

bae urban economics

In-Lieu Fee Study for Compliance with City of Los Angeles Measure JJJ
Affordability Gaps Study

March 13, 2017

bae urban economics

San Francisco

2600 10th St., Suite 300
Berkeley, CA 94710
510.547.9380

Sacramento

803 2nd St., Suite A
Davis, CA 95616
530.750.2195

Los Angeles

448 South Hill St., Suite 701
Los Angeles, CA 90013
213.471.2666

Washington DC

1400 I St. NW, Suite 350
Washington, DC 20005
202.588.8945

New York City

49 West 27th St., Suite 10W
New York, NY 10001
212.683.4486

www.bae1.com

Table of Contents

EXECUTIVE SUMMARY	I
Overview of Measure JJJ Affordable Housing Requirements	i
Rental Affordability Gaps Analysis.....	i
For-Sale Affordability Gaps Analysis.....	ii
Implementation	iv
INTRODUCTION	1
Study Purpose	1
OVERVIEW OF MEASURE JJJ AFFORDABLE HOUSING REQUIREMENTS	2
Affordable Housing Requirements	2
Calculation of In-Lieu Fee	3
RENTAL AFFORDABILITY GAPS ANALYSIS	4
Methodology	4
Findings	11
FOR-SALE AFFORDABILITY GAPS ANALYSIS	12
Methodology	12
Findings	20
IMPLEMENTATION	25
Rental In-Lieu Fee Calculations.....	25
For-Sale In-Lieu Fee Calculations.....	29
APPENDIX A: CONDOMINIUM COST DIFFERENTIALS	34
APPENDIX B: AFFORDABLE SALE PRICE CALCULATIONS	35

EXECUTIVE SUMMARY

City of Los Angeles voters approved Measure JJJ in November 2016, which added provisions to the City’s municipal code to require developers of certain residential projects to either provide affordable units or pay an in-lieu fee. Per the requirements of Measure JJJ, this study identifies the affordability gaps for rental and for-sale units. This executive summary provides a brief overview of the methodology used for this study, which is described in further detail in the full report, and the rental and for-sale affordability gaps.

Overview of Measure JJJ Affordable Housing Requirements

The affordable housing requirements in Measure JJJ apply to projects that receive a discretionary General Plan amendment, zone change, or height district change resulting in either an increase in residential density of more than 35 percent or development of a residential use where residential uses were not previously allowed. The measure requires that rental projects that receive more than a 35 percent increase in density provide at least five percent of the total number of units at rents affordable to extremely low-income households, plus either six percent of units to very low-income households or 15 percent of units to lower-income households. Rental projects receiving discretionary approvals to allow for residential uses where not previously allowed must provide at least five percent of units affordable to extremely low-income households, plus either 11 percent of units affordable to very low-income households or 20 percent of units to lower-income households. For-sale projects must provide at least 11 percent of units affordable to very low-income households, 20 percent affordable to low-income households, or 40 percent affordable to moderate-income households, regardless of whether a project triggers the requirements due to an increase in density or a zone change to a residential use.

Calculation of In-Lieu Fee

Measure JJJ allows developers to meet the affordable housing requirements by building units on site, building units off-site, acquiring and preserving existing at-risk affordable properties, or paying an in-lieu fee. The in-lieu fee amount specified in Measure JJJ is equal to 1.1 times the number of affordable units that the developer would otherwise be required to provide, multiplied by the applicable “affordability gap”, as defined below.

Measure JJJ requires the City to update the Affordability Gaps study every two years for the purpose of updating the in-lieu fee rates.

Rental Affordability Gaps Analysis

Measure JJJ defines the rental affordability gap as the difference between the total development cost by unit type (i.e., number of bedrooms) for recently-completed local affordable housing projects and the amount of permanent financing by unit type and affordability level that each unit can support based on the restricted rent. To calculate the

average per-unit development costs, this study used data from the Los Angeles Housing and Community Investment Department (HCID) on 1,446 units in affordable developments that were completed in Los Angeles between 2013 and 2016. The supportable loan amount is a function of the amount of net operating income (rental income minus expenses and vacancy allowance) that is available to pay loan debt service and the financing terms.

Table ES1 below shows the rental affordability gaps calculated in this study. These figures represent the per unit subsidy amounts that would be necessary to support development of affordable units, after accounting for the permanent loan that an apartment operator could support from rent payments.

**Table ES1: Rental Affordability Gaps,
City of Los Angeles, 2017**

Unit Size	Income Level		
	Extremely Low	Very Low	Lower
Studio	\$377,030	\$347,850	\$333,260
1 Bedroom	\$401,239	\$367,909	\$351,312
2 Bedroom	\$444,448	\$407,103	\$388,363
3 Bedroom	\$493,490	\$451,862	\$431,115

Source: BAE, 2017.

For-Sale Affordability Gaps Analysis

For units that would be offered for sale, Measure JJJ defines the affordability gap as the difference between the median home sale price by unit type and the restricted affordable sale price. Measure JJJ requires separate affordability gap calculations for each of the City’s 37 Community Plan Areas (CPAs) to reflect the difference in median sale prices between each CPA.

This study calculated the median home sale price for single-family homes and condominiums by number of bedrooms for each of the 35 CPAs in Los Angeles that include residential units, using data from CoreLogic on sales that occurred during the second half of 2016.¹ Due to the variation in the housing markets across the City, most CPAs had at least one category of market-rate for-sale units with zero or very few sale records. This analysis discarded all median values based on two sales or fewer, and interpolated the market sale prices for the unit types with fewer than three sale records, including those with no sale records. These sale price interpolations were based on the sale prices for similar units in the same CPA and the typical relationships between sale prices for various unit types across the City.

This study calculated the restricted sale prices for affordable for-sale units for households of various sizes with incomes corresponding to the for-sale affordability requirements in Measure

¹ The Los Angeles World Airport and Port of Los Angeles CPAs have no residential development.

JJJ. The affordable sale prices are a function of household income, which determines the amount that a household can afford to pay for mortgage payments (principal plus interest), property taxes, homeowner's insurance, and any homeowner association fees.

Per the requirements of Measure JJJ, this study calculates the for-sale affordability gaps by subtracting the restricted sale prices at each affordability level by unit size from the median sale price by CPA, unit size, and building type. This results in a total of 1,050 for-sale affordability gaps (35 CPAs x 5 unit sizes x 2 building types x 3 affordability levels).

Table ES2 shows the range in single-family and condominium affordability gaps for each of the CPAs in the City. Table 9 and Table 10 of the full report show all 1,050 for-sale affordability gaps by CPA, number of bedrooms, and single-family/condominium building type. The affordability gap calculations found that market sale prices for some unit types in some CPAs were lower than the restricted sale prices, meaning that market rate sale prices for some unit types are affordable to some lower- and moderate-income households. In these cases, it is unlikely that market rate developers will build new units of that type in those CPA until market conditions support higher market rate sale prices. As the Affordability Gaps Study is updated every two years, the market medians for these areas will be revised to reflect any future increases in market rate sales prices, and the updated affordability gap calculation could indicate a gap between the market sale price and the affordable sale price.

