



FLEXIBLE CO-LIVING HOUSING FEASIBILITY STUDY

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Los Angeles, California

Study done in collaboration with Gensler and The Pew Charitable Trusts. Funding for this research was provided by Arnold Ventures and The Pew Charitable Trusts.

Pew Gensler

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Defining the Problem: Increasing the supply of low-cost housing

Cities across the United States are grappling with a long-term housing affordability crisis. Rising housing costs and a chronic undersupply of affordable housing impact the livelihoods of residents, with significant office inventories remaining vacant and unused. These trends have become more pronounced in the aftermath of the Covid-19 pandemic.

Housing Affordability and Availability

Nationwide, the median rent was \$1,382 in November 2024, an increase of 21% in just the four years since November 2020.¹ Further, rent growth has often outpaced wage growth in recent years, worsening affordability. Experts point to chronic undersupply as one of the primary drivers of rising rents. Current regulatory frameworks, policies, and construction typologies are unable to deliver affordable and accessible housing near jobs, transit, and other socioeconomic drivers of economic opportunity, further contributing to increased costs of existing housing as renters compete for limited supply. The number of lower-income renters continues to rise, resulting in renters increasingly priced out of local housing markets.²

Housing Insecurity and Homelessness

With chronic undersupply of housing, and especially low-cost housing, the United States faces housing insecurity and homelessness. In 2024, HUD reported a record 770,000 people experiencing homelessness, an 18% increase from the year prior.³ Research indicates that homelessness rates are highest in cities with the highest rents, and that homelessness rises when rents rise.⁴

Vacant Office Stock

While the nation experiences a housing shortage, office occupancy continues to fall as the commercial real estate market responds to declining office demand due to long-term trends and post-Covid demand shifts. Moody's has found the office vacancy rate hit a record-high 20% in 2024 as office tenants continued to use less space.⁵ Rising office vacancies threaten the vitality of central business districts and their continued impact on municipal revenue generation, as cities have long relied significantly on commercial property taxes to fund local budgets.

¹ Apartment List November 2024 National Rent Report <https://www.apartmentlist.com/research/national-rent-data>

² NLIHC Releases The Gap 2023: A Shortage of Affordable Homes <https://nlihc.org/news/nlihc-releases-gap-2023-shortage-affordable-homes>

³ HUD January 2024 Point-in-Time Count Report https://www.hud.gov/press/press_releases_media_advisories/HUD_No_24_327

⁴ How Housing Costs Drive Levels of Homelessness <https://www.pewtrusts.org/en/research-and-analysis/articles/2023/08/22/how-housing-costs-drive-levels-of-homelessness>

⁵ Moody's Office Vacancy Report <https://www.moody.com/web/en/us/about/insights/data-stories/us-commercial-real-estate-vacancies-downtown-vs-suburbs.html>

Re-Introducing Low-Cost Housing Typologies

The misalignment of housing costs and the housing budgets of renters is worsening, with a record 50% of renters cost-burdened, meaning they spend more than 30% of income on rent.¹ In many cases this is exacerbated by regulatory frameworks that encourage and prioritize construction of market-rate housing that is higher-cost and beyond the means of most renters.

In the mid-20th century, most cities in the U.S. were characterized by an abundance of lower-cost housing typologies, particularly single-room occupancy (SRO) dwellings. Starting in the 1950s, restrictive zoning and building codes and financial incentives resulted in the elimination of SRO's as an affordable housing alternative. Between the 1970s and the 1990s alone, it is estimated that the United States lost one million SRO units to conversions and demolitions.²

Through regulatory reform and the reintroduction of lower-cost residential typologies, the supply of lower-cost housing can be increased to meet the current needs of renters.

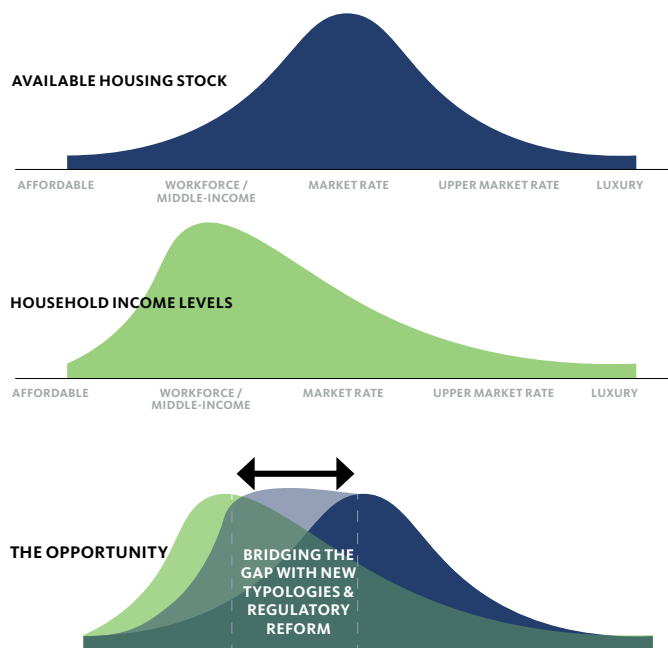
The reintroduction of flexible co-living residential typologies has the potential to:

- 1) reduce the costs of additional residential inventory,
- 2) increase the supply of available housing to lower-income renters, and
- 3) alleviate some of the negative impacts of long-term demand changes for office properties.

Expanding the Office-to-Residential Conversion Potential

Central to this solution is the potential for leveraging vacant office stock in cities' central business districts, which are already located in transit-accessible and job- and amenity-rich locations. Many of these vacant or underutilized office buildings are being assessed for their potential conversion to housing across the U.S.

Gensler analysis suggests a notable subset of existing office stock is potentially suitable for conversion into market-rate housing.³ However, many buildings are not economically viable candidates due to configurations that appeal to office tenants, but are incompatible with traditional residential layouts. Large floor plates with little interior natural light, inoperable windows, and the high costs of plumbing and mechanical retrofits all challenge the design and economic feasibility of conversion, particularly under current regulatory frameworks in most cities.



¹New Report Shows Rent Is Unaffordable for Half of Renters as Cost Burdens Surge to Record Levels <https://www.jchs.harvard.edu/press-releases/new-report-shows-rent-unaffordable-half-renters-cost-burdens-surge-record-levels>

²The Rise and Fall of the American SRO <https://www.bloomberg.com/news/articles/2018-02-22/the-rise-and-fall-of-the-american-sro>

³What We've Learned by Assessing More Than 1,300 Potential Office-to-Residential Conversions <https://www.gensler.com/blog/what-we-learned-assessing-office-to-residential-conversions>

Los Angeles: Existing Conditions, Regulatory Overview, and Building Stock

The State of Housing in Los Angeles

Los Angeles is a city of high rents and a lack of housing affordability, which has continued to worsen in recent years. According to Apartment List data, between 2018 and 2023, the overall median rent in the city of Los Angeles increased 9% and is \$2,072 per month as of November 2024, even during a time when household growth has been relatively flat.

