



STRATEGICECONOMICS

# **ECONOMIC FEASIBILITY ANALYSIS**

## **CUPERTINO BELOW MARKET RATE (BMR) HOUSING PROGRAM**

**Prepared for:**

**City of Cupertino**

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# I. INTRODUCTION

Strategic Economics was retained by the City of Cupertino (the “City”) to evaluate potential changes to the Below Market Rate (BMR) Housing Program. The BMR program requirements are currently as follows:

- The City currently has a BMR Housing Program that imposes an inclusionary requirement of 15% on for-sale and rental residential developments with seven or more units. For rental developments, the BMR units must be affordable to very-low (up to 50% Area Median Income “AMI”) or low-income (up to 80% AMI) households<sup>1</sup>. For-sale developments must provide BMR units affordable to median- (up to 100% AMI) and moderate-income (up to 120% AMI) households.<sup>2</sup>
- Small residential projects of less than seven units can pay the City’s Housing Mitigation In-Lieu Fees<sup>3</sup> (the “Housing Mitigation Fees”) or provide one BMR unit. The Housing Mitigation Fees are based on the City’s 2015 Residential Below Market Rate Housing Nexus Analysis and Non-Residential Jobs-Housing Nexus Analysis (the “2015 Nexus Study”). Housing Mitigation Fees are currently set at \$17.82 per square feet for detached single family, \$19.60 per square feet for small lot single family/townhomes, \$23.76 for attached multifamily residences (ownership and rental), and \$11.88 per square foot for commercial/retail uses.
- The City first adopted linkage fees for office and Research and Development (“R&D”) projects in 1992 and expanded the program to apply to retail and hotel developments in 2004. The City updated the non-residential linkage fees in 2015 (based on the 2015 Nexus Study) to the current levels of \$23.76 per square foot for office/R&D uses, and \$11.88 per square foot for hotel and retail uses.<sup>4</sup>

The City Council is considering modifying the BMR Housing Program, providing direction to examine the following issues:

- Study the potential to increase the inclusionary requirements to 20% or 25%
- Explore inclusionary housing policy to include units for extremely-low income/disabled persons
- Include median- and moderate-income units in rental projects
- Study inclusionary housing programs in other cities as a comparison
- Study the economic feasibility of increasing non-residential linkage fees on new office/R&D, hotel, and retail developments

This report provides technical findings on the economic feasibility of increasing the City’s BMR requirements for residential developments and non-residential developments. It also provides findings regarding the potential for including extremely-low income housing units and/or median-and moderate-income units in rental projects. The report also summarizes inclusionary housing programs and non-residential linkage fees in other cities in Santa Clara County.

The report is divided into three sections.

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<sup>1</sup> Rental BMR policy states that 40% of affordable units must be set aside for low income, and 60% for very low income units.

<sup>2</sup> For-Sale BMR policy states that half of affordable units must be set aside for median income households, and half for moderate income households.

<sup>3</sup> Housing Mitigation In-Lieu Fees: A fee assessed in accordance with the City’s General Plan Housing Element, Municipal Code (CMC 19.172) and the City’s BMR Housing Mitigation Program Procedural Manual.

<sup>4</sup> Keyser Marston Associates, “City of Cupertino: Non-residential Jobs-Housing Nexus Analysis,” *City of Cupertino*, April 2015.

- Section II: The first section focuses on the BMR requirements on housing development.
- Section III: The second section is focused on the non-residential linkage fees on new office/R&D, hotel, and retail developments.
- Section IV: The third section provides key takeaways and conclusions.

The appendix to the report provides additional background data on housing trends.

## II. BMR REQUIREMENTS FOR RESIDENTIAL DEVELOPMENT

### Approach

The following summarizes the methodology of the financial feasibility analysis.

#### Step 1. Develop Prototypes

The first step in the financial feasibility analysis is to review the types of residential and mixed-use (residential and retail) projects that would be subject to the BMR policy. In close coordination with City staff, Strategic Economics updated the residential and nonresidential prototypes used in the 2015 Nexus Study, ensuring that they represent the ownership and rental residential development types that are likely to occur in city in the short term. The prototypes varied based on assumptions regarding building type, density, unit size, etc.

#### Step 2. Develop Assumptions about BMR Units

Strategic Economics worked closely with City staff to develop assumptions about the percentage of inclusionary units that should be tested, the income targets, and the affordable sales prices and rents. Maximum sales prices and rents were calculated using the method and parameters established by City policy, in coordination with Hello Housing, the BMR Program administrator.

#### Step 3. Collect Key Inputs and Build Pro Forma

The financial feasibility of each prototype is measured using a static pro forma model that solves for the profit to the developer. A pro forma model is a tool that is commonly used to estimate whether a project is likely to be profitable. The key inputs into the financial feasibility analysis are the revenues (rents/ sales prices), development costs, and land costs. Strategic Economics collected and summarized data on land prices, residential values, and construction costs using the following data sources:

- Costar, a commercial real estate database that tracks rental multifamily properties and property transactions
- Interviews with local developers and brokers
- Redfin, a real estate brokerage firm that collects data on residential sales prices
- Review of pro formas from other projects and clients

#### Step 4. Calculate Financial Feasibility

The pro forma model tallies all development costs, including land costs, hard costs (construction costs), soft costs, and financing costs. The pro forma also tallies the project's total value. The project's total value is the sum of (1) the estimated value of the condominiums or townhomes (i.e. the average per unit sale price multiplied by the number of units), and (2) if applicable, the capitalized value of retail. The project's ROC is then calculated by dividing the project's net revenue (i.e. total value minus total development costs), by total development costs. To understand the potential impact of inclusionary requirements on financial feasibility, the ROC results for each prototype and inclusionary housing scenario are compared to developers' typical expectation of return, or the threshold for feasibility. If the ROC for a project is above the threshold for feasibility, it is considered financially feasible. If the ROC is below the threshold, it is not financially feasible.

More details on each step of the analysis is provided in the section below.

## DEVELOPMENT PROTOTYPES

The analysis estimates the feasibility of different inclusionary requirements for five residential prototypes, as described in Figure 1. The building characteristics of each development prototype, including size, density (floor-area-ratio), and parking assumptions are based on prototypes analyzed as part of the City's 2015 Nexus Study<sup>5</sup>. These development prototypes represent the range of typical residential development expected to come online in Cupertino in the short term. These prototypes are mostly based on recently completed projects or development proposals in the pipeline in Cupertino. It is also assumed that future development will likely be located along Stevens Creek Boulevard, and in existing residential neighborhoods, given that these locations have been identified in the City's General Plan and Heart of the City Specific Plan as key areas for new residential and mixed-use development.

The prototypes vary based on the following characteristics:

- **Ownership and Rental.** Three of the prototypes include only for-sale units (Prototypes 1, 2, and 3) and two are rental developments (Prototypes 4 and 5).
- **Mixed-Use and Residential Only.** Two of the prototypes (Prototypes 1 and 2) are 100% residential while the attached multifamily prototypes have a ground-floor retail component (Prototypes 3, 4, and 5).
- **Project Density and Size**
  - The single-family detached prototype 1 represents detached single-family custom-built homes with an average density of 4.5 dwelling units per acre. Because this prototype has fewer than eight units, it would be allowed to pay the in-lieu fee or provide one BMR unit under the current BMR policy. The small number of units in this prototype reflects the fact that there are few potential single-family detached sites in Cupertino that can accommodate more than 7 units.
  - Prototype 2 represents two-story small lot single-family and townhome developments with a density of 15 dwelling units per acre.
  - Prototype 3 is a three-story multi-family condominium building with a density of 35 units per acre. Parking is accommodated in an above-ground podium.
  - Prototype 4 is a three-story multifamily rental building with a density of 40 units per acre. Parking is accommodated in an above-ground podium.
  - Prototype 5 is a higher-density six-story project with a density of 76 units per acre. This prototype is based on a Housing Element site that allows six to eight story heights. Parking is accommodated in an above-ground podium.
- **Parking Ratios.** The City requires 2 parking spaces per unit. However, for the multi-family prototypes there are opportunities to achieve parking reductions under certain conditions. The assumptions in the pro forma are as follows.
  - For Prototype 1 and Prototype 2, the assumption is that the development would provide all of the required parking.

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<sup>5</sup> Keyser Marston Associates (2015). Residential Below Market Rate Housing Nexus Analysis.



- For the condominium prototype 3, developers can lower parking by 10%, assuming that the reduction is justified by a parking study.
- For multi-family rental housing prototypes 4 and 5, developers can receive parking reductions on residential units in the scenarios where 5% of the housing units are for very low-income households, in accordance with Gov't Code Sec. 65915(p).

**FIGURE 1: DESCRIPTION OF PROTOTYPES**

	<b>Prototype 1</b>	<b>Prototype 2</b>	<b>Prototype 3</b>	<b>Prototype 4</b>	<b>Prototype 5</b>
	Detached Single Family	Small Lot Single Family/Townhome	Condominium	Lower Density Rental Apartments	Higher Density Rental Apartments
Tenure	For-Sale	For-Sale	For-Sale	Rental	Rental
Unit Mix	5 bedrooms	3 bedrooms	2 and 3 bedrooms	Studios, 1, 2, and 3 bedrooms	Studios, 1, 2, and 3 bedrooms
Format	Low-rise, large sites	Low-rise, small sites	Mid-rise, small sites	Mid-rise, small sites	Higher density, small sites
Number of Units	7	50	100	100	100
Parcel Size (Acres)	1.6	3.3	2.9	2.9	1.3
<b>Residential Program</b>					
Studios	-	-	-	10	10
1-BD	-	-	-	45	45
2-BD	-	-	50	40	40
3-BD	-	50	50	5	5
4-BD	0	-	-	-	-
5-BD	7	-	-	-	-
Total	7	50	100	100	100
Dwelling Units Per Acre	4.5	15	35	35	76
<b>Ground Floor Retail (Sq. Ft.)</b>	0	0	10,000	10,000	15,000
<b>Parking</b>					
	2-Car Garage + Driveway	2-Car Garage + Driveway	Podium	Podium	Podium
Parking Requirement (Per Unit)	4	2.8	2	2	2
Parking Requirement (Commercial)	n/a	n/a	4 per 1,000 sq. ft.	4 per 1,000 sq. ft.	4 per 1,000 sq. ft.
Required Parking Spaces	28	140	240	240	260
Reduced Parking Spaces (a)	28	140	216	185	205

(a) For the condominium prototype 3, developers can lower parking by 10%, assuming that the reduction is justified by a parking study. For multi-family rental housing prototypes 4 and 5, developers can receive parking reductions on residential units in the scenarios where 5% of the housing units are for very low-income households (50% AMI), in accordance with Gov't Code Sec. 65915(p).

Source: Strategic Economics, City of Cupertino.

## BMR HOUSING PROGRAM ASSUMPTIONS

Strategic Economics built a pro forma model that tested the feasibility of various inclusionary housing scenarios under the existing BMR housing program and alternative scenarios. Below is a summary of the existing BMR program:

- The City currently has a BMR Housing Program that imposes an inclusionary requirement of 15% on for-sale and rental residential developments with seven or more units. For rental developments, the BMR units must be affordable to very low or low-income households<sup>6</sup>. For-sale developments must provide BMR units affordable to median- and moderate-income households.<sup>7</sup>
- Small residential projects of less than seven units can pay the housing mitigation fee or provide one BMR unit. The housing mitigation fees are based on the 2015 Nexus Study, and are currently set at \$17.82 per square feet for detached single family, \$19.60 per square feet for small lot single family/townhomes, \$23.76 for attached multifamily residences (ownership and rental), and \$11.88 per square foot for commercial/retail uses.
- The BMR program uses income limits published annually by the California Department of Housing and Community Development (HCD) for Santa Clara County, per household size. For some income categories, the income targets for pricing BMR units are slightly different from household income limits that determine eligibility. Maximum BMR sales and rent prices are determined by the City and its BMR program administrator, Hello Housing, based on the maximum affordable housing cost provisions of Section 50052.5 of the California Health and Safety Code, Section 6920 of the California Code of Regulations, and most recent published HCD income limits. The household income limits for BMR eligibility as well as the income targets for pricing BMR units are shown in Figure 2.

FIGURE 2: CITY OF CUPERTINO BMR INCOME LIMITS AND INCOME TARGET FOR PRICING BMR UNITS

	Household Income Limits	Income Target for Pricing BMR Units
<b>Ownership</b>		
Median	100% AMI	90% AMI
Moderate	120% AMI	110% Ami
<b>Rental</b>		
Extremely Low	30% AMI	30% AMI
Very Low	50% AMI	50% AMI
Low	80% AMI	60% AMI

Sources City of Cupertino Housing Element; City of Cupertino Housing Mitigation Program Procedural Manual.

The inclusionary housing scenarios tested in this analysis reflect the range of policy options under consideration by the City for ownership and rental development. They are summarized below and shown in Figure 3 and Figure 4.

<sup>6</sup> Rental BMR policy states that 40% of affordable units must be set aside for low income, and 60% for very low-income units.

<sup>7</sup> For-Sale BMR policy states that half of affordable units must be set aside for median income households, and half for moderate income households.

## OWNERSHIP DEVELOPMENT

Strategic Economics tested the economic feasibility of the development of ownership housing (single-family, townhouse, and condominium prototypes) under five different inclusionary scenarios:

- Scenario 0 (No Requirements): This scenario assumes that the project is 100% market-rate, with no affordable units and no in-lieu fees required.
- Scenario 1 (Existing Policy): This scenario mirrors the City's existing inclusionary housing requirement. The development projects must provide 15% of the units at prices affordable to median- (100% AMI) and moderate-income households (120% AMI).
- Scenario 2 (20% Inclusionary): This scenario requires new ownership projects to include at least 20% BMR units, targeting median and moderate-income households.
- Scenario 3 (25% Inclusionary): This scenario requires new ownership projects to include at least 25% BMR units, targeting median and moderate-income households.
- Scenario 4 (In-Lieu Fees): This scenario assumes that the development is required to pay in-lieu fees instead of providing affordable units on-site.

These scenarios are summarized in Figure 3 below.

**FIGURE 3: INCLUSIONARY HOUSING SCENARIOS TESTED FOR OWNERSHIP PROTOTYPES (DETACHED SINGLE-FAMILY PROTOTYPE 1, SMALL LOT/TOWNHOUSE PROTOTYPE 2, AND CONDOMINIUM PROTOTYPE 3)**

Inclusionary Housing Scenarios	% of Units at BMR Prices	Income Targets for BMR Units*	In-Lieu Fee Payment
Scenario 0 (No Requirements)	0%	N/A	No
Scenario 1 (Existing Policy)	15%	8% of units at 90% AMI 7% of units for 110% AMI	No
Scenario 2 (20% Inclusionary)	20%	10% of units at 90% AMI 10% of units at 110% AMI	No
Scenario 3 (25% Inclusionary)	25%	13% of units at 90% AMI 12% of units at 110% AMI	No
Scenario 4 (In-Lieu Fees)	0	N/A	Yes

\*Per the City of Cupertino Housing Mitigation Program Procedural Manual, the maximum sales price for median income BMR units is set at 90% AMI. The maximum sales price for moderate income BMR units is set at 110% AMI.

Sources: City of Cupertino Housing Mitigation Program Procedural Manual, 2018; Strategic Economics, 2018.

## RENTAL DEVELOPMENT

Strategic Economics tested the economic feasibility of the development of ownership housing (single-family, townhouse, and condominium prototypes) under five different inclusionary scenarios:

- Scenario 0 (No Requirements): This scenario assumes that the project is 100% market-rate, with no affordable units and no in-lieu fees required.
- Scenario 1 (Existing Policy): This scenario mirrors the City's existing inclusionary housing requirement. The development projects must provide 15% of the units at prices affordable to low-income (80% AMI) and very low-income households (50% AMI).
- Scenario 2 (20% Inclusionary): This scenario requires new ownership projects to include at least 20% BMR units, targeting median and moderate-income households.