Table ES2: Summary of For-Sale Affordability Gaps, City of Los Angeles, 2017

Community Plan Area	Single-Family		Condominium	
	Minimum	Maximum	Minimum	Maximum
Arleta/Pacoima	\$7,770	\$238,492	\$0	\$257,260
Bel Air/Beverly Crest	\$507,507	\$1,938,047	\$486,858	\$1,278,174
Boyle Heights	\$7,770	\$241,047	\$0	\$213,228
Brentwood/Pacific Palisades	\$934,415	\$2,705,547	\$230,133	\$1,144,784
Canoga Park/Winnetka/Woodland Hills/West Hills	\$164,086	\$478,047	\$82,985	\$309,784
Central City	\$490,474	\$1,275,840	\$296,883	\$852,103
Central City North	\$122,638	\$579,892	\$370,407	\$792,040
Chatsworth/Porter Ranch	\$103,247	\$440,047	\$54,120	\$316,760
Encino/Tarzana	\$256,454	\$1,255,547	\$63,407	\$394,784
Granada Hills/Knollwood	\$44,909	\$335,992	\$14,747	\$277,925
Harbor Gateway	\$69,941	\$422,047	\$43,758	\$419,760
Hollywood	\$458,480	\$1,598,547	\$234,633	\$668,650
Los Angeles World Airport	N/A	N/A	N/A	N/A
Mission Hills/Panorama City/North Hills	\$16,652	\$318,047	\$0	\$303,510
North Hollywood/Valley Village	\$180,961	\$708,047	\$100,896	\$419,912
Northeast Los Angeles	\$152,836	\$548,492	\$71,883	\$464,760
Northridge	\$70,533	\$493,047	\$69,641	\$314,284
Palms/Mar Vista/Del Rey	\$465,171	\$1,293,047	\$220,907	\$757,439
Port of Los Angeles	N/A	N/A	N/A	N/A
Reseda/West Van Nuys	\$59,431	\$338,047	\$31,407	\$289,760
San Pedro	\$80,303	\$490,547	\$63,741	\$398,760
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$431,125	\$1,343,047	\$157,738	\$602,284
Silver Lake/Echo Park/Elysian Valley	\$300,862	\$888,492	\$219,909	\$699,784
South Los Angeles	\$13,691	\$265,047	\$0	\$395,103
Southeast Los Angeles	\$0	\$140,047	\$0	\$111,105
Sun Valley/La Tuna Canyon	\$38,263	\$363,047	\$0	\$399,760
Sunland/Tujunga/Lake View Terrace/Shadow Hills/East La Tuna Canyon	\$58,099	\$478,047	\$71,883	\$344,760
Sylmar	\$10,730	\$284,297	\$6,455	\$349,760
Van Nuys/North Sherman Oaks	\$137,589	\$574,047	\$60,041	\$330,784
Venice	\$759,744	\$2,378,297	\$641,192	\$1,611,376
West Adams/Baldwin Hills/Leimert	\$140,480	\$598,047	\$71,883	\$355,932
West Los Angeles	\$595,138	\$1,543,047	\$313,166	\$859,510
Westchester/Playa Del Rey	\$357,112	\$1,008,492	\$211,028	\$662,774
Westlake	\$87,405	\$387,073	\$155,407	\$486,503
Westwood	\$856,553	\$3,651,047	\$245,383	\$1,166,784
Wilmington/Harbor City	\$0	\$411,047	\$11,350	\$399,760
Wilshire	\$507,507	\$1,465,547	\$81,383	\$633,396

Source: BAE, 2017.

Implementation

Per the requirements of Measure JJJ, in-lieu fee payments for projects subject to the Measure JJJ affordability requirements would be equal to 1.1 times the number of affordable units that a developer would provide to meet the affordability requirements with units on site, multiplied by the applicable affordability gap. Measure JJJ requires affordable units to be comparable to market-rate units in terms of the number of bedrooms and other factors, and therefore this study assumes that the unit mix used to calculate in-lieu fee payments would mirror the unit mix in the project.

Measure JJJ provides multiple options for developers to meet affordability requirements by providing units on site, but does not specify which of these options would be used as the basis

for in-lieu fee calculations. This study assumes that developers will select the in-lieu fee calculation that leads to the lowest fee rate, unless the City adopts policies to require that fee calculations will be based on higher rates.

Rental In-Lieu Fee Calculations

The in-lieu fee payment for rental developments subject to the Measure JJJ affordability requirements would be consistent across projects for each unit size. For projects that are subject to the affordability requirements due to discretionary approvals for a General Plan amendment, zone change, or height district change resulting in an increase in density of more than 35 percent, the in-lieu fees would be as follows:

- \$43,695 per studio unit
- \$46,350 per one-bedroom unit
- \$51,313 per two-bedroom unit
- \$56,965 per three-bedroom unit

These fee rates represent fees in-lieu of providing five percent of units affordable to extremely low-income households and six percent of units affordable to very low-income households. This results in a lower fee amount than a fee in-lieu of providing five percent of units affordable to extremely low-income households and 15 percent of units affordable to lower-income households.

For projects that are subject to the affordability requirements due to discretionary approvals for a General Plan amendment, zone change, or height district change to allow residential uses where not previously allowed, the in-lieu fees would be as follows:

- \$62,826 per studio unit
- \$66,585 per one-bedroom unit
- \$73,704 per two-bedroom unit
- \$81,817 per three-bedroom unit

These fee rates represent fees in-lieu of providing five percent of units affordable to extremely low-income households and 11 percent of units affordable to very low-income households. This results in a lower fee amount than a fee in-lieu of providing five percent of units affordable to extremely low-income households and 20 percent of units affordable to lower-income households.

For-Sale In-Lieu Fee Calculations

The for-sale in-lieu fees vary substantially based on CPA, number of bedrooms, and whether the fee rate reflects a fee in lieu of providing 11 percent of units affordable to very low-income households, 20 percent affordable to lower-income households, or 40 percent affordable to moderate-income households. Depending on the unit mix in a particular project, the lowest and highest for-sale in-lieu fees could be based on any of the three on-site affordability options for for-sale units. Overall, fee rates could vary from a few hundred dollars per market-rate unit to over \$400,000 or more per market-rate unit, assuming developers are able to select the

lowest fee rate based on the various options for compliance through units built on site. The Measure JJJ in-lieu fee formula for for-sale units requires project-by-project in-lieu fee calculations to determine the appropriate fee amounts.

INTRODUCTION

In November 2016, the City of Los Angeles electorate approved Los Angeles Measure JJJ, which adds affordable housing requirements and construction labor standards for new residential development projects with ten units or more seeking zoning changes or General Plan Amendments, along with other provisions. Measure JJJ provides an in-lieu fee option for developers that choose not to provide affordable units directly, and stipulates the basis for calculating the in-lieu fee amount.

Study Purpose

Measure JJJ requires that the City produce a study that identifies the Affordability Gaps for rental and for-sale units, which will be the basis for the calculation of in-lieu fees, within 90 days of the enactment of the ordinance. The City of Los Angeles commissioned BAE to conduct the Affordability Gaps study using the methodology outlined in Measure JJJ.

OVERVIEW OF MEASURE JJJ AFFORDABLE HOUSING REQUIREMENTS

This section provides an overview of the affordable housing requirements in Measure JJJ as they relate to the Affordability Gaps study. Measure JJJ includes a number of provisions in addition to those described below, including requirements for construction contractors to conform to local hire and prevailing wage standards.