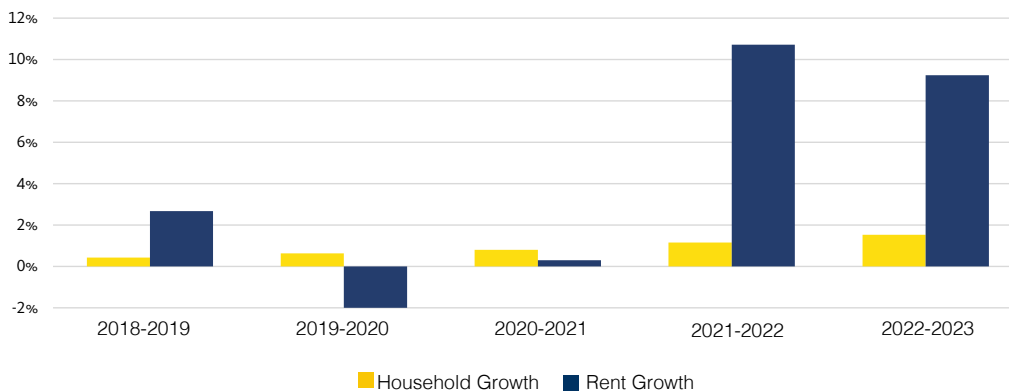
Los Angeles has long grappled with housing insecurity and a high rate of homelessness. There are an estimated 71,320 individuals experiencing homelessness in Los Angeles County. This rate of 74 per 10,000 inhabitants far exceeds the national average and is one of the highest rates in the country.¹ At the same time, downtown office vacancy rates average 28%.²

The Opportunity

The opportunity to introduce affordable co-living housing in Los Angeles is promising: There are no significant local regulatory barriers that would otherwise prohibit flexible co-living residential typologies. Initial conversations suggest that there is notable local political will to encourage new housing typologies, along with other solutions to address housing affordability and rising homelessness and housing insecurity.

Several local programs that support these goals are already underway or in development and can be leveraged to enhance the viability of this housing model.

Household and Rent Growth (Cumulative)



2018-2023:

HOUSEHOLDS:

+2%

RENT:

+9%

¹ HUD January 2024 Point-in-Time Count Report https://www.hud.gov/press/press_releases_media_advisories/HUD_No_24_327

² Colliers Downtown Commercial Vacancy Rate Q3 2024 <https://www.colliers.com/en/research/los-angeles/downtown-los-angeles-office-research-report-2024-q3>
 Chart Data Sources: Apartment List National Rent Report (as of November 2024) <https://www.apartmentlist.com/research/national-rent-data>, Esri Business Analyst

Los Angeles at a glance:



**MEDIAN
RENT**

\$2,072



**HOMELESSNESS
RATE**

74 per 10k



**DOWNTOWN
OFFICE
VACANCY**

28%



**REGULATORY
BARRIERS**

MEDIUM

Los Angeles uses International Code Council (ICC) with amendments. Currently, 2023 is the base code.

LOS ANGELES LAND-USE CODE

In the City of Los Angeles, “congregate housing” is typically defined as a type of housing that offers shared living spaces and amenities, with a focus on group living. This includes arrangements where residents live in individual units or rooms but share common spaces such as kitchens, bathrooms, and sometimes living areas. Congregate housing is often designed for specific populations, such as seniors, students, or individuals in need of supportive services, and is generally regulated to ensure safety and accessibility.

Section 12.03 of the Los Angeles City Zoning Code identifies residential “dwelling” under the following definitions:

- DWELLING. Any residential building, other than an Apartment House, Hotel or Apartment Hotel.
- DWELLING, GROUP. Two or more one- family, two-family or multiple dwelling, apartment houses or boarding or rooming houses, located on the same lot.
- DWELLING, MULTIPLE. A dwelling containing two dwelling units and not more than five guest rooms.
- DWELLING UNIT. A group of two or more rooms, one of which is a kitchen, designed for occupancy by one family for living and sleeping purposes.
- Fraternity or sorority houses and dormitories are described as a permitted use under the “R-4” Residential district within SEC. 12.11. “R4” MULTIPLE DWELLING ZONE.

Chapter 2 of the California Building Code (CBC) outlines the definition of congregate residences. Any building or portion thereof that contains facilities

for living, sleeping and sanitation, as required by this code, and may include facilities for eating and cooking, for occupancy by other than a family. A congregate residence may be a shelter, convent, monastery, dormitory, fraternity or sorority house, but does not include jails, hospitals, nursing homes, hotels or lodging houses.

Congregate Living (Congregate residences) (transient) with more than 10 occupants falls under 310.2 Residential Group R-1.

Residential Group R-1 occupancies containing sleeping units where the occupants are primarily transient in nature.

Existing Structure Conversion

The upcoming Los Angeles City Zoning Code 2040 will implement the “Downtown Adaptive Reuse Program,” designed to support the preservation and reuse of existing buildings in the Downtown Community Plan Area. The selected site is located within this area.

Because the selected site is at least 25 years old, it is eligible to take part of the program.

The program provides incentives for conversion in the following manner:

- Existing floor area which exceeds the maximum floor area ratio of the applied Form District shall be considered allowed.
- Additional floor area created within an existing building, such as mezzanines (as defined in Chapter 9 of the Building Regulations), will not count toward the maximum floor area limit for the lot.
- The following shall not be considered as adding new floor area that enlarges an existing building or structure:

1. The change of use for any area within an existing building that is exempt from floor area is allowed, as long as it aligns with the permitted uses in the applied Use District. This includes renovating interior spaces for permitted uses but does not allow for new construction. All changes must stay within the building's existing exterior walls and below the current roof.
 2. The change of use for any area within an existing building exempt from floor area is permitted for conversion to lot amenity spaces or residential amenity spaces.
 3. The change of use is permitted for any area within an existing basement or portions of an eligible building located below grade.
 4. The conversion of existing parking areas or structures is allowed, provided the conversion stays within the exterior walls of the existing building.
- The construction of new rooftop structures on the existing roof shall not be considered new floor area, as long as the new rooftop structures:
 1. Do not exceed one story.
 2. Comply with the height requirements of the applied Form District.
 - Adaptive reuse projects are not required to make eligible buildings or structures comply with the applied Frontage District standards. However, if a building or structure is already nonconforming with the Frontage District, the adaptive reuse project must not make it less compliant.
 - Adaptive reuse projects are exempt from the Project Review process requirements outlined in the Development Standards District and detailed in Div. 4C.14 (Project Review Threshold).
 - Adaptive reuse projects shall be exempt from any requirements to go through the Project review process as determined by the applied Development Standards District and set forth in Div. 4C.14. (Project Review Threshold).
 - The Zoning Administrator can approve adaptive reuse projects for buildings that are at least 10 years old and were built according to the codes in effect at the time of construction. Approval is given under Sec. 13B.2.1 (Class 1 Conditional Use Permit) if the project meets the eligibility requirements in Sec. 9.4.5.B and satisfies the standards in Sec. 9.4.5.C. If approved, the project may receive applicable incentives described in Sec. 9.4.5.D.
 - The Zoning Administrator has the authority to approve, modify, or deny any of the incentives outlined in Sec. 9.4.5.D, as per Sec. 13.B.2.1 (Class 1 Conditional Use Permit). Additionally, they can grant other incentives or exemptions from zoning standards to allow adaptive reuse projects, including permission for dwelling units and live-work spaces, even if these conflict with the nonconformity rules in Article 12.

Seismic Retrofit Program

Under Ordinances 183893 and 184081, structures will be required to test for structural vulnerabilities identified by the city, such as weaknesses in its design or construction. Therefore, it may still be subject to specific retrofit requirements.

- They are two or more stories tall with wood-frame construction.
- They were built under building codes before January 1, 1978.
- They include ground-floor parking or similar open floor space.

Affordable Housing Program

An adaptive reuse project that adds 18 or more new dwelling units must set aside at least 10% of the units for moderate-income households and at least 5% of the units for very low-income households as restricted affordable units. The City of Los Angeles defines moderate-income households as 120% of area median income (AMI) and very low-income households as 50% of AMI. When calculating the required number of restricted affordable units, any fraction resulting from the calculation must be rounded up to the next whole number.

Parking Program

The required number of parking spaces must be at least the same as the existing number of spaces on the lot and cannot be reduced. However, if the parking requirement for the new use (according to Div. 4C.4. - Automobile Parking) is less than the current number of spaces, the parking spaces can be reduced to match the new requirement.