- Scenario 3 (25% Inclusionary): This scenario has a higher inclusionary requirement of 25% and targets lower income groups. The income targets include low-income (80% AMI), very low-income (50% AMI), and extremely low-income households (30% AMI).
- Scenario 4 (In-Lieu Fees): This scenario assumes that the development is required to pay in-lieu fees instead of providing affordable units on-site.

These scenarios are summarized in Figure 4 below.

**FIGURE 4: INCLUSIONARY HOUSING SCENARIOS TESTED FOR RENTAL PROTOTYPES (LOWER DENSITY RENTAL PROTOTYPE 4 AND HIGHER DENSITY RENTAL PROTOTYPE 5)**

Inclusionary Housing Scenarios	% of Units at BMR Rents	Income Targets for BMR Units*	In-Lieu Fee Payment
Scenario 0 (No Requirements)	0%	N/A	No
Scenario 1 (Existing Policy)	15%	9% of units at 50% AMI 6% of units at 60% AMI	No
Scenario 2 (20% Inclusionary)	20%	10% of units at 50% AMI 10% of units at 60% AMI	No
Scenario 3 (25% Inclusionary)	25%	10% of units at 50% AMI 10% of units at 60% AMI 5% of units at 30% AMI	No
Scenario 4 (In-Lieu Fees)	0	N/A	Yes

\*Per City policy, pricing for low-income BMR units is set at 60% AMI.

Sources: City of Cupertino Housing Mitigation Program Procedural Manual, 2018; Strategic Economics, 2018.

# Financial Feasibility Methodology

This section describes the method used to measure financial feasibility and the major cost and revenue assumptions underlying the analysis. Additional information is provided in the Appendix.

## MEASURING FINANCIAL FEASIBILITY

The financial feasibility of each prototype is measured using a static pro forma model that solves for the profit to the developer. A pro forma model is a tool that is commonly used to estimate whether a project is likely to be profitable. For a policy analysis like this one, we use development prototypes to represent typical projects. However, it is important to note that individual development projects may be less or more profitable than these prototypes, depending on the specifics of the development program, development costs (construction and land), sources of financing, and other factors. Furthermore, because it is a static model reflecting today's market conditions, the pro forma analysis does not factor in changes in prices/rents, construction costs, or financing.

For the purposes of measuring financial feasibility in this analysis, developer profit was measured by using one of two metrics:

- **Return on cost (ROC) for ownership housing.** ROC is a common measure of project profitability for residential ownership development. The pro forma model tallies all development costs, including land costs, hard costs (construction costs), soft costs, and financing costs. The pro forma also tallies the project's total value. The project's total value is the sum of (1) the estimated value of the condominiums or townhomes (i.e. the average per unit sale price multiplied by the number of units), and (2) if applicable, the capitalized value of retail. The project's ROC is then calculated by dividing the project's net revenue (i.e. total value minus total development costs), by total development costs.
- **Yield on cost (YOC) for rental housing.** YOC is a common measure of profitability for income-generating projects, such as residential rental development. The pro forma model tallies all development costs (land costs, hard costs, soft costs, and financing costs). The pro forma also estimates total revenues: the project's net annual operating income is the stabilized income from the property (i.e. rental income generated from both the residential and retail uses), minus operating expenses and an allowance for vacancy. The YOC is estimated by dividing the total annual net operating income by total development costs.

## RETURN THRESHOLDS

To understand the potential impact of inclusionary requirements on financial feasibility, the ROC and YOC results for each prototype and inclusionary housing scenario are compared to developers' typical expectation of return. These return thresholds are summarized in Figure 5 and discussed below:

- For the Single-Family Detached Prototype 1, the minimum ROC threshold ranges between 10 to 15%, based on developer interviews for new single-family development in Cupertino.
- For the Small Lot Single-Family/Townhouse Prototype 2 and the Condominium Prototype 3, the minimum ROC threshold ranges between 18 to 20%, based on a review of pro forma models for new multifamily ownership projects in Santa Clara County.
- For the Lower Density Apartment Prototype 4 and the Higher Density Apartment Prototype 5, the minimum YOC threshold ranges between 4.75% and 5.25%. According to the developers interviewed for this study, and a review of recent development project pro formas in the Silicon

Valley, the minimum YOC for a new multi-family development project should usually be 1.0 to 1.5 points higher than the published capitalization rate (cap rate). The current cap rate for multifamily properties in the San José Metropolitan Area is between 3.75 to 4.25%.<sup>8</sup> The cap rate, measured by dividing the net operating income generated by a property by the total project value, is a commonly used metric to estimate the value of an asset. Cap rates rise and fall along with interest rates. In a climate of rising interest rates, it is important to set the expectations of YOC at a conservative level, to allow for a margin between the cap rate and the rate of return. It is also important to consider that investors consider a wide range of factors to determine if a development project makes financial sense, and some investors may have different levels of risk tolerance than others.

**FIGURE 5: MINIMUM RETURN THRESHOLDS BY PROTOTYPE**

<b>Return on Cost Thresholds</b>	
Prototype 1: Detached Single Family	10-15%
Prototype 2: Small Lot/Townhomes	18-20%
Prototype 3: Condominiums	18-20%
<b>Yield on Cost Thresholds</b>	
Prototype 4: Lower-Density Rental Apartments	4.75-5.25%
Prototype 5: Higher-Density Rental Apartments	4.75-5.25%

Source: Developer interviews and a review of recent project pro formas, 2018; Strategic Economics, 2018.

## REVENUE ASSUMPTIONS

### MARKET RATE RESIDENTIAL

There is significant pent-up housing demand in Santa Clara County and the broader Bay Area region, as housing development has not kept up with employment growth. Between 2009 and 2015, Santa Clara County added over 170,000 new jobs between 2010 and 2015, but only 29,000 new housing units.<sup>9</sup> Apartment rents accelerated beginning in 2011, as the economy emerged from the Great Recession, and continued growing at an average annual rate of nearly eight percent until 2015. Since then rents have continued to grow at a slower pace of about four percent.

Sales prices in Cupertino and Santa Clara County have been escalating at a rapid rate over the last five years. In Cupertino, the median sales price for a single-family home increased from \$1.68 million in 2014 to \$2.37 million in 2018.<sup>10</sup> Similarly, the median sales price for a condominium climbed from \$895,500 in 2014 to \$1.4 million in 2018.<sup>11</sup>

The market-rate sale prices and rents assumed for each prototype are summarized in Figure 6. The values are calculated as a weighted average to reflect that different types of units have different unit

<sup>8</sup> CBRE Investor’s Cap Rate Survey (H1, 2018).

<sup>9</sup> SPUR, “Room for More: Housing Agenda for San José,” August 2017.

<sup>10</sup> Santa Clara County Association of Realtors, 2014 and 2018.

<https://www.sccaor.com/pdf/stats/2014.pdf>

<https://www.sccaor.com/pdf/stats/2018.pdf>.

<sup>11</sup> Ibid

values. For new single-family detached development (Prototype 1), sale prices were based on sales of newly built single-family homes in Cupertino as reported by Redfin. Sales prices for small lot single-family/townhomes (Prototype 2) and condominium projects (Prototype 3) were based on recent re-sales in Cupertino as reported by Redfin. The Appendix to this report (Figures A-1 through A-3) includes detailed information on the project comparables used to inform these estimates.

Because of the lack of recently built apartment projects in Cupertino, the rental rate estimates for rental units (Prototypes 4 and 5) were based on developer interviews and a review of recently built, comparable apartment projects in Cupertino and neighboring cities (Mountain View, Sunnyvale, Campbell, and Santa Clara), as reported by Costar. Since Cupertino's apartment buildings command higher rents than in the other cities, a 5% premium was applied over the market area's weighted average. Figure A-4 in the Appendix includes detailed information on the project comparables used to inform these estimates.



**FIGURE 6: MARKET RATE RESIDENTIAL SALE PRICES AND MONTHLY RENTS, BY PROTOTYPE**

	Unit Mix	Unit Size (Sq. Ft.)	Sale Price Per Sq. Ft.	Sale Price Per Unit
<b>Prototype 1: Single Family</b>				
5-BD	100%	3,700	\$946	\$3,500,200
<b>Prototype 2: Small Lots/Townhomes</b>				
3-BD	100%	1,850	\$970	\$1,794,500
<b>Prototype 3: Condominiums</b>				
2-BD	50%	1,350	\$1,100	\$1,485,000
3-BD	50%	1,600	\$1,000	\$1,600,000
Weighted Average Unit Size/Sale Price		1,475	\$1,050	\$1,542,500
<b>Prototype 4: Lower-Density Rental</b>				
Studios	10%	680	\$4.94	\$3,360
1-BD	45%	800	\$4.73	\$3,780
2-BD	40%	1,100	\$4.30	\$4,725
3-BD	5%	1,400	\$4.13	\$5,775
Weighted Average Unit Size/Monthly Rent		938	\$4.54	\$4,216
<b>Prototype 5: Higher-Density Rental</b>				
Studios	10%	680	\$4.94	\$3,360
1-BD	45%	800	\$4.73	\$3,780
2-BD	40%	1,100	\$4.30	\$4,725
3-BD	5%	1,400	\$4.13	\$5,775
Weighted Average Unit Size/Monthly Rent			\$4.54	\$4,216

Source: Strategic Economics, 2018.

The total value of market-rate units is summarized in Figure 7. For the ownership prototypes (Prototypes 1, 2, and 3), the total project value is obtained by multiplying the per unit sale price by the total number of units. For the rental prototypes (Prototypes 4 and 5), an income capitalization approach is used. This approach first estimates the annual net operating income (NOI) of the prototype, which is the difference between project income (annual rents) and project expenses

(operating costs and vacancies). The NOI is then divided by the current cap rate to derive total project value.<sup>12</sup>

FIGURE 7. MARKET RATE RESIDENTIAL VALUE CALCULATION, BY PROTOTYPE

		Prototype 1	Prototype 2	Prototype 3	Prototype 4	Prototype 5
		Detached Single Family	Small Lot Single Family/ Townhome	Condo	Lower Density Rental Apartments	Higher Density Rental Apartments
Weighted Average Monthly Rent (a)	per unit	n/a	n/a	n/a	\$4,216	\$4,216
Annual Rent	per unit	n/a	n/a	n/a	\$50,589	\$50,589
Vacancy Allowance		n/a	n/a	n/a	5.00%	5.00%
Operating Expenses	% gross revenue	n/a	n/a	n/a	30.00%	30.00%
<b>Annual Net Operating Income</b>	per unit	n/a	n/a	n/a	<b>\$32,883</b>	<b>\$32,883</b>
Capitalization Rate (b)		n/a	n/a	n/a	4.25%	4.25%
Sales Value/Capitalized Value	per unit	<b>\$3,500,200</b>	<b>\$1,794,500</b>	<b>\$1,542,500</b>	<b>\$773,714</b>	<b>\$773,714</b>
Total Units		7	50	100	100	100
<b>Total Residential Value (c)</b>	total project	<b>\$24,501,400</b>	<b>\$89,725,000</b>	<b>\$154,250,000</b>	<b>\$77,371,412</b>	<b>\$77,371,412</b>

(a) See Figure 5 for details on how the per unit sale price was derived.

(b) CBRE, H1 2018 Cap Rate Survey. Cap rates for the San José Metropolitan Area were between 3.75% and 4.25% for infill multifamily Class A.

(c) Assuming all units are market rate. Total residential value is calculated by multiplying the per unit sales value/capitalized value (which is a weighted average) by the total number of units.

Sources: CBRE, 2018; CoStar, 2018; Strategic Economics, 2018.

## BELOW MARKET RATE HOUSING

BMR residential values at different AMI levels are summarized in Figure 8. Maximum sales prices and rents were provided by Hello Housing, the City's BMR program administrator. Sales prices and rents for BMR units were calculated using the method and parameters established in the City's Policy and Procedures Manual for Administering Deed Restricted Affordable Housing Units ("BMR Manual").<sup>13</sup>

An income capitalization approach is also applied to BMR units to derive total residential value.

<sup>12</sup> As mentioned above, the CBRE Investor's Cap Rate Survey (H1, 2018) estimates the cap rate for infill multifamily Class A in San José Metro Area to range from 3.75 to 4.25%.

<sup>13</sup> Maximum sales price calculations incorporate a 10% down payment, as well as an interest rate based on a 10-year rolling average for 30-year fixed-rate mortgages, according to data from Freddie Mac. Resale prices for existing BMR units are determined by the City. Annual housing costs associated with BMR rental units, including rent, utility costs, parking fees, and other costs, may not in sum exceed 30% of the annual income associated with the income target for which the unit is designated.

**FIGURE 8. BELOW MARKET RATE RESIDENTIAL VALUES, BY PROTOTYPE AND AMI LEVEL**

	<b>Prototype 1</b>	<b>Prototype 2</b>	<b>Prototype 3</b>	<b>Prototype 4</b>	<b>Prototype 5</b>
<b>Income Target for Pricing BMR Units</b>	Detached Single Family	Small Lot Single Family/ Townhomes	Condominium	Lower Density Rental Apartments	Higher Density Rental Apartments
30% AMI (Extremely Low)	n/a	n/a	n/a	\$116,806	\$116,806
50% AMI (Very Low)	n/a	n/a	n/a	\$211,968	\$211,968
60% AMI (Low)*	n/a	n/a	n/a	\$260,224	\$260,224
90% AMI (Median)*	\$483,270	\$344,879	\$322,981	n/a	n/a
110% AMI (Moderate)*	\$612,662	\$462,872	\$435,374	n/a	n/a

\*Per policy, the maximum price for BMR units for low income is set at 60% AMI, median income at 90% AMI, and moderate income at 110% AMI.

Note: All values are weighted averages, according to each prototype's unit mix. Affordable sale prices and rents were provided by the City of Cupertino and Hello Housing, based on 2018 Santa Clara County income and rent limits, published by the California Tax Credit Allocation Committee, and the 2018 Santa Clara County maximum utility allowance, published by HUD.

#### RETAIL COMMERCIAL

Retail lease assumptions were developed from Costar listings for comparable ground floor retail spaces in Cupertino, with capitalization rates reported by CBRE for the San José Metro Area. The annual net operating income and capitalized value were calculated based on the assumptions shown in Figure 9.

**FIGURE 9. RETAIL REVENUE ASSUMPTIONS AND CAPITALIZED VALUE**

	<b>Unit</b>	<b>New Retail (NNN)</b>
<u>Assumptions</u>		
Monthly Rent, Triple Net (a)	Per SF	\$4.25
Vacancy	Percent	10%
Operating Expenses	Percent	Pass through
Capitalization Rate	Percent	7.00%
<u>Capitalized Value</u>		
Gross Annual Retail Income	Per SF	\$51.00
Less Retail Vacancy	Per SF	-\$5.10
Less Operating Expenses	Per SF	\$0.00
Annual Net Operating Income	Per SF	\$45.90
<b>Capitalized Value</b>	<b>Per SF</b>	<b>\$655.71</b>

(a) Based on recent lease transactions in Cupertino for recently constructed ground-floor retail. Under a triple net lease (NNN) the tenant pays operating expenses, including real estate taxes, building insurance, and maintenance (the three "nets") on the property in addition to the rents.

(b) Based on the CBRE H1 2018 Cap Rate Survey. Cap rates for the San José Metropolitan Area were between 4.5% to 5.5% for (Class A) and 6.25% to 7.25% (Class B) for Neighborhood Retail.

Source: CBRE, 2018; Costar, 2018; Strategic Economics, 2018.

