

# From Workspace to Homebase

Exploring the viability of office-to-residential conversion  
in San Francisco's changing real estate market





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# Executive Summary

San Francisco's downtown recovery is hindered by a lack of economic diversity and a shortage of workforce housing. Could converting vacant office space to residential use be a financially viable solution to both problems?

Flexible work has transformed San Francisco, changing how companies and employees use office space. Increasingly, firms are reducing their physical footprint in San Francisco, abandoning sub-par Class B and Class C spaces, and instead leasing higher-quality Class A buildings. Older buildings are at risk of becoming obsolete. And the decrease in people and activity downtown has negatively impacted small businesses, cultural institutions, and the hospitality industry.

Restoring the economic and social health of downtown San Francisco will require many types of efforts, including improving transit, diversifying the business mix, and introducing more entertainment. But converting underperforming office buildings to residential use could go some way toward two revitalization efforts: creating workforce housing and increasing foot traffic to support small businesses downtown. Other cities, including Calgary, Chicago, New York, and Washington, D.C., are pursuing a similar strategy.

In a first-of-its-kind study for San Francisco, SPUR and ULI San Francisco, in partnership with Gensler and HR&A Advisors, explored not just the physical suitability of office buildings for redevelopment as housing (as other research has done) but also tested the financial feasibility of conversion projects under different economic conditions and policy scenarios. The analysis focused on San Francisco's central business district, which includes the North and South Financial District areas. Together they contain 63% of the office space in downtown San Francisco. However, the findings can be extrapolated to the greater downtown area, which includes the SoMa, Yerba Buena, Mission Bay, and Jackson Square/ Northern Waterfront areas.

## FINDINGS

### **1. Because of their physical characteristics, office buildings in San Francisco are stronger candidates for conversion than office buildings in other cities in North America.**

Using a proprietary tool, Gensler evaluated the physical factors that make for a good residential building, including the building shape and size, ceiling heights, availability of elevators, neighborhood context, proximity to transit, and other criteria. It found that only 20% of the buildings it evaluated across North America scored high for conversion. In downtown San Francisco, Gensler deemed 40% of the evaluated buildings to be good candidates. The best candidates were high-rise buildings with floor plates of between 12,000 and 20,000 square feet.

## **2. Conversion of vacant office buildings could physically accommodate 14,277 housing units in downtown San Francisco, including the central business district, SoMa, Yerba Buena, Mission Bay, and Jackson Square/Northern Waterfront areas.**

According to JLL, the amount of office space available to lease is 29 million square feet (33% of the total inventory), and the vacancy rate is the highest it has ever been. Office vacancy in the city is projected to remain high through 2026 as more leases expire and tenants reduce their footprints. If 40% of the currently unleased space could be physically converted to housing, 14,277 units could be created. (Unit counts reflect the assumption that 80% of the building could become livable space and that the average unit size would be 650 gross square feet.) If only the available Class B and Class C buildings were converted, approximately 4,200 units could be accommodated downtown. But the actual construction of housing depends on financial viability from the perspective of a developer or investor.

## **3. While the city's newly passed legislation will remove many regulatory constraints to conversion, additional barriers in the building code continue to represent a major challenge for conversions.**

The studied properties are all in the core downtown areas that allow residential development “by right,” that is, without the need for case-by-case local approvals. In July 2023, the mayor and board of supervisors approved legislation that will remove many of the planning code requirements that made it difficult to redevelop an office building into housing. For example, the legislation removes open space requirements and relaxes unit mix requirements for conversion projects. Because of the challenges of adapting an office layout for residential uses, most conversion projects could not have adhered to the city's requirements prior to the legislative changes.

However, there are still significant barriers to conversion in the building code. Critically, conversions in San Francisco would be subject to earthquake-related codes. Significant seismic upgrades can be triggered when buildings change from commercial use to residential use. If conversions are required to include a substantial seismic retrofit, the ensuing cost could hinder many projects from moving forward. To receive relief from any of these code requirements, builders would need to undertake an onerous and years-long process with no guarantee of success. Most developers are unlikely to undertake a complex conversion project under these circumstances.

## **4. Given current economic conditions and development costs, most conversions of underperforming office buildings to housing are not financially feasible.**

For projects to be financially feasible, the value generated from rental income must exceed the cost of development. Since the onset of the pandemic, construction costs have escalated rapidly, while apartment rents have dropped by 10% to 15%. The construction costs of conversion projects, including labor and materials, are estimated to range from \$472,000 to \$633,000 per unit — without seismic upgrades. Soft costs, which include city fees, range from about 20% to 40% of total project

development costs. Given today's costs and potential revenues, a residential conversion would generate less value for the property owner than maintaining the office use, even given high office vacancy. If residential rents rise to pre-pandemic levels, owners of the most distressed office buildings would likely have a viable pathway to convert to housing. However, the economics of redevelopment would still be challenging without further cost reductions and incentives.

## **5. The city's inclusionary housing requirement and impact fees are financial barriers to conversion.**

In July 2023, the mayor and the president of the Board of Supervisors introduced legislation to reduce San Francisco's inclusionary housing requirement from 21.5% to 15% for new projects. However, conversion projects are still not financially feasible to develop at the lowered rate. Unlike new construction, conversion projects cannot take advantage of California's density bonus law, which partially offsets the cost of providing affordable units by allowing additional height or density. The city's open space in lieu fee, which applies to housing in the Transbay district, can be a very significant cost for conversion projects. Its economic impact is nearly equivalent to that of the inclusionary requirement. Concurrently reducing city fees and inclusionary requirements would greatly increase the feasibility of conversions.

## **6. Case studies from other cities show that incentives are critical to office-to-residential conversions.**

The cities of Calgary, Chicago, New York, and Washington, D.C., offer insights into the types of programs that can help accelerate redevelopment of vacant office buildings into much-needed housing. Each city implemented an incentive program that provided funding or property tax abatements for conversion projects. Calgary offered property owners up to \$75 per square foot in grants, resulting in the creation of 1,200 homes in a two-year period, with more in the pipeline. Chicago offered tax increment financing for conversion projects that make 30% of units affordable, resulting in six project applications. Washington, D.C., introduced a property tax abatement program targeted at conversion projects that make at least 15% of the units affordable. New York's governor has proposed a partial property tax abatement for office conversions that include affordable housing, and the State of New York and New York City are considering regulatory changes to enable conversions.

# **POLICY IMPERATIVES**

San Francisco's office vacancy rate is at a historic high and is likely to remain that way in the short term. About one-third of the available office space is in Class B and C buildings, which are less competitive for office tenants than Class A buildings. The vacant space is concentrated in the Financial District and South Financial District — areas that have limited housing and entertainment uses to offset the absence of workers.

Redeveloping San Francisco's obsolete office buildings into housing delivers economic, social, environmental, and fiscal benefits to the city and the state. In addition to creating more housing for workers in an area with high-quality transit, conversions will increase support for small businesses, artists, and cultural organizations. Redeveloping low-value space will increase the value of remaining office building stock and increase property and sales tax revenues for the city. Office-to-residential conversions in other North American cities have helped transform central business districts into mixed-use, 24/7 social hubs with housing, restaurants, retail, entertainment, and culture.

The unfolding economic crisis of downtown must be met with bold strategies that fall outside of traditional policy thinking parameters. SPUR and ULI have identified six policy imperatives for encouraging office-to-residential conversions in San Francisco.

- 1. Remove obstacles in building codes and simplify approvals for conversion projects.**
- 2. Consider making the inclusionary housing requirement less stringent.**
- 3. Consider reducing city impact fees and in-lieu fees for conversion projects.**
- 4. Explore tools to provide incentives for office conversion projects.**
- 5. Explore state legislation that provides property tax incentives for conversion projects that produce affordable housing and workforce housing.**
- 6. Consider policies to create a "reserve" for the office space removed through conversions.**

# Introduction

San Francisco's post-COVID downtown recovery has lagged behind the recovery of most major North America cities' downtowns. Downtown San Francisco was particularly hard hit because of the drop in tourism, stemming from travel restrictions in Asian markets. In addition, the return to office has been slower in San Francisco than other comparable metropolitan areas, with a higher share of technology employers allowing and encouraging remote work. Fewer than a third of the people who frequented San Francisco's downtown before the pandemic do so now.<sup>1</sup> The share of people working from home has stayed relatively flat, with only about 46% of San Francisco's workers back in the office.<sup>2</sup> Despite the city's efforts to bring workers and visitors back downtown, the continued lack of economic activity — combined with quality of life issues — has created distress for retail districts and for small businesses, many of which have shuttered permanently.

But the problem of downtown San Francisco isn't just about half-empty office buildings, vacant storefronts, and the absence of workers and visitors. Downtown generates the majority of the city's business tax and commercial revenues, which pay for affordable housing, community facilities, infrastructure, and city services. Downtown is also the Bay Area's largest transportation, retail, tourism, and cultural hub. A joint report from the city controller, the mayor's budget director, and the Board of Supervisors budget analyst estimates that the budget deficit could increase from \$291 million in the 2023–2024 fiscal year to \$1.3 billion by the 2027–2028 fiscal year.<sup>3</sup> The health of downtown San Francisco has importance for the entire city and region.

Despite all of the challenges from hybrid work, many of the problems in downtown San Francisco predate the COVID pandemic. In February 2020, downtown San Francisco already faced many of its current challenges, including traffic congestion, patchy transit service, and insufficient housing. The city's office market was incredibly expensive, in part because of 1986's Proposition M, which put a cap on how much office space could be built each year. The limited office inventory restricted the types of businesses that could afford to operate downtown, and many nonprofits and small firms were priced out of San Francisco. In addition, the retail industry was already undergoing structural changes with the growth of online shopping, and some retail districts were struggling to find viable tenants for ground-floor spaces.

San Francisco faces a huge opportunity to reimagine its downtown. It could become a 24-hour, mixed-use hub that is welcoming to all Bay Area residents and visitors. The vacant commercial spaces could transform underutilized buildings and provide more housing in a transit-rich area surrounded by culture, recreation, and entertainment.