California Adaptive Reuse Incentives

The state of California has recently adopted Assembly Bill No. 529, which seeks to facilitate the redevelopment of commercial properties into housing by adopting adaptive reuse ordinances to reduce barriers for potential conversions. To assist with conversions, the state has allocated \$400 million of state funds from existing state and federal programs to be used as competitive grants and other forms of subsidy.

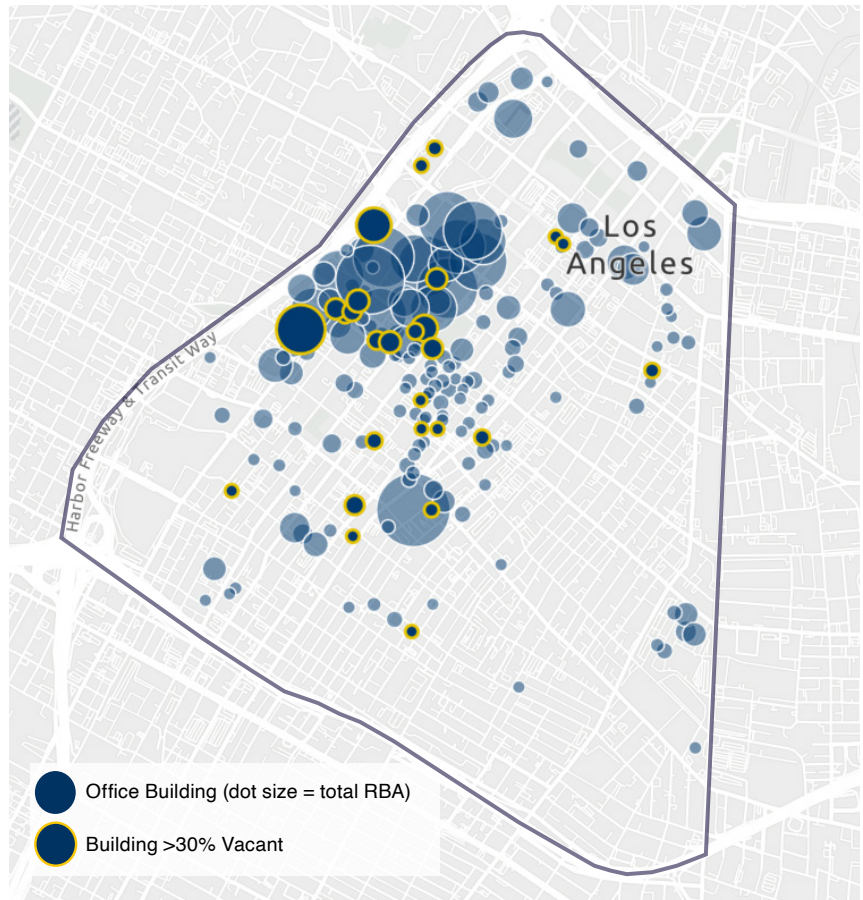


The Los Angeles Central Business District (CBD)

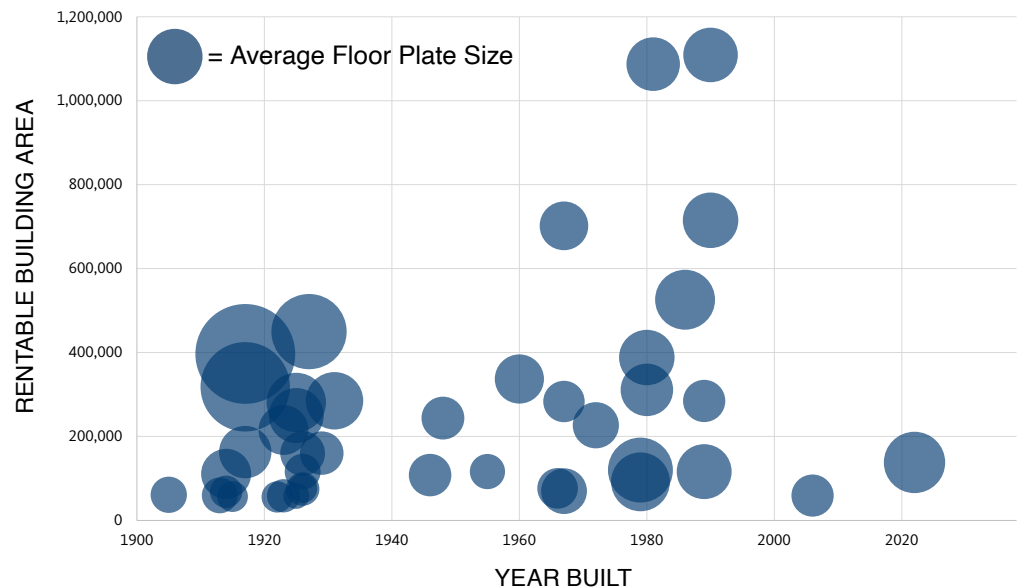
According to data from CoStar, there are approximately 190 office buildings over 50,000 SF in what is typically defined as the Los Angeles Central Business District, comprising about 58 million square feet. **An estimated 42 office buildings within the boundary are at least 30% vacant.**

Los Angeles has a significant inventory of pre-war brick and masonry buildings constructed prior to 1945. From 1945-onward, downtown office construction was relatively steady with a peak in the 1980s and early 1990s, when the city constructed its largest and tallest office buildings.

Los Angeles CBD



Downtown Office Stock (>30% Vacant)





>30% VACANT PROPERTIES	TYPE 1	TYPE 2	TYPE 3
% of Building Stock	~30-35% of total SF	<15% of total SF	~50-55% of total SF
Age	1940 and prior	1960-1980	1960-1990
Number of Floors	10	8	31
Average Floor Area Ratio (FAR)	5.8	6.0	11.2
Average Floorplate	17,600 SF	16,300 SF	17,700 SF
Average Vacancy Rate	54%	66%	45%
			DOMINANT TYPOLOGY

Office Typologies

There are 42 buildings reported to have a vacancy rate of at least 30%. These buildings have been identified, analyzed, and grouped to define prototypical typologies.

The city’s office stock with at least 30% vacancy can be categorized into three primary typologies, as described below, based on attributes such as height, floor plate size, style and year built. These factors, along with other physical attributes such as building depth and window configuration, impact their potential for conversion to traditional, market-rate residential products.

Three typologies of properties experiencing 30%+ vacancy downtown:

Type 1: Mid-rise buildings averaging 10 stories built prior to 1940 with an average floor plate of 17,600 SF. These buildings represent about one-third of the selected inventory.

Type 2: Mid-density mid-rise buildings averaging 8 stories, mostly built between 1960 and 1980. These properties have an average floorplate of 16,300 SF and represent less than 15% of the selected office inventory.

Type 3: High rise office buildings built between 1960 and 1990 averaging 31 stories. The average floorplate of these properties is 17,700 SF and represent over half of the selected office inventory.