Affordable Housing Requirements

Measure JJJ institutes affordable housing requirements for projects that receive a discretionary General Plan amendment, zone change, or height district change resulting in either an increase in residential density of more than 35 percent or development of a residential use where residential uses were not previously allowed. Projects with increases in residential density of less than 35 percent are covered by the California Density Bonus Law, which provides for density bonuses up to 35 percent for projects that provide affordable housing. Table 1 summarizes the Measure JJJ affordability requirements, which are described in further detail below. Since these requirements apply only to those projects seeking these specific discretionary approvals, developers essentially “opt-in” to these requirements in exchange for entitlements for additional residential density.

Table 1: Measure JJJ Affordable Housing Requirements

	Rental Projects	For-Sale Projects
Increase in Residential Density >35%	5% extremely low income and 6% very low income - or - 5% extremely low income and 15% lower income	11% very low income - or - 20% lower income - or - 40% moderate income
Residential Use Where Not Previously Allowed	5% extremely low income and 11% very low income - or - 5% extremely low income and 20% lower income	11% very low income - or - 20% lower income - or - 40% moderate income

Rental Affordability Requirements

Under the provisions of Measure JJJ, rental projects that receive discretionary approvals for General Plan amendments, zone changes, or height district changes resulting in an increase in density of more than 35 percent must provide at least five percent of the total number of units in the project at rents affordable to extremely low-income households, plus either six percent of units to very low-income households or 15 percent of units to lower-income households.

Projects that receive discretionary approvals to allow residential uses in an area where not previously allowed must provide at least five percent of units affordable to extremely low-income households, plus either 11 percent of units affordable to very low-income households or 20 percent of units to lower-income households.²

For-Sale Affordability Requirements

Measure JJJ requires for-sale projects that receive discretionary approvals for more than 35 percent added density or for residential uses where not previously permitted to provide at least 11 percent of units affordable to very low-income households, 20 percent affordable to low-income households, or 40 percent affordable to moderate-income households.³

Alternatives to On-Site Affordable Units

For projects subject to the affordable housing requirements, Measure JJJ provides three alternatives to providing affordable units on site. Developers may satisfy the affordability requirements off site by either constructing new affordable units or acquiring a property with at-risk affordable units and transferring ownership of the property to a non-profit entity, Community Land Trust, or tenant ownership that will preserve the affordability of the units. Both off-site options are subject to specific requirements, including requirements for additional units if the off-site units are more than one-half mile from the site of the project that triggers the affordability requirements. Alternatively, developers may elect to pay an in-lieu fee that accrues to the City's Housing Trust Fund.

Calculation of In-Lieu Fee

Measure JJJ identifies the manner in which the City will calculate the in-lieu fee for projects that elect to pay the fee rather than providing units on or off site. For both rental and for-sale projects, the in-lieu fee is equal to 1.1 times the number of affordable units that the developer would otherwise be required to provide, multiplied by the applicable "affordability gap". According to Measure JJJ, the affordability gap for rental units is the difference between the total affordable unit development cost and the amount of permanent financing that the restricted rents would support. The affordability gap for for-sale units is equal to the difference between the median home sale price and the restricted affordable sale price. The rental and ownership affordability gap calculations are described in further detail in the applicable sections below. Measure JJJ requires the City to update the Affordability Gaps study and resulting in-lieu fees every two years.

² Extremely low-income units target households earning up to 30 percent of the Area Median Income (AMI), very low-income units target households earning up to 50 percent of AMI, and lower-income units target households earning up to 80 percent of AMI. Per the City's policy for density bonus units, the rent limit for lower-income units is set at the rate affordable to households earning 60 percent of AMI, though households earning up to 80 percent of AMI can qualify for lower-income units.

³³ Very low-income units target households earning up to 50 percent of the Area Median Income (AMI), lower-income units target households earning up to 80 percent of AMI, and moderate-income units target households earning up to 120 percent of AMI.

RENTAL AFFORDABILITY GAPS ANALYSIS

BAE calculated the affordability gaps for rental units in accordance with the provisions set forth in Measure JJJ. As mentioned previously, Measure JJJ defines the rental affordability gap as the difference between the total development cost by unit type for recently-completed affordable housing projects and the amount of permanent financing by unit type and affordability level that each unit can support based on the restricted rent.

Methodology

Following is a detailed description of the methodology used to calculate the rental housing affordability gaps, and the associated in-lieu fees.

Affordable Unit Development Cost

Measure JJJ stipulates that the rental affordability gaps will be calculated using total development costs for recently-completed projects funded by the City's Affordable Housing Trust Fund (AHTF), by unit type (i.e., number of bedrooms) and affordability level.

Projects Analyzed

The projects recently funded by the AHTF do not represent the spectrum of apartment unit bedroom sizes or affordability levels and are therefore insufficient to calculate the rental affordability gaps. Since 2013, the City's AHTF (General Fund only) has provided funding for three projects with a total of 193 units, including 133 studios, 58 one-bedroom units, and two two-bedroom managers' units. All three projects consisted of permanent supportive housing. Consequently, data from these projects do not provide information on development costs for projects that include larger units (i.e., units with two or more bedrooms) or projects that serve families or seniors. In addition, because costs can vary substantially between projects, the development costs among the relatively small sample of projects funded by the AHTF may not be representative of typical development costs, even for those unit types included in the sample.

Given the limitations of the data regarding projects that were funded through the AHTF, this study analyzed a larger sample of affordable housing projects built in Los Angeles since 2013. In addition to the data on projects funded by the AHTF, this study also incorporated data on local projects completed with the following other sources of funding: (1) HOME funds, (2) Community Development Block Grant funds (CDBG), (3) Tax Credits and (4) Community Redevelopment funds, among others.

Table 2 below provides a summary of the development cost data from the projects analyzed in this study. These data represent 24 projects with a total of 1,446 units, including 428 studios, 586 one-bedroom units, 241 two-bedroom units, 187 three-bedroom units, and four four-bedroom units. The projects included a mix of family, senior, and permanent supportive

housing. Across all projects analyzed, total development costs averaged \$337 per square foot and approximately \$401,100 per unit.⁴

Table 2: Summary of Affordable Housing Development Cost Data, City of Los Angeles, 2013-2016

Project	Total	Number of Units					Total	Total Dev.	Cost	Avg. Cost
	Sq. Ft.	Studios	1 bdrm	2 bdrm	3 brm	4 brm		Cost (a)	per SF	per Unit
A	76,975	25	53	0	0	0	78	\$23,725,698	\$308	\$304,176
B	69,117	62	32	1	0	0	95	\$29,375,621	\$425	\$309,217
C	86,830	108	0	0	0	0	108	\$33,587,500	\$387	\$310,995
D	121,930	0	102	6	0	0	108	\$37,801,432	\$310	\$350,013
E	82,868	0	28	9	19	4	60	\$21,412,824	\$258	\$356,880
F	51,972	7	48	1	0	0	56	\$20,147,919	\$388	\$359,784
G	35,304	45	5	2	0	0	52	\$18,771,411	\$532	\$360,989
H	91,500	0	10	43	24	0	77	\$27,799,968	\$304	\$361,039
I	30,453	41	4	1	0	0	46	\$17,053,404	\$560	\$370,726
J	103,131	27	23	30	10	0	90	\$36,462,131	\$354	\$405,135
K	131,085	0	2	50	35	0	87	\$35,267,490	\$269	\$405,373
L	74,663	16	51	0	0	0	67	\$27,755,432	\$372	\$414,260
M	63,337	63	0	0	0	0	63	\$26,767,324	\$423	\$424,878
N	69,163	0	31	10	8	0	49	\$21,217,522	\$307	\$433,011
O	85,584	0	27	10	16	0	53	\$23,259,475	\$272	\$438,858
P	31,184	0	32	1	0	0	33	\$14,843,883	\$476	\$449,815
Q	49,405	0	32	7	0	0	39	\$17,740,773	\$359	\$454,892
R	113,660	0	22	20	18	0	60	\$27,340,104	\$241	\$455,668
S	69,608	0	20	9	15	0	44	\$20,224,166	\$291	\$459,640
T	31,716	0	1	12	8	0	21	\$10,732,496	\$338	\$511,071
U	67,598	17	9	13	6	0	45	\$23,888,251	\$353	\$530,850
V	69,765	0	20	8	12	0	40	\$21,550,203	\$309	\$538,755
W	17,122	0	21	0	0	0	21	\$11,791,793	\$689	\$561,514
X	<u>97,400</u>	<u>17</u>	<u>13</u>	<u>8</u>	<u>16</u>	<u>0</u>	<u>54</u>	<u>\$31,529,127</u>	<u>\$324</u>	<u>\$583,873</u>
Total/Overall Average	1,721,370	428	586	241	187	4	1,446	\$580,045,948	\$337	\$401,138