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<sup>1</sup> Chapple, Karen, et al., "Recovery Rankings," Downtown Recovery — Winter: December 2022–February 2023, February 2023, [https://downtownrecovery.com/dashboards/recovery\\_ranking.html](https://downtownrecovery.com/dashboards/recovery_ranking.html).

<sup>2</sup> AVANT by Avison Young, "Orbital Insight, San Francisco Market Update," February 2023.

<sup>3</sup> Goncher, Dan, Anna Duning, and Ben Rosenfield, "Budget Outlook Update," <https://sf.gov/sites/default/files/2023-03/March%20Update%20FY%2023-24%20through%20FY%2027-28.pdf> (accessed April 1, 2023).



## ROLE OF OFFICE-TO-RESIDENTIAL CONVERSIONS IN DOWNTOWN RECOVERY

There are two main reasons for downtown San Francisco's lackluster recovery. First, a large share of San Francisco's jobs can be done mostly remotely.<sup>4</sup> Second, many workers are unable to find affordable housing options near their jobs, making the Bay Area's average commute among the longest in the country.<sup>5</sup> From 2020 to 2022, according to the U.S. Census Bureau, San Francisco lost 65,000 residents, many of whom were low-wage service workers seeking more affordable places to live.<sup>6</sup>

These challenges are not unique to San Francisco and the Bay Area. Other cities with large office markets, including New York, Chicago, Los Angeles, Seattle, and Boston, face similar challenges.<sup>7</sup> Cities that offer a more diverse economic base and shorter commute times have fared much better in downtown recovery.<sup>8</sup>

There are five reasons that office-to-residential conversions can play an important role in the city's economic recovery:

- 1. San Francisco's office vacancy rate is at a historic high and is likely to remain that way for years.** According to JLL, the amount of office space available to lease is 29 million square feet (33% of the total inventory), and the vacancy rate is 28%. This is the highest San Francisco's office vacancy rate has ever been.<sup>9</sup> At the lowest point of the dotcom bust, San Francisco's office vacancy rate was 20.5%, and during the Great Recession, it was 18.0%. Right now, many companies are still renting office space because their lease terms have not yet ended. Some large tech companies, including Pinterest, Meta, Uber, Airbnb, Slack, and Zynga, are offering to sublease large amounts of unused space out. Many other leases will expire by 2026, potentially increasing the amount of available space by millions of square feet.
- 2. About one-third of the available office space is in Class B and C buildings, which are less competitive for office tenants.** The office buildings with the highest vacancy rates are Class B and Class C buildings that have a less desirable address and an inefficient layout and that lack premium amenities. Today, there is more than 11 million square feet of available Class B and Class C space, equivalent to 21 Transamerica Pyramid buildings.

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<sup>4</sup> Dingel, Jonathan, and Brent Neiman, "How Many Jobs Can Be Done at Home?" National Bureau of Economic Research, NBER Working Paper Series, Working Paper 26948, April 2020.

<sup>5</sup> Vital Signs, "Commute Time | Vital Signs," May 2020, <https://www.vitalsigns.mtc.ca.gov/commute-time>.

<sup>6</sup> United States Census Bureau, "U.S. Census Bureau QuickFacts: San Francisco County, California," July 1, 2022, <https://www.census.gov/quickfacts/sanfranciscocountycalifornia>.

<sup>7</sup> Van Nieuwerburgh, Stijn, "The Remote Work Revolution: Impact on Real Estate Values and the Urban Environment," National Bureau of Economic Research, NBER Working Paper 30662, November 2022.

<sup>8</sup> Chapple, Karen, et al., "The Death of Downtown? Pandemic Recovery Trajectories Across 62 North American Cities," School of Cities, University of Toronto Research Brief, January 2022.

<sup>9</sup> Lasalle, Jones Lang, "Office Insight San Francisco," Q2 2023, <https://www.us.jll.com/content/dam/jll-com/documents/pdf/research/americas/us/q2-2023-office-insights/jll-us-office-insight-q2-2023-san-francisco.pdf>.

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- 3. Downtown San Francisco’s lack of economic diversity has proven to be a liability in the post-pandemic era.** From 2018 to 2023, the tech industry drove demand for office space in San Francisco, accounting for almost one-third of office lease transactions.<sup>10</sup> Much of the new office construction happened in the SoMa, East Cut, and Mid-Market areas. Now, nearly half of the vacant office space is located in the Financial District and South Financial District. These office areas have limited entertainment uses and housing to offset the absence of office workers.
- 4. Strategies to incentivize office-to-residential conversion have succeeded in creating mixed-use, 24/7 downtown districts in other North American cities.** Calgary, New York, and Philadelphia have successfully converted underperforming office buildings to housing, creating mixed-use downtowns that support economic, cultural, and social activities.
- 5. Converting San Francisco’s obsolete office buildings into housing provides economic, social, environmental, and fiscal benefits locally and regionally.** In addition to creating more housing supply, conversions will also generate more foot traffic downtown to help support small businesses, artists, and cultural organizations. More downtown workers could live near their jobs and save precious time on their commute. Moreover, repurposing underutilized office buildings will remove obsolete, low-value space that is dragging down the office market, thereby increasing the value of remaining office building stock, which in turn generates greater fiscal revenues for the city. The redevelopment of vacant buildings would improve the perception of downtown San Francisco and would help higher-quality office buildings attract tenants on the upper floors and on the ground floor. Creating more housing in a transit-rich and pedestrian-friendly location like downtown has environmental benefits because new residents are able to travel without a car more easily. And redeveloping buildings rather than constructing new ones provides substantial greenhouse gas savings.<sup>11</sup>

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<sup>10</sup> AVANT by Avison Young, “Orbital Insight, San Francisco Market Update,” February 2023.

<sup>11</sup> Based on its experience in sustainable design and low-carbon alternatives to in-situ concrete structures, Gensler conservatively estimated a greenhouse gas intensity of 300 kgCO<sub>2</sub>e/m<sup>2</sup> for the embodied carbon emissions of a concrete structure. Reusing high-rise concrete buildings instead of constructing new structures represents a substantial savings.

EXHIBIT 1

**Class B and C Building Vacancies in San Francisco, 2019–2023**

From 2019 to 2023, the vacancy rate for Class B and Class C buildings jumped from 5% to more than 29%, a bigger jump than any other major city experienced.

Source: JLL

**Note:** Class A office buildings are typically the highest quality in the best locations with high-end finishes, state-of-the-art technology, and amenities such as fitness centers, conference rooms, and restaurants. Class B office buildings are average-quality buildings with fewer amenities and finishes than Class A buildings. They are in good locations but not necessarily in the most prestigious areas, and they tend to attract smaller businesses or startups. Class C office buildings are typically the oldest and lowest quality.

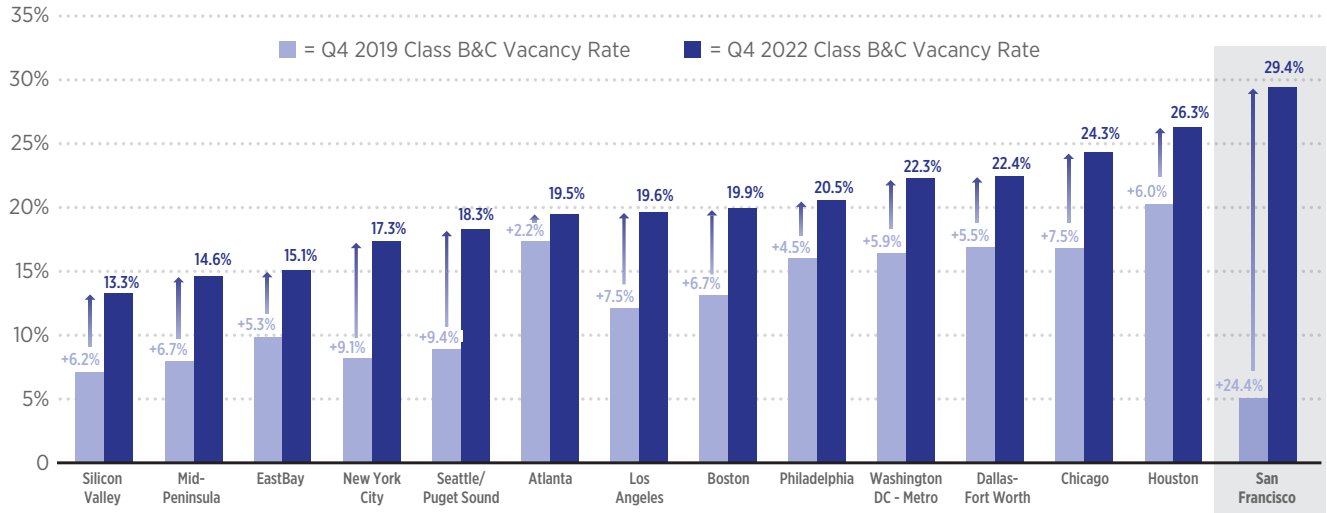
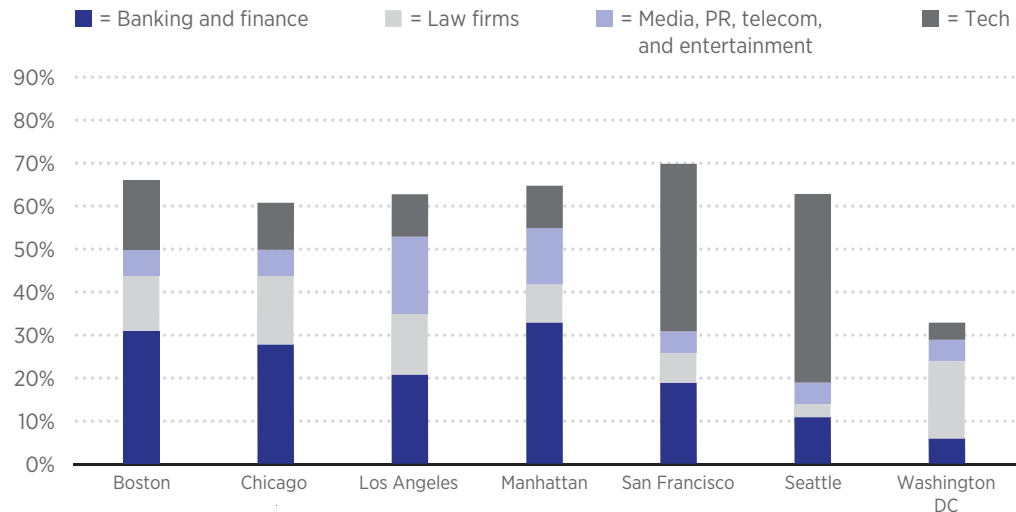


EXHIBIT 2

**Office Tenant Mix in San Francisco and Six Other Large Cities, 2023**

The office market in San Francisco is more reliant on tech industries, making it more vulnerable to hybrid work. By comparison, Boston, Chicago, Los Angeles, and Manhattan have a more diverse office tenant mix.