Type 3 was selected as the prototype for testing possible conversion feasibility

Flexible Co-Living: Defining the Product

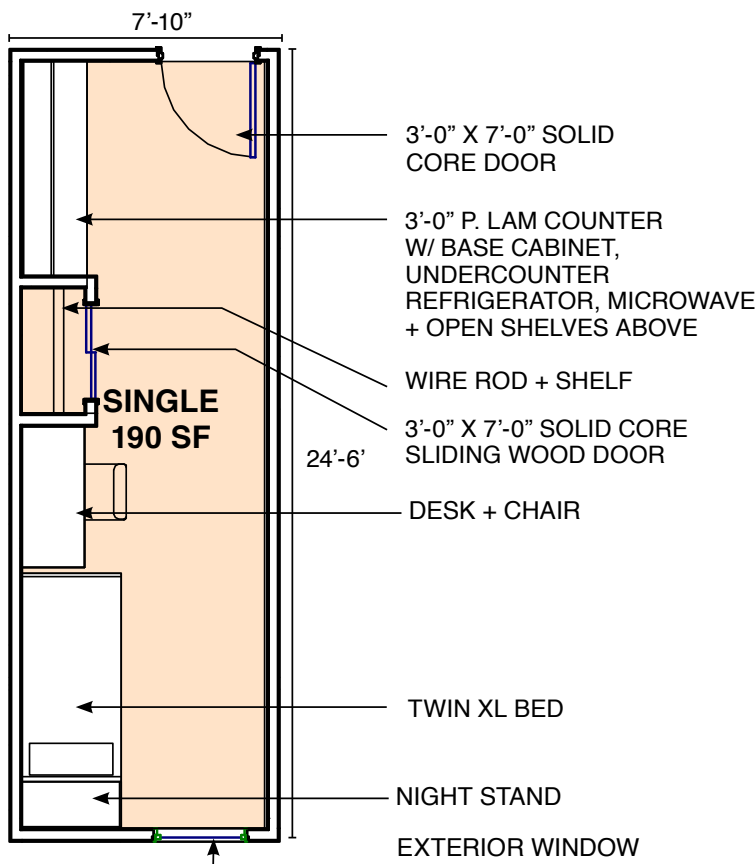
Program and Unit Module

A program and unit module were developed to align with the project's goals and conform to the City of Los Angeles' building code.

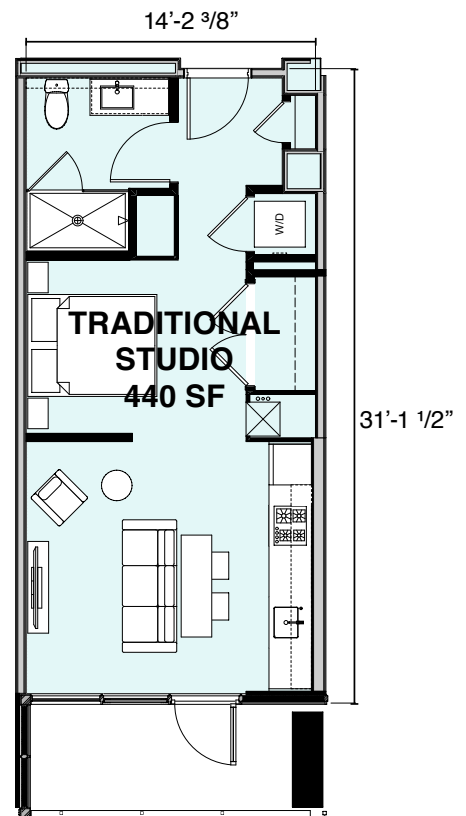
A typical single-occupant sleeping room consists of a 190 SF private room. In-room furnishings would include a twin XL bed, desk and chair, and nightstand along with a microwave and standard-depth half-sized refrigerator to store personal food and beverage items. A storage shelf and cabinet can be used to store personal belongings.

Each sleeping room is secured via a solid core wood door that can be locked by its occupant. Demising walls between sleeping rooms are designed with specifications to ensure the appropriate sound insulation.

A traditional studio layout of approximately 440 SF is shown as a point of comparison, which includes a full kitchen and bathroom in-unit.



Unit Module



Traditional Studio Layout

Test Fits and Yields

Shared Facilities and Amenity Spaces

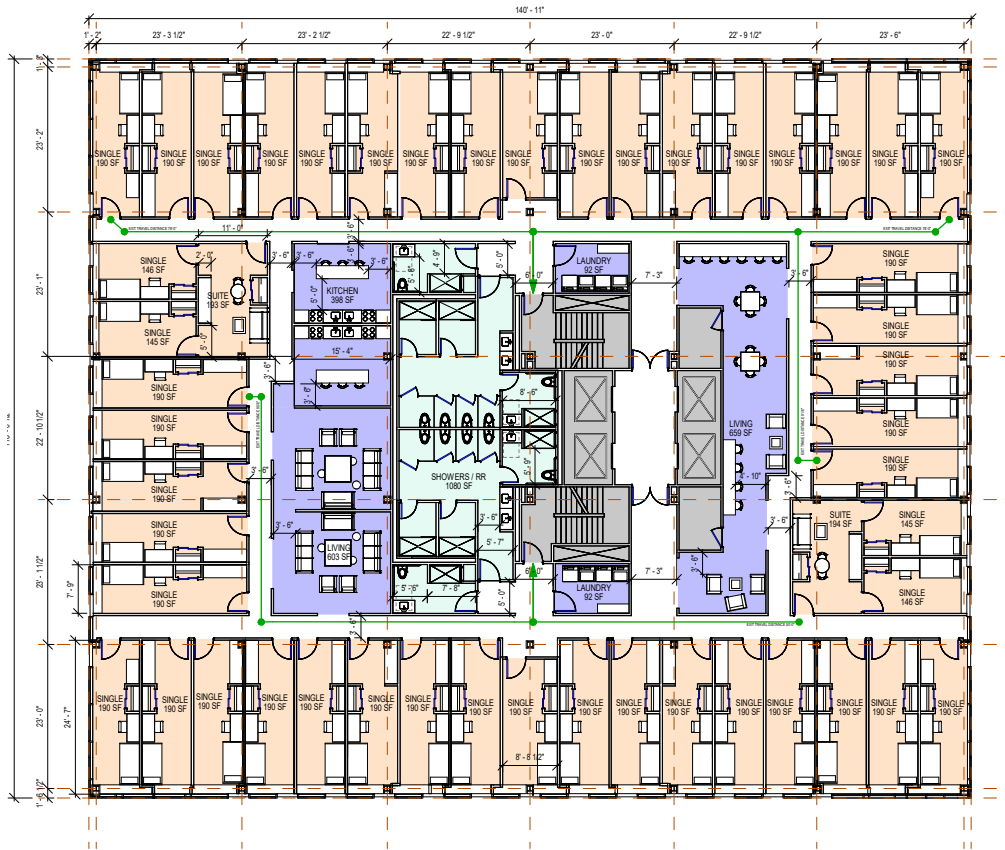
The following shared facilities are provided on each residential floor. The quantities of specific fixtures are driven by required ratios per occupant as defined by building code:

- Kitchens:** Four shared kitchen areas are included on each floor. Each kitchen area includes standard fixtures and appliances including a sink, electric range/oven, range hood, and microwave. In lieu of a refrigerator in the kitchen area, tenants have access to their individual half-sized refrigerator located in their dwelling unit. There are no code minimums for number of occupants per kitchen facility.
- Living Room:** There are two large shared living areas per floor, accommodating a variety of seating areas including couches and tables.
- Bathrooms:** Bathroom facilities are shared in the interior of the floor utilizing existing plumbing stacks from the office core. Two central bathroom facilities each contain six toilets, four sinks, and four showers. The facilities accommodate a variety of configurations, including single-user restroom and shower facilities plus shared sink areas. Altogether, there are twelve toilets, twelve sinks (including sinks in the kitchen facilities), and eight showers per floor.
- Laundry:** Two laundry rooms per floor accommodate two washers and two dryers each. There are no code minimums for number of occupants per laundry facility.

