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Building Small: Assessing Feasibility of 5-to-10 Unit Projects in California

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Author

Biro, Emily

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BUILDING SMALL: ASSESSING FEASIBILITY OF 5-TO-10 UNIT PROJECTS IN CALIFORNIA

Prepared by: Emily Biro

Client: San Francisco Planning Department

Faculty Advisor: Paavo Monkkonen

A comprehensive project submitted in partial satisfaction of the requirements for the degree Master of Urban and Regional Planning.



San Francisco
Planning

UCLA

Lewis Center
for Regional Policy Studies

Disclaimer

This report was prepared in partial fulfillment of the requirements for the Master in Urban and Regional Planning degree in the Department of Urban Planning at the University of California, Los Angeles. It was prepared at the direction of the Department and of the San Francisco Planning Department as a planning client. The views expressed herein are those of the authors and not necessarily those of the Department, the UCLA Luskin School of Public Affairs, UCLA as a whole, or the client.

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Executive Summary

California is amidst an affordable housing crisis. Despite recent legislative efforts to spur housing development, local jurisdictions still fail to meet critical supply goals and affordable housing needs. Much of this shortage can be attributed to restrictive land use policies, such as zoning, that limit the amount of housing allowed. Most land in California, particularly in high-resource areas, is primarily zoned for single-family homes. In 2021, California passed Senate Bill 9 (SB 9), allowing for the development of up to four units on single-family zoned parcels. However, housing professionals, including local developers and advocates, as well as recent studies, indicate that the rules of SB 9 do not allow for financially feasible development. SB 9's overall success in allowing widespread development remains unclear due to factors such as confining design requirements and restrictive permitting processes. Since SB 9 took effect in January 2022, the State's largest cities have seen limited SB 9 project undertakings, with San Francisco, Los Angeles, Sacramento, and San Diego collectively approving less than 60 related projects.

Given feasibility concerns with proposed SB 9 projects, this research explores whether larger developments, with 5-to-10 units, are more financially feasible on single-family zoned parcels in California and whether opportunities exist to improve the feasibility of small multi-family housing development. This research presents findings from semi-structured interviews with over 22 housing professionals and a financial analysis using a pro forma model for various 5-to-10-unit project scenarios. I find that limited financial feasibility exists for new 5-to-10-unit projects in primarily single-family zoned areas in San Francisco and Los Angeles under existing economic and design conditions. None of the modeled 5-unit projects in San Francisco or Los Angeles would be financially feasible. Besides 10-unit for-sale projects in Los Angeles, most 10-unit rental projects are not viable and would require reduced city fees, a partial property tax abatement, or a per-unit subsidy to be financially feasible and meet industry standard profit expectations in San Francisco or Los Angeles.

Based on my analysis, I recommend several actions for the State and San Francisco Planning Department to consider, including increasing allowable density on single-family zoned lots in high-opportunity areas to 10 units, allowing single-stair/vertical shared access buildings, and revising local development design regulations.

Introduction

Over the past six years, several California laws have attempted to facilitate and expedite housing development. Despite recent efforts to bring much-needed units to the housing market, California cities and counties still fail to meet critical construction goals and affordable housing needs. Land use policies, such as zoning, restrict the amount and type of housing that can be built in specific neighborhoods and sites. Most land zoned for residential uses in California is zoned for only single-family housing. For example, San Francisco has designated 51 percent of its residential zoning for single-family homes, and Los Angeles has designated 74 percent for single-family homes (Menendian et al., 2020; 2022).

California lawmakers have acknowledged the barriers with restrictive zoning regulations and sought to encourage additional unit development on single-family properties, as recent legislation indicates. Most recently and significantly, to expand the number of homes allowed on each lot, California did away with single-family zoning in 2022 with the implementation of Senate Bill 9 (SB 9), also known as the California H.O.M.E Act (Senate Bill 9). In a significant shift away from exclusionary zoning policies, SB 9 allows ministerial approval (which requires little to no discretion by the approving agency) of up to two units (such as duplexes) and lot splits on eligible single-family zoned parcels. Previously, single-family zoned parcels only allowed up to one primary unit. Under SB 9, two homes can be built on the two new lots, allowing for four units. SB 9, therefore, creates an

opportunity for the construction of duplexes or fourplexes on single-family zoned parcels. Modest increases in density in single-family zoned neighborhoods, also known as small multi-family housing or “missing middle housing,” are an exciting and necessary opportunity to help expand the housing supply and spur development in high-resource areas (areas that offer greater opportunities, such as low environmental hazards and pollution levels, and a higher concentration of community facilities like schools and parks).

Existing research has examined the opportunities and challenges in constructing new small multi-family housing. However, an investigation into the market feasibility of adding additional units to single-family parcels in California is understudied. Recent studies have highlighted potential feasibility concerns with developing three- and fourplexes on single-family zoned parcels. As such, SB 9’s success in resulting in thousands of developed units across the state remains unclear due to its recent adoption and short lifetime.

Considering this, the San Francisco Planning Department is particularly interested in exploring the feasibility and practicality of encouraging slightly larger housing projects of 5-to-10 units. It is important to note that local developers may be more likely to undertake larger-scale developments than homeowners compared to the 2–4-unit housing typology. Regardless, further research into the feasibility of 5-to-10-unit projects could unveil new opportunities to expand this

scale of development and house current and future residents.

This research does not suggest that adding small multi-family housing to the existing housing stock will solely address the ongoing local and statewide housing crisis. Meeting California's housing needs will require further investigation into a multifaceted policy approach targeting several housing strategies, such as implementing anti-displacement measures, preserving existing affordable housing, increasing funding opportunities for development, streamlining the approval process, and modifying land use regulations, including zoning. However, this research aims to explore an understudied approach to expanding the supply of small multi-family housing to create additional opportunities to help solve existing housing challenges.

This research study focuses on the State of California; however, this research highlights crucial information related to San Francisco and Los Angeles where appropriate to focus the statewide analysis on a local context to help orient the reader within the discussion of housing challenges and solutions. Additionally, these two jurisdictions are

experiencing the greatest relative housing shortages, the highest rents and sale prices, and the need for affordable and stable housing in the state.

This research explores whether larger developments, with 5-to-10 units, are more financially feasible on single-family zoned parcels in California and whether opportunities exist to improve the feasibility of small multi-family housing development.

I begin this report with context on the current housing crisis in California, historical policies that have led to shifts in multi-family housing construction, recent efforts to encourage small-scale development, and the necessity to investigate the feasibility of 5-to-10-unit projects. I then describe the quantitative and qualitative study approach in the *Methodology* section. In the *Findings and Analysis* section, I present the results of the semi-structured interviews and financial analysis for the various San Francisco and Los Angeles 5-to-10-unit project scenarios. I conclude the report with a discussion and recommendations for the State and San Francisco Planning Department to consider in the *Conclusions and Policy/Planning Recommendations* section.

Background

California's Housing Crisis

In 2019, California had the nation's largest deficit of nearly 978,000 homes (Up for Growth, 2022). The San Francisco Bay Area and Southern California metropolitan region were among the nation's two hot spots for housing supply underproduction, ranking seventh and first, respectively (Up for Growth, 2022). Still, the magnitude of the gap continues to grow.

Unsurprisingly, housing costs in California, especially in the Bay Area and Southern California, are among the highest in the world. The cost of renting and buying property in California can be out of reach for many residents. Between 2017 and 2022, the average median home sales price in San Francisco grew 22.8 percent, reaching a peak of \$1.61 million in April 2022. During the same period, the average median home sales price in Los Angeles grew 47.52 percent, reaching a peak of \$1.05 million in May 2022 (Redfin, 2022).

Meanwhile, as of November 2022, the average monthly rent in San Francisco and Los Angeles was \$3,812 and \$3,438, representing a 5.91 percent increase and 32.1 percent increase, respectively, since November 2016 (Cal Matters, 2017; Zillow, 2022). The Bay Area and Los Angeles region collectively have the greatest number of extremely low-income renter households, percentage of severely cost-burdened households, and deficit of affordable and available rentals. Extremely low-income

households¹ are among the most severely cost burdened² and most in need of stable and affordable housing. The California Department of Housing and Community Development (HCD) defines "extremely low-income" in San Francisco County and Los Angeles County as \$39,150 and \$25,050, respectively, for an individual, and \$55,900 and \$35,750, respectively, for a family of four (HCD, 2022). San Francisco was dubbed the most expensive rental market in the country between July 2014 and August 2021 (Zumper, 2022). As of 2022, there is a deficit of over 1.3 million affordable and available rental homes in California (California Housing Partnership, 2022).

The housing market characteristics described above make these areas increasingly vulnerable to displacement for existing residents, especially low-income residents and residents of color. As of 2018, over 10 percent of low-income households (households making below 80 percent of Area Median Income [AMI]) in San Francisco lived in areas at risk of or currently experiencing gentrification (Urban Displacement Project, 2021a). Los Angeles County exhibited the highest rates of gentrification in Southern California, with 10 percent of census tracts classified as at risk of gentrification, early/ongoing gentrification, or advanced gentrification (Urban Displacement Project, 2021b). In all areas, Black and Hispanic renters face a greater likelihood of displacement and housing instability (Joint Center for Housing Studies of Harvard University, 2020). California has also seen a growing number of unhoused individuals, with those experiencing

¹ Extremely low-income households are considered to earn 15-30% of Area Median Income (AMI).

² Cost-burdened households spend more than 50% of their income on housing costs and utilities.

homelessness growing by 6 percent since 2020, resulting in over 115,400 unhoused individuals in just California as of 2022 (Paluch and Herrera, 2023).

Regional Housing Needs Allocation

Since 1979, HCD has assigned a total number of new homes each region must develop for each income level based on respective needs, known as the Regional Housing Needs Allocation (RHNA). Each jurisdiction must demonstrate how it can accommodate the assigned RHNA in its housing plan, also known as the Housing Element (HCD, n.d.). However, jurisdictions have not permitted and constructed enough housing to meet their development goals. During the 2015-2023 Housing Element period, San Francisco received an allocation of 28,870 units. As of 2021, San Francisco nearly met its overall RHNA goal for total units permitted; however, it has not developed enough housing to support very low-, low-, and moderate-income households, as shown in Table 1 (San Francisco Planning Department, 2022a). Similarly, while Los Angeles met its overall RHNA goal of 82,002 total permitted units through the 2013-2021 Housing Element period, Los Angeles also has not developed enough housing to support very low-, low-, and moderate-income households, as shown in Table 2 (Los Angeles Planning Department, 2021b). During the current Housing Element period (2023-2030 for San Francisco and 2021-2029 for Los Angeles), San Francisco must accommodate 82,069 units, and Los Angeles must accommodate 456,643 units (San Francisco Planning

Department, 2022b; Los Angeles Planning Department, 2021b).

California has a housing supply and a housing affordability crisis. Existing residents are increasingly priced out of metropolitan areas, and far too many families are severely rent burdened. Existing planning and policy responses, such as the RHNA process, have demonstrated little effectiveness in helping California reach necessary housing production goals. Further, the stability of home ownership is out of the means for many residents. There is simply not enough housing.