Source: AVANT by Avison Young



## Incentive Programs for Office-to-Residential Conversions

Some North American cities have launched financial incentive programs for office-to-residential conversions to revitalize their downtowns. New York’s 421-g program began in the mid-1990s in response to a weakening economy, high office vacancy rates, and increasing demand for housing in Lower Manhattan. The program incentivized the creation of about 13,000 units by providing partial property tax exemptions and abatements for 15 years. As part of its “New New York” COVID recovery plan, New York City has launched a new initiative modeled on the 421-g program to add housing and diversify the city’s commercial office districts. In 2021, Calgary initiated an adaptive reuse incentive program in response to an economic downturn that pre-dated COVID-19. The city provides a financial incentive of up to \$75 per square foot to property owners to convert underutilized office spaces. In only two years, Calgary’s program has resulted in about 1,200 homes, with more in the pipeline. In 2022–2023, Chicago and Washington, D.C., launched new financial incentive programs to introduce more housing in their downtowns through conversions.

### EXHIBIT A

#### Financial Incentives for Office-to-Residential Conversions in Four Big Cities

In some cities, local and state governments have provided financial incentives for office-to-residential conversions to revitalize downtowns.

	CHICAGO	WASHINGTON, D.C.	CALGARY	NEW YORK
PROGRAM	LaSalle Street Reimagined	Housing in Downtown Abatement Program	Downtown Calgary Development Incentive Program <sup>a</sup>	Lower Manhattan Revitalization Plan (421-g)
LEAD DEPARTMENTS	Office of the Mayor, Department of Planning and Development	Executive Office of the Mayor, Office of the Deputy Mayor of Planning and Economic Development	Office of the Mayor, Downtown Strategy Team	Mayor, state legislature
FINANCIAL INCENTIVE	Federal tax credits, property tax incentives, funds from the LaSalle/Central Tax Increment Financing District, PACE financing, Low-Income Housing Tax Credit	Property tax abatements	\$150 million total; \$75 per square foot	Property tax exemptions and abatements
GEOGRAPHIC TARGET	LaSalle Street corridor	Central Business District	Greater downtown area, with a priority placed on the Downtown Core	Lower Manhattan excluding Battery Park City
AFFORDABILITY REQUIREMENT	30%	15%	None	Rent stabilization during the abatement period <sup>b</sup>
TOTAL UNITS PRODUCED/ PROJECTED	1,000 units proposed	NA	1,200 completed with more in the pipeline	12,865
TIME PERIOD	September 2022 onward	March 2022 onward	April 2021 onward	1995–2006

Source: SPUR analysis based on publicly available data

<sup>a</sup> The program is part of Calgary’s Greater Downtown Plan, which authorized \$200 million for downtown revitalization in addition to subsidies for office-to-residential conversions.

<sup>b</sup> Rental housing units developed under the Lower Manhattan 421-g program were required to be rent stabilized in every year that the property received tax benefits. Under New York’s rent stabilization system, landlords can only increase rents by a limited amount each year. Property owners were permitted to deregulate units upon the expiration of the 421-g tax benefits.

## Chapter 1: Building Suitability Analysis

Converting office buildings into residential uses is complex because their building shapes, floor plans, and facades are not always easily adapted to apartments.<sup>12</sup> For new construction residential projects, architects typically aim to have an efficiency of at least 85%, meaning that only 15% of the space is dedicated to non-rentable spaces like hallways and lobbies. However, many conversion projects achieve much lower efficiency ratios because they have more unrentable interior spaces and are not configured for apartment dimensions. Not every office building has the right physical characteristics to be a strong candidate for conversion.

SPUR and ULI partnered with Gensler, a global architecture, design, and planning firm, to evaluate the physical feasibility of converting downtown San Francisco's office buildings to housing. Using its proprietary building scoring system, Gensler has assessed the compatibility of office buildings for conversion in more than 900 buildings in 25-plus cities in North America. Gensler's residential conversion compatibility assessment tool evaluates and ranks buildings on key criteria, including floor plates and depth, building size and form, facades, context, and servicing.

### EXHIBIT 3

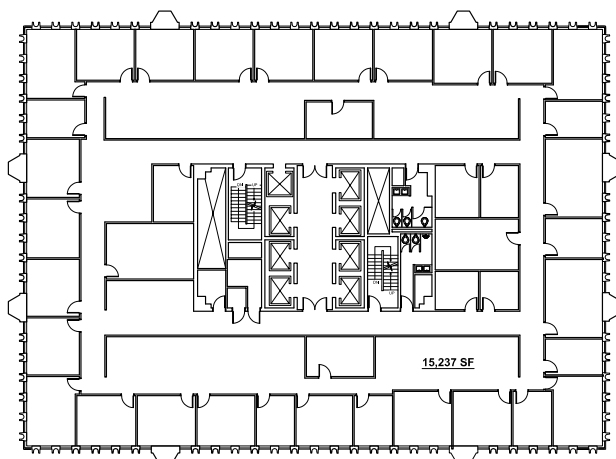
#### Type of Office Building Well-Suited to Efficient Apartment Layout

The Residences at Rivermark Centre, located in Baton Rouge, is a planned 14-floor office-to-residential conversion designed by Gensler. The project exemplifies how buildings with framed tube structures (i.e., those with

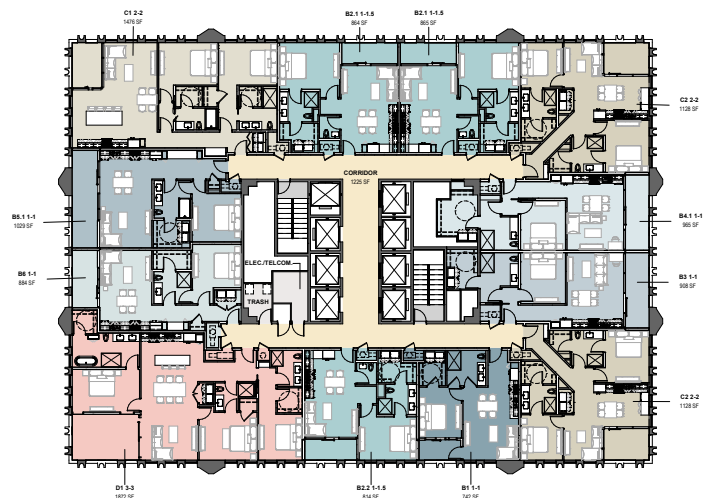
central cores) can more easily transition from office to housing. The absence of internal columns and walls allows for expansive, unobstructive floor plans.

Source: Residences at Rivermark Centre designed by Gensler.

#### Before



#### After



<sup>12</sup> Badger, Emily, and Larry Buchanan, "Here's How to Solve a 25-Story Rubik's Cube." *The New York Times*, March 11, 2023, <https://www.nytimes.com/interactive/2023/03/11/upshot/office-conversions.html>.

## APPROACH

For this analysis, Gensler first selected 108 office buildings in San Francisco with a vacancy rate of at least 30% and a total rentable area of at least 20,000 square feet. The number of buildings was then narrowed down to 43 buildings that are located in the Financial District and South Financial District sub-areas. Gensler then applied qualitative filters to remove buildings, such as registered historic buildings (listed in Article 10 of the San Francisco Planning Code), with characteristics that would make them challenging to convert. The resulting list of 25 buildings is representative of the breadth of building types found in San Francisco.

The 43 buildings in the study are located in the Financial District and South Financial District sub-areas.

Source: Gensler



Gensler classified each building according to a building typology based on height, floor plate size, and facade type. These characteristics impact overall physical compatibility with and relative cost of conversion. High-rise buildings scored the highest on average, and properties with mid-size floorplates scored the highest across all categories. Compared with floorplate size, facade type had a relatively lower impact on compatibility scores. Nevertheless, in many instances, it was the factor that made a property either a very good or average candidate for conversion.

## Office-to-Residential Conversion Scoring Criteria

### EXHIBIT B

#### Five Criteria for Evaluation the Suitability of Office Buildings for Residential Conversion

Among the five criteria, building form and floor plate have the largest impacts on an office's suitability for residential conversion.

Source: Genster



Genster evaluated the suitability of office buildings for residential conversion on the basis of five criteria:

**Urban Context** — Factors such as nearby amenities, public transportation options, and local zoning regulations can impact a property's value and attractiveness to potential residents.

**Building Size and Form** — The size and form of the building can impact the feasibility of conversion. Large buildings with complex floor plans may be more challenging to convert into residential use because they require more extensive renovation work to create usable spaces and achieve efficient unit layouts.

**Floor Plate Depth** — The depth of the floor plate (the distance between the windows and the center of the building) determines the amount of natural light and ventilation that can be achieved in the

residential units. Generally, shallow floor plates are preferred for housing because they allow more natural light to penetrate the apartment and provide better access to fresh air.