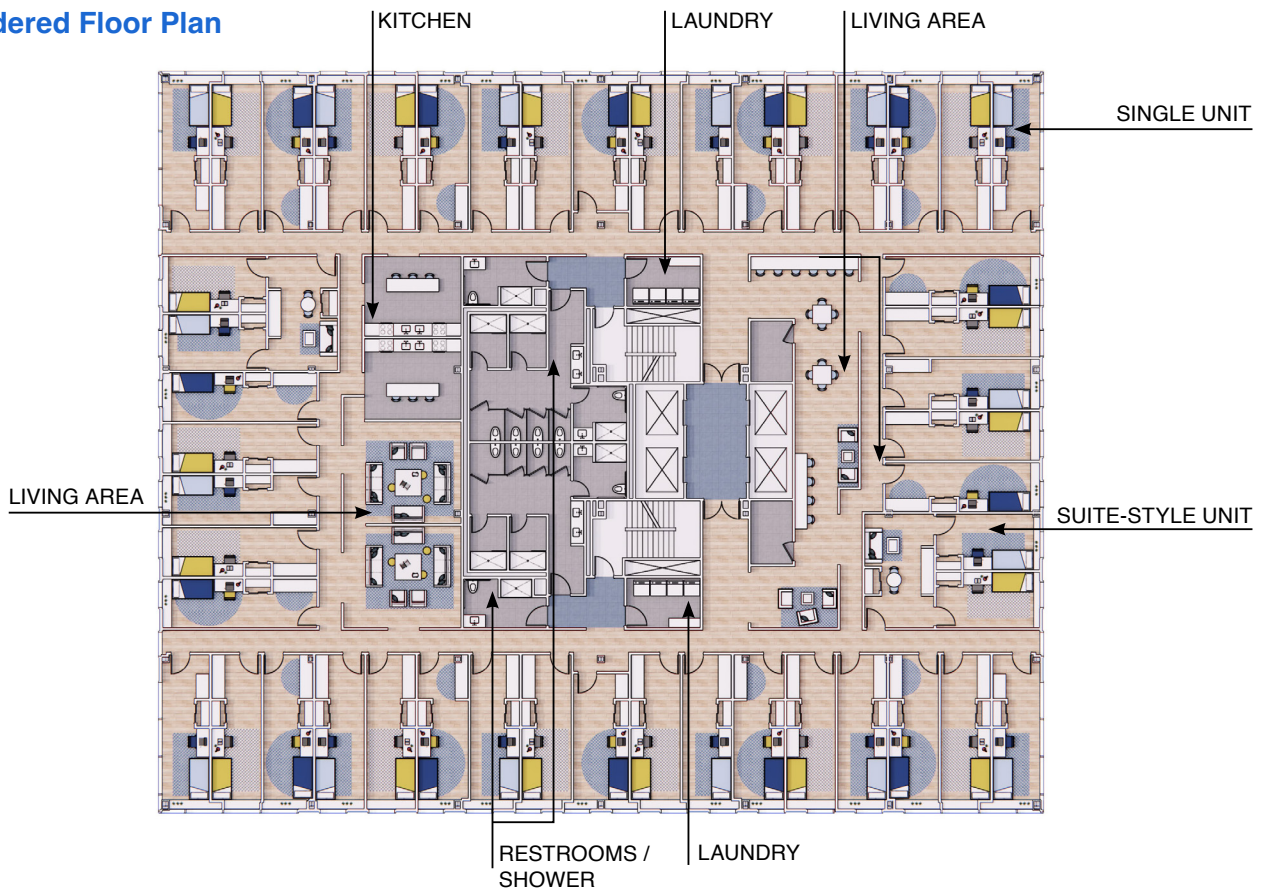
Typical Unit Rendering



Typical Floor Test Fit



Rendered Floor Plan



Yields per Floor

The prototypical building studied has a gross floor area of 16,373 SF. Each floor can accommodate 48 beds across 9,329 SF of area. To offer a variety of unit options, 44 of the beds are typical single units, while the remaining four beds are organized into two suite-style configurations with an additional shared living area. An additional 2,924 SF of floor area is dedicated to shared facilities, including bathrooms, kitchens, and living areas. The remaining square footage consists of circulation, mechanical areas, and the building’s core.

This yield produces a residential efficiency ratio of 75%. The remaining 25% of the gross floor area is comprised of the building’s core and interior circulation.

The ratios of shared facilities/fixtures per occupant conform with Los Angeles’ building code regulations.

Building Summary

The prototypical building studied is 20 floors. The ground floor would consist of a main lobby, a management office, and approximately 12,300 SF of retail space. The second floor contains approximately 7,500 SF of Class B office space plus building-level shared amenities including a fitness center. Parking for 337 cars and 500 bikes is included in the basement level. Floors 3-20 are dedicated for residential use, and each floor would have an identical layout.

Assuming 18 residential floors and 48 beds per floor, the building can yield a total occupancy of 864 residents.

Residential
Residential
Residential
Residential
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Residential
Residential
Residential
Residential
Residential
Residential
Residential
Office / Amenity
Retail
Lobby
Leasing
Parking

STATISTICS

Residential Area	9,329 SF per floor
Interior Amenity	2,924 SF per floor
Gross Floor Area	16,373 SF per floor
Efficiency	75%
Occupants	48 (44 single units, 4 suite-style singles)
	341 GSF per occupant
Toilets	12 (4.0 occupants per fixture)
Showers	8 (6.0 occupants per fixture)
Sinks	12 (4.0 occupants per fixture)
Kitchens	4 (12.0 occupants per fixture)
Washer/Dryers	4 (12.0 occupants per fixture)

Building Summary

	Levels	Floor to Floor	OA Height	Units	Parking Spaces	Bikes	Bike Room	Storage	B.O.H Services/ Mech	Common Area	Leasing/ Lobby	Interior Amenity	Retail / Office	Net Rentable Unit Area per Floor	Gross SF per Floor	EFF / Flr	Avg Unit Size
			213.00						SF	SF	SF	SF		SF	SF		SF
Residential	20	11.00	213.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	19	11.00	202.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	18	11.00	191.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	17	11.00	180.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	16	11.00	169.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	15	11.00	158.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	14	11.00	147.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	13	11.00	136.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	12	11.00	125.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	11	11.00	114.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	10	11.00	103.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	9	11.00	92.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	8	11.00	81.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	7	11.00	70.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	6	11.00	59.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	5	11.00	48.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	4	11.00	37.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Residential	3	11.00	26.00	48				0	775	3,345		2,924		9,329	16,373	74.8%	194
Amenity Floor	2	11.00	15.00	0					775	3,098		5,000	7,500		16,373		
Ground Floor	1	15.00	0.00	0	0				775	798	2,500		12,300		16,373		
Basement Parking	B	11.00			337	500	5,000										
	Floors			Units	Parking Spaces	Bikes	Bike Room	Storage	B.O.H Services/ Mech	Common Area	Leasing/ Lobby	Interior Amenity	Commercial	Net Rentable Unit Area	GSF		Avg Unit Size
Totals	20		213	864	337	500	5,000	0	15,500	64,106	2,500	57,632	19,800	167,922	327,460		194

Meeting the Market: Rents and Users

Quantifying the Market for Flexible Co-Living

Initial market research suggests that there is a sizable potential market for the flexible co-living concept. According to data from the American Community Survey, within the city of Los Angeles and adjacent communities, about two-thirds of the 1.4 million households are renters. Of these 908,000 households, 38% are single-occupant, and only 20% are comprised of four people or more.

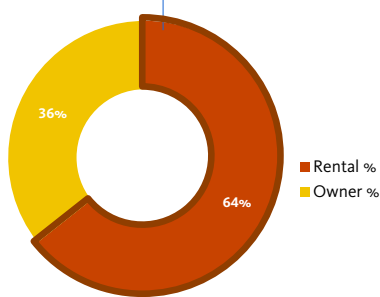
While there is a sizable group of high-income renters earning over \$100,000 per year, the household incomes of Los Angeles' single-occupant renters skew towards the lower end of the income range. Approximately 14% or 49,000 single-occupant households earn between \$30,000 and \$50,000 per year.