Note:

(a) All development costs adjusted to 2016 costs based on the Turner Building Cost index.

Sources: City of Los Angeles HCID, 2017; BAE, 2017.

Approach to Estimating Construction Costs for Rental Units by Number of Bedrooms

The affordable housing development cost data include total development costs for each project in its entirety rather than for individual units. Since most of the affordable housing projects analyzed in this study, including all projects with units that have two or more bedrooms, include a mix of unit sizes, the development cost data do not allow for a direct calculation of the average development cost by unit type across projects. Consequently, BAE calculated the average development cost per unit by number of bedrooms using the following methodology:

⁴ The projects analyzed in this study differ somewhat from the projects analyzed for the City's recently-completed Linkage Fee Study, which analyzed development costs for units that received tax credit allocations between 2013 and 2015. Some of the projects analyzed in the Linkage Fee Study have not yet been completed. Since Measure JJJ calls for an analysis of recently-completed projects, this study analyzes projects that were completed between 2013 and 2016, which received funding allocations in earlier years, typically two to three years before the completion date.

1. Calculated the average cost per unit across all properties in which 85 percent of units or more are studio units. In total, four projects with a total of 269 units meet this threshold, two of which have studio units only. In total, 3.3 percent of units in these projects are one-bedroom units and 1.1 percent are two-bedroom units. For the purposes of this study, the average per unit development cost among these projects was assumed to represent the average development cost for a studio unit. Although these four projects included a limited number of units with one or two bedrooms, inclusion of these units provided a wider data set than would be possible using only those projects comprised entirely of studios. Among these four projects, the two projects with studio units only represent the upper and lower end of the range of total development costs per unit, which confirms that the per-unit costs for the projects with a limited number of larger units are consistent with the cost for projects with studios only. This calculation resulted in an estimated average studio unit development cost of approximately \$357,500 per unit.
2. Repeated Step 1 for properties in which 85 percent of units or more are one-bedroom units. Four properties with a total of 218 units met this threshold, one of which included exclusively of one-bedroom units. The projects that met the 85 percent threshold for one-bedroom units included seven studio units and eight two-bedroom units. The analysis assumes any cost differentials for studios and two-bedroom units relative to one-bedroom units generally balance out across this sample. This calculation resulted in an estimated average per unit development cost of approximately \$388,000 per one-bedroom unit.
3. Estimated the aggregate cost for all studio and one-bedroom units in the project sample, assuming the average cost per unit for studios and one-bedroom units identified in Steps 1 and 2. The estimated aggregate cost totaled approximately \$380 million ($\$357,500 \text{ per studio} \times 428 \text{ studios} + \$388,000 \text{ per one-bedroom unit} \times 586 \text{ one-bedroom units}$).
4. Subtracted the result from Step 3 from the total development cost for all units in the sample, resulting in an aggregate combined cost for two-, three-, and four-bedroom units totaling approximately \$200 million ($\$580 \text{ million for all units} \text{ minus } \$380 \text{ million for all studios and one-bedroom units combined} = \$200 \text{ million for all remaining units in the sample}$). This resulted in an average estimated development cost of \$462,100 per unit across all two-, three-, and four-bedroom units in the sample ($\$200 \text{ million divided by } 432 \text{ units}$).
5. Estimated the development cost differential between two-, three-, and four-bedroom units. This methodology differs from the methodology used to derive the average development cost for studio and one-bedroom units because none of the recently-

developed projects are sufficiently weighted toward any one of these larger unit types to isolate the costs for an individual unit size with two or more bedrooms. The cost differential between a one-bedroom unit and a two-bedroom unit includes the cost for the addition of the second bedroom and, in some cases, may include the addition of a second bathroom. Three-bedroom units are more likely than two-bedroom units to include a second bathroom, and may also have a larger kitchen and living area to accommodate a larger household. Consequently, this study assumes a smaller cost differential between one- and two-bedroom units than between two- and three-bedroom units. The estimated cost differential for a four-bedroom unit is smaller than the cost differential to increase the unit size to a two- or three-bedroom unit, assuming the addition of a fourth bedroom, but no change to the number of bathrooms or other unit features as compared to a three-bedroom unit.

The resulting estimated development cost averages approximately \$437,500 for a two-bedroom unit, \$492,700 for a three-bedroom unit, and \$517,900 for a four-bedroom unit. The weighted average of these per-unit costs is equal to the average cost among two-, three-, and four-bedroom units, as calculated in Step 4.

Although Measure JJJ calls for a calculation of development costs by affordability level and number of bedrooms, this study does not differentiate development costs based on affordability levels. Given the wide variation in development costs across projects, the development cost data do not provide sufficient information to cross-tabulate development costs by unit sizes and affordability levels. Moreover, while unit size can have a significant impact on development costs, affordability levels may have little to no effect on development costs. For example, projects that are 100 percent affordable will have the same general development costs for all units of a particular number of bedrooms, despite potentially targeting households at various income levels.

Supportable Financing Amount

The second variable that factors into the Affordability Gaps calculation is the amount of permanent financing that the restricted rents for affordable units can support. This represents the amount that an affordable housing developer/operator can borrow to finance an affordable development, based on the loan payments that the operator can make using rent income. The permanent loan amount that an affordable housing operator can qualify for is based on net operating income (NOI) – i.e., rental income less operating expenses and vacancy allowance – and the financing terms that apply to the loan.

The restricted affordable rents determine the rental income from an affordable unit. This analysis calculates rental income based on the restricted rental rate for extremely low-, very low-, and lower-income households, corresponding to the income levels for the on-site unit requirements stipulated in Measure JJJ, per the HCID Rent Limits provided in Land Use

Schedule VI (effective August 2016). The Schedule VI rent limits for lower-income households are set to the rents affordable to households earning 60 percent of AMI.

Per the requirements of Measure JJJ, this study uses data from HCID on recently-completed affordable developments in Los Angeles to estimate operating expenses. Measure JJJ specifies that the operating cost assumptions should be based on projects funded by the AHTF. However, due to the relatively limited sample of recent projects that received funding from the AHTF (see discussion above), this analysis uses the larger project sample shown in Table 2 to calculate average operating expenses. As shown in Table 3 below, the data indicate that operating costs for affordable units average \$5,663 per year.