Table 1. San Francisco RHNA Progress Summary (2015-2021)

RHNA Income Affordability	RHNA Goal	Units Built	Deficit
Very Low (<50% AMI)	6,234	2,657	3,577
Low (50-80% AMI)	4,639	2,317	2,322
Moderate (80-120% AMI)	5,460	1,817	3,643
Above Moderate (>120% AMI)	12,536	22,220	0
Total	28,869	29,011	9,542

Source: San Francisco Planning Department 2022a

Table 2. Los Angeles RHNA Progress Summary (2014-2020)

RHNA Income Affordability	RHNA Goal	Units Built	Deficit
Very Low (<50% AMI)	20,427	7,012	13,415
Low (50-80% AMI)	12,435	3,727	8,708
Moderate (80-120% AMI)	13,728	827	12,901
Above Moderate (>120% AMI)	35,412	105,522	0
Total	82,002	117,088	35,024

Source: Los Angeles Planning Department 2021a

A Small, But Mighty Opportunity: Small Multi-Family Housing

Small multi-family housing, also known as “missing middle housing”, “light touch density”, and “medium density housing”, refers to the small-scale development of multi-unit housing ranging roughly from two to twenty units (Opticos Design, n.d.; AEI Housing Center, 2022). Small multi-family housing can offer significant potential to meet the growing housing need. It is recognized as an untapped opportunity since it can be more politically feasible than larger multi-family developments. In May 2022, the Biden-Harris Administration released the Housing Supply Action Plan to help close the housing supply gap by 2027.

Several strategies proposed under the plan include deploying new financing mechanisms to build and preserve accessory dwelling units (ADUs), 2–4-unit properties, and other smaller multi-family buildings (The White House, 2022). Dan Parolek, the founder of the “missing middle housing” concept, defines this typology as “a range of house-scale buildings with multiple units—compatible in scale and form with detached single-family homes—located in a walkable neighborhood” (Opticos Design, n.d.). This type of housing is considered “missing” because, since the mid-20th century, cities have seen very few of these developments built, mainly due to zoning constraints (Parolek, 2020). Figure 1 illustrates examples of Parolek’s “missing middle housing”.

Figure 1. Missing Middle Housing Types



Source: Opticos Design, Inc.

Historical Trends in Multi-Family Housing Development

Promoting smaller-scale development as an opportunity to increase housing supply represents an important return to a time when zoning allowed multi-family housing in more California cities. Single-family zoning dominates much of California and the nation, but why? Several compounding policies and actions from Federal and local governments during the 20th century have minimized and disincentivized the creation of multi-family and affordable housing through the past few decades. In the landmark 1926 *Village of Euclid v. Ambler Realty Co.* case, the Court considered apartments “a mere parasite”, effectively supporting single-family zoned areas and upholding segregation by land use types (*Village of Euclid v. Ambler Realty Co.*, 1926). Single-family zoning effectively served as racial exclusion, particularly for Black and immigrant families (Shertzer et al., 2016). Federally, the Tax Reform Act of 1986 affected financial returns to landlords and homeowners through the “compression

of marginal tax rates, slowing of depreciation, and limitations on the use of negative taxable income from investment properties” (Davidoff, 2013). Economist James Poterba suggests that the tax reform, which also created the Low-Income Housing Tax Credit (LIHTC) program, contributed to a decline in multi-family housing by reducing incentives for rental housing investment and effectively leading to higher rents in the long run (Poterba, 1992). As a result of the Tax Reform Act of 1986, there was an observed reduction in new multi-family construction from 500,000 units in 1985 to under 150,000 in 1991 (Poterba, 1992). Others also suggest that the tax reform essentially signified Federal support for homeownership and generally made the investment in rental housing less attractive, with a demonstrated decrease in multi-family construction and an unprecedented increase in homeownership following the Tax Reform Act of 1986 (Davidoff, 2013).

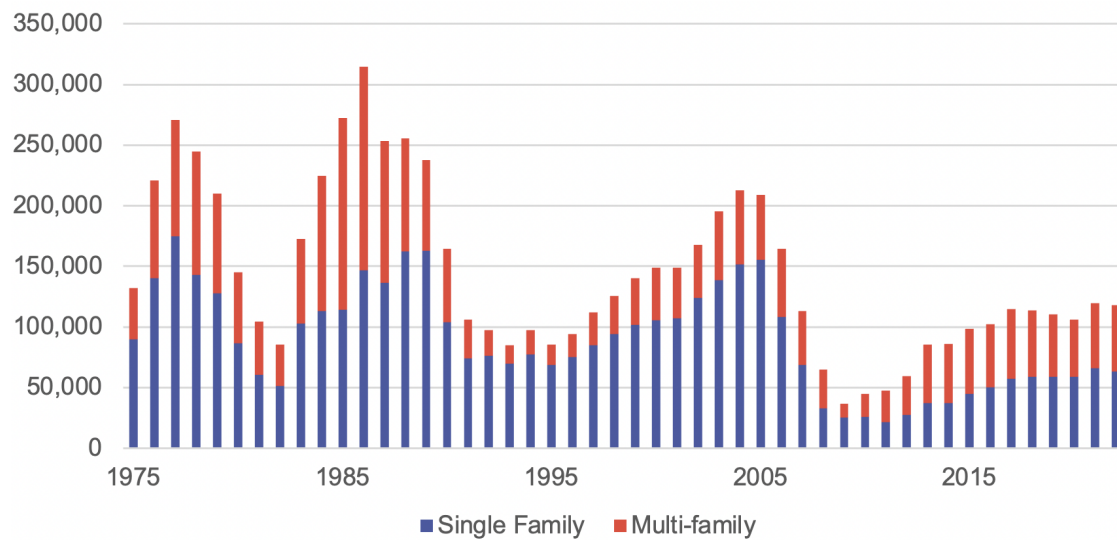
At the local level, California saw similar discouragement of multi-family housing

development. In 1978, San Francisco approved large-scale downzoning (change of zoning to allow for less density) across the City, even rezoning areas of existing multi-family properties (San Francisco Planning Department, 2020). Nearly 31 percent (approximately 125,466 units) of all homes in San Francisco today exceed current zoning restrictions, meaning they include more units than are now allowed for new development projects in the same area (San Francisco Planning Department, 2020). In 1960, Los Angeles had a zoned capacity to house up to 10 million people. By 1980, the zoned capacity had fallen to about 3.95 million following two decades of dramatic downzoning (Phillips, 2022a). Overall, single-family homes have been the focus of construction in California. The

subsequent construction and share of small multi-family as part of the housing stock also declined, as seen in Figure 2 and Figure 3 (Phillips, 2022b).

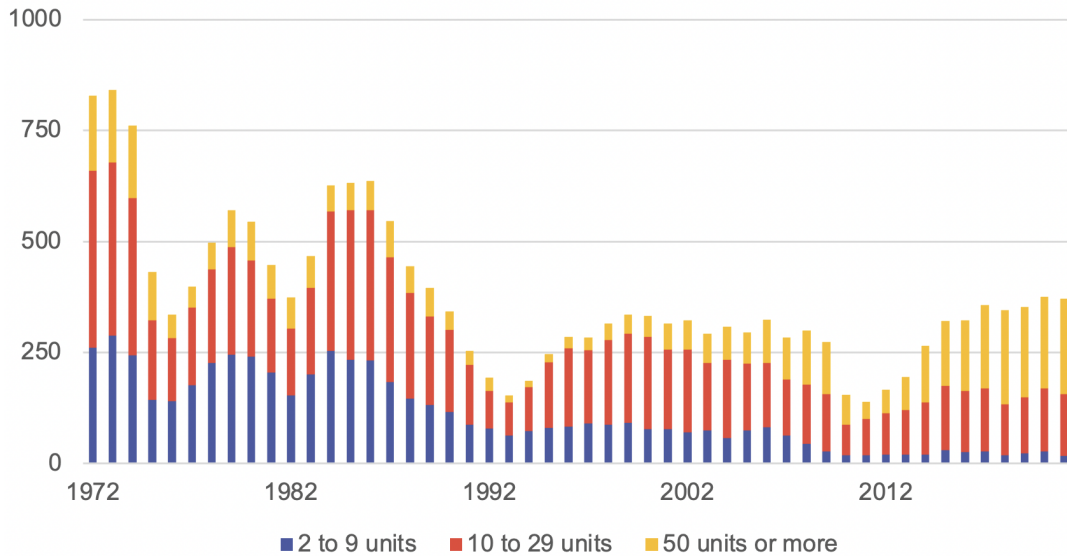
As a result of these actions, existing and potential California residents are experiencing the repercussions of limited multi-family housing production in areas that need them most. The legacy of historical planning policies has fostered high barriers to multi-family construction and highly restrictive land use policies that continue to exacerbate the ongoing housing crisis. However, incremental changes in easing zoning and land use regulations can lead to increased opportunities for effectively housing the population.

Figure 2. Authorized Building Permits in California, 1975-2022



Source: HCD, 2023

Figure 3. Production of Multi-Family Housing in the United States, 1972-2021



Source: United States Census Bureau, 2022

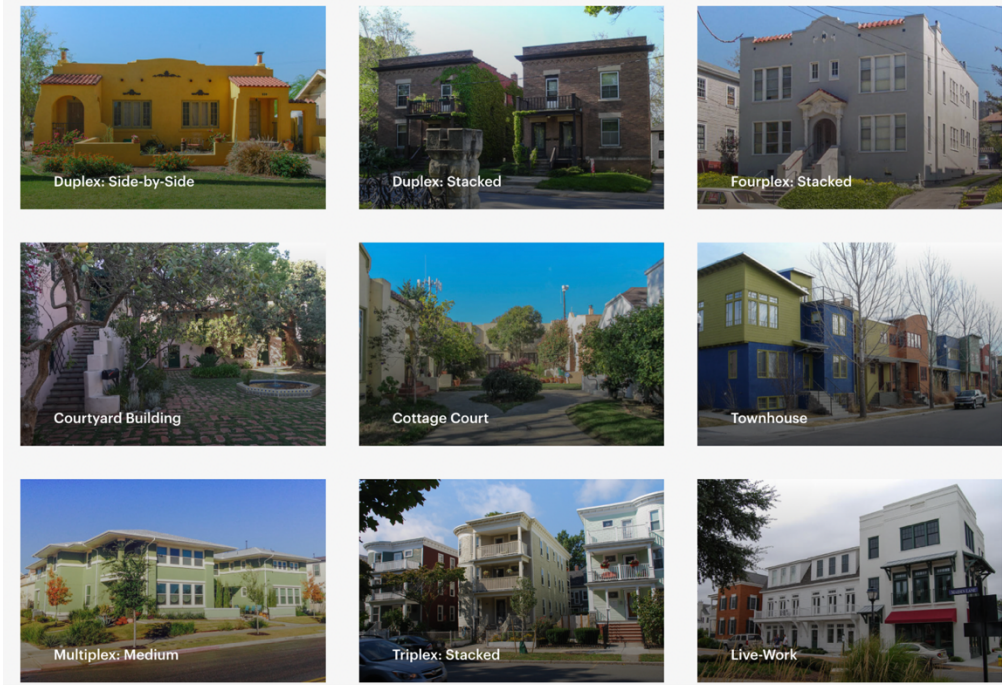
Benefits of Small Multi-Family Housing

In addition to helping to reverse the legacy of exclusive planning policies and practices such as single-family zoning, small multi-family housing development - like all multi-family - can offer environmental and economic benefits, as well as diverse housing choices to meet the needs of changing demographics or household preferences, as shown in Figure 4 below (Opticos Design, n.d.). These developments support walkable neighborhoods while supplying smaller-context buildings and units that can blend in with existing single-family neighborhoods. These developments are more politically feasible as they offer modest increases in density without requiring lot consolidation or sacrificing design or neighborhood aesthetics.