32% of Los Angeles-area renters are considered severely cost-burdened, meaning they pay more than 50% of their income for rent. 56%, or over half, of all Los Angeles-area renters spend more than 30% of income on rent.¹

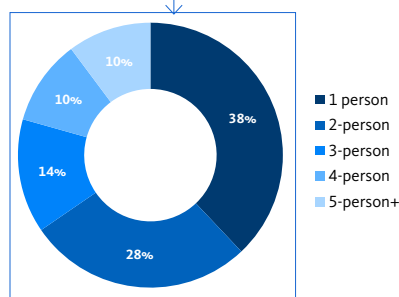
The quantity of single-person renter households earning less than \$50,000 per year, or approximately 50% of the Area Median Income (AMI), suggests a sizable market for the flexible co-living typology. The single-occupant model offers a more affordable product that aligns with renters' incomes and housing budgets.

There are 908,000 renter households in Los Angeles and 38% (345,000) of them are single-occupant

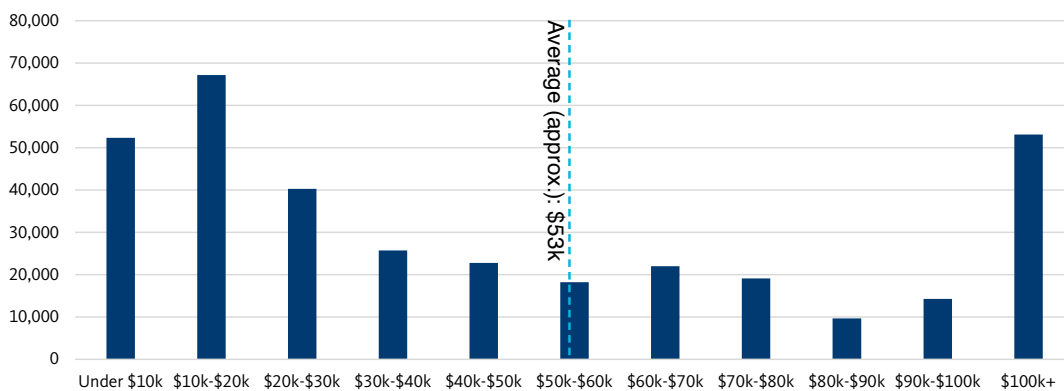
Household Type



Renters by Household Size



Single-Person Renters by Household Income



¹ The State of the Nation's Housing, Harvard Joint Center on Housing Studies https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_State_Nations_Housing_2022.pdf
 Source: American Community Survey Public Use Microdata Sample (PUMS) 2022 1-Year Estimates.

Potential Rents

Based on the distribution of single-person renter households in Los Angeles, there are approximately 49,000 individuals who earn between \$30,000 and \$50,000 per year.

HUD standards define a monthly housing budget as 30% of monthly income. Within this income bracket, households have a supportable housing budget of \$750 to \$1,250 per month. A \$750 to \$1,250 monthly housing budget would correspond to approximately 30-50% of local Area Median Income (AMI) levels for single-person households.

The median monthly rent for a market-rate unit in the city of Los Angeles is currently \$2,072. As such, the housing budgets of this segment are far lower than the rents of most existing and available product within the city.

Developing the flexible co-living product at rents between \$750 to \$1,250 per bed per month would meet the target resident’s housing budget in the market and provide an affordable option as compared to other available housing, delivering new supply at a significant discount to other market-rate offerings.

HH Income	Count	HH Income		Monthly Housing Budget (30%)		AMI (Average)
		Low	High	Low	High	
Under \$10k	52,300	\$0	\$9,999	\$0	\$250	<20% AMI
\$10k-\$20k	67,180	\$10,000	\$19,999	\$250	\$500	<20% AMI
\$20k-\$30k	40,280	\$20,000	\$29,999	\$500	\$750	20-30% AMI
\$30k-\$40k	25,700	\$30,000	\$39,999	\$750	\$1,000	30-40% AMI
\$40k-\$50k	22,800	\$40,000	\$49,999	\$1,000	\$1,250	40-50% AMI
\$50k-\$60k	18,250	\$50,000	\$59,999	\$1,250	\$1,500	50-60% AMI
\$60k-\$70k	21,980	\$60,000	\$69,999	\$1,500	\$1,750	60-70% AMI
\$70k-\$80k	19,130	\$70,000	\$79,999	\$1,750	\$2,000	70-80% AMI
\$80k-\$90k	9,680	\$80,000	\$89,999	\$2,000	\$2,250	80-90% AMI
\$90k-\$100k	14,260	\$90,000	\$99,999	\$2,250	\$2,500	90-100% AMI
\$100k+	53,100	\$100,000	\$1,000,000	\$2,500	\$25,000	100%+ AMI

\$750-\$1,250
 Target Per Bed Rent Range

Source: American Community Survey Public Use Microdata Sample (PUMS) 2022 1-Year Estimates.

Selected Public Use Microdata Area (PUMA) geographies: Los Angeles County (North)--LA City (Northwest/Chatsworth & Porter Ranch) PUMA; California, Los Angeles County (North)--LA City (North Central/Granada Hills & Sylmar) PUMA; California, Los Angeles County--LA (North Central/Arleta & Pacoima) & San Fernando Cities PUMA; California, Los Angeles County (North)--LA City (Northeast/Sunland, Sun Valley & Tujunga) PUMA; California, Los Angeles County (North)--LA City (Northeast/North Hollywood & Valley Village) PUMA; California, Los Angeles County (Northwest)--LA City (North Central/Van Nuys & North Sherman Oaks) PUMA; California, Los Angeles County (North)--LA City (North Central/Mission Hills & Panorama City) PUMA; California, Los Angeles County (Northwest)--LA City (Northwest/Encino & Tarzana) PUMA; California, Los Angeles County--LA City (Northwest/Canoga Park, Winnetka & Woodland Hills) PUMA; California, Los Angeles County (West Central)--LA City (Central/Hancock Park & Mid-Wilshire) PUMA; California, Los Angeles County (Central)--LA City (East Central & Hollywood) PUMA; California, Los Angeles County (Central)--LA City (Central/Koreatown) PUMA; California, Los Angeles County--LA City (East Central/Silver Lake, Echo Park & Westlake) PUMA; California, Los Angeles County--LA City (Mount Washington, Highland Park & Glassell Park) PUMA; California, Los Angeles County (Central)--LA City (East Central/Central City & Boyle Heights) PUMA; California, Los Angeles County (Central)--LA City (Southeast/East Vernon) PUMA; California, Los Angeles County--LA City (Central/Univ. of Southern California & Exposition Park) PUMA; California, Los Angeles County (Central)--LA City (Central/West Adams & Baldwin Hills) PUMA; California, Los Angeles County--LA (Southwest/Marina del Rey & Westchester) & Culver City Cities PUMA; California, Los Angeles County (South Central)--LA City (South Central/Westmont) PUMA; California, Los Angeles County (South Central)--LA City (South Central/Watts) PUMA; California, Los Angeles County (South)--LA City (South/San Pedro) PUMA; California, Los Angeles County (West Central)--LA City (West Los Angeles, Century City & Palms) PUMA; California, Los Angeles County (Central)--LA City (Central) PUMA; California, Los Angeles County (West Central)--LA City (Central/Westwood & West Los Angeles) PUMA; California

Operating Model and Financial Feasibility

Baseline project assumptions include industry standard and local market benchmarks to evaluate the feasibility of the project without additional subsidy. The following pages identify various levers that a developer could utilize in order to arrive at marketable returns for levered and unlevered internal rates of return (IRR).