## DEVELOPMENT COSTS

The development costs incorporated into the pro forma analysis include land costs, hard costs (construction materials and labor), soft costs, and financing costs. Cost assumptions are summarized in Figure 10 and described below.

### LAND COSTS

A critical factor for development feasibility is the cost of land. To determine the market value of sites zoned for residential use in Cupertino, Strategic Economics interviewed developers and reviewed recent pro formas for similar development projects in Cupertino and nearby communities. Recognizing that one of the key factors that drives the value of the site is the permitted density, this analysis assumes that sites zoned for single family detached homes are valued at \$9 million per acre (\$207 per square foot), while sites zoned for higher-density housing are valued at \$10 million per acre (\$230 per square foot).

Note that these values are approximations for the purposes of the feasibility analysis; in reality, the value of any particular site is likely to vary based on its location, amenities, and property owner expectations.

### HARD COSTS

Hard costs are based on Strategic Economics' review of pro formas for similar development projects, as well as interviews with developers active in Cupertino and surrounding cities. The assumptions for hard costs, shown in Figure 10, include estimates for basic site improvements and construction costs for residential areas, retail areas, and parking structures.

It should be noted that construction costs have been escalating rapidly in the Bay Area in the last several years<sup>14</sup>; project feasibility is highly sensitive to changes in construction cost assumptions.

### SOFT COSTS AND FINANCING COSTS

Soft costs include items such as architectural fees, engineering fees, insurance, taxes, legal fees, accounting fees, marketing costs, developer overhead, and city fees, as shown in Figure 10. City fees and other development impact fees were calculated for the individual prototypes based on data provided by City staff. Detailed fee calculations are shown in Figure 21. Other soft costs were estimated based on standard industry ratios, calculated as a percentage of hard costs.

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<sup>14</sup> Turner Center for Housing Innovation, UC Berkeley. Understanding the Drivers of Rising Construction Costs in California (Ongoing Research), <https://turnercenter.berkeley.edu/construction-costs>.

FIGURE 10: DEVELOPMENT COST ASSUMPTIONS

	Metric	Estimate
<b>Land Costs</b>		
Land zoned for single-family	per site acre	\$9 million
Land zoned for townhomes/multi-family/mixed-use	per site acre	\$10 million
<b>Hard Costs</b>		
Site Costs (demo, infrastructure, etc.)	per site sq. ft.	\$30
Residential Area		
Single Family (includes 2-car garage)	per gross sq. ft.	\$95
Townhomes (includes 2-car garage)	per gross sq. ft.	\$150
Stacked condominiums (Type V)	per gross sq. ft.	\$275
Stacked apartments (Type V)	per gross sq. ft.	\$235
Higher density apartments (Type 3 modified)	per gross sq. ft.	\$300
Retail Area (Including T.I.)	per gross retail sq. ft.	\$130
Surface parking	per space	\$10,000
Podium parking	per space	\$35,000
<b>Soft Costs</b>		
Architectural, Engineering, Consulting	% of hard costs	6%
Taxes, Insurance, Legal, Accounting	% of hard costs	3%
Other	% of hard costs	3%
Contingency	% of hard costs	5%
Developer Overhead and Fees	% of hard costs	4%
City Permits and Fees (a)		
Prototype 1	per unit	\$153,022
Prototype 2	per unit	\$83,463
Prototype 3	per unit	\$67,755
Prototype 4	per unit	\$65,949
Prototype 5	per unit	\$67,241
<b>Financing Costs</b>		
Financing	% of hard and soft costs	6%

(a) Includes City fees and permits, school district fees, and sanitation district fees paid on the residential and retail component of each prototype for market rate units. Includes housing mitigation fee for the retail component.

Sources: Developer interviews, 2018; City of Cupertino, 2018; Cupertino School District and Fremont High School District, 2018; Strategic Economics, 2018.

## Key Results

This section summarizes the findings of the financial feasibility analysis under different inclusionary housing scenarios for each prototype. Figure 11 and Figure 12 demonstrate the return obtained by each prototype, compared to the minimum threshold for feasibility. Figure 21 shows development costs by type and detailed City fees. Figure 22 through Figure 26 provide the pro forma results for each prototype.

**Ownership residential development can feasibly support higher inclusionary requirements than rental development.** While growth in apartment rents has reportedly started to plateau in Santa Clara County in the last year, ownership prices (including condominium prices) continue to increase, making it generally more feasible to build ownership projects.<sup>15</sup>

**Detached single-family development (Prototype 1) can support an inclusionary requirement of 15%, 20%, or the payment of Housing Mitigation Fees.** As shown in Figure 11, the single-family detached Prototype 1 shows positive project revenues for Scenarios 1, 2, and 4, achieving a return on cost (ROC) well above the minimum threshold of 10%. Recent sales prices of newly constructed single-family homes in Cupertino are sufficient to offset development costs as well as support inclusionary requirements or the payment of Housing Mitigation Fees. However, the single-family detached prototype cannot support an inclusionary requirement of 25% (Scenario 3), which generates a return of less than 1%. Figure 22 provides more detailed pro forma results for this prototype.

**Small lot/townhome development (Prototype 2) can also support all inclusionary requirement of 15%, 20%, or the payment of Housing Mitigation Fees.** As shown in Figure 11, Prototype 2 shows positive project revenues for Scenarios 1, 2, and 4, achieving a return exceeding the minimum threshold of 15% required for feasibility. Although there has been limited townhome construction in recent years in Cupertino, recent townhome re-sales suggest that prices for new construction would generate sufficient revenues to offset development costs as well as support any inclusionary requirement or the payment of Housing Mitigation Fees. Figure 23 provides more detailed pro forma results for this prototype.

**A mixed-use condominium prototype (Prototype 3) can support inclusionary requirements of 15%, 20%, or the payment of Housing Mitigation Fees.** As shown in Figure 11, Prototype 3 shows positive project revenues for Scenarios 1, 2, and 4, achieving a return well above the minimum threshold of 15%. Despite the lack of recent condominium construction in Cupertino, condominium re-sales suggest that prices for new construction would support any of the scenarios that impose an inclusionary requirement or the payment of in-lieu fees. Figure 24 provides more detailed pro forma results for this prototype.

**The lower density mixed-use apartment prototype (Prototype 4) is nearly feasible as a 100% market-rate project.** Without any BMR requirements, the lower density rental prototype achieves a yield on cost of 4.5%, below the minimum requirement of 4.75%, as shown in Figure 12. The lower density rental prototype does not generate sufficient revenues to support inclusionary requirements or in-lieu fees under current rents and costs. Figure 25 provides the pro forma for this prototype.

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<sup>15</sup> Mercury News, Louis Hansen, May 16, 2018. Bay Area condo market heats up as alternative to pricey homes. <https://www.mercurynews.com/2018/05/16/bay-area-condo-market-heats-up-as-alternative-to-pricier-homes/>

**The higher density rental multifamily prototype (Prototype 5) can support Housing Mitigation Fee payments (Scenario 4) but cannot feasibly provide inclusionary BMR units under current market rents, construction costs, and land costs.** Prototype 5 achieves a higher YOC than Prototype 4, largely due to the greater efficiencies of a higher density project, and is financially feasible in Scenario 1 and Scenario 4 (see Figure 12). Figure 26 provides more detailed pro forma results.

**The lower density mixed-use apartment prototype (Prototype 4) can feasibly provide up to 15% inclusionary BMR units if it could command 15% higher revenues or if construction and land costs were reduced by 15%.** If a lower density rental project were able to achieve higher revenues (15% higher) on the apartment units and on the ground-floor retail space, as shown in Figure 13 and Figure 14, the project could feasibly accommodate an inclusionary requirement of 15% BMR units. Alternatively, if a development project were able to secure a construction bid and purchase a site that reduced these costs by 15%, the lower density mixed-use apartment prototype could feasibly provide 15% inclusionary BMR units (see Figure 15 and Figure 16).

**The higher density mixed-use apartment prototype (Prototype 5) can feasibly provide inclusionary BMR units if it can command 10% higher revenues or if construction and land costs were reduced by 5%.** If a higher density rental project can achieve 10% higher rents on the apartments and retail space, the project can feasibly accommodate an inclusionary requirement of 15% BMR units (see Figure 17 and Figure 18). In another scenario, if a higher density mixed-use apartment could secure a construction bid and site that is 5% less expensive, this prototype could also feasibly provide 15% inclusionary BMR units (see Figure 19 and Figure 20).



**FIGURE 11: RETURN ON COST FOR OWNERSHIP PROTOTYPES BY INCLUSIONARY HOUSING SCENARIO**

Inclusionary Housing Scenarios	Prototype 1:	Prototype 2:	Prototype 3:
	Single Family Detached	Small Lot SF/Townhouse	Condominiums
Minimum Required Return	10-15%	18-20%	18-20%
Scenario 0 (No Requirements)	31%	41%	38%
Scenario 1 (Existing Policy)	15%	26%	23%
Scenario 2 (20% Inclusionary)	14%	21%	19%
Scenario 3 (25% Inclusionary)	1%	16%	14%
Scenario 4 (In-Lieu Fees)	28%	37%	33%

Source: Strategic Economics, 2019.

**FIGURE 12: YIELD ON COST UNDER DIFFERENT INCLUSIONARY HOUSING SCENARIOS FOR MULTI-FAMILY RENTAL PROTOTYPES 4 AND 5**

Inclusionary Housing Scenarios	Prototype 4:	Prototype 5:
	Lower Density Rental	Higher Density Rental
Minimum Required Yield on Cost	4.75%-5.25%	4.75%-5.25%
Scenario 0 (No Requirements)	4.52%	4.93%
Scenario 1 (15% Inclusionary)	4.22%	4.63%
Scenario 2 (20% Inclusionary)	4.10%	4.50%
Scenario 3 (25% Inclusionary)	3.94%	4.34%
Scenario 4 (In Lieu Fees)	4.40%	4.76%

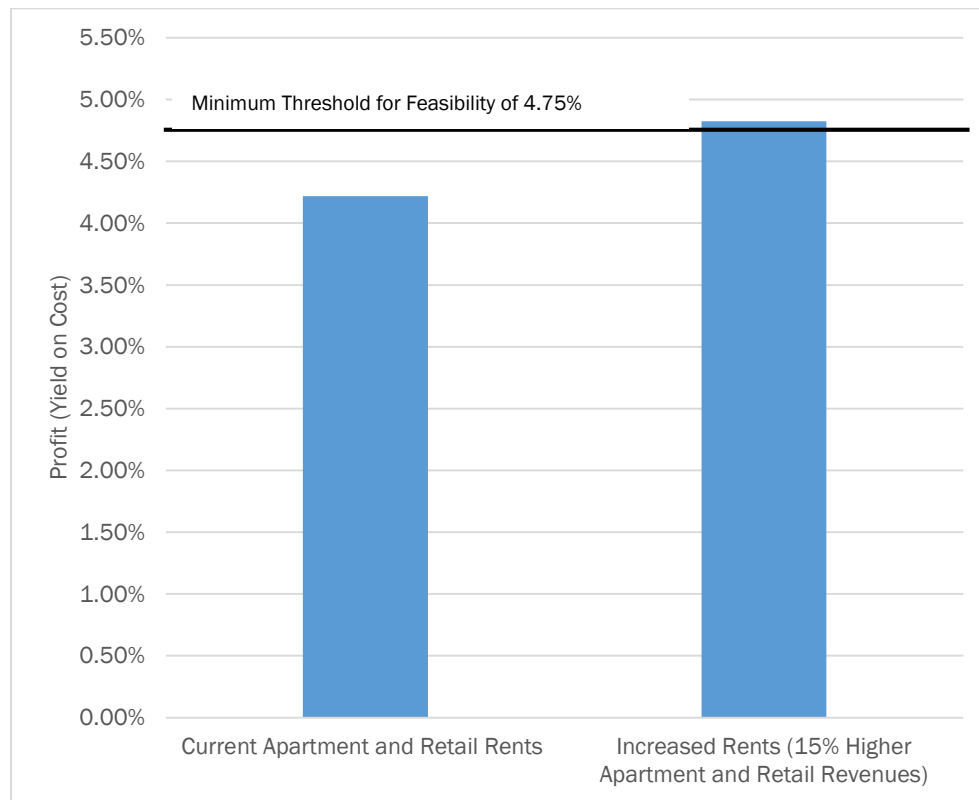
Source: Strategic Economics, 2019.

**FIGURE 13: YIELD ON COST UNDER DIFFERENT REVENUE ASSUMPTIONS FOR LOWER DENSITY MULTI-FAMILY RENTAL (PROTOTYPE 4) WITH 15% BMR REQUIREMENT**

Revenue Assumptions	Monthly Market Rate Apt. Rent per Unit	Monthly Retail Rent per SF	Yield on Cost	Feasibility Results
Current Apartment and Retail Rents	\$4,216	\$4.25	4.22%	Not Feasible
Increased Rents (15% Higher Revenues)	\$4,848	\$4.89	4.82%	Feasible

Source: Strategic Economics, 2019.

**FIGURE 14: FEASIBILITY OF LOWER DENSITY MULTI-FAMILY RENTAL PROTOTYPE (PROTOTYPE 4) WITH 15% INCLUSIONARY BMR REQUIREMENT AND INCREASED REVENUES**



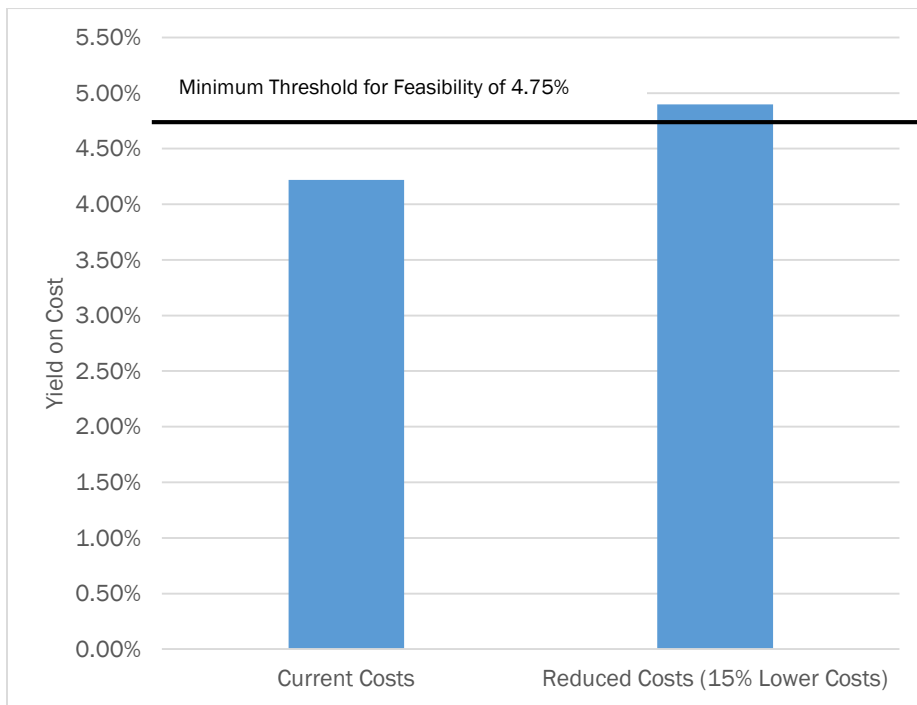
Source: Strategic Economics, 2019.

**FIGURE 15: YIELD ON COST UNDER DIFFERENT COST ASSUMPTIONS FOR LOWER DENSITY MULTI-FAMILY RENTAL (PROTOTYPE 4) WITH 15% BMR REQUIREMENT**

Cost Assumptions	Construction Cost per Unit	Land Cost per Unit	Yield on Cost	Feasibility Results
Current Costs	\$385,958	\$250,000	4.22%	Not Feasible
Reduced Costs (15% Lower Costs)	\$328,064	\$212,500	4.90%	Feasible

Source: Strategic Economics, 2019.