**Facade** — The placement and type of windows on the building can impact its viability as a residential property. Older buildings constructed in the 1970s and 1980s often have ribbon windows that are much easier to partition into apartments. Newer buildings often have glass curtain walls that cannot be opened, and would require extensive modifications to adapt them for housing. In an urban context like downtown San Francisco, many buildings have obstructed views or lack windows on one or two sides of the building, making it difficult to bring light and air into the interior spaces.

**Servicing** (parking, loading, mechanical, elevators) — The building's servicing requirements are important considerations. Office and residential buildings have very different plumbing and mechanical requirements. Typically, office buildings have a centralized plumbing system, which doesn't work well in a residential building where each apartment needs its own bathroom and kitchen. Ventilation and heating requirements are different as well, and many office buildings have outdated systems that would need to be updated to meet new energy efficiency standards.



## BUILDING SUITABILITY SCORING RESULTS

Based on the scoring results, 40% of buildings were deemed to have a high potential for conversion. Ten properties received a score of 80% or higher. These buildings are the best conversion candidates. Eleven properties had a score of between 70% and 79%, meaning that they could potentially be successfully converted with some compromises, but would be less efficient and attractive for residential units. Four properties scored under 70% and would be more challenging to convert.

### EXHIBIT 4

#### Conversion Scores by Building Typology

Gensler classified each building into a building typology based on height, floor plate size, and facade type. High-rise buildings with floor plates of between 12,000 and 20,000 square feet, with ribbon or punched windows, are the most likely to convert based on the scoring results. Urban infill buildings scored the lowest and would be more challenging to convert.

Building Typology					Average score by typology		
BUILDING TYPE	FLOOR PLATE SIZE (SQ. FEET)	FACADE	ASSUMED AVERAGE UNIT SIZE (SQ. FEET)	CALCULATED EFFICIENCY (% LEASABLE SPACE)	BUILDING TYPE	FLOOR PLATE SIZE	FACADE
High rise 1a	12,001-20,000	Ribbon windows	650	80%	80%	84%	81%
High rise 1b	12,001-20,000	Punched windows	650	80%	80%	84%	85%
High rise 2a	Up to 12,000	Curtain wall	650	80%	80%	74%	77%
High rise 2b	Up to 12,000	Ribbon windows	650	80%	80%	74%	64%
High rise 2c	Up to 12,000	Punched windows	650	80%	80%	74%	78%
High rise 3a	Over 20,000	Curtain wall	650	80%	80%	79%	76%
High rise 3b	Over 20,000	Punched windows	650	80%	80%	79%	80%
Low-mid rise 4	6,001-20,000	Punched windows	650	75%	72%	76%	77%
Low-mid rise 5	Over 20,000	Punched windows	650	75%	72%	62%	62%
Low-mid rise 6	Up to 6,000	Punched windows	650	75%	72%	72%	72%
Urban infill 7	Up to 6,000	Punched windows	650	70%	65%	63%	63%
Urban infill 8	12,001-20,000	Punched windows	650	70%	65%	71%	71%

Source: Gensler

**Note:** Ribbon windows are a series of windows set side by side to form a continuous band horizontally across a facade. Punched windows can be placed idiosyncratically, do not need to be parallel to one another, and do not need to be rectangles. A curtain wall is a thin and lightweight nonstructural wall, usually made of aluminum and glass, that transfers the load of wind and gravity to the structure of the building and that ensures the building interior remains airtight.

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## REGULATORY BARRIERS TO CONVERSION

The properties studied in this analysis are all in the core downtown zoning districts that allow residential development “by right,” that is, without the need for case-by-case local approvals.<sup>13</sup> However, when the building suitability analysis was completed in late 2022, the city’s planning code and building code contained requirements that made it difficult to redevelop an office building into housing. For example, none of the studied buildings would have met the open space requirements in the planning code. Because of the challenges of adapting an office layout for residential uses, most conversion projects would not have adhered to the city’s requirement that at least 25% of units in any given building have at least two bedrooms.

In July 2023, the San Francisco Board of Supervisors unanimously approved legislation to remove many of the barriers in the planning code to permit office-to-residential conversions. The legislation removes the unit mix requirement, relaxes open space requirements, and allows projects to add a modest amount of additional square footage. The legislation also directs the Building Inspection Commission to create an adaptive reuse manual to make it easier for developers to understand the building code requirements.

Nevertheless, some building requirements will remain challenging for conversion projects. Critically, conversions in San Francisco would be subject to earthquake-related codes. Significant seismic upgrades can be triggered when buildings change from commercial use to residential use. If conversions are required to include a substantial seismic retrofit, the ensuing cost could hinder many projects from moving forward. In addition, requirements by other agencies outside of city government can add significant costs to a conversion project.

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<sup>13</sup> All properties studied are in C-3-R, C-3-O, or C-3-O(SD) zoning districts, which allow residential uses.

## Chapter 2

# Case Studies of Office-to-Residential Conversions

Office-to-residential conversions have been undertaken across the country. The three projects profiled here demonstrate how such conversions can be successfully implemented under different conditions, with lessons for San Francisco.

### Case Study 1

## 100 VAN NESS, SAN FRANCISCO, CALIFORNIA

A 12-month conversion of the building at 100 Van Ness Avenue (formerly the headquarters of the California Automobile Association) created 418 rental housing units.

The conversion of 100 Van Ness created 418 apartments and a roof deck with 360-degree views of San Francisco.

Source: Emerald Fund



<b>DEVELOPER/OWNER:</b>		<b>ARCHITECT:</b>	<b>CONVERSION ARCHITECT:</b>	
Emerald Fund and National Real Estate Advisors		Albert F. Roller	SCB	
<b>YEAR BUILT:</b>	<b>DATE OF CONVERSION:</b>	<b>FLOORPLATE:</b>	<b>APARTMENTS CREATED:</b>	<b>BELOW MARKET RATE UNITS:</b>
1974	2015	15,000 square feet	<b>418</b>	<b>49</b>

**ZONING AND CONTEXT:**

C-3-G / Downtown General. This zoning district covers the western portions of downtown and has various uses: retail, offices, hotels, entertainment, clubs and institutions, and high-density residential. Many of these uses have a citywide or regional function, although the intensity of development is lower here than in the downtown core area. As in the case of other downtown districts, no off-street parking is required for individual commercial buildings. In the vicinity of Market Street, the configuration of this district reflects easy accessibility by rapid transit.

## The Conversion

Following the Great Recession, 100 Van Ness was entirely vacant, and demand for office space was low, while housing demand was strong. These market conditions, combined with the building's efficient floorplate size and the newly adopted Market & Octavia Area Plan, allowed new residential uses on Van Ness Avenue, facilitating the office-to-residential conversion. The Emerald Fund partnered with NREA to finance the building conversion.

The original concrete and punched window facade, which dates back to the building's construction in 1974, was replaced with a glass-unitized curtain wall.<sup>14</sup> Unitized curtain walls are composed of large units assembled and glazed off-site in a factory, shipped to the site, and erected on the building. These prefabricated walls allow buildings to be enclosed quickly, accelerating construction and tenant occupation. Replacement of the heavy precast concrete panel facade required no seismic retrofits, a rarity for San Francisco buildings over 40 years old. The transition to residential use meant that the building's commercial-grade air conditioning and filtration equipment, located on the rooftop, could be removed entirely. SCB, the architect, reformatted the rooftop of the building into a shared roof deck with fire pits and seating for residents. The roof deck features 360-degree views of the city.

<sup>14</sup> Punched windows can be placed idiosyncratically, do not need to be parallel to one another, and do not need to be rectangles. A curtain wall is a thin and lightweight nonstructural wall, usually made of aluminum and glass, that transfers the load of wind and gravity to the structure of the building and that ensures the building interior remains airtight.

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## Lessons Learned

**Conversions require supportive land use policies, including flexible affordable housing and open space requirements.** Multiple policy factors made the 100 Van Ness conversion project possible. First, the Market & Octavia Area Plan and the Van Ness Market Special Use District, where the building is located, were adopted in 2012, right before the project was proposed. Therefore, it was covered by the community plan's Environmental Impact Review and was eligible for an exemption, which amounted to an expedited environmental review process, saving time and money. Second, the city agreed to reduce the project's affordable housing requirement, from 15% to 12%. Third, the planning department's zoning administrator made a flexible interpretation of open space to enable the project to meet the residential open space requirements, which can be a challenge for office-to-residential conversions.

**Buildings that do not require significant seismic retrofit are more easily converted.** When converting an office building into residential units, one of the critical considerations is the building's capacity to withstand seismic activity. The need for seismic retrofits can arise when the building's original design and construction need to meet current seismic standards or if the building is located in an area prone to earthquakes. The conversion of 100 Van Ness demonstrated that one way to reduce the need for seismic retrofits during an office-to-residential conversion is to remove heavy building facades, such as concrete panels, and to replace them with lighter materials, such as glass curtain walls. Heavy building facades can increase the building's weight and stiffness, making it more vulnerable to earthquake damage. Glass curtain walls are lighter and more flexible, which can help the building absorb seismic forces without sustaining damage. Another advantage of using glass curtain walls is that they provide better natural lighting and can enhance the building's energy efficiency when compared with the original facade. This energy efficiency can be particularly important in residential units, where occupants spend more time indoors and have higher energy demands.

