Street Reimagined*. Chicago, IL: City of Chicago, 2024. URL: <https://www.chicago.gov/city/en/sites/lasalle-street/home.html> (visited on 04/23/2026).
- City of Chicago Council Office of Financial Analysis. *State of the Economy: City of Chicago August 2025*. Chicago, IL, Aug. 2025. URL: https://www.chicago.gov/content/dam/city/depts/COFA/StateoftheEconomy/State%20of%20Economy_2025_COFA.pdf.
- City of Cleveland. *Ordinance No. 544-2022. Amending the Residential Tax Abatement Program*. Implementation began January 1, 2024. Cleveland, OH: Cleveland City Council, June 6, 2022. URL: <https://www.clevelandohio.gov/city-hall/departments/community-development/programs-services/tax-abatement> (visited on 04/23/2026).
- *Shore-to-Core-to-Shore TIF District seeks to transform waterfronts, strengthen city core and Cleveland neighborhoods*. City of Cleveland News. Jan. 2024. URL: <https://www.clevelandohio.gov/news/shore-core-shore-tif-district-seeks-transform-waterfronts-strengthen-city-core-and-cleveland>.
- City of Cleveland Department of Community Development. *Request for Proposals: Modular Home Manufacturing Facility*. Joint initiative with the Site Readiness for Good Jobs Fund. Cleveland, OH: City of Cleveland, Dec. 2, 2024. URL: <https://sitereadycle.org/news/press-releases/> (visited on 04/23/2026).
- Colorado General Assembly. *House Bill 24-1125: Tax Credit Commercial Building Conversion*. 74th General Assembly, 2nd Regular Session. Accessed: 2026-04-30. 2024. URL: <https://leg.colorado.gov/bills/hb24-1125>.
- Cook County Treasurer's Office. *2024 Tax Year Bill Analysis*. Chicago, IL: Cook County Treasurer's Office, Nov. 2025. URL: <https://www.cookcountytreasurer.com/pdfs/taxbillanalysisandstatistics/taxyear2024analysisenglishversion.pdf> (visited on 04/23/2026).
- Cushman & Wakefield. *MarketBeat: Chicago CBD Office Q4 2019*. Chicago, IL, Jan. 2020. URL: https://www.cushmanwakefield.com/-/media/cw/marketbeat-pdfs/2019/q4/chicago_americas_marketbeat_office_cbd_q42019.pdf.
- *MarketBeat: U.S. Office Q2 2018*. 2018. URL: https://trerc.tamu.edu/wp-content/uploads/files/PDFs/MktResearch/US_Office_CushmanWakefield.pdf.
- Davis, Miranda. "Chicago to Go Ahead With Plan to Revamp Empty Downtown Towers". In: *Bloomberg* (Mar. 2024). URL: <https://www.bloomberg.com/news/articles/2024-03-04/chicago-to-go-ahead-with-plan-to-revamp-empty-downtown-towers>.
- DC Green Bank. *DC PACE Program and Nuveen Green Capital Announce Largest C-PACE Deal in the United States*. Jan. 2026. URL: <https://dcgreenbank.com/news/geneva-pace/>.

Denver Department of Transportation and Infrastructure. *Denver Moves Everyone 2050: State of the System*. Mar. 2022.

Denver Metro Association of Realtors. *Market Trends Report: January 2026*. Jan. 2026.

Downtown Denver Partnership. *Catalytic Downtown Investments Advanced by Downtown Development Authority Board*. July 2025. URL: <https://www.downtowndenver.com/post/catalytic-downtown-investments-approved-by-downtown-development-authority-board>.

Florin Petrut. *Office-to-apartment conversions break records again*. Mar. 2026. URL: <https://www.rentcafe.com/blog/rental-market/market-snapshots/adaptive-reuse-office-to-apartments-2026/>.

Gaumer, E. *The 2023 New York City Housing and Vacancy Survey: Selected Initial Findings*. New York, NY, May 2024.

Greeley Tribune. “Colorado Commercial Real Estate Office Space Economic Outlook”. In: (Jan. 2024). URL: <https://www.greeleytribune.com/2024/01/05/colorado-commercial-real-estate-office-space-economic-outlook/>.

Gupta, Arpit, Candy Martinez, and Stijn Van Nieuwerburgh. *Converting Brown Offices to Green Apartments*. Working Paper. Aug. 2023. URL: <https://ssrn.com/abstract=4533244>.

Hatzius, Jan, Elsie Peng, and Pierfrancesco Mei. *The State of Housing (Un)Affordability in the US*. Sept. 2025. URL: <https://www.gspublishing.com/content/research/en/reports/2025/10/01/532d47b5-b67c-4428-a2fa-95f1ceacb419.html>.

Hill, Bryce. *Nearly All Illinois Communities Smaller Since 2020; Chicago Loses Nearly 30K*. May 2025. URL: <https://www.illinoispolicy.org/nearly-all-illinois-communities-smaller-since-2020-chicago-loses-nearly-30k/>.

Jones Lang LaSalle Research. *Chicago Office Market Dynamics 2023*. Market Report. Chicago, IL, 2023.