Smaller developments also have the potential to gently increase density on underutilized land, thereby allowing for

greater efficiency and providing more naturally occurring affordable housing (AEI Housing Center, 2022). As such, small multi-family housing can facilitate entry into the housing market through lower-cost for-sale units while offering wealth-building opportunities. Further, recent studies have suggested that new market-rate development, including those that can be classified as “luxury units”, cause rents in the immediate vicinity to drop (Phillips et al., 2021). In some instances, it can also help manage the cost of development by reducing the cost of land per unit, although this can be nuanced (Abu-Khalaf, 2022). In some areas of California, building a larger single-family home on an existing lot is more profitable than redeveloping with four units (Monkkonen et al., 2020). Nonetheless, greater density can boost housing supply and affordability, and looking in depth at 5-to-10-unit projects could offer a critical opportunity to facilitate greater development (AEI Housing Center, 2022).

Figure 4. Example Missing Middle Housing Types



Source: Opticos Design, Inc.

Existing Barriers to Small Multi-Family Housing

As part of this research, it is important to explore the intricacies of small multi-family development currently permitted on single-family zoned parcels today (up to four units), including significant challenges (beyond zoning regulations) that can stifle meaningful development.³

The combination of factors described below can lead to overall little (if any) financial feasibility for potential new developments, especially for new rental units. Property owners and local professional developers tend to be unmotivated and unable to undertake new unit development projects. Cities in California, especially areas with

high needs, such as San Francisco and Los Angeles, cannot harness property owners' capabilities to add new units. At the same time, local developers have little incentive to pursue new smaller unit construction. Further exploration into 5-to-10 units may offer unexplored opportunities to overcome these barriers.

Lack of Available or Useful Financing

Conventional financing tools are not always accessible to homeowners without significant home equity or available cash flow from either savings or family members (Biro, 2022). The median construction cost (labor and materials cost) of just building a single ADU in California can cost \$150,000 or \$250 per square foot (Turner Center for Housing Innovation, 2021). Permitting and

³ This section incorporates pertinent information from a report prepared by the author for the San Francisco

Planning Department, which has been cited to the original source as appropriate.

city fees also contribute added costs on top of labor and materials. Architect and engineering fees can cost about 10 percent of construction costs and city fees range from about 6 to 9 percent of construction costs. In combination with construction costs, added fees from permits and staff time can affect financial feasibility and ability to undergo these types of projects. Without useful financing tools, these initial costs can put the construction of additional units out of reach for many. Most existing financing tools are not structured to support or promote additional unit development.

Perceived Length and Difficulty of Permitting Process

Based on interviews completed with sponsors of small multi-family projects (under four units) in San Francisco, participants identified the planning review and approval process as one of the primary obstacles to development (San Francisco Planning Department, 2022c; Biro, 2022). Most housing development projects must undergo discretionary review, which can lead to lengthy entitlement process timelines. In San Francisco, the City's Charter requires all permits, including building permits, to undergo discretionary review (*Guinnane v. San Francisco City Planning Commission*, 1989). In Los Angeles, only six percent of projects with five units or more were approved by-right between 2014 and 2016 (Manville et al., 2022). However, those approved by-right were permitted 28 percent faster than discretionary projects. Although recent State and local legislation has theoretically streamlined the development of ADUs, duplexes, triplexes, and fourplexes, it can still be challenging to identify the proper

resources to take advantage of these streamlining efforts.

Rising Construction Costs

The Turner Center for Housing Innovation estimates that between 2008 and 2018, hard costs per square foot rose over 25 percent across the State, a nearly \$44 increase per square foot (after adjusting for inflation) and rose most dramatically nearly 119 percent across the same period in the Bay Area (Raetz et al, 2020; Biro, 2022). Compared to the rest of the State, hard costs are \$35 more expensive per square foot in Los Angeles and \$81 more expensive per square foot in the Bay Area. In 2017, San Francisco was the second most expensive city to build in the world. The construction market has only continued to rise due to supply chain issues exacerbated by the COVID-19 pandemic and record-high inflation (Reid and Raetz, 2020). Additionally, parking requirements can add significant costs to development, typically accounting for 10-20 percent of housing costs (Litman, 2023).

Market Volatility

Early during the COVID-19 pandemic in 2020, California's metropolitan housing markets experienced "pandemic lows" (Brinklow, 2020). Since then, home prices and rents have continued to climb and remain high compared to most of the rest of the country. Additionally, mortgage interest rates have continued to seesaw over the past three years, creating uncertainty in the market for those hoping to become first-time homebuyers or develop additional units on an existing property (Goodman and Neal, 2022; Biro, 2022).

Market Feasibility of 2-to-4 Unit Projects

As discussed above, there has been a recent push to build multi-unit developments such as ADUs, duplexes, three-, and four-unit buildings in California and beyond. SB 9 and other recent legislation will undoubtedly unlock some opportunities for additional units on previously restricted single-family zoned parcels. However, SB 9's scale of impact is still largely unknown given its recent implementation. Research prior to SB 9 adoption identified that approximately 700,000 new units and 110,000 new single-family parcels (1.5 percent of total single-family parcels in California) would become market-feasible for development (Metcalf et al., 2021). In the Southern California Association of Governments (SCAG) and Metropolitan Transportation Commission (MTC) and Association of Bay Area Government (ABAG) regions, there would be more than double net new market feasible parcels compared to pre-SB 9 legislative baseline (Monkkonen et al., 2020). However, as of November 2022, San Francisco has only approved 4 of the 25 received SB 9 applications and Los Angeles has approved 38 of the 211 received applications (Garcia and Alameldin, 2023).

Several California jurisdictions have released SB 9 implementing requirements, including unit design requirements, affordability requirements, and use of land requirements that could further affect the financial feasibility of eligible projects (Almeldin and Garcia, 2022). Further, the overall impact of fourplex projects varies across regions in California. Existing research has found a discrepancy in many

jurisdictions regarding how much development is market-feasible and how much development is most profitable under SB 9 (Monkkonen et al., 2020).

Unfortunately, redeveloping an existing single-family home with a larger home might be more profitable in some jurisdictions than replacing it with a fourplex rental (Monkkonen et al., 2020).

For most single-family parcels in San Francisco, the most financially viable option would be not to pursue constructing any three- or four-unit developments on parcels requiring the demolition of an existing single-family home (San Francisco Planning Department, 2022d). The expected financial returns from redeveloping an existing single-family home would likely not outweigh the financial benefit from just selling the existing home without redevelopment. Therefore, pursuing a complete demolition and rebuild of a 3-to-4-unit project would be challenging, and homeowners or developers may not find the time and risk associated with development worth it when considering the limited financial incentive. Interestingly, potential public policy influences analyzed for these projects identified partial property tax abatements as having the most substantial possible impact on lowering the feasibility gap (San Francisco Planning Department, 2022d). The applied property tax abatement offered the most considerable observed feasibility gap reduction (between \$390,000 and \$711,000) for three- and four-unit projects instead of waiving city fees or reducing the construction loan interest rates. Analyzing a partial property tax abatement impact relative to the financial feasibility of 5-to-10-unit projects will also be vital in identifying potential policy changes

under the control of cities or the State to support development.

Studies looking at developments slightly larger than four units identified potential feasibility opportunities. The City of San Jose's feasibility study, completed as part of its Opportunity Housing effort, found that most 2-to-4-unit configuration scenarios were not feasible in the highest value market tier studied. In comparison, the majority of the 6-to-8-unit configuration scenarios were feasible. The increased density (6-to-8 units) improved overall affordability (City of San Jose, 2021; Strategic Economics, 2021). Research investigating small-scale stacked flats of 6- and 12-plexes in Austin, Texas found this scale of housing was not financially feasible as a market-rate rental project. However, it supported potentially favorable profit conditions as for-sale condominium projects (Banker, 2022). Additionally, the Turner Center for Housing Innovation noted that allowing zoning for slightly denser options beyond what is allowed by SB 9, along with complimentary design requirements, could expand these types of projects where feasible (Garcia et al., 2022). Interviewed developers noted that projects started to become financially feasible with 8-to-12 units (Garcia et al., 2022).

Willingness to Develop

Willingness and ability to develop are important facets of additional unit construction that remain understudied. Research in the Sacramento region, an urbanized area with relatively high housing costs and low vacancy rates, suggests that 33.8 percent to 47.2 percent of homeowners would be interested in ADU (one additional unit) development. However, the research

did not study whether those same homeowners pursued ADU development (Volker and Handy, 2022). Construction and permitting costs, followed by permitting and regulatory concerns, were the highest-ranked barriers for homeowners interested in ADU development (Volker and Handy, 2022). Though ADUs can be more financially feasible to develop than three- and four-unit buildings (Century Urban, 2021).

Research to date has yet to examine the willingness of existing property owners or local developers to pursue additional multi-unit (non-ADU) construction. Such as, would those currently pursuing a 2-to-4-unit redevelopment project (as allowed under SB 9) be interested in pursuing a slightly larger development (i.e., 5-to-10 units) if it could be permitted with streamlined incentives (by-right approval)? However, recent financial feasibility analysis suggests property owners or local developers would be less financially motivated to undergo the construction of three to four additional units on a site based on the presumed feasibility gap under existing conditions (San Francisco Planning Department, 2022d). Nonetheless, this remains an unanswered question that could provide key insights into potential development motivations and behavior.

Diving Deeper into 5-to-10 Unit Projects

Existing research has focused primarily on the perceived market feasibility of SB 9 eligible parcels in California and overarching opportunities and barriers with small multi-family housing. However, California has placed a hard cut-off with a maximum

potential of four units on single-family parcels. Recent studies have indicated that these developments are often not financially feasible. There is a desperate need for more housing, and planners and researchers alike are determined to bring widespread change to increase the housing stock effectively. Most parcels in the state are zoned for single-family housing and proposed large-scale multi-family development often experience fierce opposition. However, allowing fourplexes may not be enough. Identifying opportunities to catalyze smaller developments in single-family zoned areas can increase the housing stock and create more affordable and diverse communities. Therefore, diving deeper into the feasibility of facilitating slightly larger developments is imperative.

Why 5-to-10 Units?

The housing market in California, specifically in San Francisco and Los Angeles, is expensive, lacking an appropriate supply of affordable housing, and generally competitive for local developers, homeowners, and renters. While LIHTC is the most important funding source for affordable housing, it is a highly competitive application process that can be complicated and convoluted with various requirements. Further, as recent housing development progress suggests, it is not an efficient nor reliable source of affordable housing production. Additionally, California is in unprecedented times with construction costs. The construction cost index, which measures cost trends for specific construction trade labor and materials in San Francisco and Los Angeles, increased by 13.4 percent between 2020 and 2021

and 9.3 percent between 2021 and 2022 (DGS, n.d.). Where smaller developments of four units or less may not support this increase in construction costs, slightly larger developments may be able to offset these costs by spreading them across more units.