**Case Study 2**

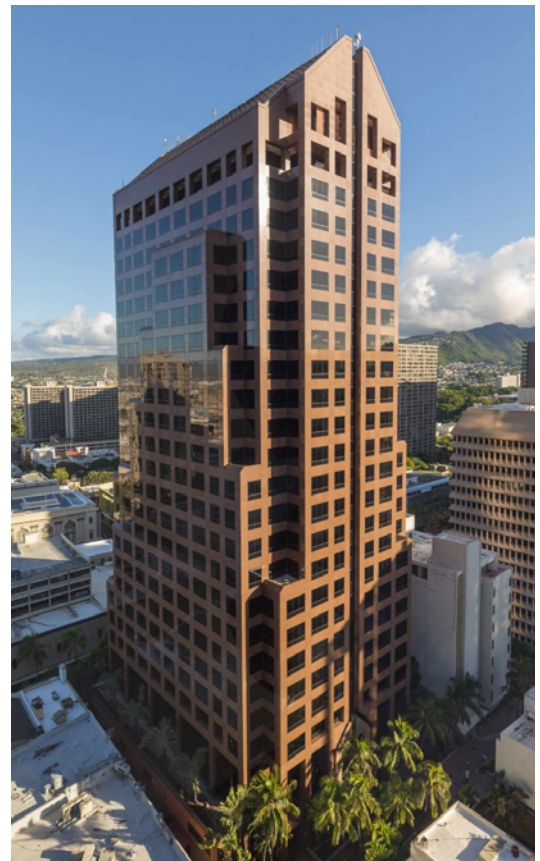
**1132 BISHOP STREET, HONOLULU, HAWAII**

The building of Douglas Emmett, Inc., a real estate investment trust, is undergoing a phased conversion of 462,072 square feet of commercial office space into 500 workforce housing units in downtown Honolulu.

<b>DEVELOPER/OWNER:</b>		<b>ARCHITECT:</b>	<b>CONVERSION ARCHITECT:</b>	
Douglas Emmett, Inc.		Gin Wong Associates	Solomon Cordwell Buenz	
<b>YEAR BUILT:</b>	<b>DATE OF CONVERSION:</b>	<b>FLOORPLATE:</b>	<b>APARTMENTS CREATED:</b>	<b>BELOW MARKET RATE UNITS:</b>
1971	2020-2024 (phased conversion)	19,702 square feet	<b>493</b> at buildout	<b>252</b> affordable to 80% to 120% of area median income
<b>ZONING:</b>				
Commercial, downtown Honolulu				

Conversion of 1132 Bishop Street will yield 500 workforce housing units in downtown Honolulu.

Source: Solomon Cordwell Buenz



## The Conversion

Complete conversion of the 25-story building will take several years. The project was initiated when office vacancy rates in Honolulu were 20%, while rental apartment vacancy rates were virtually zero. The developer has planned a staged transition to relocate office tenants into other Douglass Emmet-owned buildings in Honolulu. When completed, the conversion will create 493 units — a mix of studios and one- and two-bedroom apartments — and 252 of them will be for families earning between 80% and 120% of the area median income.

The developer took advantage of an incentive provided by the Hawaii Housing Finance and Development Corporation, known as Chapter 201H, which provides low-income-housing tax credits, tax-exempt revenue bonds, and low-interest loans to projects that provide more than 50% of units at rents that are affordable to households at or below 140% of area median income.<sup>15</sup> The incentive program waived some building requirements, such as open space requirements.

Construction began in 2019, and the first phase of residential units came online in 2020. Douglas Emmett will complete the planned conversion of the office building to rental units in three phases. Phase 1 is conversion to 103 residential units on six floors and renovation of the first two floors for lobby and amenities. Phase 2 is conversion to 71 units on three floors. Phase 3 is conversion to units on the remaining floors as leases of existing office tenants expire. There is no specific date when the leases will expire or when all the affordable rental units will be available.

## Lesson Learned

**Some buildings can convert into housing using a phased approach.** Phasing office buildings into housing and creating mixed-use office and residential buildings could make the conversion process more feasible because it allows for a gradual transition from one use to another. This approach can mitigate some of the risks and financial challenges associated with delaying conversion until a building is fully vacant. Costs can be easier to manage with a gradual conversion that allows for certain compromises, such as sharing of elevators and lobbies by residents and office tenants.

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<sup>15</sup> Hawaii Finance and Development Corporation, "Summary of Hawaii's 201H Process," Waialae-Kahala Neighborhood Board No. 3, May 18, 2023, <https://dbedt.hawaii.gov/hhfdc/files/2023/05/2023-05-18-201H-Process-FINAL.pdf>.

**Case Study 3****CHICAGO TRIBUNE BUILDING, CHICAGO, ILLINOIS**

The 34-story Tribune Tower, a landmarked historic building built in the mid-1920s after an international design competition, has been converted into 162 luxury condominiums.

**OWNERS:**

CIM Group and Golub & Company

**ARCHITECT:**

Howells & Hood

**CONVERSION ARCHITECT:**

Solomon Cordwell Buenz

**YEAR BUILT:**

1925

**DATE OF****CONVERSION:**

2018

**FLOORPLATE:**

21,167 square feet

**APARTMENTS CREATED:**

**162**

**ZONING:**

Tall buildings, campuses, and other large developments must be negotiated through a discretionary approvals process. Developers gain freedom in building design but must work with the city to ensure the project serves and integrates with the surrounding neighborhood.

**The Conversion**

The CIM Group and Golub & Company began the tower's conversion when the newspaper moved out in June 2018. Large unit sizes made accommodating and adapting to the nuances of the historic landmark building's large floor plan easier. The conversion included three adjoining low-rise structures, the WGN Radio and WGN Television buildings and the original Tribune publishing plant. Because of the extra-large floor plate of the former printing plant, SCB removed square footage to create a new courtyard and facilitate double-loaded corridors in each of the wings of the building. The conversion recaptured lost square footage for the new courtyard by building four new floors of condominiums on top of the former WGN Television Building.

Condos in the landmark building average 2,700 square feet and sell at the top of the Chicago housing market at \$1,000 per square foot. The 162 for-sale units are priced from \$900,000 to more than \$7 million.



The former home of the *Chicago Tribune* is now the site of luxury condominiums.

Source: SCB



## Lesson Learned

**With significant investments, historic office buildings can be converted into unique residential homes.** The layout of a building like the Chicago Tribune Tower is not easily converted into residential homes. However, some creative solutions, like cutting out the center to make a courtyard, made it possible to create attractive housing units. The higher cost of the conversion could be partly offset by offering large units that can appeal to high-income renters or buyers who pay a premium for amenities.

## Chapter 3

# Financial Feasibility Analysis

The SPUR and ULI team, with support from HR&A Advisors, Sylvan Development Group, and the Emerald Fund, studied the financial feasibility of converting office buildings to residential uses.

There are three main factors to consider. First, would the building perform better financially as an office use or as a residential use? Second, would the conversion project provide enough value to attract private investment? And third, what types of public policy changes could the city or state implement to make it easier for conversion projects to become financially feasible?

## APPROACH

The SPUR and ULI team built two financial analysis models. The first model compared the economic value of maintaining the building as an office use versus converting it as a residential building. It was run for six building typologies — derived from the Gensler compatibility assessment — to inform conversion-supportive policies and programs and to provide a basis for scaling their potential impact. The model assumes that a property owner would only pursue conversion if the value of a residential building, after factoring in the cost of redevelopment, exceeds the existing value of the office building.

This initial threshold test — whether a building generates more value from residential conversion than from maintaining office use — is not sufficient to determine whether a conversion project will be financially feasible. The project would also need to generate a sufficient return on the investment of money in associated development costs, including building acquisition costs.

A second model evaluated the financial feasibility of three hypothetical Class B high-rise building conversion projects. We then tested how different policy levers could affect the financial feasibility of development. These policy levers included, in order of financial impact, property taxes generated by the conversion project, the city's affordable housing requirement, real estate transfer taxes, and the city's impact fees.

## COMPARATIVE ANALYSIS: MAINTAIN VERSUS CONVERT

For the comparative analysis, HR&A Advisors identified six building typologies derived from the Gensler compatibility assessment. The typologies are representative of typical office buildings found in San Francisco's central business district, and they include Class A, Class B, and Class C buildings.

EXHIBIT 5

**Conversion Feasibility of Six Building Typologies Common in San Francisco’s Central Business District**

High-rise buildings have more efficient configurations for residential apartments, making the per-unit construction cost of a residential conversion lower in these buildings than in low-mid-rise buildings.

Source: Gensler, HR&A Advisors



	High Rise Over 20k Floorplate	High Rise 12-20k Floorplate	High Rise Up to 12k Floorplate	Low-Mid Rise Over 20k Floorplate	Low-Mid Rise 6-20k Floorplate	Low-Mid Rise Under 6k Floorplate
Average Age*	77	57	88	99	103	105
Average Floors*	32	21	20	6	19	6
Average FAR*	14	16	13	4	9	6
Average Floorplate*	20,000	15,000	7,000	27,000	14,000	5,000

\* Average across Gensler-tested buildings within each typology

For each building typology, HR&A Advisors modeled a scenario in which the building remains as office (“maintain”), and one in which it converts to rental housing (“convert”). The financial model calculated the net present value (NPV) of a building’s cash flow over 20 years as an office use and as a residential conversion. For conversions, we assumed that it would take three years for an office building to empty out and undergo construction. Assumptions about existing debt burdens from acquisition or prior improvements were not built into the model because they vary considerably from building to building.

Turner Construction provided the hard construction cost estimates for conversions.<sup>16</sup> It estimated a cost of \$472,000 to \$633,000 per unit for conversions, depending on the building. Because high-rise buildings have the most efficient configurations for residential apartments, their construction cost is lower per unit than that of low-mid-rise buildings. For other cost and revenue inputs, the team used data from Costar and interviewed local developers. The key inputs to the feasibility analysis, including cost and revenue assumptions, discount rates, and capitalization rates, are available on this report’s landing page ([spur.org/officeconversions](http://spur.org/officeconversions)).

The results of any financial feasibility analysis are highly dependent on market conditions. Currently, the values for office and residential uses are transitioning. On average, the buildings we studied had a vacancy rate of 45%, but some individual buildings have vacancy rates as high as

<sup>16</sup> Turner Construction’s cost estimates for this initial analysis were developed at a high level and did not include a budget for seismic and structural upgrades or environmental remediation. The analysis assumed only minor improvements to the structure and facade. Pricing was based on a Q1 2023 construction start, with an escalation factor of 5.5% per year.