**FIGURE 16: FEASIBILITY RESULTS OF LOWER DENSITY MULTI-FAMILY RENTAL PROTOTYPE (PROTOTYPE 4) WITH 15% INCLUSIONARY BMR REQUIREMENT AND LOWER COSTS**



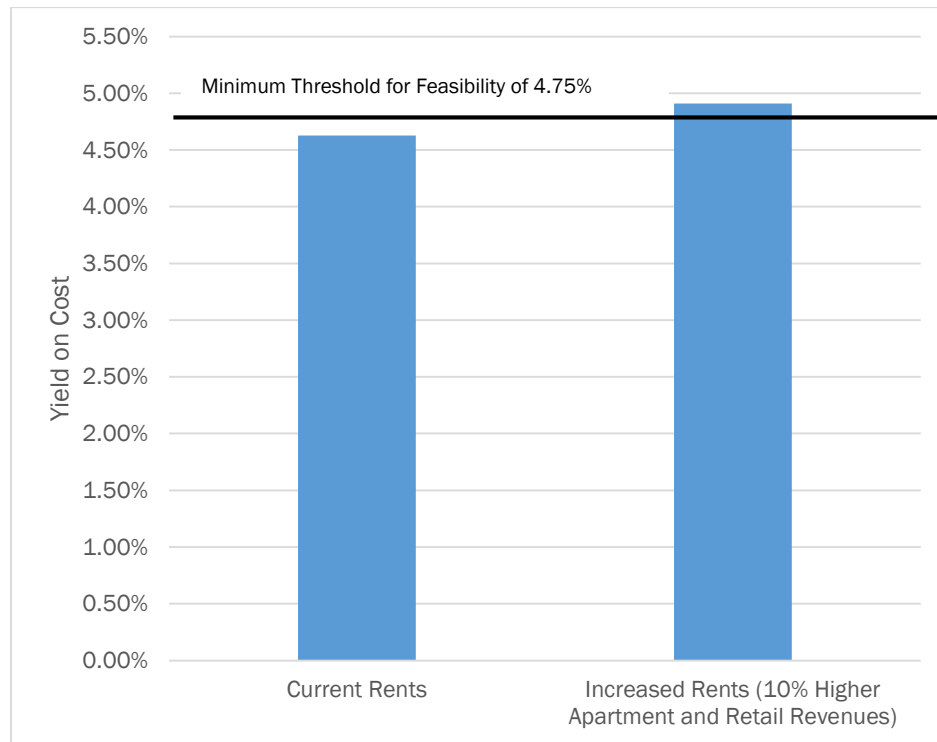
Source: Strategic Economics, 2019.

**FIGURE 17: YIELD ON COST UNDER DIFFERENT REVENUE ASSUMPTIONS FOR HIGHER DENSITY MULTI-FAMILY RENTAL (PROTOTYPE 5) WITH 15% BMR REQUIREMENT**

Revenue Assumptions	Monthly Market Rate Apt. Rent per Unit	Monthly Retail Rent per SF	Yield on Cost	Feasibility Results
Current Rents	\$4,216	\$4.25	4.63%	Not Feasible
Increased Rents (10% Higher Revenues)	\$4,637	\$4.68	4.91%	Feasible

Source: Strategic Economics, 2019.

**FIGURE 18: FEASIBILITY RESULTS OF HIGHER DENSITY MULTI-FAMILY RENTAL PROTOTYPE (PROTOTYPE 5) WITH 15% INCLUSIONARY BMR REQUIREMENT AND HIGHER REVENUES**



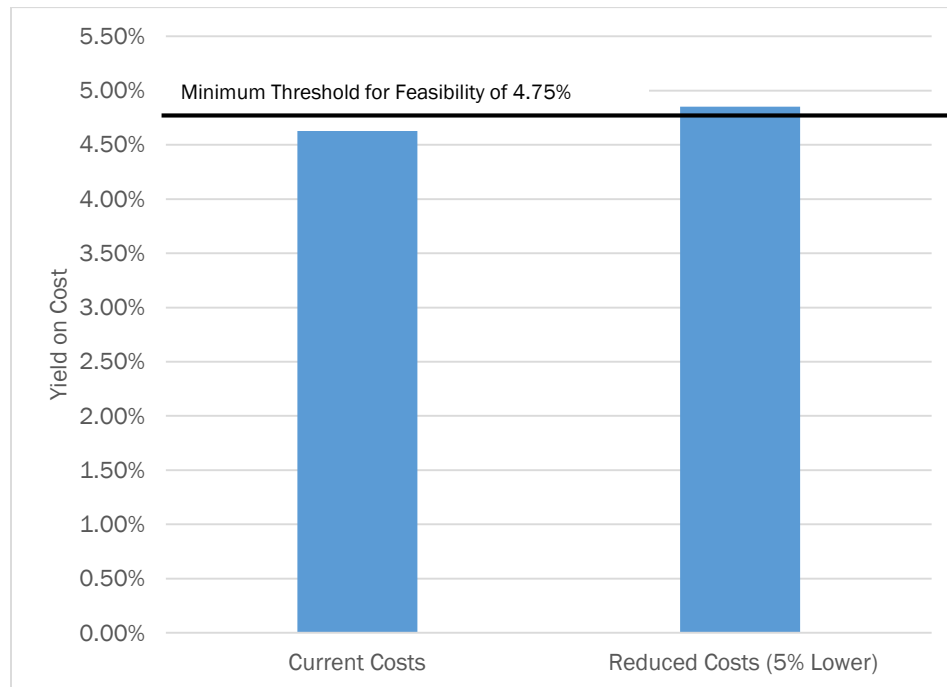
Source: Strategic Economics, 2019.

**FIGURE 19: YIELD ON COST UNDER DIFFERENT COST ASSUMPTIONS FOR HIGHER DENSITY MULTI-FAMILY RENTAL (PROTOTYPE 5) WITH 15% BMR REQUIREMENT**

<b>Cost Assumptions</b>	<b>Construction Cost per Unit</b>	<b>Land Cost per Unit</b>	<b>Yield on Cost</b>	<b>Feasibility Results</b>
Current Costs	\$460,195	\$131,579	4.63%	Not Feasible
Reduced Costs (5% Lower Costs)	\$437,185	\$125,000	4.85%	Feasible

Source: Strategic Economics, 2019.

**FIGURE 20: FEASIBILITY RESULTS OF HIGHER DENSITY MULTI-FAMILY RENTAL PROTOTYPE (PROTOTYPE 5) WITH 15% INCLUSIONARY BMR REQUIREMENT AND LOWER COSTS**



Source: Strategic Economics, 2019.

**FIGURE 21. DETAILED CALCULATION OF THE CITY OF CUPERTINO’S PERMITS AND FEES FOR EACH PROTOTYPE (PER UNIT)**

	<b>Prototype 1</b>	<b>Prototype 2</b>	<b>Prototype 3</b>	<b>Prototype 4</b>	<b>Prototype 5</b>
	Detached Single Family	Small Lot Single Family/Townhome	Condominium	Lower Density Rental Apartments	Higher Density Rental Apartments
<b>Planning Fees</b>					
Planning Applications	\$9,210	\$1,289	\$645	\$400	\$400
CEQA	\$3,571	\$2,447	\$1,223	\$1,223	\$1,223
Consultant Review	\$2,111	\$296	\$148	\$148	\$148
Housing Mitigation Fee (Non-residential only)	\$0	\$0	\$1,188	\$1,188	\$1,782
<b>Public Works Fees</b>					
Transportation Impact Fee	\$6,177	\$3,380	\$4,374	\$4,374	\$4,871
Grading	\$420	\$59	\$29	\$29	\$29
Tract Map	\$1,350	\$189	\$94	\$94	\$94
Plan Check and Inspection	\$543	\$76	\$38	\$38	\$38
Storm Drain Fees	\$4,902	\$501	\$367	\$354	\$312
Parkland Dedication (a)	\$105,000	\$60,000	\$54,000	\$54,000	\$54,000
<b>Building Division Fees</b>					
Building Fees	\$11,428	\$10,592	\$1,664	\$1,133	\$1,199
Construction Tax	\$752	\$752	\$1,075	\$1,075	\$1,237
<b>Other Fees</b>					
School District Fees (b)	\$7,012	\$3,506	\$2,826	\$1,808	\$1,823
Sanitary Sewer District Connection Permit Fee	\$350	\$350	\$70	\$70	\$70
Stormwater Management Fee	\$197	\$28	\$14	\$14	\$14
<b>Estimated City Fees, Total Per Unit</b>	<b>\$153,022</b>	<b>\$83,463</b>	<b>\$67,755</b>	<b>\$65,949</b>	<b>\$67,241</b>

(a) Parkland dedication fees waived for affordable units.

(b) Based on the average of Cupertino School District and Fremont Union High School District school fees.

Sources: City of Cupertino, 2018; Fremont Union School District; Cupertino School District; Cupertino Sanitary Sewer District, 2018.

FIGURE 22: FINANCIAL FEASIBILITY RESULTS FOR SINGLE-FAMILY DETACHED PROTOTYPE 1

	Scenario 0 (No BMR Req.)	Scenario 1 (15% On-Site)	Scenario 2 (20% On-Site)	Scenario 3 (25% On-Site)	Scenario 4 (In-Lieu Fees)
Total Units	7	7	7	7	7
Market Rate Units	7	6	6	5	7
Affordable Units	0	1	1	2	0
Fractional Units	0	0.05	0.4	0	0
<b>Revenues</b>					
Residential Capitalized Value	\$24,501,400	\$21,484,470	\$21,484,470	\$18,596,932	\$24,501,400
Per Unit	\$3,500,200	\$3,069,210	\$3,069,210	\$2,656,705	\$3,500,200
<b>Development Costs</b>					
<b>Land Costs</b>					
Land Costs	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000
Per Unit	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
<b>Direct Costs</b>					
Gross Residential Area (a)	\$2,775,564	\$2,775,564	\$2,775,564	\$2,775,564	\$2,775,564
Subtotal Direct Costs	\$2,775,564	\$2,775,564	\$2,775,564	\$2,775,564	\$2,775,564
Per Unit	\$396,509	\$396,509	\$396,509	\$396,509	\$396,509
Per Gross Sq. Ft.	\$95	\$95	\$95	\$95	\$95
<b>Indirect Costs</b>					
City Fees (b)	\$1,071,155	\$991,537	\$1,169,211	\$861,155	\$1,532,693
Other Soft Costs (c)	\$582,868	\$582,868	\$582,868	\$582,868	\$582,868
Per Unit	\$83,266.92	\$83,266.92	\$83,266.92	\$83,266.92	\$83,266.92
Subtotal Indirect Costs	\$1,654,023	\$1,574,405	\$1,752,079	\$1,444,023	\$2,115,561
Per Unit	\$236,289	\$224,915	\$250,297	\$206,289	\$302,223
<b>Financing</b>					
Financing	\$265,775	\$260,998	\$271,659	\$253,175	\$293,468
Per Unit	\$37,968	\$37,285	\$38,808	\$36,168	\$41,924
<b>Total Development Costs</b>					
Total Development Costs	\$18,695,363	\$18,610,968	\$18,799,302	\$18,472,763	\$19,184,593
Per Unit	\$2,670,766	\$2,658,710	\$2,685,615	\$2,638,966	\$2,740,656
Per Gross Sq. Ft.	\$640	\$637	\$643	\$632	\$657
<b>Feasibility</b>					
Net Revenue (d)	\$5,806,037	\$2,873,502	\$2,685,168	\$124,169	\$5,316,807
Return on Cost (e)	31%	15%	14%	1%	28%

(a) Includes costs for site prep and 2-car parking garage

(b) Figure 14 shows detailed City fees. Includes fractional in-lieu housing mitigation fee for scenario 1 and 2. Parkland dedication fees waived for affordable units.

(c) Includes architectural fees, engineering fees, insurance, taxes, legal fees, accounting fees, marketing costs, and developer overhead

(d) Net revenue is the project total revenue minus total development costs. (d) Return on cost is the net revenue, divided by total development costs.

(e) Return on cost is the net revenue, divided by total development costs.

Source: Strategic Economics, 2018.

FIGURE 23: FINANCIAL FEASIBILITY RESULTS FOR SMALL LOT SINGLE-FAMILY/TOWNHOUSE PROTOTYPE 2

	Scenario 0 (No BMR Req.)	Scenario 1 (15% On-Site)	Scenario 2 (20% On-Site)	Scenario 3 (25% On-Site)	Scenario 4 (In-Lieu Fees)
Total Units	50	50	50	50	50
Market Rate Units	50	42	40	37	50
Affordable Units	0	8	10	13	0
<b>Revenues</b>					
Residential Capitalized Value	\$89,725,000	\$79,265,818	\$75,818,755	\$72,312,696	\$89,725,000
Retail Capitalized Value	\$0	\$0	\$0	\$0	\$0
Total Capitalized Value	\$89,725,000	\$79,265,818	\$75,818,755	\$72,312,696	\$89,725,000
<i>Per Unit</i>	\$1,794,500	\$1,585,316	\$1,516,375	\$1,446,254	\$1,794,500
<b>Development Costs</b>					
<b>Land Costs</b>					
Land Costs	\$33,333,333	\$33,333,333	\$33,333,333	\$33,333,333	\$33,333,333
<i>Per Unit</i>	\$666,667	\$666,667	\$666,667	\$666,667	\$666,667
<b>Direct Costs</b>					
Site Prep/Demo	\$4,356,000	\$4,356,000	\$4,356,000	\$4,356,000	\$4,356,000
Gross Residential Area (a)	\$15,651,677	\$15,651,677	\$15,651,677	\$15,651,677	\$15,651,677
Subtotal Direct Costs	\$20,007,677	\$20,007,677	\$20,007,677	\$20,007,677	\$20,007,677
<i>Per Unit</i>	\$400,154	\$400,154	\$400,154	\$400,154	\$400,154
<i>Per Gross Sq. Ft.</i>	\$192	\$192	\$192	\$192	\$192
<b>Indirect Costs</b>					
City Fees (b)	\$4,173,154	\$3,693,154	\$3,573,154	\$3,393,154	\$5,986,154
Other Soft Costs (c)	\$4,201,612	\$4,201,612	\$4,201,612	\$4,201,612	\$4,201,612
<i>Per Unit</i>	\$84,032	\$84,032	\$84,032	\$84,032	\$84,032
Subtotal Indirect Costs	\$8,374,767	\$7,894,767	\$7,774,767	\$7,594,767	\$10,187,767
<i>Per Unit</i>	\$167,495	\$157,895	\$155,495	\$151,895	\$203,755
<b>Financing</b>					
	\$1,702,947	\$1,674,147	\$1,666,947	\$1,656,147	\$1,811,727
<i>Per Unit</i>	\$34,059	\$33,483	\$33,339	\$33,123	\$36,235
<b>Total Development Costs</b>					
	\$63,418,723	\$62,909,923	\$62,782,723	\$62,591,923	\$65,340,503
<i>Per Unit</i>	\$1,268,374	\$1,258,198	\$1,255,654	\$1,251,838	\$1,306,810
<i>Per Gross Sq. Ft.</i>	\$608	\$603	\$602	\$600	\$626
<b>Feasibility</b>					
Net Revenue (d)	\$26,306,277	\$16,355,895	\$13,036,032	\$9,720,772	\$24,384,497
Return on Cost (e)	41%	26%	21%	16%	37%

(a) Includes 2-car parking garage

(b) Figure 14 shows applicable city fees. Only Scenario 4 pays in-lieu housing mitigation fees. Parkland dedication fees waived for affordable units.