Measure JJJ calls for the Affordability Gaps study to calculate the average operating cost by unit type and affordability level. BAE analyzed the operating cost data and found no distinct correlation between operating costs and either unit size or affordability level, and therefore used the average per unit operating cost across all units for this analysis.

Table 3: Affordable Housing Operating Expenses, City of Los Angeles, 2017

Project	Number of Units						Annual Operating Cost (a)	Avg. Cost per Unit
	Studios	1 bdrm	2 bdrm	3 brm	4 brm	Total		
G	0	10	43	24	0	77	\$359,657	\$4,671
Q	0	20	9	15	0	44	\$217,017	\$4,932
T	0	1	12	8	0	21	\$103,576	\$4,932
V	17	9	13	6	0	45	\$224,869	\$4,997
K	0	2	50	35	0	87	\$436,174	\$5,013
C	108	0	0	0	0	108	\$551,668	\$5,108
O	0	27	10	16	0	53	\$274,960	\$5,188
P	0	22	20	18	0	60	\$318,684	\$5,311
D	0	102	6	0	0	108	\$574,523	\$5,320
M	16	51	0	0	0	67	\$359,409	\$5,364
F	45	5	2	0	0	52	\$286,343	\$5,507
L	27	23	30	10	0	90	\$499,980	\$5,555
B	62	32	1	0	0	95	\$546,286	\$5,750
U	0	20	8	12	0	40	\$231,949	\$5,799
H	0	28	9	19	4	60	\$389,478	\$6,491
E	7	48	1	0	0	56	\$364,169	\$6,503
R	0	32	1	0	0	33	\$214,974	\$6,514
N	0	31	10	8	0	49	\$319,800	\$6,527
S	0	32	7	0	0	39	\$258,674	\$6,633
I	41	4	1	0	0	46	\$316,734	\$6,886
W	17	13	8	16	0	54	\$374,645	\$6,938
X	<u>0</u>	<u>21</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>21</u>	<u>\$166,448</u>	<u>\$7,926</u>
Total/Overall Average	340	533	241	187	4	1,305	\$7,390,020	\$5,663

Notes:

Operating cost data were not available for two of the developments shown in Table 2. These two developments were excluded from operating cost calculations.

(a) HCID provided operating cost data from the year of project construction. BAE adjusted all costs to 2016 dollars based on CPI.

Sources: City of Los Angeles HCID, 2017; BAE, 2017.

BAE used conventional financing assumptions to determine the supportable loan amount by unit type and affordability level. As shown in Table 4, the supportable loan amounts range from \$0 per unit for extremely low-income units (i.e., operating expenses exceed NOI, leaving no NOI to support debt payments) to \$61,585 per unit for three-bedroom units serving lower-income households.

Affordability Gaps Calculations

Per Measure JJJ, the rental affordability gap is calculated by subtracting the supportable permanent loan amount for each unit type from the unit development cost, as shown in Table 4. This represents the amount of subsidy funds needed to finance each unit. The supportable loan amount is a function of the amount of NOI that is available to pay loan debt service, the debt service coverage ratio, and the loan term (number of years) and the loan interest rate. These assumptions are shown in the notes at the bottom of Table 4.

To the extent that affordable units generate negative NOI, this study adds an additional amount to the affordability gaps to account for this negative value. Since units with negative NOI reduce the total NOI at both the unit and project level, these units reduce the loan amount that a project can support overall, which increases the public funding sources needed to cover the financing gap for the project. For example, Table 4 shows that the operating expenses for a two-bedroom unit serving an extremely low-income household exceed rental income by \$49 per month, while a two-bedroom unit serving a very low-income household generates \$216 per month in NOI after accounting for operating expenses. In a project composed of two-bedroom units serving extremely low- and very low-income households, each extremely low-income unit would require a subsidy equal to \$49 dollars per month to cover operating expenses, which would come from the \$216 in monthly NOI from a very low-income unit. The remaining NOI from each very low-income unit providing a cross-subsidy to an extremely low-income unit would therefore be reduced to \$166 per month (\$216 minus \$49). This cross-subsidy reduces the loan payment that these very low-income units can support by \$39 per month ($\$49 \text{ NOI} / 1.25 \text{ debt coverage ratio}$), which reduces the loan amount that the very low-income unit can support by \$6,948. The affordability gap for a two-bedroom unit serving an extremely low-income household is therefore equal to the total unit development cost (\$437,500), plus the \$6,948 in cross-subsidy needed from other units in the development.

Table 4: Rental Affordability Gaps Calculations, City of Los Angeles, 2017

	Extremely Low	Very Low	Lower	Extremely Low	Very Low	Lower
	Studio			One-Bedroom Unit		
Maximum Affordable Monthly Rent per Unit (a)	\$326	\$544	\$653	\$373	\$622	\$746
Monthly Operating Expenses (b)	\$472	\$472	\$472	\$472	\$472	\$472
Vacancy (c)	5%	5%	5%	5%	5%	5%
Net Operating Income per Unit (d)	-\$139	\$68	\$172	-\$94	\$143	\$260
Monthly Supportable Debt Service per Unit (e)	\$0	\$55	\$138	\$0	\$114	\$208
Loan Amount (f)	\$0	\$9,650	\$24,240	\$0	\$20,091	\$36,688
Operating Subsidy from Units with Positive NOI (g)	\$139	\$0	\$0	\$94	\$0	\$0
Reduction in Project-Level Loan Payments (h)	\$111	\$0	\$0	\$75	\$0	\$0
Foregone Loan Amount Due to Cross-Subsidy (i)	\$19,530	\$0	\$0	\$13,239	\$0	\$0
Total Development Costs Per Unit	\$357,500	\$357,500	\$357,500	\$388,000	\$388,000	\$388,000
Affordability Gap per Affordable Unit (j)	\$377,030	\$347,850	\$333,260	\$401,239	\$367,909	\$351,312
	Two-Bedroom Unit			Three-Bedroom Unit		
Maximum Affordable Monthly Rent per Unit (a)	\$420	\$699	\$839	\$466	\$777	\$932
Monthly Operating Expenses (b)	\$472	\$472	\$472	\$472	\$472	\$472
Vacancy (c)	5%	5%	5%	5%	5%	5%
Net Operating Income per Unit (d)	-\$49	\$216	\$349	-\$6	\$290	\$437
Monthly Supportable Debt Service per Unit (e)	\$0	\$173	\$279	\$0	\$232	\$350
Loan Amount (f)	\$0	\$30,397	\$49,137	\$0	\$40,838	\$61,585
Operating Subsidy from Units with Positive NOI (g)	\$49	\$0	\$0	\$6	\$0	\$0
Reduction in Project-Level Loan Payments (h)	\$39	\$0	\$0	\$4	\$0	\$0
Foregone Loan Amount Due to Cross-Subsidy (i)	\$6,948	\$0	\$0	\$790	\$0	\$0
Total Development Costs Per Unit	\$437,500	\$437,500	\$437,500	\$492,700	\$492,700	\$492,700
Affordability Gap per Affordable Unit (j)	\$444,448	\$407,103	\$388,363	\$493,490	\$451,862	\$431,115
Assumptions						
Total Affordable Unit Development Costs (k)						
Studio	\$357,500					
1 Bedroom	\$388,000					
2 Bedroom	\$437,500					
3 Bedroom	\$492,700					
Financing Terms						
Debt Coverage Ratio	1.25					
Interest Rate	5.50%					
Term of Loan (years)	30					

Notes:

- (a) City of Los Angeles - 2016 Income and Rent Limits; Land Use Schedule VI.
- (b) Data from funding applications for recent projects.
- (c) Typical required assumption for loan underwriting.
- (d) Affordable monthly rent less operating expenses & vacancy.
- (e) Previous row divided by Debt Coverage Ratio; units with negative NOI cannot support any loan amount.
- (f) Based on financing terms below.
- (g) NOI from other units needed to cover operating expenses.
- (h) Previous row divided by Debt Coverage Ratio.
- (i) Based on financing terms below.
- (j) Total development costs less loan amount, plus foregone loan amount.
- (k) HCID data from recent projects.