Further research related to a small-to-medium housing typology can be helpful in understanding if greater market feasibility exists and inform local and statewide policies, such as rezoning efforts to increase baseline density limits, maximize opportunities on single-family properties, and address critical supply and affordability deficits. This research focuses on projects with a minimum of five units since SB 9 imposed a new maximum of four units on single-family zoned parcels. This study focuses on 5-to-10-unit projects since it was important to broaden the context of financial feasibility to a scale larger than has already been studied. However, it was limited to projects with a maximum of 10 units as SB 10 streamlines rezoning of up to 10 units for specific areas, and since San Francisco's Inclusionary Housing Program requires new residential projects with 10 units or more to pay an Affordable Housing Fee (if a certain amount of units are not provided as below market rate) to further investigate the sensitivity of financial feasibility by imposing various costs onto smaller projects.

Slightly larger projects of 5-to-10 units may be more financially viable with costs being spread out among more units, while also being more politically feasible as a gentle increase from the allowed four units under SB 9, and still retaining smaller-unit character. Further, implementing streamlined approaches to slightly larger developments could reduce city and

developer staff time and offer more straightforward and accessible approaches to increasing housing opportunities. Based on previous financial studies, the forthcoming feasibility analysis of 5-to-10-unit projects will look at applying a property tax abatement, capping city fees, and including a \$50,000 per unit subsidy in various scenarios to identify its relative effect on reducing potential feasibility gaps.

Therefore, to help close the knowledge gap related to the feasibility of additional unit development on single-family zoned parcels, this research seeks to build upon existing research to specifically explore the feasibility of constructing 5-to-10-unit projects in California and identify what opportunities exist to improve the feasibility of small multi-family housing development.

Methodology

This research study consisted of interviews and a financial analysis to gain deeper insights into opportunities to develop small multi-family housing projects of 5-to-10 units on single-family zoned parcels in California.

Interviews

Given the recent nature of state legislation and policy changes, it was important to gather insight from individuals active in California and most familiar with the current small multi-family housing landscape. I conducted semi-structured interviews with 22 housing development experts, including local developers, lenders, non-profit organizations, architects, planners, and advocates, to guide the forthcoming financial feasibility analysis and understand potential practicality and feasibility concerns

related to developing small multi-family housing in San Francisco and Los Angeles.

I conducted interviews via Zoom between January 2023 and March 2023.

Financial Analysis

Both market-rate and affordable housing projects must generate an adequate rate of return for developers or investors to pursue. I conducted a financial analysis using a pro forma model for various 5-to-10-unit project scenarios to identify various financial return measures and determine if each relative development scenario was financially feasible.

The financial modeling and feasibility analysis consisted of the steps shown below in Figure 5.

Figure 5. Financial Modeling and Feasibility Analysis Process



Identify Sub Areas and Target Development Sites

Two sub-areas were analyzed: the west side neighborhoods of San Francisco and Los Angeles, shown in Figures 6 and 7.

These areas and associated neighborhoods were selected as they have seen minimal small multi-family housing development (considering the respective local zoning

codes restrict it), include a majority of single-family zoned parcels, and are located in primarily high resources areas, as defined by the 2023 California Tax Credit Allocation Committee/HCD Opportunity Map (CTCAC/HCD, 2023).

Figure 6. Sub Areas of San Francisco Selected for Financial Analysis

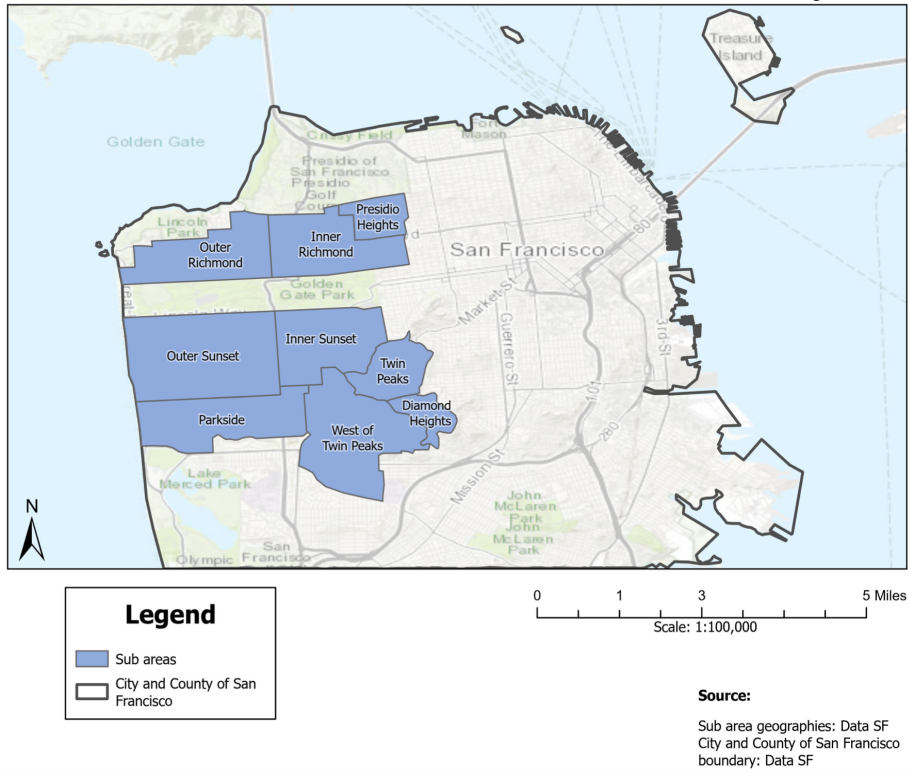
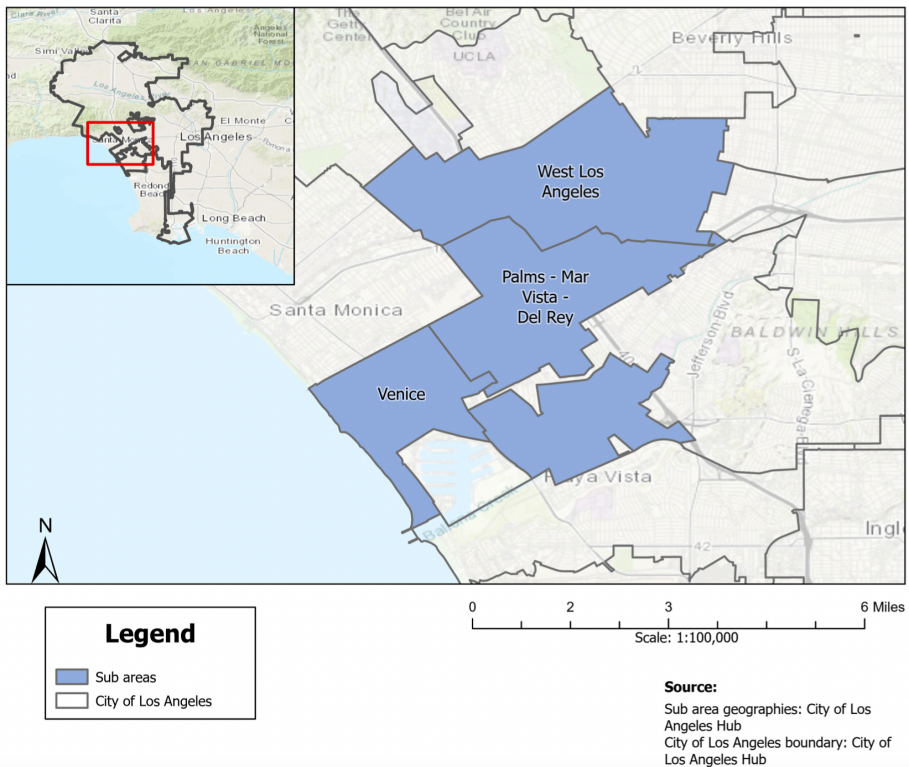


Figure 7. Sub Areas of Los Angeles Selected for Financial Analysis



Development of 5-to-10-unit projects on single-family zoned parcels would likely include demolishing an existing single-family home. I presumed that developers would be more likely to redevelop less-than-ideal sites or homes, such as unrenovated or decaying homes, since newly developed or recently remodeled single-family homes would typically have a higher market value. Therefore, I utilized the following criteria to identify target redevelopment sites in the identified sub-areas in San Francisco and Los Angeles:

- Single-family zoned parcels
- Homes sold within a 3-month period (February 2023 through April 2023)
- Structure or home located on site built before 2000
- Sold for less than \$5,000,000

In January 2023, I analyzed 351 sites in San Francisco and 179 sites in Los Angeles. To further narrow parcels for redevelopment, I selected sites priced up to the 25th percentile of sold properties since these sites would be most likely targeted for redevelopment considering the lower for-sale price.

Tables 3 and 4 provide the 25th percentile home price, 25th percentile home price per average lot square foot, average lot size per square foot, and average home price per square foot for the identified sub-areas.

Table 3. San Francisco Sub Area Characteristics

25th Percentile Home Price	\$1,157,000
Average Lot Size (Square Feet)	2,885
25th Percentile Home Price/Average Square Foot (Lot)	\$402
Average Home Price/Average Square Foot (House)	\$905

Table 4. Los Angeles Sub Area Characteristics

25th Percentile Home Price	\$1,380,000
Average Lot Size (Square Feet)	6,074
25th Percentile Home Price/Average Square Foot (Lot)	\$227
Average Home Price/Average Square Foot (House)	\$775

Develop Project Scenarios

This feasibility study considered two development scenarios to understand the context of increasing density on single-family zoned parcels in the San Francisco and Los Angeles sub-areas. Tables 5 and 6 below provide the various scenarios.

Based on previous financial analysis completed for SB 9 projects, this financial model considers a variation of both for-sale and rental projects and three different policy influences to determine its relative impact on a project’s financial feasibility for the above-listed development scenarios. Table 7 describes the seven various scenarios.