75%. Office rents are also in flux. Many building owners have not significantly dropped their asking rents, but it is expected that underperforming buildings will be renting at much lower levels in the future. Apartment rents are still 10% to 15% lower than pre-pandemic levels, but it is possible that rents will recover. Because there is still so much uncertainty in the real estate market, we modeled the financial analysis for three scenarios:

- **Scenario A** reflects current office and residential market conditions: the vacancy rate for underperforming office buildings is 45%, and residential rents are 10% to 15% lower than pre-pandemic levels for premium high-rise buildings.
- **Scenario B** represents a scenario in which some office building owners are making significant investments in their property and are dropping rents slightly to reduce vacancies and in which residential rents are restored to pre-pandemic levels.
- **Scenario C** represents a scenario in which the most distressed office buildings, those with vacancy rates of 75% or higher, are no longer desirable to office tenants and in which residential rents are restored to pre-pandemic levels.

For each scenario, we compared the residual land value generated by maintaining an office building relative to converting it to residential use and divided this value by the gross square footage of building area. If the residential conversion generates a higher residual land value per gross square foot (RLV/GSF), there is an incentive for a building owner to consider pursuing conversion. If the residential conversion decreases residual land value, no pathway to the conversion is realistic.

**Given current office and residential market conditions (vacancy and rent) and very high development costs, conversion today is not financially rational for any of the studied typologies in scenarios A or B.** In both scenarios, after applying typology-specific baseline office rents, construction costs, and residential efficiencies, all the building types were more valuable if they were maintained as office uses rather than converted.

## EXHIBIT 6

**Scenario A Results: Residential Conversion Infeasible, Property Owners Maintain Office Use**

In a scenario in which the vacancy for underperforming office buildings is 45% and residential rents are 10% to 15% lower than pre-pandemic levels for high-rise buildings, office-to-residential conversions do not make financial sense.

**Assumptions:**

OFFICE VACANCY	OFFICE RENT	CAPITAL INVESTMENT FOR OFFICE	RESIDENTIAL RENTS PER SQUARE FOOT	RESIDENTIAL RENTS PER UNIT
45%	2022 rents	\$25/square foot	\$6.50	\$4,225

BUILDING TYPE	FLOOR PLATE SIZE (SQUARE FEET)	PHYSICAL SUITABILITY SCORE	UNDER-PERFORMING BUILDINGS DOWNTOWN	SCENARIO A (RLV/GSF)		
				MAINTAIN AS OFFICE	CONVERT TO RESIDENTIAL	DIFFERENCE IN VALUE
Type 1. High Rise 12-20K	12,001-20,000	Category 1 - Strong	20	\$26	-\$126	-\$152
Type 2. High Rise <12K	Up to 12,000	Category 2 - Good	12	-\$7	-\$99	-\$92
Type 3. High Rise 20K+	Over 20,000	Category 2 - Good	3	-\$44	-\$141	-\$97
Type 4. Low-Mid Rise 6-20K	6,001-20,000	Category 2 - Good	8	\$23	-\$133	-\$156
Type 5. Low-Mid Rise 20K+	Over 20,000	Category 3 - Challenging	3	\$12	-\$128	-\$139
Type 6. Low-Mid Rise < 6K	Up to 6,000	Category 3 - Challenging	8	-\$132	-\$224	-\$92

Source: HR&A Advisors' analysis based on data from Gensler and Turner Construction

## EXHIBIT 7

**Scenario B Results: Residential Conversion Infeasible, Property Owners Maintain Office Use**

In a scenario in which some office building owners are making significant investments in their property and are dropping rents slightly to reduce vacancies and in which residential rents are restored to pre-pandemic levels, office-to-residential conversions do not make financial sense.

**Assumptions:**

OFFICE VACANCY	OFFICE RENT	CAPITAL INVESTMENT FOR OFFICE	RESIDENTIAL RENTS PER SQUARE FOOT	RESIDENTIAL RENTS PER UNIT
20%	10% drop from 2022 rents	\$100/square foot	\$7.25	\$4,713

BUILDING TYPE	FLOOR PLATE SIZE (SQUARE FEET)	PHYSICAL SUITABILITY SCORE	SCENARIO B (RLV/GSF)			
			UNDER-PERFORMING BUILDINGS DOWNTOWN	MAINTAIN AS OFFICE	CONVERT TO RESIDENTIAL	DIFFERENCE IN VALUE
Type 1. High Rise 12-20K	12,001-20,000	Category 1 - Strong	20	\$66	-\$76	-\$142
Type 2. High Rise <12K	Up to 12,000	Category 2 - Good	12	\$22	-\$50	-\$72
Type 3. High Rise 20K+	Over 20,000	Category 2 - Good	3	-\$26	-\$91	-\$65
Type 4. Low-Mid Rise 6-20K	6,001-20,000	Category 2 - Good	8	\$54	-\$86	-\$140
Type 5. Low-Mid Rise 20K+	Over 20,000	Category 3 - Challenging	3	\$41	-\$81	-\$122
Type 6. Low-Mid Rise < 6K	Up to 6,000	Category 3 - Challenging	8	-\$148	-\$178	-\$30

Source: HR&A Advisors' analysis based on data from Gensler and Turner Construction

**However, individual office buildings with the highest vacancy rates may have a pathway to residential conversion — if the residential market improves (Scenario C).** The value of a residential conversion is slightly higher than maintaining these buildings for office uses. Even so, residential conversion is not financially feasible because the net value of the studied building types remains negative. Making it financially feasible would require additional cost reductions through tax or financial incentives, decreased impact fees, or changes to inclusionary housing requirements.

## EXHIBIT 8

**Scenario C Results: Residential Conversion Feasible, Property Owners May Decide to Pursue**

In a scenario in which office buildings with vacancy rates of 75% or higher are no longer desirable to office tenants and in which residential rents recover to pre-pandemic levels, office-to-residential conversions would make more financial sense than maintaining office uses. However, additional cost reductions would be needed to make it financially feasible.

**Assumptions:**

OFFICE VACANCY	OFFICE RENT	CAPITAL INVESTMENT FOR OFFICE	RESIDENTIAL RENTS PER SQUARE FOOT	RESIDENTIAL RENTS PER UNIT
75%	40% decline from 2022 rents	\$25/square foot	\$7.25	\$4,713

BUILDING TYPE	FLOOR PLATE SIZE (SQUARE FEET)	PHYSICAL SUITABILITY SCORE	UNDER-PERFORMING BUILDINGS DOWNTOWN	SCENARIO C (RLV/GSF)		
				MAINTAIN AS OFFICE	CONVERT TO RESIDENTIAL	DIFFERENCE IN VALUE
Type 1. High Rise 12-20K	12,001-20,000	Category 1 - Strong	20	-\$212	-\$76	\$136
Type 2. High Rise <12K	Up to 12,000	Category 2 - Good	12	-\$222	-\$50	\$173
Type 3. High Rise 20K+	Over 20,000	Category 2 - Good	3	-\$230	-\$91	\$139
Type 4. Low-Mid Rise 6-20K	6,001-20,000	Category 2 - Good	8	-\$195	-\$86	\$109
Type 5. Low-Mid Rise 20K+	Over 20,000	Category 3 - Challenging	3	-\$196	-\$81	\$115
Type 6. Low-Mid Rise < 6K	Up to 6,000	Category 3 - Challenging	8	-\$234	-\$178	\$57

Source: HR&A Advisors' analysis based on data from Gensler and Turner Construction

## FEASIBILITY GAP ANALYSIS FOR CASE STUDIES

Even though many buildings are physically suited for conversion, the comparative financial analysis showed that under current conditions and city policies, developers are unlikely to pursue office-to-residential conversions in downtown San Francisco. But would some buildings be more likely to switch to residential uses if the value of Class B and Class C offices dropped significantly? What can the city and state do to reduce costs to unlock the potential for conversions?

To answer these questions, SPUR and ULI partnered with Sylvan Development Group and Emerald Fund to conduct a more tailored financial feasibility analysis. To generate more detailed figures for this analysis, we evaluated three office buildings that were put on the market in spring 2023. Using a developer/investor's perspective, we assessed the cost of converting each building, compared that cost to the value that could be generated from residential rental revenues, and measured the difference to arrive at the "feasibility gap." If the revenue value is higher than the conversion cost, the project is feasible and can attract private investment capital. If the value is lower than the cost, the project cannot attract investors and the building will not be converted.

Because all of the studied buildings had a feasibility gap under existing policies, the team analyzed policy scenarios that help close the gap. This analysis was designed to provide a realistic assessment of the economic viability of office-to-residential conversions of the studied buildings and to enable decision makers to understand how they could move the needle using public policy.

## Assumptions

The studied buildings are Class B and Class C towers built in the 1970s and 1980s and located in the North and South Financial District. They fall into the building typology that achieved the highest physical suitability score: high-rise buildings with floor plates of 16,000 to 17,000 square feet and punched or ribbon windows. For each building, an architect drafted floor plans and created a unit mix that was based on the most effective layout. The plans yielded efficiencies of 73% to 80% and average unit sizes of 735 to 869 square feet.

## Costs

The team brought on engineers to provide recommendations for structural and mechanical, engineering, and plumbing (MEP) systems. Using this information, along with the building layouts and unit mix, general contractors provided construction cost estimates for each building.<sup>17</sup>

On the basis of recently reported building sales and guidance from brokers, we estimated that the buildings could be acquired for historically low prices. Recently, Class B and Class C buildings have been sold at prices that are approximately 60% to 80% lower than they were valued prior to 2020.<sup>18</sup>

We consulted city staff to estimate the impact fees for each building. Overall, impact fees, which are charged for effects on municipal infrastructure, are lower for these office-to-residential conversion projects than for new construction. However, one of the buildings is located in the Transbay C-3 Special Use District, which has an open space requirement. If conversion of that building would not provide open space within the project footprint, the city would charge an in-lieu fee equivalent to \$88,000 per unit to be deposited into a fund for open space within the district. When this analysis was conducted, the open space in-lieu fee still applied for conversion projects in the Transbay district, but the mayor and the president of the Board of Supervisors have since introduced legislation to lower all impact fee amounts by 33%.