(c) Includes architectural fees, engineering fees, insurance, taxes, legal fees, accounting fees, marketing costs, and developer overhead

(d) Net revenue is the project total revenue minus total development costs. (d) Return on cost is the net revenue, divided by total development costs.

(e) Return on cost is the net revenue, divided by total development costs.

Source: Strategic Economics, 2018.



FIGURE 24: FINANCIAL FEASIBILITY RESULTS FOR CONDOMINIUM PROTOTYPE 3

	Scenario 0 (No BMR Req.)	Scenario 1 (15% On-Site)	Scenario 2 (20% On-Site)	Scenario 3 (25% On-Site)	Scenario 4 (In-Lieu Fees)
Total Units	100	100	100	100	100
Market Rate Units	100	85	80	75	100
Affordable Units	0	15	20	25	0
<b>Revenues</b>					
Residential Capitalized Value	\$154,250,000	\$136,743,959	\$130,983,540	\$125,110,729	\$154,250,000
Retail Capitalized Value	\$6,557,143	\$6,557,143	\$6,557,143	\$6,557,143	\$6,557,143
Total Capitalized Value	\$160,807,143	\$143,301,101	\$137,540,683	\$131,667,871	\$160,807,143
Per Unit	\$1,608,071	\$1,433,011	\$1,375,407	\$1,316,679	\$1,608,071
<b>Development Costs</b>					
<b>Land Costs</b>					
Land Costs	\$28,571,429	\$28,571,429	\$28,571,429	\$28,571,429	\$28,571,429
Per Unit	\$285,714	\$285,714	\$285,714	\$285,714	\$285,714
<b>Direct Costs</b>					
Site Prep/Demo	\$3,733,714	\$3,733,714	\$3,733,714	\$3,733,714	\$3,733,714
Gross Residential Area	\$50,703,125	\$50,703,125	\$50,703,125	\$50,703,125	\$50,703,125
Gross Retail Area	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000
Parking	\$7,560,000	\$7,560,000	\$7,560,000	\$7,560,000	\$7,560,000
<b>Subtotal Direct Costs</b>	<b>\$63,296,839</b>	<b>\$63,296,839</b>	<b>\$63,296,839</b>	<b>\$63,296,839</b>	<b>\$63,296,839</b>
Per Unit	\$632,968	\$632,968	\$632,968	\$632,968	\$632,968
Per Gross Sq. Ft.	\$343	\$343	\$343	\$343	\$343
<b>Indirect Costs</b>					
City Fees (a)	\$6,775,479	\$5,965,479	\$5,695,479	\$5,425,479	\$10,398,879
Other Soft Costs (b)	\$13,292,336	\$13,292,336	\$13,292,336	\$13,292,336	\$13,292,336
Per Unit	\$132,923	\$132,923	\$132,923	\$132,923	\$132,923
<b>Subtotal Indirect Costs</b>	<b>\$20,067,815</b>	<b>\$19,257,815</b>	<b>\$18,987,815</b>	<b>\$18,717,815</b>	<b>\$23,572,415</b>
Per Unit	\$200,678	\$192,578	\$189,878	\$187,178	\$235,724
<b>Financing</b>	<b>\$5,001,879</b>	<b>\$4,953,279</b>	<b>\$4,937,079</b>	<b>\$4,920,879</b>	<b>\$5,212,155</b>
Per Unit	\$50,019	\$49,533	\$49,371	\$49,209	\$52,122
<b>Total Development Costs</b>	<b>\$116,937,963</b>	<b>\$116,079,363</b>	<b>\$115,793,163</b>	<b>\$115,506,963</b>	<b>\$120,652,839</b>
Per Unit	\$1,169,380	\$1,160,794	\$1,157,932	\$1,155,070	\$1,206,528
Per Gross Sq. Ft.	\$634	\$630	\$628	\$626	\$654
<b>Feasibility</b>					
Net Revenue (c)	\$43,869,180	\$27,221,739	\$21,747,520	\$16,160,909	\$40,154,304
Return on Cost (d)	38%	23%	19%	14%	33%

(a) Figure 14 shows detailed city fees. In-lieu housing mitigation fees apply to non-residential sq. ft. and Scenario 4. Parkland dedication fees waived for affordable units.

(b) Includes architectural fees, engineering fees, insurance, taxes, legal fees, accounting fees, marketing costs, and developer overhead.

(c) Net revenue is the project total revenue minus total development costs.

(d) Return on cost is the net revenue, divided by total development costs.

Source: Strategic Economics, 2018.

FIGURE 25: FINANCIAL FEASIBILITY RESULTS FOR LOWER DENSITY RENTAL APARTMENTS PROTOTYPE 4

	Scenario 0 (No BMR Req.)	Scenario 1 (15% On-Site)	Scenario 2 (20% On-Site)	Scenario 3 (25% On-Site)	Scenario 4 (In-Lieu Fees)
Total Units	100	100	100	100	100
Market Rate Units	100	85	80	75	100
Affordable Units	0	15	20	25	0
<b>Revenues</b>					
Residential Net Operating Income	\$3,288,285	\$2,942,477	\$2,831,310	\$2,691,717	\$3,288,285
Retail Net Operating Income	\$459,000	\$459,000	\$459,000	\$459,000	\$459,000
Total Net Operating Income	\$3,747,285	\$3,401,477	\$3,290,310	\$3,150,717	\$3,747,285
Total Capitalized Value	\$83,928,555	\$75,791,903	\$73,176,197	\$69,891,657	\$83,928,555
<i>Per Unit</i>	\$839,286	\$757,919	\$731,762	\$698,917	\$839,286
<b>Development Costs</b>					
<b>Land Costs</b>					
Land Costs	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000	\$25,000,000
<i>Per Unit</i>	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
<b>Direct Costs</b>					
Site Prep/Demo	\$3,267,000	\$3,267,000	\$3,267,000	\$3,267,000	\$3,267,000
Gross Residential Area	\$27,553,750	\$27,553,750	\$27,553,750	\$27,553,750	\$27,553,750
Gross Retail Area	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000
Parking	\$7,560,000	\$6,475,000	\$6,475,000	\$6,475,000	\$7,560,000
<b>Subtotal Direct Costs</b>	<b>\$39,680,750</b>	<b>\$38,595,750</b>	<b>\$38,595,750</b>	<b>\$38,595,750</b>	<b>\$39,680,750</b>
<i>Per Unit</i>	\$396,808	\$385,958	\$385,958	\$385,958	\$396,808
<i>Per Gross Sq. Ft.</i>	\$338	\$329	\$329	\$329	\$338
<b>Indirect Costs</b>					
City Fees (a)	\$6,594,875	\$5,784,875	\$5,514,875	\$5,244,875	\$8,942,363
Other Soft Costs (b)	\$8,332,958	\$8,105,108	\$8,105,108	\$8,105,108	\$8,332,958
<i>Per Unit</i>	\$83,329.58	\$81,051.08	\$81,051.08	\$81,051.08	\$83,329.58
<b>Subtotal Indirect Costs</b>	<b>\$14,927,832</b>	<b>\$13,889,982</b>	<b>\$13,619,982</b>	<b>\$13,349,982</b>	<b>\$17,156,520</b>
<i>Per Unit</i>	\$149,278	\$138,900	\$136,200	\$133,500	\$171,565
<b>Financing</b>					
<i>Per Unit</i>	\$3,276,515	\$3,149,144	\$3,132,944	\$3,116,744	\$3,410,236
<i>Per Unit</i>	\$32,765	\$31,491	\$31,329	\$31,167	\$34,102
<b>Total Development Costs</b>	<b>\$82,885,097</b>	<b>\$80,634,876</b>	<b>\$80,348,676</b>	<b>\$80,062,476</b>	<b>\$85,247,506</b>
<i>Per Unit</i>	\$828,851	\$806,349	\$803,487	\$800,625	\$852,475
<i>Per Gross Sq. Ft.</i>	\$707	\$688	\$685	\$683	\$727
<b>Feasibility</b>					
Net Revenue (c)	\$1,043,457	(\$4,842,973)	(\$7,172,479)	(\$10,170,819)	(\$1,318,952)
Yield on Cost (d)	4.5%	4.2%	4.1%	3.9%	4.4%

(a) Appendix shows detailed city fees. Excludes affordable housing mitigation in-lieu fee, except in Scenario 4. Parkland dedication fees waived for affordable units.

(b) Includes architectural fees, engineering fees, insurance, taxes, legal fees, accounting fees, marketing costs, and developer overhead.

(c) Net revenue is the project total revenue minus total development costs.

(d) Yield on cost is the total project net operating income divided by total development costs.

Source: Strategic Economics, 2018.

FIGURE 26: FINANCIAL FEASIBILITY RESULTS FOR HIGHER DENSITY RENTAL APARTMENTS PROTOTYPE 5

	Scenario 0 (No BMR Req.)	Scenario 1 (15% On-Site)	Scenario 2 (20% On-Site)	Scenario 3 (25% On-Site)	Scenario 4 (In-Lieu Fees)
<b>Total Units</b>	100	100	100	100	100
Market Rate Units	100	85	80	75	100
Affordable Units	0	15	20	25	0
<b>Revenues</b>					
Residential Net Operating Income	\$3,288,285	\$2,942,477	\$2,831,310	\$2,691,717	\$3,288,285
Retail Net Operating Income	\$688,500	\$688,500	\$688,500	\$688,500	\$688,500
Total Net Operating Income	\$3,976,785	\$3,630,977	\$3,519,810	\$3,380,217	\$3,976,785
Total Capitalized Value	\$87,207,126	\$79,070,475	\$76,454,769	\$73,170,229	\$87,207,126
<i>Per Unit</i>	\$872,071	\$790,705	\$764,548	\$731,702	\$872,071
<b>Development Costs</b>					
<b>Land Costs</b>					
Land Costs	\$13,157,895	\$13,157,895	\$13,157,895	\$13,157,895	\$13,157,895
<i>Per Unit</i>	\$131,579	\$131,579	\$131,579	\$131,579	\$131,579
<b>Direct Costs</b>					
Site Prep/Demo	\$1,719,474	\$1,719,474	\$1,719,474	\$1,719,474	\$1,719,474
Gross Residential Area	\$35,175,000	\$35,175,000	\$35,175,000	\$35,175,000	\$35,175,000
Gross Retail Area	\$1,950,000	\$1,950,000	\$1,950,000	\$1,950,000	\$1,950,000
Parking	\$8,190,000	\$7,175,000	\$7,175,000	\$7,175,000	\$8,190,000
<b>Subtotal Direct Costs</b>	\$47,034,474	\$46,019,474	\$46,019,474	\$46,019,474	\$47,034,474
<i>Per Unit</i>	\$470,345	\$460,195	\$460,195	\$460,195	\$470,345
<i>Per Gross Sq. Ft.</i>	\$401	\$392	\$392	\$392	\$401
<b>Indirect Costs</b>					
City Fees (a)	\$6,724,069	\$5,914,069	\$5,644,069	\$5,374,069	\$9,688,129
Other Soft Costs (b)	\$9,877,239	\$9,664,089	\$9,664,089	\$9,664,089	\$9,877,239
<i>Per Unit</i>	\$98,772	\$96,641	\$96,641	\$96,641	\$98,772
<b>Subtotal Indirect Costs</b>	\$16,601,308	\$15,578,158	\$15,308,158	\$15,038,158	\$19,387,168
<i>Per Unit</i>	\$166,013	\$155,782	\$153,082	\$150,382	\$193,872
<b>Financing</b>	\$3,818,147	\$3,695,858	\$3,679,658	\$3,663,458	\$3,985,299
<i>Per Unit</i>	\$38,181	\$36,959	\$36,797	\$36,635	\$39,853
<b>Total Development Costs</b>	\$80,611,823	\$78,451,384	\$78,165,184	\$77,878,984	\$83,564,835
<i>Per Unit</i>	\$806,118	\$784,514	\$781,652	\$778,790	\$835,648
<i>Per Gross Sq. Ft.</i>	\$688	\$669	\$667	\$664	\$713
<b>Feasibility</b>					
Net Revenue (c)	\$6,595,303	\$619,090	(\$1,710,416)	(\$4,708,755)	\$3,642,291
Yield on Cost (d)	4.9%	4.6%	4.5%	4.3%	4.8%

(a) Appendix shows detailed city fees. Excludes affordable housing mitigation in-lieu fee, except in Scenario 4. Parkland dedication fees waived for affordable units.

(b) Includes architectural fees, engineering fees, insurance, taxes, legal fees, accounting fees, marketing costs, and developer overhead.

(c) Net revenue is the project total revenue minus total development costs.

(d) Yield on cost is the total project net operating income divided by total development costs.

Source: Strategic Economics, 2018.

## Peer Cities

Strategic Economics researched BMR housing programs in peer cities, including: San Jose, Santa Clara, Campbell, Mountain View, Sunnyvale, and Palo Alto. The key findings from the research are explained below and summarized in Figure 27.

### INCLUSIONARY REQUIREMENTS

As shown in Figure 27, all of the cities have inclusionary requirements for ownership housing. They are typically set at 15%, with the exception of Mountain View and Sunnyvale, which have requirements of 10% and 12.5%, respectively. For rental housing, Palo Alto and Sunnyvale have a housing mitigation fee, but no inclusionary requirements. However, both cities are considering revising their policies on rental housing.

### TARGET INCOME

For inclusionary requirements on ownership housing, all of the peer cities have targeted moderate-income households, roughly defined as between 80 and 120% of AMI. For rental housing, the income target is typically low-income (up to 80% AMI), although San Jose also targets very low-income households (up to 50% AMI). Santa Clara has targeted moderate-income households for both ownership and rental housing requirements.

Cities that charge housing mitigation fees on rental or ownership housing have set their fees based on nexus studies that measure the affordable housing needs of very-low, low-, and moderate-income households.

None of the peer cities have targeted extremely-low income households for their inclusionary requirements. However, city staff from Sunnyvale and San Jose have indicated that they are providing funding to develop housing for extremely-low income households through the revenues they have collected from housing mitigation fees, in-lieu fees, and other housing funds. Local revenues are often combined with Santa Clara County Measure A funds – which are specifically targeted to extremely-low income households – as well as 9% and 4% Low Income Housing Tax Credits (LIHTC) and Section 8 vouchers from the Santa Clara County Housing Authority.

### ALTERNATIVE MEANS OF COMPLIANCE

All of the cities prefer that units are built onsite, but they allow alternative means of complying with inclusionary requirements. Developers can typically satisfy the requirement by providing units off-site, paying in-lieu fees, or dedicating land for affordable housing. However, in some cases, the developer must first demonstrate that the inclusionary requirement is not feasible. For example, the City of Palo Alto requires that the applicant present “substantial evidence to support a finding of infeasibility” and of “feasibility of any proposed alternative.” In other cities, like Mountain View, Sunnyvale, and Santa Clara, developers must receive approval from the City Council for the alternative. In Sunnyvale and San Jose, developers that pursue an alternative to the onsite inclusionary requirement must provide a higher number of affordable units.