Table 5. San Francisco Sub Area Scenarios

	5-Unit Project	10-Unit Project
Assumed Site Size	3000 Square Feet	3000 Square Feet
Floor Area Ratio*	1.8	3
Building Efficiency	85%	85%
Max Gross Buildable Area	5,400	9,000
Net Leasable Area	4,590	7,650
Unit Types	2, one-bedroom units; 3, two-bedroom units	5, one-bedroom units; 5, two-bedroom units
Parking Spaces	3	5

**5-to-10 units are not currently allowed under existing local design and zoning regulations; however, for research purposes of this financial study, I assumed building code, local design, and zoning regulations would be revised to allow 5-to-10 units.*

Table 6. Los Angeles Sub Area Scenarios

	5-Unit Project	10-Unit Project
Assumed Site Size	5,500 Square Feet	5,500 Square Feet
Floor Area Ratio*	1	1.8
Building Efficiency	85%	85%
Max Gross Buildable Area	5,500	9,900
Net Leasable Area	4,675	8,415
Unit Types	2, one-bedroom units; 3, two-bedroom units	5, one-bedroom units; 5, two-bedroom units
Parking Spaces	3	5

**5-to-10 units are not currently allowed under existing local design and zoning regulations; however, for research purposes of this financial study, I assumed building code, local design, and zoning regulations would be revised to allow 5-to-10 units.*

Table 7. Scenario Summary

Scenario	Description
1	Market-Rate, For-Sale Project
2	Market-Rate, Rental Project
3	1 BMR Unit, For-Sale Project
4	1 BMR Unit, Rental Project
5	Market-Rate, Rental Project, 80% Property-Tax Abatement
6	Market-Rate, Rental Project, City Fees Capped at \$10,000
7	Market-Rate, Rental Project, \$50,000 Per Unit Subsidy

Establish Development and Operating Cost Assumptions

I made several key assumptions related to land acquisition costs, hard and soft costs, total development costs, and operating costs (for rental projects). These costs are further described below. For this feasibility analysis, I assumed hard costs for market-rate and below market-rate (BMR) units were the same.

a. Land acquisition

Existing property owners do not need to consider land costs in their financial feasibility analysis since they already own the land. However, local developers or those looking to invest in development projects must consider these costs to obtain the most accurate expectations for financial returns. The land acquisition costs were calculated based on the 25th percentile home costs identified for the above San Francisco and Los Angeles sub-areas. Table 8 summarizes the land acquisition costs.

Table 8. Assumed Land Acquisition Costs

	San Francisco	Los Angeles
Total Land Cost	\$1,157,000	\$1,380,000
Cost Per Square Foot of Assumed Site Size	\$401	\$251

b. Hard Costs

Hard costs include costs for demolition and construction, including parking development and a standard contingency applied towards the total cost. I utilized low-rise and mid-rise apartment construction cost assumptions

from the 2022 RSMeans Data. Table 9 summarizes these cost assumptions for San Francisco and Los Angeles, which vary based on provided location factors applied to each construction type.

c. Soft Costs

Soft costs include professional and consulting fees, local jurisdiction permits and fees, property taxes, and a standard contingency applied toward the total cost. Table 10 summarizes the various soft cost assumptions for San Francisco and Los Angeles. These costs vary as applicable based on relevant local jurisdiction permits and fees, such as each jurisdiction's affordable housing fee for developments of 10 units or more in San Francisco and 6 units or more in Los Angeles. For select scenarios, city fees were capped at \$10,000, reducing the soft costs.

d. Total Development Costs

Total development costs are the compilation of hard, soft, and land acquisition costs. Table 11 summarizes the total development cost assumptions for San Francisco and Los Angeles. I applied a \$50,000 per unit subsidy toward the total development cost for select scenarios.

e. Operating Expenses

Rental projects typically include operating costs as part of their financial analysis. I utilized industry-standard assumptions for operating expenses, including costs for administrative/management, utilities, insurance, and a property tax rate of 1.20 percent. Select scenarios include an 80 percent property tax abatement. Table 12 summarizes the operating expense assumptions for 5-unit and 10-unit projects.

Table 9. Hard Costs Assumptions

	San Francisco 5-Unit	San Francisco 10-Unit	Los Angeles 5-Unit	Los Angeles 10-Unit
Total hard cost per square foot	\$401	\$397	\$352	\$346
Total hard cost per unit	\$432,830	\$357,400	\$386,800	\$377,800

Table 10. Soft Costs Assumptions

	San Francisco 5-Unit	San Francisco 10-Unit	Los Angeles 5-Unit	Los Angeles 10-Unit
Total soft cost per square foot	\$83	\$125	\$68	\$86
Soft cost to hard cost ratio	20.7%	31.4%	19.4%	24.7%

Table 11. Total Development Costs (With Land Acquisition Cost) Assumptions

	San Francisco 5-Unit	San Francisco 10-Unit	Los Angeles 5-Unit	Los Angeles 10-Unit
Total development cost per square foot	\$698	\$650	\$675	\$571
Total development cost per unit	\$753,850	\$585,500	\$737,700	\$565,300

Table 12. Operating Expenses Assumptions

	5-Unit Projects	10-Unit Projects
Administrative/Management	3%	
Maintenance	\$1.5 per square foot	\$2 per square foot
Utilities	\$1.5 per square foot	\$2 per square foot
Insurance	\$500 per unit	
Property Taxes	1.20%	

Determine Market-Rate Assumptions and Affordability Requirements

I utilized assumptions based on comparable projects and existing rental units on the market to determine market-rate rental rates and for-sale prices in San Francisco and Los Angeles. Tables 13 and 14 summarize the market-rate assumptions.

I utilized maximum monthly rental rates for

BMR housing units from the San Francisco Mayor’s Office of Housing and Community Development and the Los Angeles Housing Department. I assumed the BMR units to be two-bedroom, very low-income (50 percent AMI) units. I derived BMR for-sale prices from sample sales prices for San Francisco and Los Angeles BMR housing.

Table 13. Assumed Market-Rate Rental Rates and For-Sale Prices in San Francisco

	San Francisco
Total rent (one-bedroom)	\$3,150 (\$4.50 per square foot)
Total rent (two-bedroom)	\$4,038 (\$4.25 per square foot)
Total sales price (one-bedroom)	\$700,000 (\$1,000 per square foot)
Total sales price (two-bedroom)	\$950,000 (\$1,000 per square foot)

Table 14. Assumed Market-Rate Rental Rates and For-Sale Prices in Los Angeles

	Los Angeles
Total rent (one-bedroom)	\$2,870 (\$4.35 per square foot)
Total rent (two-bedroom)	\$4,133 (\$4.10 per square foot)
Total sales price (one-bedroom)	\$770,000 (\$1,100 per square foot)
Total sales price (two-bedroom)	\$1,045,000 (\$1,100 per square foot)

Perform Financial Modeling and Feasibility Analysis

This feasibility analysis conducted both static and cash flow pro forma analyses. I made several assumptions about the financing characteristics to calculate the financial return measures for the above scenarios. For the cash flow analysis, financing assumptions are provided below in Table 15.

Table 15. Financing Assumptions

Construction Loan-to-TDC (LTC) Ratio	65%
Debt Service Coverage Ratio	1.2
Permanent Loan Interest Rate	6%
Permanent Loan Term (Years)	30
Exit Cap Rate	5.50%
Closing Costs	2%

For market-rate projects, there is an industry-standard financial return for both rental and for-sale projects. There is a minimum target net operating income (NOI) yield of 5 percent for rental projects. NOI yield is calculated by subtracting the total annual operating expenses from the total annual rent revenue and dividing it by the total development cost. There is a minimum target return on cost (ROC) of 18 percent of development costs, without land acquisition costs, for for-sale projects.

Based on the calculated financial metrics, I identified whether each project scenario was financially feasible (i.e., the project scenario would result in a sufficient rate of return that would financially motivate a developer or investor to pursue) or not financially feasible.

I assessed the financial feasibility of the various 5-to-10-unit project scenarios by calculating the residual land value. The residual land value is the maximum amount available, or how much a developer could afford to pay, for land acquisition after accounting for development costs, revenue from the rent or sale of units, and a minimum return. If the residual land value meets or exceeds the expected acquisition cost of the land, the project is considered

financially feasible. There is a “feasibility gap” when the residual land value is less than the expected acquisition cost of the land. As provided by housing development professionals, I assumed a capitalization (cap) rate of 5 percent based on current industry assumptions for this scale of multi-family housing.

Limitations

There were several limitations with preparing the financial analysis using a pro forma model for various 5-to-10-unit project scenarios:

5-to-10 units are not currently allowed on single-family zoned parcels. Since 5-to-10 units are not currently allowed by existing zoning regulations or design standards in the identified sub areas, this financial analysis assumed that these types of projects would be allowed and appropriately designed on single-family zoned parcels for purposes of the financial model. Therefore, this financial model does not consider specific physical site conditions or design constraints that could impact future developments of this scale.

Data inputs and financial metrics are static at the time of the pro forma model preparation. This model relies on

assumptions about the current housing development landscape as of Spring 2023, such as hard and soft costs inputs, market-rate rents, market-rate sales prices, affordability requirements, and cap rates. Therefore, the assumed inputs and resulting financial metrics for this financial model may vary as the characteristics of the housing market change.

Limited proven development experience.

Since small multi-family housing development is limited in most jurisdictions, there are few builders, design professionals, and lenders with direct small multi-family housing developments experience. There are also limited newly built small multi-family housing developments that offer comparable financial metrics. Most individuals I spoke with had adjacent experience with either building smaller developments of 1-3 units or large-scale multi-family projects of 20+ units. Only one individual interviewed was currently undergoing permitting for an SB 9 project with four units. Therefore, there was limited industry experience and knowledge with housing projects of 5-to-10 units, and building the financial model utilized and adapted assumptions based on larger constructed projects with a proven pro forma model.

Findings and Analysis

This section presents the findings and analysis of the semi-structured interviews with housing professionals, as well as the financial metrics of the pro forma model.

- Bequall
- Beneficial State Bank
- Casita Coalition
- Curtis Development
- Edmonds + Lee Architects
- Enterprise Community Partners
- Frolic
- Homestead
- Housing Action Coalition (HAC)
- Livable Communities Initiative

These interviews explored challenges with overall housing development in San Francisco and Los Angeles; the unique barriers to small multi-family housing development and financing; impediments to building affordable housing units; and opportunities for enabling small multi-family housing projects in high-opportunity areas. The interviews ranged in discussion from specific regulatory and funding policies that disincentivize multi-family housing projects to specific occurrences during the project development process for SB 9 and other smaller-scale housing projects:

Senate Bill 800 has made rental projects more attractive. Several housing

Interviews

I interviewed over 22 housing professionals, including individuals from the following organizations:

- Local Initiatives Support Coalition (LISC)
- Municipal Planners from Los Angeles, San Francisco, Seattle, and San Diego
- Northern California Land Trust (NCLT)
- Orange Splot
- Related California
- Sightline Institute
- Turner Center for Housing Innovation
- United Dwelling

developers noted that Senate Bill 800, which requires builders to address construction defects for up to 10 years, creates additional liability for developers pursuing for-sale projects. As a result, rental projects, where the developer maintains ownership, are most attractive for developers to consider. Based on this, the financial analysis completed as part of this project focused mainly on rental projects to be most useful for development professionals to consider.

Single-stair/vertical shared access building codes offer significant development opportunities. Existing building codes for egress and stairway

requirements, including those that require a second staircase for buildings above three stories, significantly affect small-scale infill development. These requirements create inefficiencies in livable space resulting in smaller units with less sunlight and cross-ventilation opportunities. Allowing single-stair or vertical shared access design, where a building is built around a core set of stairs or elevators, can accommodate additional and larger units while allowing for better ventilation and access to sunlight or green space and even allow for easier and faster building such as modular construction. Seattle, which currently allows single-stairways for multi-family housing developments up to five stories (for only residential buildings), has higher fire/life safety standards than developments with two stairway developments (Seattle Department of Construction and Inspections, n.d.).