Khater, Sam et al. *Housing Supply: Still Undersupplied by Millions of Units*. Nov. 2024. URL: <https://www.freddiemac.com/research/insight/housing-supply-still-undersupplied>.

Kohrman Jackson & Krantz. *KJK Finalizes Closing of Erieview Tower Redevelopment*. KJK News. Jan. 2025. URL: <https://kjk.com/2025/01/06/kjk-finalizes-closing-of-erieview-tower-redevelopment/>.

Lincoln Property Company. “Recent Trends and Key Insights in the Federal Real Estate Sector”. In: (Jan. 2025). URL: <https://lpc.com/insights-research/recent-trends-and-key-insights-in-the-federal-real-estate-sector/>.

Lodona. “Expanding the Downtown Development Authority: What You Should Know”. In: (Sept. 2024). URL: <https://lodona.org/community-news/expanding-the-downtown-development-authority-what-you-should-know/>.

Marketbeat: *United States Office Q4 2025*. 2026.

- Markoff, Shira. *The DC Budget Needs to Equitably Grow the Economy*. DC Fiscal Policy Institute. Accessed: 2026-04-30. June 2025. URL: <https://dcfpi.org/all/the-dc-budget-needs-to-prioritize-residents/>.
- Mercado, Melody. “On LaSalle Street, City Breaks Ground On First Office-To-Apartments Development”. In: *Block Club Chicago* (Mar. 2025). URL: <https://blockclubchicago.org/2025/03/27/on-lasalle-street-city-breaks-ground-on-first-office-to-apartments-development/>.
- Metropolitan Transportation Authority. *MTA Daily Ridership Data: 2020–2025*. New York State Open Data. Jan. 2025. URL: https://data.ny.gov/Transportation/MTA-Daily-Ridership-Data-2020-2025/vxuj-8kew/about_data.
- Office of the Deputy Mayor for Planning and Economic Development. *Housing in Downtown Tax Abatement Program: Program Rules and Guidelines*. 2024.
- Office of the New York City Comptroller. *NYC’s Office Market: Doom Loop or Boom Loop?* Nov. 2025. URL: <https://comptroller.nyc.gov/reports/nycs-office-market-doom-loop-or-boom-loop/>.
- *Office-to-Residential Conversions in NYC: Economics and Fiscal Estimates*. July 2025. URL: <https://comptroller.nyc.gov/reports/office-to-residential-conversions-in-nyc-economics-and-fiscal-estimates/>.
- *Spotlight: What Risks Does the Office Market Pose for the City’s Finances?* June 2023. URL: <https://comptroller.nyc.gov/reports/spotlight-what-risks-does-the-office-market-pose-for-the-citys-finances/>.
- Office of the New York State Comptroller. *Office Real Estate in New York City: A Review of Market Valuation Shifts*. Aug. 2024. URL: <https://www.osc.ny.gov/osdc/reports/nyc-sectors/office>.
- Pipitone, Nick. *How Cleveland Cracked the Code on Office Conversion Projects*. LinkedIn News. May 2024. URL: <https://www.linkedin.com/pulse/how-cleveland-cracked-code-office-conversion-projects-nick-pipitone-hkwpe/>.
- Propmodo. *Evaluating the Economics and Capital Stack of Office-to-Residential Conversions*. Webinar. Produced in partnership with Gensler and Nuveen Green Capital. Mar. 2026. URL: <https://propmodo.com/evaluating-the-economics-and-capital-stack-of-office-to-residential-conversions/>.
- Rice, Karin Connelly. “The Wait Is Over: Warner & Swasey Redevelopment Secures Full Funding, Set For January Groundbreaking”. In: *FreshWater Cleveland* (Dec. 2025). URL: https://www.freshwatercleveland.com/features/The-Wait-Is-Over-Warner-Swasey-Redevelopment-Secures-Full-Funding-Set-For-January-Groundbreaking_120825.aspx.
- Schuetz, Jenny. “To Improve Housing Affordability, We Need Better Alignment of Zoning, Taxes, and Subsidies”. In: *Brookings Institution* (Dec. 2019). URL: <https://www.brookings.edu/articles/to-improve-housing-affordability-we-need-better-alignment-of-zoning-taxes-and-subsidies/>.

- U.S. Census Bureau. *Annual Estimates of Housing Units for Counties in New York: April 1, 2020 to July 1, 2024 (CO-EST2024-HU-36)*. National, State, and County Housing Unit Totals: 2020–2024. 2024. URL: <https://www.census.gov/data/datasets/time-series/demo/popest/2020s-total-housing-units.html>.
- Valerija, I. “Office Loans Delinquency Hits Record High”. In: *CRE Daily* (Feb. 2026). URL: <https://www.credaily.com/briefs/office-loans-delinquency-hits-record-high/>.
- Washington DC Economic Partnership. *DC Development Report (2025/2026)*. Annual analysis of development and construction activity. Washington, D.C., Dec. 2025. URL: <https://wdcep.com/>.
- Western Reserve Land Conservancy. *Cleveland Property Inventory: Data on 162,000 City Parcels*. 2023.