FIGURE 27: INCLUSIONARY HOUSING REQUIREMENTS AND HOUSING MITIGATION FEES IN PEER CITIES

City	Inclusionary Requirement		Target Income for BMR Policy		Housing Mitigation Fee/In Lieu Fees		Alternatives to compliance
	Ownership	Rental	Ownership	Rental	Ownership	Rental	
Cupertino	15%	15%	1/2 of BMR units at Median (100% AMI) and 1/2 of BMR units at Moderate (120% AMI)*	60% of BMR units at Very Low (50% AMI) and 40% of BMR units at Low (60% AMI)	-Single family: \$17.82/sf -Small lot single family/Townhome: \$19.60/sf -Multifamily attached: \$23.76/sf	-Multifamily Attached (up to 35 du/ac): \$23.76/sf -Multifamily attached (over 35 du/ac): \$29.70/sf	Onsite units are preferred, but alternatives may be possible with City Council approval. These include: on-site BMR rental units where ownership units or a fee is required; purchase of off-site units to be dedicated/rehabbed as for-sale or rental BMR units; development of off-site units to be dedicated as for-sale or rental BMR units; land for development of affordable housing. An Affordable Housing Plan is required.
Mountain View	10%	15%	Moderate (80 - 120% AMI)	Low (50-80% AMI)	In-lieu fee of 3% of sales price	\$34/sf (applies to fractional units only)	Onsite units are preferred, but City Council can approve other alternatives.
Sunnyvale	12.5%	None	Moderate (Below 120% AMI)	Low (Below 80% AMI)	In-lieu fee of 7% of sales price	\$17/sf	For ownership units, onsite units are preferred. With Council approval, developers may provide alternatives if they result in a higher number of BMR units.
San Jose	15%	15%	Moderate (Below 120% AMI)	9% Mod (80% AMI) 6% VLI (30-50% AMI)	In-lieu fee of \$153,000 per unit.	\$17.41/sf for projects of 3 to 19 units in size	Developers have the option of providing units off-site or paying in-lieu fees, but the affordable housing requirement is 20%, and the target income is lower.
Santa Clara	15%	15%	Moderate (Below 100% AMI)	Moderate (Below 100% AMI)		\$20-\$30/sf, depending on housing type	Alternatives include dedication of land for affordable housing, development of affordable units at an off-site location, or some combination thereof, with approval from City Council through a Development Agreement.
Campbell	15%	15%	Moderate (Below 110% AMI)	Low (Below 70% AMI)	\$34.50/sf for projects of 6 units or less	None	Developers can dedicate land or pay in lieu fees.
Palo Alto	15%	None	2/3 BMR units at 80-100% AMI and 1/3 BMR units at 100-120% AMI	Mod (80-120% AMI) Low (50-80% AMI) VLI (30-50% AMI)	\$50-\$75/sf depending on housing type	\$20/sf	Developers can dedicate land, pay in lieu fees, provide rental units within the ownership project, convert or rehabilitate affordable housing units. They must first demonstrate that the inclusionary requirement is not feasible.

\*Sales prices set at 110% for BMR moderate income unit and 90% for a BMR median income unit.

Source: Interviews with City staff, BMR housing ordinances, Strategic Economics,

### III. NON-RESIDENTIAL LINKAGE FEE

The City is considering updating non-residential fees, otherwise known as commercial linkage fees, on new workplace buildings (office, R&D, hotel, and retail development projects). Linkage fees are used to mitigate the impacts of an increase in affordable housing demand associated with a net increase in worker households, as employees at new non-residential developments seek housing nearby. The funds raised by the linkage fees are deposited into a housing fund specifically reserved for use by a local jurisdiction to increase the supply of affordable housing for the workforce. Linkage fees are one of several funding sources that jurisdictions can use to help meet affordable housing needs of new workers.

The City first adopted linkage fees for office and R&D projects in 1992, and expanded the program to apply to retail and hotel developments in 2004. Following a 2015 nexus study update completed by Keyser Marston Associates, the City amended the fees for all three uses to their current levels—\$23.76 for office/R&D uses, and \$11.88 for hotel and retail uses.<sup>16</sup> This memo report provides updated policy analysis, including a financial feasibility analysis, and a review of current non-residential linkage fees in neighboring cities to establish a recommendation on updated linkage fees in Cupertino.

## Approach

### METHODOLOGY

The financial feasibility of establishing updated non-residential linkage fees in Cupertino was tested using a pro forma model that measures profit for the developer or investor. Yield on cost (YOC) is a commonly used metric indicating the profitability of a non-residential project. The pro forma model tallies all development costs, including land, direct construction costs, indirect costs (including financing), and developer fees. Revenues from lease rates or hotel room rates are the basis for calculating annual income from the new non-residential development. The total operating costs are subtracted from the total revenues to calculate the annual net operating income. The YOC is then estimated by dividing the annual net operating income by the total development costs. The fee levels were then added as an additional development cost to measure the resulting change in the YOC.

### DEVELOPMENT PROTOTYPES

The analysis estimates the feasibility of potential linkage fees for three non-residential prototypes: office/R&D, hotel, and retail. The building characteristics of each development prototype, including size, density (floor-area-ratio), and parking assumptions are based on a review of projects that were recently built, and in planning stages in Cupertino, as well as recently built and pipeline projects in surrounding areas.

Based on the development activity in Cupertino, the following is assumed regarding each prototype:

- Office/R&D: Based on a review of market activity in the City, recent and proposed developments in neighboring cities, it is assumed that the office/R&D development project would be a speculative building serving the tech industry.

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<sup>16</sup> Keyser Marston Associates, "City of Cupertino: Non-residential Jobs-Housing Nexus Analysis," *City of Cupertino*, April 2015.

- Hotel: Newer hotel development projects in Cupertino and surrounding areas are typically upscale, select-service chains that serve business travelers.
- Retail: The retail development prototype is assumed to be a small low-density retail center.

The details regarding the size, density (floor-area ratio), parking, and other key assumptions for each prototype are summarized in Figure 28 below.

**FIGURE 28. DESCRIPTION OF DEVELOPMENT PROTOTYPES**

Prototype Description	Office/R&D	Hotel	Retail
	Class A Office Speculative Building	Select-Service Upscale Business Hotel	Neighborhood Retail Shopping Center
Project Type			
Parcel Size (Sq. Ft.)	174,240	87,120	21,780
Parcel Size (Acres)	4	2	0.5
Total Stories	4	5	1
Floor-Area Ratio (without parking) (a)	1.50	1.20	0.35
Gross Building Area (GSF)	261,360	104,544	7,623
Efficiency Ratio (b)	90%	n/a	90%
Net area (NSF)	235,224	n/a	6,861
Number of rooms	n/a	140	n/a
Total Parking Spaces	825	155	30
Surface	93	70	30
Structured Garage	732	0	0
Underground	0	85	0
Parking Ratio (per room)	n/a	1.1	n/a
Parking Ratio (per 1,000 SF)	3.2	1.5	4.0

**Notes:**

(a) The Floor-Area Ratio (FAR) is often used as a measure of density. In this analysis, it is calculated as the gross building area, not including parking, divided by the parcel size.

(b) The Efficiency Ratio refers to the ratio of gross building area to net leasable area. An efficiency ratio of 90% means that 90% of the gross building area is leasable space. In hotels, revenue is informed by room count, rather than square footage, and therefore the net area is omitted.

## DEVELOPMENT COSTS

The development costs incorporated into the pro forma analysis include hard costs, (construction materials and labor) land costs, soft costs (indirect costs), and financing costs.

### HARD COSTS

Hard costs are based on Strategic Economics' review of pro formas for similar development projects, industry publications, and interviews with developers with projects in Cupertino and nearby jurisdictions. The assumptions for hard costs by prototype are described in Figure 29. They include estimates for basic site improvements, construction costs for the building, and costs for parking by type. In addition, the cost of construction includes a tenant improvement allowance for office/R&D and retail uses, as well as a Furniture, Fixtures, and Equipment (FF&E) allotment for hotel uses, which are both typical for this market.

FIGURE 29. HARD COSTS ASSUMPTIONS BY PROTOTYPE

Cost Category	Metric	Office/R&D	Hotel	Retail
Site Prep	Per Site Sq. Ft.	\$3	\$3	\$3
Construction Costs	Per Gross Building Sq. Ft.	\$300	\$250	\$165
	Per Room		\$342,472	
Parking Costs	Cost per Space			
Surface	\$7,000			
Structured Garage	\$30,000			
Underground	\$60,000			
Land Costs				
Entitled Land	Per Site St. Ft.	\$137.74	\$137.74	\$75.00
	Per Acre	\$6,000,000	\$6,000,000	\$3,267,000
Tenant Improvement Allowance	Per Building Net Sq. Ft.	\$75	n/a	\$35
Furniture, Fixtures, Equipment	Per Room	n/a	\$35,000	n/a

Source: Costar, 2019; HVS Consulting, 2017; review of pro formas for comparable development projects in Santa Clara County; interviews with developers in Cupertino and Santa Clara County, 2019; Strategic Economics, 2019.

#### LAND COSTS

One of the critical cost factors for a non-residential development project is land cost. To determine the land value of sites zoned for commercial uses, Strategic Economics analyzed recent sales transactions and estimates for properties in Santa Clara County and interviewed developers.

Land values are similar for both hotel and office development in the Cupertino area, based on a review of recent transactions. Comparable values for office and hotel sites are shown in Figure 22 below. As shown, the land values typically range from \$120 to \$185 per square foot. One exception in the Cinnabar Street land sale for over \$200 per square foot, which is in the Diridon Station Area, and planned for higher intensity development projects than the prototypes for this study. For the purposes of this analysis, it is assumed that sites zoned for office/R&D or hotel would have a land value of \$138 per square foot (\$6 million per acre).

There are fewer land sales transactions for sites that are entitled for low-density retail development. However, a review of smaller retail property transactions shows that typically the land values are usually under \$100 per square foot. For the purposes of this analysis, it is assumed that a low-density retail site in Cupertino would have a land value of \$75 per square foot (about \$3.2 million per acre).



FIGURE 30. LAND COMPARABLES FOR OFFICE AND HOTEL

Property	Jurisdiction	Year Sold	Acres	Estimated Value Per Sq. Ft. Land	Proposed Land Use
4995 Patrick Henry Dr.	Santa Clara	2016	48.6	\$118	Office
357-387 Cinnabar St. (a)	San Jose	2017	5.6	\$210	Office
767 Mathilda Ave.	Sunnyvale	2017	3.28	\$146	Hotel
10801 N. Wolfe Rd. (b)	Cupertino	2018	1.72	\$185	Hotel

Notes:

(a) 357-387 Cinnabar St. is in the Diridon Station area, and part of Google's transit village, which will have a significantly higher FAR than the office prototype.

(b) Estimated value for 10801 N. Wolfe Rd. is based on valuation from CBRE in 2018 rather than a sales transaction.

Sources: Costar, 2019; CBRE, 2018;

SOFT COSTS

Soft costs (often referred to as indirect costs) include items such as architectural fees, engineering fees, insurance, taxes, legal fees, accounting fees, city fees, and marketing costs. Cupertino's Traffic Impact Fee was calculated based on the City's fee schedule. Other permits and fees were calculated for each prototypes based on estimates generated for new development projects as part of the feasibility analysis for the Vallco Specific Plan. Soft costs were estimated based on standard industry ratios, calculated as a percentage of hard costs. These assumptions are shown in Figure 31.

FIGURE 31. SOFT COST ASSUMPTIONS BY PROTOTYPE

Soft Cost	Metric	Office/R&D	Hotel	Retail
<b>City Permits and Fees</b>				
Traffic Impact Fee				
Office	Per Gross Building Sq. Ft.	\$17.40	\$4.70	\$9.94
Hotel	Per Room		\$3,387	
Other Permits and Fees	Per Gross Building Sq. Ft.	\$48.01	\$38.34	\$57.16
Subtotal City Permits and Fees	Per Gross Building Sq. Ft.	\$65.41	\$43.04	\$67.10
<b>Other Soft Costs</b>				
Arch, Eng., & Consulting	% of Hard Costs	5%	5%	5%
Taxes, Insurance, Legal, Acct	% of Hard Costs	3%	3%	3%
Developer Overhead	% of Hard Costs	4%	4%	4%
Subtotal Other Soft Costs (Excluding Fees)	% of Hard Costs	12%	12%	12%
<b>Construction Financing</b>	% of Hard + Soft Costs	6%	6%	6%

Source: Review of pro formas for comparable development projects in Cupertino, 2019; Individual developer interviews, 2019; Vallco Specific Plan Feasibility Analysis, 2018; Strategic Economics, 2019.

## REVENUES

Revenue assumptions for each prototype are informed by a range of resources, including commercial broker reports, hospitality industry reports, and Costar, as well as from interviews with developers and brokers active in Cupertino and Santa Clara County. They are summarized in Figure 32.

**Office:** For office rents, Strategic Economics reviewed Cupertino's office market and the greater Santa Clara County office market. The largest office development in Cupertino has been the Apple Park project, which is a build-to-suit development specifically intended for Apple. There has been minimal recent speculative office development in Cupertino targeting other users. (Main Street was the only such project completed in the last five years, and most of the space has also been leased to Apple.) Buildings that are leased by Apple typically achieve rents of \$4 per square foot per month (NNN), compared to lease rates of \$4.50-\$5.00 per square foot for tech office buildings in neighboring West San Jose and Sunnyvale (see Figure 33). This is due to the fact that landlords are willing to accept a lower rent for a long-term lease with Apple, due to the low risk associated with a major corporation. According to brokers and developers, there is potential to achieve higher rents for buildings that attract other smaller tech office tenants. For the purposes of this analysis, the rental rate assumption is \$4.50 per square foot per month (NNN). While this rental rate is higher than the current average office rent in Cupertino, it is a reasonable estimate for a new, multi-tenant tech office building in the Silicon Valley.

**Hotel:** The assumptions of hotel revenues are based on a combination of data sources, including interviews with hotel developers in Cupertino, and data from STR, a hotel research firm that tracks hotel room rates, vacancy rates, and revenues per available room for properties in Cupertino (see Figure 32).

**Retail:** Strategic Economics reviewed leases from 2018 and 2019 for retail spaces in Cupertino, as summarized in Figure 34. Average lease rates (asking NNN) were between 4.25 to 5.42. All of these recent leases were for restaurant spaces on Stevens Creek Boulevard. For the purposes of this analysis, it is assumed that the retail space would lease for about \$4 per square foot per month (NNN).

FIGURE 32. REVENUE ASSUMPTIONS BY PROTOTYPE

Prototypes	Metric	Assumption
<b>Retail</b>		
Annual Rent (NNN)	Per Net Sq. Ft.	\$48.00
Vacancy Rate		5%
Operating Expenses	% of Gross Revenue	10%
Annual Net Operating Income	Per Net Sq. Ft.	\$40.80
<b>Office/R&amp;D</b>		
Annual Rent (NNN)	Per Net Sq. Ft.	\$54.00
Vacancy Rate		5%
Operating Expenses	% of Gross Revenue	7%
Annual Net Operating Income	Per Net Sq. Ft.	\$47.52
<b>Hotel</b>		
Gross annual Room Income	RevPAR (a)	\$79,154
Gross Annual Other Revenue (b)	Per Room	\$27,704
Gross Revenue	Per Room	\$106,858
Vacancy Rate (c)		n/a
Operating Expenses	70% of Gross Revenue	(\$74,800)
Annual Net Operating Income		\$32,057

Source: Costar, 2019; STR Trends Report, 2019; Individual developer interviews, 2019; Strategic Economics, 2019.

Notes:

- (a) RevPAR is a measure of revenue per room, calculated as occupancy percentage times average daily rate.
- (b) Other Revenue for hotels based on data from STR Consulting, and from hotel developer interviews.
- (c) Vacancy is already reflected in RevPAR estimate.