“We need to involve industry professionals in the policy-making process. Their lack of input is clear: no housing is getting built!” - Interview Participant

Need increased subsidy/public investment from the State. Several individuals interviewed stressed the necessity of implementing and increasing state subsidies to help spur additional housing development, particularly for affordable housing units and small multi-family housing. Current construction trends suggest there is little affordable housing being built, resulting in limited opportunities for low-income families to benefit from new, affordable housing. Also, considering the high cost of housing in California, most projects cannot financially accommodate

constructing affordable units as affordability requirements limit the available revenue to sustain increasingly high development costs.

Figure 8. 10-Unit Building on 3,400 Sq. Ft. Lot in Vancouver, British Columbia



Source: Checkwitch Poiron Architects Inc., 2020

Additional public incentives and investment from the State can make small multi-family developments, even those with affordable units, more financially feasible and help new projects reach affordable rents.

“More state subsidies for affordable housing will solve a lot of problems!” - Interview Participant

Small multi-family projects require the same time and effort as larger projects.

Several individuals noted that lack of efficiency and streamlining for small multi-family housing projects hinders development progress. Smaller projects can

take just as much staff time (for city staff and development professionals) for the permitting, financing, and overall building process as larger projects. The development process lacks clarity and efficiency, which makes small multi-family housing projects with only a few new units less attractive to pursue than larger projects that can potentially house significantly more people, even under recent legislation such as SB 9. The individuals I interviewed were highly mission-driven and most passionate about creating more housing opportunities as quickly and efficiently as possible, which can be more difficult with smaller typology projects.

Construction financing options are weak for small multi-family developments.

Existing financing options do not support small multi-family housing projects, particularly those between 5 and 10 units. Most are tailored towards larger projects of 20+ units and do not offer sustainable or useful loan options for builders interested in smaller multi-family projects, making these projects difficult to pursue.

Local jurisdictions should support and encourage shared ownership and financing models for small multi-family developments, such as co-ops.

Structured wealth generation through homeownership in the United States has made it difficult for renters and non-homeowners to leverage wealth. Shared ownership or “co-op” models offer an alternative to traditional investor-based development to help support small multi-family housing construction through community partnerships to unlock financing opportunities and densify single-family

zoned areas with more affordable housing and ownership options.

“The way to increase housing supply is to increase supply in areas that do not get new housing - we can rebalance and redistribute growth in cities by allowing lower-cost housing types such as stacked condos and rental housing in single-family neighborhoods” - Interview Participant

Lack of clarity from legislation, policies, and local planning departments.

Existing local and State legislation for housing development can often make it difficult for industry professionals, such as lenders and developers, to use new policies and programs to build infill housing, especially through small multi-family housing development. While SB 9 offers an opportunity to unlock previously unavailable parcels for multi-family development of up to four units, upzoning measures alone cannot encourage development. Several compounding factors can render new legislation inefficient in streamlining much-needed housing development and offer little to no benefit for developers looking to build housing. Further, legislation changes without clear implementation measures or actions for industry professionals to utilize can make it difficult for local planning departments, especially those with limited staff availability, to facilitate efficiently. Community organizations and development professionals must be involved in the legislative process to ensure new policies can effectively encourage and guide new housing development efficiently and equitably.

“Take regulatory roadblocks out of the way to make local permits, like for demolition, non-discretionary so the permitting process is easier and faster. It is so tough to build!” - Interview Participant

Financial Analysis

Table 16 and Figures 9 and 10 summarize the project scenarios' financial feasibility, residual land value, and resulting gap or profit. Appendix A provides the complete financial model for the 5-unit market-rate rental project in San Francisco. Appendix B provides the complete financial model for the 10-unit market-rate rental project in Los Angeles.

The residual land value represents the net value available when considering the overall cost of project development, not including the expected land acquisition cost, and the revenue generated from the rent or sale of the project. If there is a surplus, meaning the residual land value is higher than the expected acquisition cost, the project would be feasible, and a developer would be financially motivated to pursue the project. If there is a gap, meaning the residual land value is less than the expected acquisition cost, the project would be considered infeasible as the development costs would cost more than the expected development value from the project.

Most 5-to-10-unit project scenarios would not be financially feasible in San Francisco or Los Angeles since the residual land value would be less than the expected acquisition cost. In Los Angeles, 10-unit for-sale projects would be financially feasible. In San Francisco and Los Angeles, the only 10-unit

rental projects that would be financially feasible would include either city fees capped at \$10,000, a \$50,000 per unit subsidy, or partial property tax abatement. No 5-unit projects in San Francisco or Los Angeles would be financially feasible. Financial feasibility results were generally consistent between San Francisco and Los Angeles. San Francisco 5-unit projects generally have feasibility gaps ranging from \$252,000 to \$1.54 million, while infeasible 10-unit projects have gaps ranging from \$16,000 to \$693,700. Los Angeles 5-unit projects generally have feasibility gaps ranging from \$314,400 to \$2.0 million, while infeasible 10-unit projects have gaps ranging from \$227,100 to \$809,600. While applied external factors (i.e., capping city fees) helped to reduce the feasibility gap for most 5-unit projects, it did not reduce the gap enough to make these projects feasible in San Francisco or Los Angeles. Out of the three external factors studied, the partial property-tax abatement led to the greatest reduction in the observed feasibility gap for both San Francisco and Los Angeles projects.

The return on investment (ROI) for the feasible 10-unit project scenarios ranges from 5.35 percent (Scenario N) to 5.89 percent (Scenario L) in San Francisco and 5.19 percent (Scenario M) to 5.76 percent (Scenario L) in Los Angeles. While ROI requirements may vary for different lenders and investors, they often require a 7 percent or greater ROI.

Most project scenarios could not sustain the high development costs even with the relatively high rents for one- and two-bedrooms modeled in this financial analysis (Tables 13 and 14). Further, providing at

least one BMR unit significantly reduced feasibility, resulting in an average additional \$573,600 towards the financial gap for both 5- and 10-unit projects in San Francisco and Los Angeles. However, capping city fees at \$10,000, or applying either a \$50,000 per unit subsidy or a partial property tax abatement, could make these projects more

desirable for developers and allow for more affordable rents and sale prices. Given the above feasibility results, it would be challenging for most developers to pursue market-rate and mixed-income 5-to-10-unit projects in the observed sub-areas of San Francisco or Los Angeles.