The HUD voucher available to pay for units like these allows rents in Los Angeles up to \$1,493 in the current fiscal year, well above projected rents for this building. For comparison, a typical studio apartment in downtown Los Angeles rents for approximately \$1,900 per month as of August 2024.

For this project, rents for standard singles are assumed at \$1,000 per month, which would be affordable for a single-person household earning 41% of AMI.

PROJECT OPERATING ASSUMPTIONS		
Rent/Bed	<i>Per Month per Person</i>	<i>Annualized</i>
Singles	\$1,000	\$12,000
Vacancy/Rent Loss		10%
Total Operating Expenses (OpEx) / SF		\$14.50
Management Fee (%EGI)		2.5%
OpEx Ratio (as a % of total revenue)		38%
Capital Reserves/Unit		\$400
Rent Escalation		3%
OpEx Escalation		3%

PROJECT PROGRAM					
Units Per Floor		48	Beds/ Floor		48
Singles	44	92%	Singles	44	92%
Singles: Suite-Style	4	8%	Singles: Suite-Style	4	8%
Total Units	864		Total Units	864	

OTHER INCOME		
Parking Spaces	337 spaces	\$100/month
Bike Spaces	500 spaces	\$10/month
Office SF	7,500 SF	\$30/SF
Retail SF	12,300 SF	\$30/SF

OPERATING ASSUMPTIONS

Rent & Vacancy

Monthly rents of \$1,000 per month per person align with the target market’s housing budget and AMI levels of 30-50%. 3% annual rent and operating expense escalation rates align with market benchmarks for this type of product.

Other revenues include \$100/month for car parking, \$10/month for bike parking, a net office rent of \$30/SF and retail rent of \$30/SF to align with market benchmarks.

A 10% average vacancy rate exceeds the average market-rate vacancy rate in Los Angeles, reflecting a risk premium and is in line with typical vacancy rates for similar concepts elsewhere.

Operating Expenses

A total annual operating expense cost of \$14.50/ SF is based on industry benchmarks for multi-family buildings in this market and includes utilities, repairs, maintenance, management, and insurance. This includes a higher insurance cost to account for higher anticipated insurance premiums associated with the product. Operating expenses as a percentage of total revenue average 38%, higher than typical multi-family benchmarks but reflective of higher operating costs associated with the product.

No real estate taxes have been included at this time.

Capital Reserves

Annual capital reserves of \$400 per bed are included to account for capital improvements and necessary unit refresh upon resident move-outs.

DEVELOPMENT COST ASSUMPTIONS

Construction Costs

Turner Construction Company was engaged to develop construction cost estimates for the prototypical building and test fit studied. The key variables in estimating construction costs are the quality of the building’s existing mechanical, electrical, and plumbing (MEP) systems and the degree of anticipated interior demolition. These are heavily dependent on individual building conditions.

Turner developed a high and low cost range for two existing building conditions. The high range Option 1 assumes selective demolition of all floors and full replacement of HVAC and electrical systems. Option 2 assumes the reuse of existing HVAC and electrical systems plus the reuse of 50% of the existing shell space. In practice, developers are more likely to seek out and prioritize buildings for conversion that have the most intact systems to minimize MEP costs. Thus, **\$299/GSF in hard costs**, within the Option 2 range, is used for modeling purposes. Additional due diligence on a per-building basis would be required to refine cost estimates further.

CONSTRUCTION COST ESTIMATES	OPTION 1	OPTION 2
<i>Selective Demolition</i>	<i>Demo at all floors</i>	<i>50% of existing shell maintained</i>
<i>Hazardous Materials Abatement</i>	<i>Includes abatement allowance</i>	<i>Abatement not required</i>
<i>Fire Protection</i>	<i>Existing systems reused</i>	<i>Existing systems reused</i>
<i>Plumbing</i>	<i>Existing service/stacks reused</i>	<i>Existing service/stacks reused</i>
<i>HVAC</i>	<i>New systems required</i>	<i>Existing systems reused</i>
<i>Electrical</i>	<i>New systems required</i>	<i>Existing systems reused</i>
Construction Cost Estimate	\$356/GSF	\$299/GSF
<i>Low-High Estimate</i>	<i>\$338 - \$391/GSF</i>	<i>\$284 - \$329/GSF</i>

In addition to base construction costs, Los Angeles' code requirements and seismic risks require that all office-to-residential conversions undergo seismic retrofits to outfit a building for residential use, since residential buildings have stricter seismic requirements than office buildings. Turner developed a **seismic retrofit estimate of \$100/GSF** based on the costs associated with typical steel buildings in Los Angeles. Combined, total construction costs are estimated at **\$399/GSF**.

An industry-standard soft cost estimate of 15% of hard costs is included to account for architectural, engineering, permitting, and legal fees. A 5% contingency on hard & soft costs was also added per standard practice. \$5,000 per bed in furnishings, finishes, and equipment (FF&E) is also included.

Acquisition Costs

Due to the unknown dynamics of a potential development scenario, additional due diligence will be required on a per-building basis to identify a reasonable acquisition cost. Variables that would likely impact property value at the time of purchase include operating income, market cap rates, building condition, and available sales comps.

In addition to property value, there are multiple likely development scenarios for this product typology.

These include, but are not limited to: The existing property owner self-develops the conversion; the existing property owner contributes the land as collateral in a joint-venture development; a foreclosed or bank-owned property is purchased by a developer at a discounted purchase price; a potential land swap between property owners; or a standard purchase at market value.

The development pro forma includes a purchase price/acquisition cost of **\$100/GSF or \$32.7 million**.

Financing Assumptions

The project assumes traditional debt and equity and no public financing or other forms of assistance. Industry benchmark loan assumptions of 65% loan-to-value (LTV) and a 30-year amortization are used for permanent financing. The remaining 35% of project costs is expected to be sourced through equity.

Interest rates are assumed at 6.0% for permanent financing and 10% for the construction period. An exit cap rate of 5.75% is assumed during reversion in year 10 with a 3.0% sale commission.

DEVELOPMENT COSTS	TOTAL	PER GSF	PER BED	PER UNIT
Land/Building Purchase	\$32.75M	\$100		
Construction (Hard) Costs	\$130.66M	\$399	\$151,200	\$151,200
Soft Costs (15%)	\$19.60M	\$60		
Contingency (5%)	\$7.51M	\$23		
FF&E ¹	\$4.32M	\$13	\$5,000	
Total Project Costs	\$194.83M	\$595	\$240,000	\$240,000

PROJECT FINANCING ASSUMPTIONS

Debt Loan-to-Value (LTV)	65%
Equity	35%
Permanent Loan	6.0%
Construction Period Loan	10.0%
Permanent Loan Period	30-Years
Exit Cap Rate	5.75%
Terminal Sale Commissions	3.0%

5-YEAR CASH FLOW (\$ millions)	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Rental Income ²		10.68	11.00	11.33	11.67	12.02
Vacancy Loss		-4.27	-1.10	-1.13	-1.17	-1.20
Other Income ³		1.09	1.16	1.19	1.23	1.26
Effective Gross Revenue		7.50	11.06	11.39	11.73	12.08
Operating Expense		-3.90	-4.10	-4.22	-4.35	-4.48
Capital Reserves		0.00	-0.37	-0.38	-0.39	-0.40
NOI		3.60	6.59	6.79	6.99	7.20
Total Before Tax Cash Flow	-207.39	3.60	6.59	6.79	6.99	7.20
Terminal Value (Yr 10), Net Cost of Sale	145.09					
Unlevered IRR	0.5%					
Levered IRR	-8.9%					
Equity multiple - Exit year	0.57					

¹ Furnishings, Finishes, and Equipment

² Average weighted rent of \$1,000 per bed times 864 beds; at a 3% annual escalation

³ Assumes a 2-year stabilization/lease-up period and a stabilized occupancy of 90%

⁴ Total annual retail rent, office rent, parking and bike parking monthly fees. 3% annual escalation.