Sources: City of Los Angeles, 2017; BAE, 2017.

Findings

Table 5 below shows the rental affordability gaps. These are the per unit subsidy amounts that would be necessary to support development of affordable units, after accounting for the amount of conventional loan debt service that the apartment operator could support from estimated NOI. In the case of extremely low-income studio, one-bedroom, and two-bedroom units, the affordability gaps include the additional subsidy needed to offset the net operating loss, due to per unit operating costs which exceed the restricted rent levels.

Table 5: Rental Affordability Gaps, City of Los Angeles, 2017

Unit Size	Income Level		
	Extremely Low	Very Low	Lower
Studio	\$377,030	\$347,850	\$333,260
1 Bedroom	\$401,239	\$367,909	\$351,312
2 Bedroom	\$444,448	\$407,103	\$388,363
3 Bedroom	\$493,490	\$451,862	\$431,115

Source: BAE, 2017.

FOR-SALE AFFORDABILITY GAPS ANALYSIS

As with the rental affordability gaps, BAE calculated the affordability gaps for ownership units in accordance with the provisions set forth in Measure JJJ. Measure JJJ defines the ownership affordability gap as the difference between the median sale price by unit type and Community Plan area (CPA) and the restricted sale price for ownership units by unit type and affordability level.

Methodology

Following are detailed descriptions of the methodological steps, assumptions, and data inputs used to determine the affordability gaps for for-sale units.

Median Sale Price

Measure JJJ stipulates that the Affordability Gaps study shall identify the “market median sales prices by unit type in the 37 Community Plan areas”, which factor into the ownership Affordability Gaps calculation prescribed in the measure. For the purposes of this study, BAE analyzed data from CoreLogic, a private data vendor that provides current property records from the County Assessor, on single-family home and condominium sales between July 1, 2016 and December 31, 2016. Using data on sales over a six-month period provided a sample sufficiently large to calculate medians for most unit types in each CPA, with the exception of unit types that are uncommon in particular CPAs, while ensuring that the sale price data represent relatively current home sale prices.

BAE used the information provided in the property records from CoreLogic to categorize the sale records into unit types based on number of bedrooms (studios and one-, two-, three-, and four-bedroom units) and either single-family or condominium building type, and determined the CPA for each property using GIS software. BAE then calculated the median sale price for each of the resulting 370 categories of market-rate ownership units (37 CPAs x 5 unit sizes by number of bedrooms x 2 building types) to the extent that the sale price data included a sufficient number of records to represent each unit category. Table 6 and Table 7 below show the median home sale values.

Most CPAs lacked sale records for at least one category of market-rate ownership units, and therefore had no median sale price for that unit type, and other median sale prices were based on only one or two sale records. In general, the unit types that are not represented or represented by very few sales in a particular CPA are those that are absent or rare within that market. This analysis discarded all medians based on two sales or fewer on the basis that these medians are not based on a sufficiently large sample of sales to be representative of the market. This study then interpolated the market sale prices for the unit types with fewer than three sale records, including those with no sale records.

Unit categories that were represented by two or fewer sale records are described below, along with a description of the methodology that BAE used to interpolate sale prices for these units. The interpolated values represent hypothetical values that are consistent with the existing residential market in each CPA and citywide trends. This study did not include a market analysis to determine market demand for particular unit types in any CPAs or an analysis to determine development feasibility based on the interpolated sale prices. Table 6 and Table 7 below show the interpolated values along with the median sale prices.

Units with two or fewer sale records consisted of:

- **All unit types in the Los Angeles World Airport and Port of Los Angeles CPAs.** This study did not interpolate sale prices for these CPAs because these are no residential units in these areas.
- **Condominiums in Boyle Heights, Granada Hills/Knollwood, and Southeast Los Angeles.** This study interpolated condominium sale prices for these three CPAs by calculating the price of a condominium relative to the price of a single-family unit, by unit type (e.g., one-bedroom condominium compared to one-bedroom single-family, two-bedroom condominium compared to two-bedroom single-family) in each CPA. The resulting percentages represent the condominium sale price differential by number of bedrooms for each CPA. BAE calculated the sale price differential for each CPA only for the unit sizes for which there were three or more sales of both single-family homes and condominiums. BAE did not calculate the condominium discount for studios because there were very few single-family studio sales, and therefore insufficient data to calculate reliable median values. Appendix A shows the condominium sale price differentials.

BAE used the median of all condominium sale price differentials across CPAs, by number of bedrooms, to represent the typical condominium price differential within a CPA for each unit size. These medians indicate that the sale price for a four-bedroom condominium is typically 21 percent lower than the sale price for a four-bedroom single-family home in the same CPA. One-bedroom condominiums typically sell for 35 percent less than the sale price of a one-bedroom single-family home in the same CPA. The condominium price differentials for two- and three-bedrooms are similar to the price differentials for one-bedroom and four-bedroom units.

The typical condominium price differentials were then applied to the median single family home sale price, by number of bedrooms, in Boyle Heights, Granada Hills/Knollwood, and Southeast Los Angeles to interpolate the condominium sale price by number of bedrooms in these CPAs. For example, the median sale price for two-bedroom single-family homes in Boyle Heights was \$385,000. Two-bedroom condominiums typically sell for 37 percent less than two-bedroom single-family homes

in the same CPA, resulting in an interpolated two-bedroom condominium sale price of \$243,786 in Boyle Heights.

This study interpolated the sale prices for studio condominiums in these CPAs using a different method, which is described below.

- **Single-family homes in Central City.** The study used the condominium sale price differentials described above to interpolate the sale prices of one-, two-, three-, and four-bedroom single-family homes in the Central City CPA, building up from the median condominium sale prices.
- **One-bedroom single-family homes in many CPAs, four-bedroom single-family homes in some CPAs, two-bedroom single-family homes in Granada Hills/Knollwood, and three-bedroom single-family homes in Central City North.** BAE calculated the percent sale price discount for a one-bedroom single-family unit relative to the sale price of a three-bedroom single-family unit for all CPAs with both one- and three-bedroom single-family home sales. The study used three-bedroom units as the baseline because three-bedroom units are the most common single-family unit type in the sale records.

Based on the median across CPAs, one-bedroom single-family homes typically sell for 34 percent less than three-bedroom single-family homes in the same CPA. Therefore, in CPAs with fewer than three one-bedroom single-family home sales, the interpolated one-bedroom single-family home sale price is 34 percent lower than the median sale price for a three-bedroom single-family home in the same CPA.

BAE also calculated the percent sale price discount for a two-bedroom single-family unit relative to the sale price of a three-bedroom single-family unit for all CPAs with both two- and three-bedroom sales, and used the medians of these values to interpolate the two-bedroom single-family home price in Granada Hills/Knollwood, and the three-bedroom single-family home price in Central City North.