Figure 9. San Francisco Residual Land Value and Expected Acquisition Cost

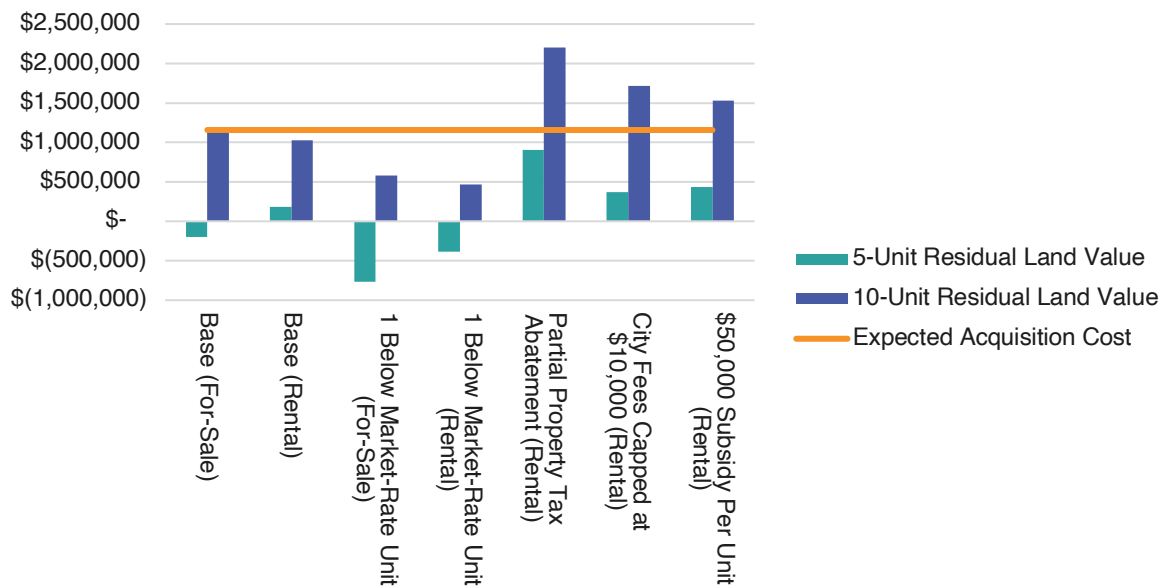


Figure 10. Los Angeles Residual Land Value and Expected Acquisition Cost

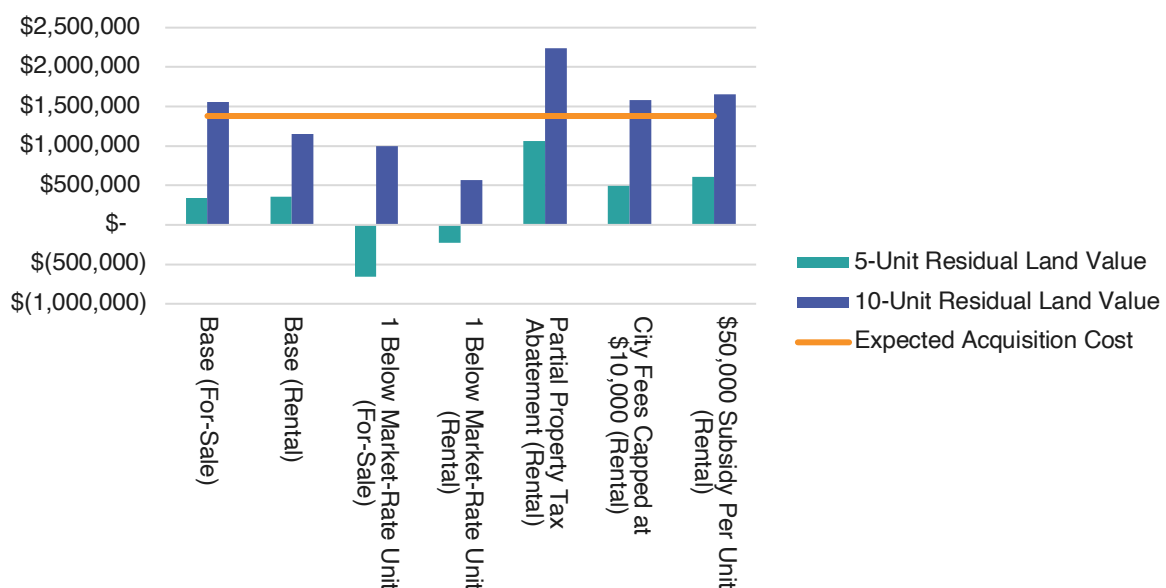


Table 16. Key Financial Model Results

Scenario		San Francisco	Los Angeles
A	5-Unit: Market-Rate, For-Sale	Not Feasible \$1,360,000 gap	Not Feasible: \$1,042,800 gap
B	5-Unit: Market-Rate, Rental	Not Feasible \$975,700 gap	Not Feasible: \$1,022,600 gap
C	5-Unit: 1 BMR Unit, For-Sale	Not Feasible \$1,920,200 gap	Not Feasible: \$2,035,500 gap
D	5-Unit: 1 BMR Unit, Rental	Not Feasible \$1,540,000 gap	Not Feasible: \$1,605,200 gap
E	5-Unit: Rental, Market-Rate, 80% Property Tax Abatement	Not Feasible \$252,000 gap	Not Feasible: \$314,400 gap
F	5-Unit: Rental, Market-Rate, City Fees Capped at \$10,000	Not Feasible \$790,500 gap	Not Feasible: \$885,800 gap
G	5-Unit: Rental, Market-Rate, \$50,000 Subsidy Per Unit	Not Feasible \$725,700 gap	Not Feasible: \$772,600 gap
H	10-Unit: Market-Rate, For-Sale	Not Feasible \$16,600 gap	Feasible: \$178,500 profit
I	10-Unit: Market-Rate, Rental	Not Feasible: \$128,600 gap	Not Feasible: \$227,100 gap
J	10-Unit: 1 BMR Unit, For-Sale	Not Feasible: \$577,900 gap	Not Feasible: \$381,800 gap
K	10-Unit: 1 BMR Unit, Rental	Not Feasible: \$693,700 gap	Not Feasible: \$809,600 gap
L	10-Unit: Rental, Market-Rate, 80% Property Tax-Abatement	Feasible: \$1,045,000 profit	Feasible: \$858,216 profit
M	10-Unit: Rental, Market-Rate, City Fees Capped at \$10,000	Feasible: \$558,500 profit	Feasible: \$200,000 profit
N	10-Unit: Rental, Market-Rate, \$50,000 Subsidy Per Unit	Feasible: \$371,400 profit	Feasible: \$272,900 profit

Note: The researcher is not recommending or assuming that any of the above listed scenarios should or should not be pursued by housing development professionals.

Conclusions and Policy/Planning Recommendations

California is amid an unprecedented housing crisis, and unlocking opportunities to increase housing supply through small multi-family developments has the potential to help meet the growing affordable housing need. Based on semi-structured interviews with 22 housing professionals and a pro forma financial analysis of various 5-to-10-unit projects, the feasibility of this typology of housing depends on several compounding factors beyond existing zoning constraints. Factors such as rising construction costs, building code constraints, and inadequate financing options contribute to difficulties with building new small multi-family projects, particularly projects ten units or under. However, this research does not suggest that developers or property owners would not pursue these types of projects or that the financial assumptions or returns presented in this research could change in the future to allow for the construction of 5-to-10-unit projects.

This research provides insight into the impact of potential policy incentives such as subsidies, property tax abatements, and limiting city fees to help new 5-to-10-unit projects become financially viable. While this research concludes that limited financial feasibility exists for new market-rate and mixed-income 5-to-10-unit projects in single-family zoned areas in San Francisco and Los Angeles under existing economic and design conditions, this scale of small multi-family housing can still provide opportunities for more affordable and equitable housing with State and local policy and planning provisions, which are discussed in further detail below.

Acknowledging the housing crisis is no longer acceptable: clear and intentional mechanisms centering the needs of underserved and underrepresented communities through State, regional, and local policies and actions is necessary to ensure families can access and remain in safe and affordable housing.

Recommendations

To best support and encourage 5-to-10-unit housing development projects, it is important to consider these recommendations in combination with others. While pursuing these developments is challenging under existing circumstances as presented in this research, meaningful policy provisions and collaboration from industry professionals and State, regional,

and local agencies can support and encourage small multi-family housing developments in high-opportunity areas.

To spur small multi-family housing development of 5-to-10 units in single-family areas, the San Francisco Planning Department should encourage the State to:

1. Increase allowable density on single-family zoned lots in high-opportunity areas to 10 units.

The State should focus on targeting single-family zoned lots in high-opportunity areas for small multi-family projects of up to 10 units to unlock areas that have been previously excluded from affordable and equitable housing choices.

2. Allow single-stair/vertical shared access building codes.

Like other cities in the United States and countries around the world, California can revise its building code standards to allow for vertical shared access (also known as point block access) for three stories and above residential buildings. Doing so can encourage lower cost and more efficient small multi-family housing developments on smaller lots without sacrificing fire safety (Larch Lab, 2021). With this approach, supplemental materials and education could address any safety concerns, along with collaboration with other local agencies and first responders on the specific code changes.

3. Implement a partial property tax abatement and subsidy program.

This research concluded that an 80 percent property tax abatement allowed the greatest reduction in observed feasibility gaps for 5- and 10-unit projects. Further, a property tax abatement or a \$50,000 per unit subsidy allowed for an otherwise infeasible 10-unit project in San Francisco or Los Angeles to become

feasible. The State should consider implementing a partial property tax abatement (since the State manages property taxes) as well as expand available subsidies, such as public land donation or matching trust funds, for projects ten units or under.

4. Develop State-backed financing options.

For non-profit or small-scale developers pursuing this housing typology, offering State-supported financing options could help overcome existing barriers to financing. By offering a loan guarantee for construction and permanent loans, developers can secure the required capital to undergo development while mitigating any potential risk to the financial lender.

At the local level, the San Francisco Planning Department should:

1. Revise local development regulations, such as height and floor area ratio standards.

Incompatible design requirements such as setbacks, open space, height, and floor area ratio can physically discourage multi-family developments on smaller lots. Revising standards to be more conducive for 5-to-10-unit projects can create more explicit expectations and reduce the need for variances while allowing for a streamlined compliance review and removing barriers to a quicker development process.

2. Implement fee waivers or cap City fees for development projects

with ten units or less. Small unit addition projects are often subject to the same fees as larger-scale developments. As such, those looking to pursue a smaller unit addition project are inundated with upfront costs, requiring significant capital. Implementing fee waivers, deferrals, or capping city fees helps alleviate the financial burden of pursuing smaller developments of 10 units or under. Additionally, the Planning Department could consider expanding fee waiver or deferral incentives specifically to non-profit and small-scale developers to benefit and reinvest in underserved communities.

- 3. Incentivize shared ownership and financing models.** Shared-equity homeownership developments can offer an alternative model to traditional renting or owning by implementing certain restrictions, such as resale and deed-restricted units, to maintain affordable housing. Alternative homeownership models can provide more affordable wealth-building opportunities for those otherwise unable to access homeownership in the existing high-cost housing market.
- 4. Streamline permitting process by implementing increased interagency review and collaboration.** In February 2023, San Francisco Mayor London Breed released Executive Order 23-01,

Housing for All, requiring several actions in collaboration with the Planning Department, including implementing internal agency process improvements to streamline development (San Francisco Office of the Mayor, 2023). While codifying these improvements, the Planning Department and other agencies should reduce redundancy in permits required for development and enable parallel processing among agencies. Additionally, the need for several review rounds with City staff (i.e., preliminary project assessment, project application, preliminary application, etc.) adds significant time to the development process. It should be revised to reduce required meetings to expedite the development process.

- 5. Support community-based coalitions.** Encouraging local coalitions and organizations that could benefit from developing this housing typology in high-resource areas can create and maintain partnerships with the city and allow for more equitable projects that benefit the community's needs. Wealthier homeowners often face new development with fierce opposition, so cultivating inclusive opportunities to ensure underserved communities most impacted by housing inequities are able and empowered to participate in the housing development process can lead to more equitable projects.

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Appendix A
Financial Model for 5-Unit Market-Rate Rental Project in San Francisco

Scenario Summary				Rents and Sales				Total Development Cost			
				Assumed Site Size (SF)				3000			
				B. Base (Rental)				B. Base (Rental)			
Total Units	5		Average Size (Sq. Ft.)	700		Acquisition Cost	\$1,157,000.00		Per SF	\$401.04	
Market Rate Units	5		rounded from comps	700		Demolition Cost	\$50,000		Per SF	\$16.67	
Affordable (Below Market Rate (BMR)) Units	0		Sales Price	-		Rent/Month	\$-		Per Unit	\$231,400.00	
Site Area (Acres)	0.069		Sales price/SF	\$1,000.00		Units	3,150				
Site Area (SF)	3000		One-Bedroom (Market-Rate)	700		2					
Floor Area Ratio (FAR)	1.8		One-Bedroom (BMR- ALI)	700		3					
Building Efficiency	85%		One-Bedroom (BMR- ELI)	700							
Max Gross Buildable Area	5400		One-Bedroom (BMR- VLI)	700							
Net Leasable Area	4590		One-Bedroom (BMR- LI)	700							
Max Units	5		Two-Bedroom (Market-Rate)	950							
DU/AC	72.46		Two-Bedroom (BMR- ALI)	700							
Parking Spaces	3		Two-Bedroom (BMR- ELI)	700							
Net Operating Income (NOI) Yield	3.71%		Two-Bedroom (BMR- VLI)	950							
Residual Land Value	\$ 181,335.88		Two-Bedroom (BMR- LI)	950							
				Total Rent/Month	\$ 18,413						
				Total Rent/Year	\$ 220,950						
				5% Minus Vacancy	\$ (11,048)						
				Effective Total Rent/Year	\$ 209,903						
				Expected Sales Price Per One-Bedroom Unit	-						
				Expected Sales Price Per Two-Bedroom Unit	-						
				Expected Total Sales Price	-						
				5% Brokerage Fees	-						
				Effective Net Revenue	-						
Scenario A - E + G											
Hard Costs											
Building Type		Apartment 1-3		Assumptions		Total	Per SF	Per Unit			
Story		M.010		Total		\$1,796,531.40	\$332.69	\$359,306.28			
RS Means Model		M.010		Construction Cost		\$36,623 per parking space	\$125,426.70	\$119.45	\$25,085.34		
				Contingency		10%	\$192,195.81	\$35.59	\$38,439.16		
				Total Hard Costs		\$2,164,153.91	\$400.77	\$432,830.78			
Soft Costs											
				Assumptions		Total	Per SF	Per Unit			
Professional and Consulting Fees (Architecture and Engineering, etc.)		7%		\$151,490.77		\$28.05	\$30,298.15				
Accounting, Insurance, etc.		1.50%		\$32,462.31		\$6.01	\$6,492.46				
Legal		1%		\$21,641.54		\$4.01	\$4,328.31				
Marketing		\$ 5,000		\$ 5,000		\$0.93	\$1,000.00				
Local Permits and Fees		-		-		-	-				
Child Care Fee per unit		\$1.33		\$6.65		\$0.00	\$1.33				
School Impact Fee per unit		\$3.79		\$18.95		\$0.00	\$3.79				
Wastewater Capacity Charge		\$5,422		\$5,422		\$1.00	\$1,084.40				
Water Capacity Charge		\$2,066		\$2,066		\$0.38	\$413.20				
Application Fees (including Building Permit, Planning Review, Fire Department, etc.)		7.50%		\$ 162,311.54		\$30.06	\$32,462.31				
Property Taxes (Construction)		-		\$26,868.92		\$4.98	\$5,373.78				
Contingency		10%		\$40,728.87		\$7.54	\$8,145.77				
				TDC minus Property Taxes		\$3,769,171.47					
Total Soft Costs				\$448,017.56		\$82.97	\$89,603.51	Soft Costs/Hard Costs		20.7%	
Total Development Costs				\$2,612,171.47		\$483.74	\$522,434.29				
Total Development Costs (with land acquisition)				\$3,769,171.47		\$697.99	\$753,834.29				