⁵ OpEx is calculated on GSF and includes common area maintenance, operations, insurance, and management fees. 3% annual escalation.

Returns

The project's feasibility was evaluated by developing an operating pro forma and financial model, employing industry-standard methodologies and metrics.

Two key metrics for assessing project performance are the unlevered and levered Internal Rate of Return (IRR). IRR measures both the project's performance and profitability, indicating the expected return on initial capital investment. Property developers and investors use preferred benchmark thresholds for both unlevered and levered IRRs when evaluating a project's financial feasibility.

Unlevered IRR assesses general project feasibility and does not calculate the impact of project financing. Lending institutions typically review a project's unlevered IRR as part of the underwriting process.

Levered IRR measures an investor's return on their project contribution. Generally, projects with attractive levered IRRs can draw investors by generating sufficient Net Operating Income (NOI) to repay investments. Individual risk tolerances determine an investor's preferred levered IRR thresholds.

Scenarios

The baseline scenario assumes conservative conditions, including market-rate, undiscounted acquisition costs, traditional market-rate financing, and no local public assistance. In reality, interested developers are likely to pursue a number of strategies to reduce development costs by leveraging programs and other subsidies available to them, often with public subsidy or other support.

Public subsidies are typically available as grants or loans. Grants directly offset total development costs, reducing the project's overall cost. Grants effectively lower the required equity and debt, positively impacting both the levered and unlevered IRR.

Public subsidies can also be repayable loans with more favorable debt terms compared to traditional lending, such as a lower interest rate or a higher loan-to-value ratio (i.e. less investor equity is required). These terms can reduce the annual cost of debt service on the loan, primarily impacting levered IRR by leaving more residual cash flow for investor returns.

To test the impact of these conditions on the baseline scenario, three alternative scenarios were developed based on the relative availability and ease of applying for and securing the various potential forms of assistance. Scenario 1 assumes a relatively low effort, while Scenario 3 requires a high degree of coordination with multiple public entities, though still within the range of possibility.

Scenario 1: No Acquisition Costs

Alternative Scenario 1 assumes no acquisition costs. This can be achieved in cases where a building is vacant or underperforming to the point where it no longer provides any value in its current state and is acquired at essentially no net cost to the buyer. Alternatively, municipalities sometimes purchase underperforming properties and donate them to developer entities as a form of public assistance for redevelopment purposes.

Scenario 2: No Acquisition Costs, Local Grant

In addition to no acquisition costs, Scenario 2 assumes local assistance in the form of a grant equal to 5% of project hard and soft costs.

Scenario 3: No Acquisition Costs, Local Grant, Below-Market Financing, Additional State Grant

Alternative Scenario 3 assumes no acquisition costs, the local grant, plus below-market financing in the form of a low interest loan that could be offered to the project through one of several national or local programs. The below-market loan is assumed to offer a 40-year amortization, preferred interest rate of 4.75%, and 75% LTV. This is in comparison to the market-rate 30-year amortization, 6.0% interest rate, and 65% LTV used in the prior scenarios. This form of assistance produces lower annual debt service costs and a higher net operating income.

Scenario 3 also assumes an additional grant via a state funding mechanism. The State of California is leveraging several state allocations of federal funds from existing Department of Transportation (DOT) and Housing and Urban Development (HUD) programs for use in adaptive reuse projects.¹ Scenario 3 assumes an additional grant equal to approximately one-third (33%) of project hard and soft costs.

SUBSIDY/ INCENTIVE	TYPE OF FUNDING	SOURCE		UNLEVERED IRR IMPACT	LEVERED IRR IMPACT
No Acquisition Costs	Grant	Local	City could purchase a building and donate to developer at no cost	X	X
Grant	Grant	Local, State, or Federal	City fund or local funding mechanism such as TIF (Tax Increment Financing)	X	X
Below-Market Financing	Loan	Local, State, or Federal	Low interest rate loan offered through existing local, state, or federal program (e.g. HUD)		X

¹ California Department of Housing and Community Development Infill Infrastructure Grant Program: <https://www.hcd.ca.gov/grants-and-funding/programs-active/infill-infrastructure-grant>

BASELINE: \$100/SF Acquisition		SCENARIO 1: No Acquisition Costs		SCENARIO 2: No Acquisition Costs 5% Subsidy		SCENARIO 3: No Acquisition Costs 38% Subsidy 4.75% Debt/75% LTV	
RETURNS		RETURNS		RETURNS		RETURNS	
Acquisition Cost	\$32.7M	Acquisition Cost	\$0	Acquisition Cost	\$0	Acquisition Cost	\$0
Subsidy/Equity	\$0	Subsidy/Equity	\$0	Subsidy/Equity	\$8.0M	Subsidy + HTC	\$58.0M
Total Project Costs Net of Subsidy	\$194.8M	Total Project Costs Net of Subsidy	\$162.1M	Total Project Costs Net of Subsidy	\$154.1M	Total Project Costs Net of Subsidy + HTC	\$104.1M
Debt	6.0%/30-year amort	Debt	6.0%/30-year amort	Debt	6.0%/30-year amort	Debt	4.75%/40-yr amort
Unlevered IRR	0.5%	Unlevered IRR	2.6%	Unlevered IRR	3.2%	Unlevered IRR	8.0%
Stabilized NOI	\$6.59M	Stabilized NOI	\$6.59M	Stabilized NOI	\$6.59M	Stabilized NOI	\$6.59M
Levered IRR	-8.9%	Levered IRR	-0.8%	Levered IRR	0.9%	Levered IRR	16.9%
Equity Multiple	0.57	Equity Multiple	1.02	Equity Multiple	1.16	Equity Multiple	3.06
Stabilized DCR	0.72	Stabilized DCR	0.86	Stabilized DCR	0.91	Stabilized DCR	1.50

Findings and Implications

Under the different scenarios tested, the project produces an unlevered IRR between 0.5% and 8.0% and a levered IRR between -8.9% and 16.9%. Scenario 3 may produce returns high enough to reach feasibility, but it is dependent on individual investor and lender tolerances, portfolios, and preferences. The baseline scenario and Scenarios 1 and 2 would likely require an additional level of subsidy to attract necessary capital.

Regardless of the return metrics, the flexible co-living concept and model succeeds in its ability to deliver much-needed housing at a lower cost. It is estimated that this concept can deliver a dwelling unit with a baseline development cost of approximately \$240,000 per unit, while the current cost of developing a traditional studio unit in the city of Los Angeles can exceed \$500,000.¹ **If subsidy dollars could be dedicated to this concept, the units produced per dollar of public assistance can greatly exceed what is generated under existing housing delivery models since the cost per bed is approximately one-half the cost of building a traditional studio.**

Furthermore, the initial market research demonstrates that **there are at least 49,000 people living in the city of Los Angeles whose income levels suggest that this concept is affordable to them**, and who otherwise may be struggling to find comparable housing options at a similar price point that may not exist today. the cost of building a traditional studio.

As housing affordability continues to erode and downtown office vacancy rates remain elevated, this concept can unlock additional office-to-residential conversion opportunities. Policymakers can consider supporting the implementation of office-to-flexible co-living conversions due to the outsized impact that the concept has on housing production in an area of critical need. If successful, cities will be able to deliver low-cost housing in a much more efficient and cost-effective manner, providing thousands of secure, modern, and attractive homes to our nation’s downtowns.

¹ Gensler benchmark study of studio construction costs, November 2024



Los Angeles, California

Study done in collaboration with Gensler and The Pew Charitable Trusts. Funding for this research was provided by Arnold Ventures and The Pew Charitable Trusts.

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