Similarly, BAE calculated the percent sale price premium for a four-bedroom single-family unit relative to the sale price of three-bedroom single-family unit for all CPAs with both four- and three-bedroom single-family home sales. This study uses the median of these sale price premiums across CPAs to interpolate the four-bedroom single-family home sale price in CPAs with fewer than three records of four-bedroom single-family home sales.

- **Studio and four-bedroom condominiums in many CPAs, one-bedroom condominiums in some CPAs, two-bedroom condominiums in Bel Air/Beverly Crest, and three-bedroom condominiums in Central City and West Adams/Baldwin Hills/Leimert.** The method that this study uses to interpolate the sale price for condominium unit sizes for which

there are fewer than three sale records is analogous to the method used to interpolate single-family home prices for which there are fewer than three sale records. BAE calculated the percent sale price discount for a studio and one-bedroom condominium unit and the sale price premium for a three- and four-bedroom condominium, relative to the sale price of a two-bedroom condominium, for all CPAs with at least three sale records each for two- and four-bedroom condominiums. The study used two-bedroom units as the baseline for condominiums because two-bedroom units are the most common condominium unit type in the sale records.

The study then used the medians of these sale price discounts and premiums across CPAs to interpolate the studio, one-bedroom, three-bedroom, and four-bedroom condominium sale prices as needed, based on the median sale price for a two-bedroom condominium in each CPA. The study used the sale price premium for a three-bedroom condominium to interpolate the two-bedroom condominium sale price in Bel Air/Beverly Crest, based on the three-bedroom condominium sale price in the same CPA.

- **Single-family homes with zero bedrooms in all CPAs.** The sale price data included a total of two sale records for single-family homes with zero bedrooms (i.e., studio units) across all CPAs, which is not a sufficient sample size to provide insight on citywide sale price trends. To interpolate the sale prices of single-family homes with zero bedrooms, BAE applied the sale price differential between studio condominiums and two-bedroom condominiums to the two-bedroom single-family median home sale price in each CPA.
- **Units in Harbor Gateway.** Due to the relatively small size of the Harbor Gateway CPA, sale records showed no sales of single-family homes or condominiums in this area. This study uses the median single-family and condominium sale prices within the four postal ZIP Codes that overlap with the Harbor Gateway CPA (90247, 90248, 90501, and 90502) to represent the median sale prices within the CPA. To the extent that the sale records from these ZIP Codes did not include particular unit types, the study applied the methodology outlined above to interpolate sale values.

Table 6: Median Single-Family Home Sale Prices by CPA and Number of Bedrooms, City of Los Angeles, 2016

Community Plan Area	Median Sale Price - Single-Family					
	Studio		One-Bedroom		Two-Bedroom	
	\$	#	\$	#	\$	#
Arleta/Pacoima	\$227,961	0	\$282,477	2	\$385,000	28
Bel Air/Beverly Crest	\$727,697	1	\$1,031,369	1	\$1,229,000	16
Boyle Heights	\$227,961	0	\$266,054	1	\$385,000	20
Brentwood/Pacific Palisades	\$1,154,605	0	\$1,522,419	0	\$1,950,000	19
Canoga Park/Winnetka/Woodland Hills/West Hills	\$384,276	0	\$419,774	0	\$649,000	35
Central City	\$710,664	0	\$855,308	0	\$1,200,233	0
Central City North	\$342,829	0	\$448,131	0	\$579,000	3
Chatsworth/Porter Ranch	\$323,438	0	\$372,147	1	\$546,250	12
Encino/Tarzana	\$476,645	0	\$666,777	0	\$805,000	31
Granada Hills/Knollwood	\$265,100	0	\$346,527	0	\$447,724	2
Harbor Gateway	\$290,132	0	\$332,732	0	\$490,000	40
Hollywood	\$686,842	0	\$710,000	11	\$1,160,000	86
Los Angeles World Airport	N/A	0	N/A	0	N/A	0
Mission Hills/Panorama City/North Hills	\$236,842	0	\$315,323	0	\$400,000	29
North Hollywood/Valley Village	\$401,151	0	\$479,554	1	\$677,500	72
Northeast Los Angeles	\$373,026	1	\$487,000	31	\$630,000	214
Northridge	\$290,724	0	\$389,555	0	\$491,000	17
Palms/Mar Vista/Del Rey	\$685,362	0	\$896,700	1	\$1,157,500	41
Port of Los Angeles	N/A	0	N/A	0	N/A	0
Reseda/West Van Nuys	\$279,622	0	\$322,221	2	\$472,250	44
San Pedro	\$300,493	0	\$427,000	7	\$507,500	48
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$651,316	0	\$747,500	5	\$1,100,000	78
Silver Lake/Echo Park/Elysian Valley	\$521,053	0	\$640,000	19	\$880,000	58
South Los Angeles	\$233,882	0	\$355,000	5	\$395,000	161
Southeast Los Angeles	\$180,000	0	\$270,000	10	\$304,000	104
Sun Valley/La Tuna Canyon	\$258,454	0	\$324,192	0	\$436,500	42
Sunland/Tujunga/Lake View Terrace/Shadow Hills/East La Tuna Canyon	\$278,289	0	\$403,500	12	\$470,000	63
Sylmar	\$230,921	0	\$312,038	2	\$390,000	23
Van Nuys/North Sherman Oaks	\$357,780	0	\$428,642	1	\$604,250	66
Venice	\$979,934	0	\$1,800,000	3	\$1,655,000	30
West Adams/Baldwin Hills/Leimert	\$361,184	0	\$392,000	7	\$610,000	155
West Los Angeles	\$815,329	0	\$985,385	0	\$1,377,000	36
Westchester/Playa Del Rey	\$577,303	0	\$788,308	0	\$975,000	33
Westlake	\$313,520	0	\$338,315	0	\$529,500	4
Westwood	\$1,076,743	0	\$1,342,587	1	\$1,818,500	10
Wilmington/Harbor City	\$201,316	0	\$299,885	0	\$340,000	27
Wilshire	\$727,697	0	\$952,538	1	\$1,229,000	46
Typical % Discount/Premium Compared to a 3-bedroom Unit				-34%		-15%

Note:

Figures in grey cells are interpolated values, based on the methodology described in this report.

Sources: CoreLogic, 2017; BAE, 2017.

(Continued on following page)

Table 6: Median Single-Family Home Sale Prices by CPA and Number of Bedrooms, City of Los Angeles, 2016 (Continued)