Operating Expenses (Rental)				Static Pro Forma				
Scenario B, D, F, + G				B. Base (Rental)				
Administrative/Management	3%	\$ 6,297	\$ 1.17	\$ 1,259	NOI	\$ 139,675.37		
Maintenance	\$1.5/SF	\$ 8,100	\$ 1.50	\$ 1,620	NOI Yield (Return on Investment)	3.71%		
Utilities	\$1.5/SF	\$ 8,100	\$ 1.50	\$ 1,620	Net Revenue - TDC	-		
Insurance	\$500/unit	\$ 2,500	\$ 0.46	\$ 500	Targeted Return on Cost	-		
Property Taxes	1.20%	\$ 45,230	\$ 8.38	\$ 9,046	Residual Land Value (For-Sale; Profit if sold)	-		
		Total Annual Expenses	\$ 70,227	\$ 13	\$ 14,045	Value Upon Completion (NOI/Cap Rate)	5.00%	\$ 2,793,507.35
		OpEx/Income	33.5%			Residual Land Value (Rental; Profit if sold)	5.00%	\$ 181,335.88
						Gross Margin	5.00%	4.81%
						Cash-on-Cash Return		1.09%
						Feasibility Gap/Surplus		\$975,664.12

Cash Flow- Scenario B

Financing Assumptions	
Construction Loan	\$2,449,961.45
Construction Loan-to-TDC(LTC) Ratio	65%
Developer Equity (TDC less Cons Loan)	\$1,319,210.01
Debt Service Coverage Ratio	1.2
Perm Loan Interest Rate	6%
Perm Loan Term (Years)	30
Exit Cap Rate	5.50%
Closing Costs	2%

Development Year		1	2	3	4	5	6	7	8	9	10	11	12
Operation/Fiscal Year	Construction	1	2	3	4	5	6	7	8	9	10	11	12
Residential NOI Escalation % (Total)													
NOI = Unlevered CF	2%	\$ 139,675.37	\$ 142,468.87	\$ 145,318.25	\$ 148,224.62	\$ 151,189.11	\$ 154,212.89	\$ 157,297.15	\$ 160,443.09	\$ 163,651.95	\$ 166,924.99	\$ 170,263.49	
Debt Service		\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)	\$ (116,396.14)
After Debt Operating Cash Flow		\$ 23,279.23	\$ 26,072.74	\$ 28,922.11	\$ 31,828.48	\$ 34,792.97	\$ 37,816.75	\$ 40,901.01	\$ 44,046.95	\$ 47,255.82	\$ 50,528.85	\$ 53,867.35	
Construction Loan Repayment		(\$2,449,961.45)	0	0	0	0	0	0	0	0	0	0	0
Permanent Loan Proceeds		\$1,617,825.00	0	0	0	0	0	0	0	0	0	0	0
After Debt Financing & Sales Proceeds		(\$832,136.45)	0	0	0	0	0	0	0	0	0	0	0
Total After Debt Cash Flow = Levered CF		\$ (808,857.22)	\$26,072.74	\$28,922.11	\$31,828.48	\$34,792.97	\$37,816.75	\$40,901.01	\$44,046.95	\$47,255.82	\$50,528.85		
NOI of TDC (Developer sells at FY10)-													
Unleveraged IRR	(\$3,769,171.47)	\$ 139,675.37	\$ 142,468.87	\$ 145,318.25	\$ 148,224.62	\$ 151,189.11	\$ 154,212.89	\$ 157,297.15	\$ 160,443.09	\$ 163,651.95	\$ 166,924.99	\$ 170,263.49	
NOI of TDC (Developer sells at FY10)-													
Leveraged IRR	(\$1,319,210.01)	(\$808,857.22)	\$26,072.74	\$28,922.11	\$31,828.48	\$34,792.97	\$37,816.75	\$40,901.01	\$44,046.95	\$47,255.82	\$50,528.85		

Unleveraged IRR	2.44%
Leveraged IRR	-23.28%

Appendix B Financial Model for 10-Unit Market-Rate Rental Project in Los Angeles

Scenario Summary		Rents and Sales				Total Development Cost			
	I. Base (Rental)								
Total Units	10	Average Size (Sq. Ft.)- rounded from comps	700	Sales price/SF	\$ 1,100.00	Units	3,045	Assumed Site Size (SF)	5500
Market Rate Units Affordable (Below Market Rate [BMR]) Units	0	One-Bedroom (Market-Rate)	700	Rent/Month	\$ 3,045	Acquisition Cost	\$ 1,380,000.00	Total	\$ 1,380,000.00
Site Area (Acres)	0.126	Two-Bedroom (Market-Rate)	950	Total Rent/Year	\$ 3,895	Demolition Cost	\$ 50,000	Per SF	\$ 250.91
Site Area (SF)	5500	Two-Bedroom (BMR- VLI)	950	Effective Total Rent/Year	\$ 3,895			Per Unit	\$ 276,000.00
Floor Area Ratio (FAR)	1.8			Expected Sales Price Per One-Bedroom Unit	\$ -				
Building Efficiency	85%			Expected Sales Price Per Two-Bedroom Unit	\$ -				
Max Gross Buildable Area	9900			Expected Total Sales Price	\$ -				
Net Leasible Area	8415			Expected Net Revenue	\$ -				
Max Units	10								
DU/AC	79.37								
Parking Spaces	5								
Net Operating Income (NOI) Yield	4.80%								
Residual Land Value	\$ 1,152,897.32								

Scenario H - L				
Hard Costs				
Building Type	Apartment 4-7			
Story	Story			
RS Means Model	M.010			
	Assumptions	Total	Per SF	Per Unit
Construction Cost	\$36,623 per parking space	\$2,885,127.30	\$291.43	\$288,512.73
Parking Cost	10%	\$183,116.50	\$104.64	\$18,311.65
Contingency	10%	\$306,824.38	\$30.99	\$30,682.44
Total Hard Costs		\$3,425,068.18	\$345.97	\$342,506.82
Soft Costs				
	Assumptions	Total	Per SF	Per Unit
Professional and Consulting Fees (Architecture and Engineering, etc.)	7%	\$239,754.77	\$24.22	\$23,975.48
Accounting, Insurance, etc.	1.50%	\$51,376.02	\$5.19	\$5,137.60
Legal	1%	\$34,250.68	\$3.46	\$3,425.07
Marketing	\$ 10,000	\$ 10,000	\$1.01	\$1,000.00
Local Permits and Fees	6.00%	\$205,504.09	\$20.76	\$20,550.41
Affordable Housing Fee		\$185,031.00	\$18.69	\$18,503.10
Property Taxes (Construction)		\$37,110.41	\$3.75	\$3,711.04
Contingency	10%	\$77,057.93	\$7.78	\$7,705.79
Total Soft Costs		\$847,637.20	\$85.62	\$84,763.72
Total Development Costs (with land acquisition)		\$5,652,705.38	\$570.98	\$565,270.54
				Soft Costs/Hard Costs 24.7%

Operating Expenses (Rental)					Static Pro Forma	
Scenario I	Assumptions	Total	Per SF	Per Unit	I. Base (Rental)	
Administrative/Management	3.00%	\$ 11,867	\$ 1.20	\$ 1,187	NOI	\$ 271,280.14
Maintenance	\$2/SF	\$ 19,800	\$ 2.00	\$ 1,980	NOI Yield (Return on Investment)	4.80%
Utilities	\$2/SF	\$ 19,800	\$ 2.00	\$ 1,980	Net Revenue - TDC	-
Insurance	\$500/unit	\$ 5,000	\$ 0.51	\$ 500	Estimated Return on Cost	-
Property Taxes	1.20%	\$ 67,832	\$ 6.85	\$ 6,783	Residual Land Value (For-Sale; Profit if sold)	-
Total Annual Expenses		\$124,300	\$ 13	\$12,430	Value Upon Completion (NOI/Cap Rate)	-
OpEx/Income		31.4%			5.00%	\$ 5,425,602.71
					Residual Land Value (Rental; Profit if sold)	5.00%
						\$ 1,152,897.32
					Gross Margin	5.00%
						20.40%
					Cash-on-Cash Return	1.83%
					Feasibility Gap/Surplus	\$227,102.68

Cash Flow- Scenario I

Financing Assumptions	
Construction Loan	\$3,674,258.50
Construction Loan-to-TDC(LTC) Ratio	65%
Developer Equity (TDC less Cons Loan)	\$1,978,446.88
Debt Service Coverage Ratio	1.2
Perm Loan Interest Rate	6%
Perm Loan Term (Years)	30
Exit Cap Rate	5.50%
Closing Costs	2%

Development Year		1	2	3	4	5	6	7	8	9	10	11	12
Operation/Fiscal Year	Construction	1	2	3	4	5	6	7	8	9	10	11	12
Residential NOI Escalation % (Total NOI =													
Unlevered CF)	2%	\$ 271,280.14	\$ 276,705.74	\$ 282,239.85	\$ 287,884.65	\$ 293,642.34	\$ 299,515.19	\$ 305,505.49	\$ 311,615.60	\$ 317,847.92	\$ 324,204.87	\$ 330,688.97	\$ 337,295.10
Debt Service		\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)	\$ (226,066.78)
After Debt Operating Cash Flow		\$ 45,213.36	\$ 50,638.96	\$ 56,173.07	\$ 61,817.87	\$ 67,575.56	\$ 73,448.41	\$ 79,438.71	\$ 85,548.82	\$ 91,781.14	\$ 98,138.09	\$ 104,622.19	\$ 111,270.28
Construction Loan Repayment		(\$3,674,258.50)	0	0	0	0	0	0	0	0	0	0	0
Permanent Loan Proceeds		\$3,142,170.26	0	0	0	0	0	0	0	0	0	0	0
After Debt Financing & Sales Proceeds		(\$532,088.24)	0	0	0	0	0	0	0	0	0	0	0
Total After Debt Cash Flow = Levered CF		(\$486,874.88)	\$50,638.96	\$56,173.07	\$61,817.87	\$67,575.56	\$73,448.41	\$79,438.71	\$85,548.82	\$91,781.14	\$98,138.09	\$104,622.19	\$111,270.28
NOI of TDC (Developer sells at FY10)-													
Unleveraged IRR	(\$5,652,705.38)	\$ 271,280.14	\$ 276,705.74	\$ 282,239.85	\$ 287,884.65	\$ 293,642.34	\$ 299,515.19	\$ 305,505.49	\$ 311,615.60	\$ 317,847.92	\$ 324,204.87	\$ 330,688.97	\$ 337,295.10
NOI of TDC (Developer sells at FY10)- Leveraged													
IRR	(\$1,978,446.88)	(\$486,874.88)	\$50,638.96	\$56,173.07	\$61,817.87	\$67,575.56	\$73,448.41	\$79,438.71	\$85,548.82	\$91,781.14	\$98,138.09	\$104,622.19	\$111,270.28

Unleveraged IRR	5.70%
Leveraged IRR	-17.31%