FIGURE 33. OFFICE COMPARABLES

Project Name	Address	City	Year Built	Mo. Rent/ Sq. Ft.	Lease Type	Source
Lot 11 @ Santana Row	500 Santana Row	San Jose	2017	\$4.45	NNN	Costar
Santana Row	700 Santana Row	San Jose	2019	\$4.45	NNN	Costar
Bldg. 5 Pathline Park (a)	700 Mary Ave	Sunnyvale	2019	\$4.95	NNN	Costar
Main Street	19319 Stevens Ck.	Cupertino	2016	\$3.75-\$4.00	NNN	Interviews

FIGURE 34: RETAIL COMPARABLES IN CUPERTINO

Project Name	Address	Year Built	Mo. Rent/ Sq. Ft.	Lease Type	Source
The Biltmore	20030-80 Stevens Creek Blvd	2015	\$4.50	NNN (asking)	Costar
Main Street	19369 Stevens Creek Blvd	2016	\$5.42	full service	Costar
Saich Way Station	20803 Stevens Creek Blvd	2015	\$4.25	NNN (asking)	Costar

## YIELD ON COST THRESHOLDS

In order to understand how the introduction of non-residential linkage fees impacts financial feasibility, the yield on cost (YOC) results can be compared to an investor’s expectations of return for each type of development. The YOC thresholds for this analysis were established relative to capitalization rates (cap rates) for each product type in the Bay Area. The cap rate, which is measured by dividing net income generated by a property by the total project value, is a commonly used metric to estimate potential returns.

To ensure that the financial analysis is conservative and does not reflect peak market conditions, the thresholds selected for determining project feasibility are slightly higher than the published cap rates. Office/R&D projects with a YOC of above 6.0% and hotel projects with a YOC above 7.5% were considered feasible in this analysis. Retail projects were considered feasible with a YOC higher than 7.0%. These thresholds are summarized in the Figure 35 below.

**FIGURE 35: YIELD ON COST THRESHOLDS BY PROTOTYPE**

Prototype	Yield on Cost Threshold	Published Cap Rate
Office/R&D (Class AA)	6.0%	4.50%-5.25%
Hotel (Select Service)	7.5%	7.0%-8.0%
Retail	7.0%	6.25-7.25%

Source: CBRE Cap Rate Survey, H2 2018; HVS, 2019; Developer interviews.

## RESULTS

Using the YOC thresholds defined above, the following summarizes the results of the financial feasibility of different linkage fee scenarios for each prototype. The pro formas for each prototype is shown in Figure 39, Figure 40, and Figure 41.

### OFFICE/ R&D

As shown in Figure 36 and Figure 39, the prototypical office/R&D project can support the existing linkage fee of \$23.76 per square foot, which generates a YOC of 6.04%. A linkage fee of \$25 (Scenario 2) would also be feasible. However, the prototype cannot feasibly support a fee higher than \$30 per square foot. At this fee level, the prototype is only marginally feasible, with a yield on cost of 5.99%.

**FIGURE 36. SUMMARY OF FINANCIAL FEASIBILITY OF OFFICE/R&D PROTOTYPE**

Fee Scenario	Fee Level Per Sq. Ft.	Yield on Cost	Office Feasibility
Current Linkage Fee	\$23.76	6.04%	Feasible
Scenario 1 (No Fee)	\$0	6.25%	Feasible
Scenario 2	\$25	6.03%	Feasible
Scenario 3	\$30	5.99%	Marginally Feasible

Note: Office/R&D projects must have a minimum yield on cost of 6.0% to be considered feasible

Source: Strategic Economics, 2019.

### HOTEL

As summarized in Figure 37 for hotel projects, the existing linkage fee of \$11.88 is financially feasible, with a yield of cost of 7.65%. A fee of \$15 per square foot (Scenario 2) is marginally feasible, resulting

in a YOC of 7.46%. A higher linkage fee of \$20 per square foot (Scenario 3) is not feasible (see Figure 40).

**FIGURE 37. SUMMARY OF FINANCIAL FEASIBILITY OF HOTEL PROTOTYPE**

<b>Fee Scenario</b>	<b>Fee Level Per Sq. Ft.</b>	<b>Yield on Cost</b>	<b>Hotel Feasibility</b>
Current Linkage Fee	\$11.88	7.50%	Feasible
Scenario 1 (No Fee)	\$0	7.65%	Feasible
Scenario 2	\$15	7.46%	Marginally Feasible
Scenario 3	\$20	7.39%	Not Feasible

Note: Hotel projects must have a minimum yield on cost of 7.5% to be considered feasible  
Source: Strategic Economics, 2019.

## RETAIL

The financial feasibility analysis shows that retail developments are not financially feasible under current market conditions. Even without a linkage fee (Scenario 1), the retail project achieves a yield on cost that is lower than the threshold of 7.0 % (see Figure 38 and Figure 41). There may be cases in which a retail project could support the current Housing Mitigation Fee if it were combined with other land uses (residential or office) in a mixed-use project.

**FIGURE 38. SUMMARY OF FINANCIAL FEASIBILITY OF RETAIL PROTOTYPE**

<b>Fee Scenario</b>	<b>Fee Level Per Sq. Ft.</b>	<b>Yield on Cost</b>	<b>Retail Feasibility</b>
Current Linkage Fee	\$11.88	6.35%	Not Feasible
Scenario 1 (No Fee)	\$0	6.48%	Not Feasible
Scenario 2	\$15	6.32%	Not Feasible
Scenario 3	\$20	6.26%	Not Feasible

Note: Retail projects must have a minimum yield on cost of 7.0% to be considered feasible.  
Source: Strategic Economics, 2019.

FIGURE 39. OFFICE/R&D PRO FORMA RESULTS

	Office/R&D
<b>Site and Building Characteristics</b>	
Parcel Size (Sq. Ft.)	174,240
Parcel Size (acres)	4.00
Total Stories	4 - 5 stories
Building Type	Steel
FAR (without parking)	1.50
<b>Revenues</b>	
Income	\$12,702,096
Net Operating Income	\$11,177,844
<b>Project Costs</b>	
<b>Land Costs</b>	<b>\$24,000,000</b>
<b>Direct Costs</b>	
Site Prep	\$522,720
Gross Building Area	\$78,408,000
Tenant Improvement Allowance	\$17,641,800
Parking	\$22,611,000
Subtotal Direct Costs	\$119,183,520
per net Sq. Ft.	\$507
per gross Sq. Ft.	\$456
<b>Indirect Costs</b>	
Soft Costs	\$14,302,022
City Permits and Fees (excl. non-residential linkage)	\$12,548,925
Subtotal Indirect Costs	\$26,850,948
<b>Financing Costs</b>	<b>\$8,762,068</b>
<b>Total Development Cost Including Land (TDC)</b>	<b>\$178,796,536</b>
per net Sq. Ft.	\$760
<b>Fee as % of Total Development Cost</b>	
Scenario 1: No Linkage Fee	0%
Scenario 2: Linkage Fee of \$25/Sq. Ft.	2.84%
Scenario 3: Linkage Fee of \$30/Sq. Ft.	3.53%
Current Linkage Fee (\$23.76/Sq. Ft.)	3.36%
<b>Yield on Cost (NOI/TDC)</b>	
Scenario 1: No Linkage Fee	6.25%
Scenario 2: Linkage Fee of \$25/Sq. Ft.	6.03%
Scenario 3: Linkage Fee of \$30/Sq. Ft.	5.99%
Current Linkage Fee (\$23.76/Sq. Ft.)	6.04%

Source: Strategic Economics, 2019.

FIGURE 40. HOTEL PRO FORMA RESULTS

	Hotel
<b>Site and Building Characteristics</b>	
Parcel Size (Sq. Ft.)	87,120
Parcel Size (acres)	2.00
Total Stories	5 stories
Building Type	Concrete
FAR (without parking)	1.20
<b>Revenues</b>	
Income	\$15,494,376
Net Operating Income	\$4,648,313
<b>Project Costs</b>	
<b>Land Costs</b>	\$12,000,000
<b>Direct Costs</b>	
Site Prep	\$261,360
Gross Building Area	\$26,136,000
FF&E	\$5,075,000
Parking	\$5,590,000
Subtotal Direct Costs	\$37,062,360
per gross Sq. Ft.	\$355
<b>Indirect Costs</b>	
Soft Costs	\$4,447,483
City Permits and Fees (excl. non-residential linkage)	\$4,499,679
Subtotal Indirect Costs	\$8,947,162
<b>Financing Costs</b>	\$2,760,571
<b>Total Development Cost Including Land (TDC)</b>	\$60,770,093
per room	\$419,104
<b>Fee as % of Total Development Cost</b>	
Scenario 1: No Linkage Fee	0%
Scenario 2: Linkage Fee of \$15/Sq. Ft.	1.69%
Scenario 3: Linkage Fee of \$20/Sq. Ft.	2.52%
Current Linkage Fee (\$11.88/Sq. Ft.)	2.00%
<b>Yield on Cost (NOI/TDC)</b>	
Scenario 1: No Linkage Fee	7.65%
Scenario 2: Linkage Fee of \$15/Sq. Ft.	7.46%
Scenario 3: Linkage Fee of \$20/Sq. Ft.	7.39%
Current Linkage Fee (\$11.88/Sq. Ft.)	7.50%

Source: Strategic Economics, 2019.

FIGURE 4.1. RETAIL PRO FORMA RESULTS

	<b>Retail</b>
<b>Site and Building Characteristics</b>	
Parcel Size (Sq. Ft.)	21,780
Parcel Size (acres)	0.50
Total Stories	1 story
Building Type	Concrete
FAR (without parking)	0.35
<b>Revenues</b>	
Income	\$329,314
Net Operating Income	\$279,917
<b>Project Costs</b>	
<b>Land Costs</b>	<b>\$1,633,500</b>
<b>Direct Costs</b>	
Site Prep	\$65,340
Gross Building Area	\$1,257,795
Tenant Improvement Allowance	\$266,805
Parking	\$213,444
Subtotal Direct Costs	\$1,803,384
per net Sq. Ft.	\$263
per gross Sq. Ft.	\$237
<b>Indirect Costs</b>	
Soft Costs	\$216,406
City Permits and Fees (excl. non-residential linkage)	\$511,470
Subtotal Indirect Costs	\$727,876
<b>Financing Costs</b>	<b>\$151,876</b>
<b>Total Development Cost Including Land (TDC)</b>	<b>\$4,316,636</b>
per net Sq. Ft.	\$629
<b>Fee as % of Total Development Cost</b>	
Scenario 1: No Linkage Fee	0%
Scenario 2: Linkage Fee of \$15/Sq. Ft.	1.74%
Scenario 3: Linkage Fee of \$20/Sq. Ft.	2.58%
Current Linkage Fee (\$11.88/Sq. Ft.)	2.05%
<b>Yield on Cost (NOI/TDC)</b>	
Scenario 1: No Linkage Fee	6.48%
Scenario 2: Linkage Fee of \$15/Sq. Ft.	6.32%
Scenario 3: Linkage Fee of \$20/Sq. Ft.	6.26%
Current Linkage Fee (\$11.88/Sq. Ft.)	6.35%

Source: Strategic Economics, 2019.



## Peer Cities

A large share of municipalities in San Mateo and Santa Clara counties, particularly cities that are desirable locations for tech and biotech companies, have adopted non-residential linkage fees. Figure 42 summarizes non-residential linkage fees in these jurisdictions.

For office/R&D uses, most cities have set linkage fees between \$15 and \$25 per square foot. The majority of cities have lower fee levels for retail uses, typically in the range of \$5 to \$10 per square foot. The non-residential linkage fees for hotel uses are usually between \$5 and \$15 per square foot. The cities of Palo Alto and San Francisco have higher linkage fees than the rest of the local jurisdictions. These cities also have higher average retail and office rents, and hotel room rates than other Bay Area locations.

Many municipalities provide exemptions or fee reductions for the following types of projects:

- Smaller non-residential projects. For example, non-residential linkage fees do not apply to projects adding less than 5,000 gross square feet in Redwood City, San Carlos, San Mateo City, Colma, or Burlingame. Projects adding less than 3,500 gross square feet in unincorporated land in San Mateo County, and less than 10,000 gross square feet in Menlo Park or East Palo Alto are also exempt. Some cities also tie their fee to building size on a sliding scale. Mountain View offers a 50% fee reduction for office projects under 10,000 square feet, and hotel or retail projects under 25,000 square feet. Sunnyvale also offers a 50% fee discount for the first 25,000 square feet of any project.
- Prevailing wage. Multiple jurisdictions, including Redwood City, San Carlos, San Mateo City, and San Mateo County, provide 25% fee reductions for projects that pay prevailing wage.
- Community-serving facilities. Most cities exempt projects such as hospitals/clinics, child care, public, educational, religious, and/or non-profit uses. Additionally, projects that are replacing property damaged from natural disasters are also often exempted.

It is common for jurisdictions to allow alternative means of complying with non-residential linkage fee requirements. Developers can typically satisfy the requirement by providing affordable housing either on or off-site, or by dedicating land for affordable housing. East Palo Alto and Palo Alto allow for the requirement to be met by either converting market-rate units to affordable units, or by rehabilitating existing affordable units. In most cases, the applicant must first prove that an alternative is necessary. For example, Palo Alto requires that the applicant present “substantial evidence to support a finding of infeasibility” of paying the fee, and of “feasibility of any proposed alternative.”

Many cities have either enacted or updated their fees in the last four years, and fees are typically adjusted annually, based on either ENR’s Construction Cost Index for the San Francisco Bay area, or on the national Consumer Price Index.

FIGURE 42. NON-RESIDENTIAL LINKAGE FEES (PER GROSS S. FT. OF NET NEW SPACE) IN NEARBY CITIES

Jurisdiction	Office/ R&D/ Medical Office	Hotel	Retail/ Restaurant/ Services	Date Fee Was Adopted
Burlingame (a)	\$18 - \$25	\$12	\$7	2017
Colma	\$5	\$5	\$5	2006
Cupertino	\$23.76	\$11.88	\$11.88	2015
East Palo Alto	\$10.72	none	none	2016
Foster City	\$27.50	\$12.50	\$6.25	2016
Los Altos	\$25	\$15	\$15	2018
Menlo Park	\$17.79	\$9.66	\$9.66	2018
Mountain View (a)	\$13.14 - \$26.27	\$1.41 - \$2.81	\$1.41 - \$2.81	2014
Palo Alto	\$36.22	\$21.08	\$21.08	2017
Redwood City	\$20	\$5	\$5	2015
San Bruno	\$12.50	\$12.50	\$6.25	2015
San Carlos	\$20	\$10	\$5	2017
San Francisco (b)	\$19.04 - \$28.57	\$21.39	\$26.66	1996
San Mateo City	\$25	\$10	\$7.50	2016
San Mateo County	\$25	\$10	\$5	2016
Santa Clara City (a)	\$10 - \$20	\$5	\$5	2017
South San Francisco	\$15	\$5	\$2.50	2018
Sunnyvale (a)	\$8.25 - \$16.50	\$8.25	\$8.25	2015

Source: City Ordinances and Fee Schedules; 21 Elements, 2019; Silicon Valley at Home, 2019; Strategic Economics, 2019

Notes:

(a) Fees vary based on project size in four cities: Burlingame, Mountain View, Santa Clara, and Sunnyvale. Hotel and retail projects under 25,000 sq. ft. and office projects under 10,000 sq. ft. in Mountain View are charged the lower fee; In Burlingame, Santa Clara and Sunnyvale, office projects under 50,000 sq. ft., 20,000 sq. ft. and 25,000 sq. ft. respectively pay the lower fee.

(b) San Francisco's fees for R&D are \$19.04 per sq. ft., while its fees for office are \$28.57 per sq. ft. Small Enterprise Workspace and Production/Distribution/Repair fees are \$22.46 per sq. ft.

## IV. KEY TAKEAWAYS

Based on the economic feasibility analysis, Strategic Economics offers the following conclusions regarding the City Council’s direction on the BMR Housing Program.