We estimated soft costs, which include design and engineering services and construction loan financing costs, on the basis of typical costs for similar projects.

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<sup>17</sup> Cost estimates include seismic upgrade and assume that contractors would pay the prevailing wage for construction workers.

<sup>18</sup> CoStar, "Another San Francisco Office Tower Hits Market at Fraction of Its Original Price," May 12, 2023, <https://www.costar.com/article/2034756922/another-san-francisco-office-tower-hits-market-at-fraction-of-its-original-price>.



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## Rents

In the baseline scenario, we assumed that the buildings would set aside 15% of the apartments to lower-income households to meet the city's inclusionary housing requirement.<sup>19</sup>

To estimate market-rate rents, we studied comparable properties in downtown San Francisco and assumed an average rent of \$5.25 per square foot, with a healthy escalation of rents on an annual basis through building lease-up, the period when a newly built or renovated residential building is launched and seeking to fill vacancies as rapidly as possible. The rent assumptions reflect the reality that the Financial District is not an established residential area with the amenities of other neighborhoods and that apartments in converted buildings often have unusual dimensions and less natural light compared with a newly constructed apartment building. In the short term, a converted downtown office building is likely to offer greater value to prospective renters than other newly built apartments.

## Design/Entitlements, Construction, and Lease-Up Duration

The team assumed that it would take about three and a half years to finalize design, obtain permits, and complete construction and another 8 to 9 months to fill all units.

## Project Value and Investment Yield

To estimate the value of the converted building, we used a standard real estate industry methodology of dividing the net operating income (rents minus expenses) generated from a fully leased building by the market capitalization rate ("cap rate"). The cap rate for an investment property such as an apartment building fluctuates on the basis of market conditions, interest rates, and risk. Investors expect the project to generate a value beyond the capitalized value, known as the yield on investment. For this analysis, we assumed a combined market cap rate and required investment yield totaling 6%. If the total development and acquisition costs are higher than the estimated value, a feasibility gap exists.

## Baseline Scenario

The baseline scenario shows a feasibility gap of \$184,000 to \$313,000 per apartment unit, indicating that the cost of development exceeds the value of the apartment under current city policies. For the three studied buildings, the cost of development, including construction, city fees, and other soft costs, is between \$746,000 and \$807,000 per apartment unit. This per-unit construction cost is 20% to 30% lower than the nearly \$1 million per-unit construction cost for new construction projects.

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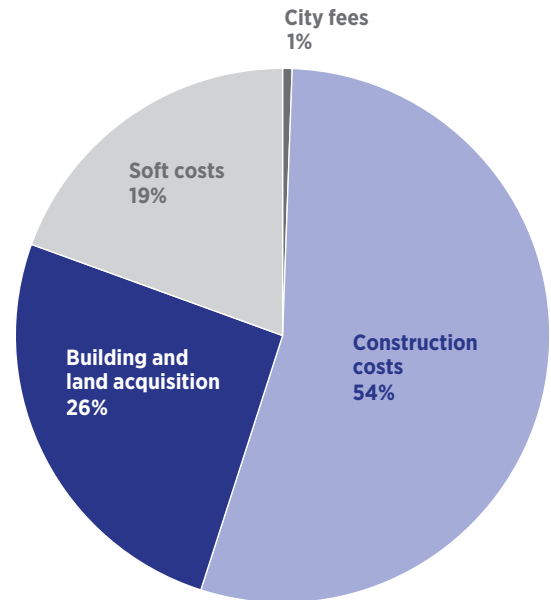
<sup>19</sup> The current inclusionary rate for rental housing in San Francisco is 22.5%, a rate found to be financially infeasible. In July 2023, the mayor and the president of the Board of Supervisors introduced legislation to reduce the requirement to 15% for new, unentitled projects.

EXHIBIT 9

**Average Development Cost of an Office-to-Residential Conversion**

The average cost of development for a conversion project is estimated at an average of \$779,000 per unit. The costs, from highest to lowest, include construction costs, building and land acquisition, soft costs (including architect and engineer consulting fees and financing costs), and city fees.

Source: SPUR analysis based on data from the Sylvan Development Group and the Emerald Fund



However, the value of the units range from \$531,000 to \$604,000. San Francisco’s real estate transfer tax of 6% adds another cost of \$42,000 to \$48,000 per apartment. Although the tax is payable only at the sale of the building, it is considerable and factors into decisions to invest in real estate projects in San Francisco.

## EXHIBIT 10

**Financial Feasibility of Converting Three San Francisco Office Buildings to Residential Use**

The cost of conversion exceeds the value by an average of \$267,000 per apartment.

	BUILDING 1	BUILDING 2	BUILDING 3	AVERAGE
PROJECT COSTS IN BASE CASE	COST PER UNIT	COST PER UNIT	COST PER UNIT	ALL 3 BUILDINGS
<b>Building area in gross square feet (GSF)</b>	250,000	220,000	300,000	
<b>Floor plate</b>	16,000	17,000	16,000	
<b>Net residential area</b>	182,000	168,000	240,000	
<b>Residential efficiency ratio<sup>a</sup></b>	73%	76%	80%	
<b>Total units</b>	209	228	288	
<b>Average unit size</b>	869	735	833	
<b>Weighted average market-rate rent</b>	\$3,884	\$3,854	\$4,111	
<b>Weighted average below-market-rate rent</b>	\$1,958	\$2,056	\$2,000	
<b>COSTS</b>				
<b>Land + building acquisition cost per GSF</b>	\$120	\$205	\$225	\$183
<b>Acquisition cost: Land + existing building</b>	\$145,000	\$197,000	\$234,000	\$192,000
<b>Construction costs</b>	\$506,000	\$353,000	\$364,000	\$407,667
<b>City impact fees</b>	\$5,000	\$4,000	\$4,000	\$4,333
<b>Open space in-lieu fee<sup>b</sup></b>	\$0	\$88,000	\$0	n/a
<b>Soft costs</b>	\$151,000	\$142,000	\$144,000	\$145,667
<b>Total development cost</b>	<b>\$807,000</b>	<b>\$783,000</b>	<b>\$746,000</b>	<b>\$778,667</b>
<i>Construction cost/GSF</i>	<i>\$423</i>	<i>\$366</i>	<i>\$349</i>	
<i>Total development cost/GSF</i>	<i>\$675</i>	<i>\$811</i>	<i>\$716</i>	
<b>Transfer tax implied cost<sup>c</sup></b>	\$42,000	\$43,000	\$48,000	\$44,333
<b>Net operating income/unit in year 1 stabilization</b>	\$32,000	\$32,000	\$36,000	\$33,333
<b>Project value<sup>d</sup></b>	\$531,000	\$533,000	\$604,000	\$556,000
<b>Feasibility gap</b>	\$318,000	\$293,000	\$190,000	\$267,000

Source: Analysis by SPUR, Sylvan Development Group, and the Emerald Fund

<sup>a</sup> Ratio of leasable to nonleasable space

<sup>b</sup> Building is located in Transbay Special Use District, which requires payment of in-lieu fee for open space that is not provided within the project

<sup>c</sup> Real estate transfer tax would be paid upon sale of the building at a rate of 6% of the market value of the completed conversion project

<sup>d</sup> Market cap rate with required investment yield applied to net operating income at stabilization (6%)

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## **POLICY LEVERS**

To unlock the financial feasibility of conversions, the City of San Francisco and the State of California have four policy levers: city fees, ad valorem property taxes at the local and state level, the city's real estate transfer tax, and inclusionary housing requirements. The last three levers in particular can significantly increase the value of a redeveloped building, enabling it to exceed the conversion delivery cost.

City and state governments can make it financially feasible to convert some functionally obsolete office buildings to residential uses by providing the right combination of policy levers. A combination of fee waivers, tax reductions, and reductions in inclusionary housing requirements can close the feasibility gap for buildings 2 and 3. Building 1 has the highest feasibility gap because of its low efficiency. It is not feasible to convert to housing, even with all of the proposed policy levers combined, showing that there will be some buildings that are too inefficient and expensive to adapt to residential uses.

## EXHIBIT 11

### Results of Analysis of Financial Feasibility of Converting Three San Francisco Office Buildings to Residential Use

Residential conversion of efficient office buildings becomes financially feasible with a combination of one or more policy levers, including reduced ad valorem property taxes, exemptions from the real estate transfer tax, and less restrictive inclusionary housing requirements.

POLICY LEVER	Building 1	Building 2	Building 3	Average
	COST REDUCTION PER UNIT	COST REDUCTION PER UNIT	COST REDUCTION PER UNIT	COST REDUCTION PER UNIT
<b>Feasibility gap</b>	\$318,000	\$293,000	\$190,000	\$267,000
<b>Impact fees</b>				
Open space in-lieu fee	\$0	\$88,000	\$0	\$88,000
Childcare or art fee	\$5,000	\$3,500	\$3,700	\$4,067
<b>Taxes</b>				
<b>Local share of property taxes<sup>a</sup></b>				
Existing office building basis <sup>b</sup>	\$19,000	\$26,000	\$31,000	\$25,333
Improvements from conversion project <sup>c</sup>	\$63,000	\$56,000	\$49,000	\$56,000
Property taxes in lieu of vehicle license fee <sup>d</sup>	\$9,000	\$8,000	\$7,000	\$8,000
<b>State share of property taxes directed to Educational Revenue Augmentation Fund<sup>e</sup></b>				
Existing office building basis <sup>b</sup>	\$7,000	\$10,000	\$12,000	\$9,667
Improvements from conversion project <sup>c</sup>	\$25,000	\$22,000	\$19,000	\$22,000
<b>Local real estate transfer tax</b>				
One-time exemption from transfer tax	\$42,000	\$43,000	\$48,000	\$44,333
<b>Inclusionary</b>				
10% below market rate	\$22,000	\$21,000	\$24,000	\$22,333
5% below market rate	\$46,000	\$43,000	\$50,000	\$46,333
0% below market rate	\$67,000	\$64,000	\$74,000	\$68,333
<b>Combined fee and tax reductions</b>				
10% below market rate	\$192,000	\$277,500	\$193,700	\$279,733
5% below market rate	\$216,000	\$299,500	\$219,700	\$303,733
0% below market rate	\$237,000	\$320,500	\$243,700	\$325,733

Source: SPUR, Sylvan Development Group, and the Emerald Fund

<sup>a</sup> Includes the city and county's share of the property tax that is allocated to the General Fund (0.55%) and the Special Revenue Fund (0.09%)

<sup>b</sup> Property tax on the assessed value of the existing office building with acquisition cost of between \$120 and \$225 per GSF.