### Is it financially feasible to increase the inclusionary requirements to 20% or 25%?

- **For ownership housing prototypes, it would be financially feasible to raise the inclusionary requirement from 15% to 20%.** The analysis indicates that the existing requirement of 15% and a higher requirement of 20% are economically feasible for single-family detached, small lot single-family/townhouse, and condominium developments.
- **Ownership housing prototypes can support a higher Housing Mitigation Fee per square foot.** The analysis shows that single-family detached, small lot single-family/townhouse, and condominium developments could support paying the maximum housing mitigation fee (in-lieu fee). The maximum nexus-based fees are \$30.10-\$30.60 per square foot for single-family detached; \$35.60 per square foot for small lot single-family/townhouse development; and \$35.10 per square foot for condominiums. The City’s Housing Mitigation Fees cannot exceed the maximum housing impact fees justified by the 2015 Nexus Study (see Figure 43 below). Exceeding the amounts shown below would require conducting a new nexus study.

FIGURE 43: CURRENT AND MAXIMUM HOUSING MITIGATION FEES BASED ON NEXUS FOR OWNERSHIP PROTOTYPES

Prototype	Current Housing Mitigation Fee	Maximum Nexus-Based Fee	Return on Cost At Maximum Fee	Is Maximum Fee Feasible?
Single-Family Detached	\$17.82	\$30.10-\$30.60	25.5%	Yes
Small Lot SF/ Townhouse	\$19.60	\$35.60	34.2%	Yes
Condominium	\$23.76	\$35.10	31.4%	Yes

Source: Keyser Marston Associates (2015). Residential Below Market Rate Housing Nexus Analysis

- **The rental apartment prototypes cannot feasibly support an inclusionary requirement under current rents and construction/land costs.** The higher density rental housing prototype can support payment of Housing Mitigation Fees of nearly \$30 per square foot, but cannot feasibly provide inclusionary BMR units under today’s rents, construction costs and land costs. However, with increases in rental revenues or decreases in construction costs and land costs, rental housing development could potentially support the current inclusionary requirement of 15%.

### Can the inclusionary housing policy be amended to include units for extremely low income/ disabled persons?

The results from the feasibility analysis show that rental development in Cupertino cannot feasibly provide BMR units on-site under current market conditions. An increase in revenues or a decrease in construction and land costs could make it possible for lower density and higher density rental prototypes to provide 15% inclusionary BMR units for very low income and low income households. Under current market conditions, it is not financially feasible for the inclusionary housing policy to include units for extremely low-income households.

However, there are strategies that could allow the City to generate funding for the development of extremely low-income units, and for disabled persons. City staff from Sunnyvale and San Jose have indicated that they are providing funding to develop housing for extremely low-income households through the revenues they have collected from housing mitigation fees, in-lieu fees, and other housing funds. These local revenues are often combined with Santa Clara County Measure A funds – which are specifically targeted to extremely-low income households – as well as 9% and 4% Low Income Housing Tax Credits (LIHTC) and Section 8 vouchers from the Santa Clara County Housing Authority.

**Can the inclusionary housing policy be amended to include median-income and moderate-income units in rental projects?**

The results from the feasibility analysis show that rental housing development in Cupertino is not feasible with an inclusionary requirement of 15% under current conditions (see Figure 25 and Figure 26). However, a 15% increase in project revenues or a decrease in construction and land costs of 15% could make the low density rental prototype feasible with a 15% BMR requirement. The higher-density rental prototype can feasibly provide Housing Mitigation Fees at the current level. An increase in revenues of 10% or a decrease in construction and land costs of 5% can make the higher density rental prototype feasible with a 15% BMR requirement.

Adding a requirement for median-income and moderate-income units in addition to the existing inclusionary requirement of 15% would not be economically feasible for the rental prototypes. For this reason, it is not financially feasible for the inclusionary housing policy to be amended to also require units for median-income and moderate-income households.

**Can the BMR requirements for non-residential development (linkage fees) be increased for office/R&D, hotel, and retail developments?**

- **For office and R&D development, it would be possible to raise the Housing Mitigation Fees to a level between \$25 to \$30 per square foot.** As shown in Figure 39, the office/R&D prototype is feasible with a non-residential linkage fee of \$25 per square foot. At \$30 per square foot, the prototype achieves a yield on cost that is slightly under the threshold required for feasibility.
- **For hotel development, it may be possible to increase the Housing Mitigation Fees to between \$12 and \$15 per square foot.** At the current fee level of \$11.88, a hotel project is feasible (Figure 37). With a fee of \$15 per square foot, the project achieves a yield on cost that is slightly lower than the threshold for feasibility.
- **The financial feasibility analysis shows that retail developments are not financially feasible under current market conditions.** Even without a Housing Mitigation Fees, the retail project achieves a yield on cost that is lower than the threshold of 7.0% (see Figure 38). There may be cases in which a retail project could support the current Housing Mitigation Fee if it were combined with other land uses (residential or office) in a mixed-use project.

# APPENDIX

The appendix includes additional information on:

- Recent single-family sales for new construction in Cupertino (Figure A-1)
- Recent townhome re-sales in Cupertino (Figure A-2)
- Recent condominium re-sales in Cupertino (Figure A-3)
- Recent rental project comparables in Cupertino and surrounding cities (Figure A-4)

**FIGURE A-1: RECENTLY BUILT SINGLE FAMILY COMPARABLES**

<b>Address</b>	<b>City</b>	<b>Lot Size</b>	<b>Beds</b>	<b>Baths</b>	<b>Price</b>	<b>Square Feet</b>	<b>Price/Sq. Ft.</b>	<b>Year Built</b>
21825 Lomita Ave	Cupertino	9,671	5	4.5	\$3,380,000	3,891	\$869	2016
21800 Almaden Ave	Cupertino	11,098	5	3.5	\$3,220,000	3,555	\$906	2017
10240 Lebanon Dr	Cupertino	9,048	5	4.5	\$4,100,000	3,623	\$1,132	2018
10257 Glencoe Dr	Cupertino	9,375	5	4.5	\$3,593,800	3,727	\$964	2016
7425 Heatherwood Dr	Cupertino	9,396	5	4	\$3,650,000	3,763	\$970	2017
805 Rose Blossom Dr	Cupertino	8,660	5	4.5	\$2,980,000	3,339	\$892	2017
10308 N Stelling Rd	Cupertino	9,612	5	4.5	\$3,350,000	3,769	\$889	2017
10381 Bret Ave	Cupertino	9,374	5	4.5	\$3,270,000	3,727	\$877	2016
20861 Dunbar Dr	Cupertino	9,750	5	3.5	\$3,998,000	3,949	\$1,012	2016
<b>Weighted Average</b>					<b>\$3,512,995</b>	<b>3,705</b>	<b>\$946</b>	

Sources: Redfin, 2018; Strategic Economics, 2018.

Sources: Redfin, 2018; Strategic Economics, 2018.

FIGURE A-2: RECENTLY BUILT TOWNHOME COMPARABLES

Address	City	Lot Size	Beds	Baths	Price	Square Feet	Price/Sq. Ft.	Year Built
10280 Park Green Ln #836	Cupertino	2,176	3	2.5	\$1,760,000	1,670	\$1,054	2006
10281 Torre Ave #817	Cupertino	2,176	3	2.5	\$1,800,000	1,670	\$1,078	2006
10700 Stevens Canyon Rd	Cupertino	1,570	3	2.5	\$1,852,000	2,239	\$827	2007
20652 Gardenside Cir	Cupertino	1,480	3	2.5	\$1,680,000	1,704	\$986	1990
20679 Gardenside Cir	Cupertino	1,440	3	2	\$1,665,000	1,640	\$1,015	1990
23020 Stonebridge St	Cupertino	3,348	3	2	\$1,830,000	2,202	\$831	1980
23030 Stonebridge	Cupertino	3,348	3	2	\$1,698,000	2,202	\$771	1980
22981 Stonebridge	Cupertino	3,348	3	2	\$1,710,000	2,202	\$777	1980
10910 Lucky Oak St	Cupertino	1,312	3	3.5	\$1,780,000	2,082	\$855	1980
10826 Northridge Sq	Cupertino	1,487	3	2	\$1,455,000	1,389	\$1,048	1978
10107 Lamplighter Sq	Cupertino	1,753	3	2.5	\$1,740,000	1,727	\$1,008	1975
10174 Potters Hatch Cmn	Cupertino	1,575	3	2.5	\$1,816,000	1,785	\$1,017	1974
10020 Mossy Oak Ct	Cupertino	1,662	3	2.5	\$1,680,000	1,645	\$1,021	1972
10142 Amador Oak Ct	Cupertino	1,854	3	2.5	\$1,600,000	1,614	\$991	1970
<b>Weighted Averages:</b>								
All years					<b>\$1,728,250</b>	<b>1,841</b>	<b>\$934</b>	
Since 2000					<b>\$1,808,896</b>	<b>1,860</b>	<b>\$970</b>	

Sources: Redfin, 2018; Strategic Economics, 2018.

FIGURE A-2: RECENT RE-SALES OF TOWNHOME COMPARABLES

Address	City	Beds	Baths	Price	Square Feet	Price/Sq. Ft.	Year Built
20488 Stevens Creek Blvd #2207	Cupertino	2	2	\$1,338,000	1,171	\$1,143	2003
20488 Stevens Creek Blvd #2309	Cupertino	2	2	\$1,430,000	1,171	\$1,221	2003
19999 Stevens Creek Blvd #209	Cupertino	2	2	\$1,266,000	1,039	\$1,218	2003
19999 Stevens Creek Blvd #101	Cupertino	2	2	\$1,265,000	1,192	\$1,061	2003
19503 Stevens Creek Blvd #317	Cupertino	2	2	\$1,400,000	1,158	\$1,209	2006
19503 Stevens Creek Blvd #251	Cupertino	2	2	\$1,200,000	1,087	\$1,104	2006
19503 Stevens Creek Blvd #139	Cupertino	2	2	\$1,468,000	1,130	\$1,299	2006
19503 Stevens Creek Blvd #261	Cupertino	2	2	\$1,530,000	1,359	\$1,126	2006
19503 Stevens Creek Blvd #331	Cupertino	3	2	\$1,728,000	1,502	\$1,150	2006
20488 Stevens Creek Blvd #1813	Cupertino	3	3	\$1,930,000	1,766	\$1,093	2003
20488 Stevens Creek Blvd #1401	Cupertino	3	2	\$1,480,000	1,578	\$938	2003
<b>Weighted Averages:</b>							
<b>2-Bd</b>				\$1,367,604	1163	\$1,171	
<b>3-Bd</b>				\$1,720,858	1615	\$1,060	

Sources: Redfin, 2018; Strategic Economics, 2018.



FIGURE A-3: RECENT RE-SALES OF CONDOMINIUM COMPARABLES

Address	City	Beds	Baths	Price	Square Feet	Price/Sq. Ft.	Year Built
20488 Stevens Creek Blvd #2207	Cupertino	2	2	\$1,338,000	1,171	\$1,143	2003
20488 Stevens Creek Blvd #2309	Cupertino	2	2	\$1,430,000	1,171	\$1,221	2003
19999 Stevens Creek Blvd #209	Cupertino	2	2	\$1,266,000	1,039	\$1,218	2003
19999 Stevens Creek Blvd #101	Cupertino	2	2	\$1,265,000	1,192	\$1,061	2003
19503 Stevens Creek Blvd #317	Cupertino	2	2	\$1,400,000	1,158	\$1,209	2006
19503 Stevens Creek Blvd #251	Cupertino	2	2	\$1,200,000	1,087	\$1,104	2006
19503 Stevens Creek Blvd #139	Cupertino	2	2	\$1,468,000	1,130	\$1,299	2006
19503 Stevens Creek Blvd #261	Cupertino	2	2	\$1,530,000	1,359	\$1,126	2006
19503 Stevens Creek Blvd #331	Cupertino	3	2	\$1,728,000	1,502	\$1,150	2006
20488 Stevens Creek Blvd #1813	Cupertino	3	3	\$1,930,000	1,766	\$1,093	2003
20488 Stevens Creek Blvd #1401	Cupertino	3	2	\$1,480,000	1,578	\$938	2003
<b>Weighted Averages:</b>							
<b>2-Bd</b>				\$1,367,604	1163	\$1,171	
<b>3-Bd</b>				\$1,720,858	1615	\$1,060	

Sources: Polaris Pacific, 2018; Redfin, 2018; Strategic Economics, 2018.

FIGURE A-4: RECENTLY BUILT RENTAL COMPARABLES

Project Name	City	Year Built	Stories	Rent Per Unit				Unit Size				Rent Per Sq. Ft.			
				Studios	1-BD	2-BD	3-BD	Studios	1-BD	2-BD	3-BD	Studios	1-BD	2-BD	3-BD
Nineteen 800	Cupertino	2014	6			\$4,026	\$5,477		0	1,339	1,562			\$3.01	\$3.51
Main Street Lofts	Cupertino	2018	4	\$3,508	\$3,995			916	1,044			\$3.83	\$3.83		
Verve	Mountain View	2017	3		\$3,860	\$5,071	\$6,195		737	1,112	1,286		\$5.24	\$4.56	\$4.82
Domus on the Boulevard	Mountain View	2015	4		\$3,868	\$4,876			788	1,061			\$4.91	\$4.60	
Elan Mountain View	Mountain View	2018	4		\$3,860	\$5,071	\$6,195		737	1,112	1,286		\$5.24	\$4.56	\$4.82
Montrose	Mountain View	2016	4		\$3,816	\$5,443			739	1,154			\$5.16	\$4.72	
Madera Apartments	Mountain View	2013	4		\$4,113	\$5,510			849	1,181			\$4.84	\$4.67	
Carmel the Village	Mountain View	2013	5	\$3,282	\$3,623	\$5,866		573	797	1,258		\$5.73	\$4.55	\$4.66	
6tenEAST	Sunnyvale	2017	4	\$3,309	\$3,515	\$4,414	\$5,185	701	808	1,136	1,406	\$4.72	\$4.35	\$3.89	\$3.69
Naya	Sunnyvale	2016	4		\$3,250	\$4,336			693	1,038		-	\$4.69	\$4.18	
481 On Mathilda	Sunnyvale	2016	4	\$3,098	\$3,251	\$4,160		701	781	1,174		\$4.42	\$4.16	\$3.54	
Encasa Apartments	Sunnyvale	2016	3	\$2,854	\$3,356	\$4,235	\$5,854	572	856	1,163	1,688	\$4.99	\$3.92	\$3.64	\$3.47
Anton 1101 2295-2305	Sunnyvale	2015	4	\$3,145	\$3,280	\$4,490		569	704	1,069		\$5.53	\$4.66	\$4.20	
Winchester Blvd	Sunnyvale	2014	3		\$3,371	\$4,248			662	1,005			\$5.09	\$4.23	
Ironworks	Sunnyvale	2017	7		\$3,520	\$4,036	\$5,109	.	784	1,174	1,365		\$4.49	\$3.44	\$3.74
Solstice	Sunnyvale	2013	6	\$2,955	\$3,329	\$4,099		462	778	1,122		\$6.40	\$4.28	\$3.65	
Orchard City Lofts	Campbell	2018	3		\$2,946	\$3,707	\$4,817		607	924	1,237		\$4.85	\$4.01	\$3.89
Revere Campbell	Campbell	2015	5		\$3,662	\$3,912	\$5,219		1,015	1,198	1,233		\$3.61	\$3.27	\$4.23
Monticello Village	Santa Clara	2016	6	\$3,356	\$3,244	\$4,074		920	842	1,251		\$3.65	\$3.85	\$3.26	
			<b>Weighted Average</b>	<b>\$3,225</b>	<b>\$3,568</b>	<b>\$4,541</b>	<b>\$5,516</b>	<b>677</b>	<b>790</b>	<b>1,137</b>	<b>1,383</b>	<b>\$4.71</b>	<b>\$4.49</b>	<b>\$3.98</b>	<b>\$3.98</b>

Sources: Costar, 2018; Strategic Economics, 2018.