<sup>c</sup> Property tax on the assessed value of building improvements after conversion, also known as the incremental property tax.

<sup>d</sup> Beginning in 2004, cities began receiving additional property taxes from the state in lieu of vehicle license fee (VLF) revenues. The property tax in lieu of VLF is calculated from the incremental value associated with conversion improvements.

<sup>e</sup> The State of California receives 0.25% of local property tax known as the Educational Revenue Augmentation Fund (ERAF). San Francisco is one of a few jurisdictions that generates higher property taxes for the state than is required, so this "excess ERAF" amount has been returned to the city's general fund in recent years.

## Funding Gap for Affordable Housing

Based on the analysis of the three studied buildings, the per-unit feasibility gap is \$267,000 under the city's current policies. The gap is considerably higher for 100% affordable housing projects because although the cost to develop a unit remains \$780,000, the rents and sales prices are restricted. For example, the maximum sales price for a two-bedroom condominium priced for a low-income family earning 80% of the area median income is \$365,000. The funding gap would be \$415,000 per low-income apartment. The City of San Francisco has historically provided \$250,000 in local funding per unit for 100% affordable housing projects. These projects also receive low-income housing tax credits (LIHTCs), the biggest source of affordable housing subsidy, as well as grants from other state and federal programs.<sup>20</sup> According to local affordable housing developers interviewed for this study, LIHTCs and other subsidy sources are highly competitive and would be challenging to use for downtown office conversion projects. Additional financial resources would be needed to close the funding gap on the conversion of office buildings to affordable housing. In 2020 and 2021, the State of California released \$3.75 billion in funding for the Homekey program, converting motels and hotels into about 12,500 apartments for people experiencing homelessness or at risk of homelessness.<sup>21</sup> A similar program could be designed for distressed office buildings in the urban centers of California.

In addition to providing direct subsidies, the city and state could explore mechanisms to reduce the cost of development for middle-income housing through property tax exemptions using a unique model. In California, joint powers authorities (JPAs) can be formed by local jurisdictions to create or acquire housing that is affordable to middle-income households earning between 80% and 120% of the area median income.<sup>22</sup> This model could potentially be implemented for office-to-residential conversion projects in San Francisco.

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<sup>20</sup>San Francisco Planning Department, "Housing Affordability Strategies," March 2020, [https://sfplanning.s3.amazonaws.com/default/files/plans-and-programs/housing/affordability-strategy/Housing\\_Affordability\\_Strategies\\_Report.pdf](https://sfplanning.s3.amazonaws.com/default/files/plans-and-programs/housing/affordability-strategy/Housing_Affordability_Strategies_Report.pdf).

<sup>21</sup>California Governor Gavin Newsom, "In Los Angeles, Governor Newsom Announces \$694 Million in Homekey Awards to Create More Than 2,500 New Homeless Housing Units Statewide," August 25, 2022, <https://www.gov.ca.gov/2022/08/24/in-los-angeles-governor-newsom-announces-694-million-in-homekey-awards-to-create-more-than-2500-new-homeless-housing-units-statewide/>.

<sup>22</sup>Metcalfe, Ben, Sarah Karlinsky, and David Garcia, "The ABCs of JPAs: California's New Tool for Creating Middle-Income Housing," Turner Center for Housing Innovation and SPUR, June 2022, [https://turnercenter.berkeley.edu/wp-content/uploads/2022/06/SPUR\\_The\\_ABCs\\_of\\_JPAs.pdf](https://turnercenter.berkeley.edu/wp-content/uploads/2022/06/SPUR_The_ABCs_of_JPAs.pdf).

## Chapter 4

# Policy Imperatives

San Francisco's office vacancy rate is at a historic high and is likely to remain that way for years. About one-third of the available office space is in Class B and C buildings, which are less competitive for office tenants than Class A buildings. The vacant space is concentrated in the Financial District and South Financial District — areas that have limited housing and entertainment uses to offset the absence of workers.

Redeveloping San Francisco's obsolete office buildings into housing delivers economic, social, environmental, and fiscal benefits to the city and the state. In addition to creating more housing for workers in an area with high-quality transit, conversions will increase support for small businesses, artists, and cultural organizations. Redeveloping low-value space will increase the value of remaining office building stock and increase property and sales tax revenues for the city. Office-to-residential conversions in other North American cities have helped transform central business districts into mixed-use, 24/7 social hubs with housing, restaurants, retail, entertainment, and culture.

The unfolding economic crisis of downtown must be met with bold strategies that fall outside of traditional policy thinking parameters. SPUR and ULI have identified six policy imperatives for encouraging office-to-residential conversions in San Francisco.

### **1. Remove obstacles in building codes and simplify approvals for conversion projects.**

The City of San Francisco has removed many of the constraints to conversion in the planning code. It will now direct the Building Inspection Commission to conduct a deeper assessment of building code impediments to conversions. As part of this assessment, the city should establish clear requirements for seismic upgrades that are appropriate for conversion projects.

In addition, the city should create a ministerial process for permit approvals. Such a process expedites permitting by Planning, Department of Building Inspections, and other departments by limiting the approvals needed when the project complies with the city's building and planning codes. Unlike discretionary approvals that involve judgment or deliberation and that are often issued by an appointed or elected decision-making body, ministerial approvals involve the application of clear requirements and are often issued by municipal staff. Importantly, ministerial approvals are not subject to the California Environmental Quality Act.

Finally, the city should seek to provide exemptions from environmental review of proposed downtown conversion projects because the projects involve existing buildings and require no new construction of transit, infrastructure, or other public facilities.

## **2. Consider making the inclusionary housing requirement less stringent.**

Although the city recently lowered the inclusionary requirement for new housing developments, the reduction was not enough to make office conversions financially feasible. And as mentioned earlier, these projects can't access cost offsets like the state density bonus. Another factor to consider: Since 1980, San Francisco has required commercial development to pay a jobs-housing linkage impact fee, which is intended to address the impact that adding new workers has on the need for more affordable housing. Because the fee has been in existence for so long, many office buildings in San Francisco have already paid it and contributed their "fair share" toward affordable housing. Given this context, as well as the economic challenges of the conversion projects, further reducing the inclusionary requirement would be reasonable. The reduction could be restricted to a period of time or a limited square footage of conversion.

## **3. Consider reducing city impact fees and in-lieu fees for conversion projects.**

Downtown office conversion projects would not have the same impact on the city's infrastructure as new development projects, given that they involve existing buildings within a highly dense urban environment. A reduction of San Francisco's impact fees, which have escalated steeply over the past few years, would significantly lower the cost of the projects' development. In particular, the city should consider eliminating the open space in-lieu fee for conversion projects in the Transbay Special Use District, which is estimated to cost \$88,000 per apartment.

## **4. Explore tools to provide incentives for office conversion projects.**

Many U.S. cities are implementing programs that encourage the conversion of office buildings to increase housing downtown. As shown in the financial feasibility analysis, conversion projects are possible with a combination of financial incentives from the city and state. San Francisco could pilot an incentive program to reduce taxes like the real estate transfer tax. It could also reimburse the local property taxes paid by conversion projects. It could establish new infrastructure financing districts downtown that dedicate future property tax revenues to facilitating the adaptive reuse of office buildings. The financial incentive programs could be restricted to a period of time or a limited square footage of conversion.

## **5. Explore state legislation that provides property tax incentives for conversion projects that produce affordable housing and workforce housing.**

As shown in the feasibility gap analysis, the state can play an important role by providing financial incentives that enable the conversion of functionally obsolete office buildings to residential uses. Conversion projects would provide long-term fiscal and economic benefits to both the city and the state in the form of higher property tax and sales tax revenues. New residents would help to reactivate the downtown and provide support for restaurants, stores, and the arts. Having a healthier



downtown would in turn allow the city to retain and attract other businesses.

The state should explore the use of joint powers authorities or property tax exemptions to convert office buildings to housing, especially if they provide housing that is affordable to middle-income workers. It also could study, as other cities and states have done, the long-term impacts and benefits of a property tax reimbursement program for conversion projects in downtowns.

Finally, the state should consider creating and expanding funding sources specifically targeted to assist adaptive reuse projects that will revitalize California cities that are suffering from high office vacancies in their downtown cores. This effort could include ensuring that the guidelines for the newly established state historic tax credit program are designed to encourage the redevelopment of older office buildings that have become functionally obsolete.

## **6. Consider policies to create a “reserve” for the office space removed through conversions.**

In 1986, San Francisco passed a voter measure, Proposition M, that caps the amount of office development that can be approved each year to 950,000 square feet. More recently, 2020’s Proposition E tied approval of office development to the amount of affordable housing built. As a result of these policies, San Francisco has occasionally been unable to approve office development projects to accommodate a growing number of companies and jobs. To avoid further constraining the office supply in downtown San Francisco in the long term, the city could consider allocating any office space removed in a conversion to the Prop. M “reserve.” This reserve could be tapped if project applications ever exceeded the maximum allowable amount of office development.



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