Community Plan Area	Median Sale Price - Single-Family			
	Three-Bedroom		Four-Bedroom	
	\$	#	\$	#
Arleta/Pacoima	\$430,000	85	\$435,000	19
Bel Air/Beverly Crest	\$1,570,000	21	\$2,145,000	11
Boyle Heights	\$405,000	13	\$448,000	7
Brentwood/Pacific Palisades	\$2,317,500	52	\$2,912,500	52
Canoga Park/Winnetka/Woodland Hills/West Hills	\$639,000	250	\$685,000	197
Central City	\$1,285,530	0	\$1,482,792	0
Central City North	\$682,167	2	\$786,845	0
Chatsworth/Porter Ranch	\$566,500	56	\$647,000	69
Encino/Tarzana	\$1,015,000	66	\$1,462,500	59
Granada Hills/Knollwood	\$527,500	20	\$530,000	10
Harbor Gateway	\$506,500	102	\$629,000	47
Hollywood	\$1,510,000	116	\$1,805,500	58
Los Angeles World Airport	N/A	0	N/A	0
Mission Hills/Panorama City/North Hills	\$480,000	123	\$525,000	41
North Hollywood/Valley Village	\$730,000	119	\$915,000	31
Northeast Los Angeles	\$740,000	211	\$735,000	47
Northridge	\$593,000	99	\$700,000	109
Palms/Mar Vista/Del Rey	\$1,365,000	74	\$1,500,000	39
Port of Los Angeles	N/A	0	N/A	0
Reseda/West Van Nuys	\$490,500	134	\$545,000	53
San Pedro	\$650,000	85	\$697,500	24
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$1,296,000	142	\$1,550,000	63
Silver Lake/Echo Park/Elysian Valley	\$1,080,000	43	\$1,024,500	17
South Los Angeles	\$410,000	111	\$472,000	31
Southeast Los Angeles	\$321,500	114	\$347,000	37
Sun Valley/La Tuna Canyon	\$493,500	100	\$570,000	30
Sunland/Tujunga/Lake View Terrace/Shadow Hills/East La Tuna Canyon	\$565,000	138	\$685,000	41
Sylmar	\$475,000	77	\$491,250	56
Van Nuys/North Sherman Oaks	\$652,500	162	\$781,000	51
Venice	\$2,000,000	27	\$2,585,250	6
West Adams/Baldwin Hills/Leimert	\$674,000	138	\$805,000	35
West Los Angeles	\$1,500,000	59	\$1,750,000	27
Westchester/Playa Del Rey	\$1,200,000	79	\$1,162,500	34
Westlake	\$515,000	3	\$594,026	2
Westwood	\$2,043,750	14	\$3,858,000	11
Wilmington/Harbor City	\$456,500	50	\$618,000	30
Wilshire	\$1,450,000	106	\$1,672,500	44
Typical % Discount/Premium Compared to a 3-bedroom Unit				15%

Note:

Figures in grey cells are interpolated values, based on the methodology described in this report.

Sources: CoreLogic, 2017; BAE, 2017.

Table 7: Median Condominium Sale Prices by CPA and Number of Bedrooms, City of Los Angeles, 2016

Community Plan Area	Median Sale Price - Condominium					
	Studio		One-Bedroom		Two-Bedroom	
	\$	#	\$	#	\$	#
Arleta/Pacoima	\$140,625	0	\$183,627	2	\$237,500	24
Bel Air/Beverly Crest	\$643,212	0	\$670,451	2	\$1,086,313	1
Boyle Heights	\$144,347	0	\$172,951	0	\$243,786	0
Brentwood/Pacific Palisades	\$383,250	4	\$539,000	21	\$863,500	92
Canoga Park/Winnetka/Woodland Hills/West Hills	\$236,102	1	\$292,500	39	\$398,750	94
Central City	\$450,000	32	\$555,000	56	\$760,000	45
Central City North	\$695,000	7	\$554,000	10	\$714,000	14
Chatsworth/Porter Ranch	\$207,237	0	\$241,918	1	\$350,000	34
Encino/Tarzana	\$236,842	0	\$247,000	24	\$400,000	80
Granada Hills/Knollwood	\$167,864	0	\$225,263	0	\$283,503	0
Harbor Gateway	\$196,875	2	\$248,500	15	\$332,500	56
Hollywood	\$387,750	6	\$505,000	46	\$619,500	69
Los Angeles World Airport	N/A	0	N/A	0	N/A	0
Mission Hills/Panorama City/North Hills	\$153,947	0	\$170,000	10	\$260,000	53
North Hollywood/Valley Village	\$254,013	0	\$307,000	13	\$429,000	75
Northeast Los Angeles	\$225,000	2	\$312,000	15	\$380,000	73
Northridge	\$233,882	0	\$253,234	1	\$395,000	47
Palms/Mar Vista/Del Rey	\$407,072	0	\$404,500	12	\$687,500	60
Port of Los Angeles	N/A	0	N/A	0	N/A	0
Reseda/West Van Nuys	\$185,033	0	\$215,000	5	\$312,500	26
San Pedro	\$216,859	2	\$280,000	13	\$366,250	80
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$310,855	0	\$390,000	27	\$525,000	155
Silver Lake/Echo Park/Elysian Valley	\$373,026	0	\$415,289	1	\$630,000	23
South Los Angeles	\$242,763	0	\$172,500	4	\$410,000	5
Southeast Los Angeles	\$113,978	0	\$175,200	0	\$192,496	0
Sun Valley/La Tuna Canyon	\$225,000	0	\$178,000	3	\$380,000	9
Sunland/Tujunga/Lake View Terrace/Shadow Hills/East La Tuna Canyon	\$225,000	0	\$261,827	1	\$380,000	21
Sylmar	\$159,572	0	\$192,859	0	\$269,500	29
Van Nuys/North Sherman Oaks	\$213,158	1	\$320,000	17	\$360,000	109
Venice	\$794,309	0	\$1,168,000	6	\$1,341,500	25
West Adams/Baldwin Hills/Leimert	\$225,000	0	\$389,000	15	\$380,000	28
West Los Angeles	\$466,283	0	\$604,500	13	\$787,500	132
Westchester/Playa Del Rey	\$364,145	2	\$423,000	30	\$615,000	50
Westlake	\$350,000	4	\$339,000	19	\$480,000	13
Westwood	\$398,500	7	\$521,000	38	\$860,000	97
Wilmington/Harbor City	\$195,395	0	\$194,943	1	\$330,000	23
Wilshire	\$234,500	10	\$373,500	50	\$592,500	126
Typical % Discount/Premium compared to a 2-bedroom unit		-41%		-28%		

Note:

Figures in grey cells are interpolated values, based on the methodology described in this report.

Sources: CoreLogic, 2017; BAE, 2017.

(Continued on following page)

Table 7: Median Condominium Sale Prices by CPA and Number of Bedrooms, City of Los Angeles, 2016 (continued)

Community Plan Area	Median Sale Price - Condominium			
	Three-Bedroom		Four-Bedroom	
	\$	#	\$	#
Arleta/Pacoima	\$328,750	16	\$397,500	4
Bel Air/Beverly Crest	\$1,292,500	8	\$1,418,414	1
Boyle Heights	\$284,880	0	\$353,468	0
Brentwood/Pacific Palisades	\$1,270,000	25	\$1,127,484	2
Canoga Park/Winnetka/Woodland Hills/West Hills	\$435,000	41	\$447,750	4
Central City	\$904,252	1	\$992,343	0
Central City North	\$714,000	3	\$932,280	0
Chatsworth/Porter Ranch	\$394,000	22	\$457,000	9
Encino/Tarzana	\$520,000	13	\$522,286	0
Granada Hills/Knollwood	\$371,048	0	\$418,165	0
Harbor Gateway	\$430,000	75	\$560,000	9
Hollywood	\$769,500	12	\$808,890	0
Los Angeles World Airport	N/A	0	N/A	0
Mission Hills/Panorama City/North Hills	\$310,000	62	\$443,750	16
North Hollywood/Valley Village	\$540,750	36	\$560,151	1
Northeast Los Angeles	\$515,000	9	\$605,000	5
Northridge	\$439,500	40	\$397,500	7
Palms/Mar Vista/Del Rey	\$763,750	16	\$897,679	0
Port of Los Angeles	N/A	0	N/A	0
Reseda/West Van Nuys	\$352,500	38	\$430,000	5
San Pedro	\$510,000	25	\$539,000	11
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$727,500	46	\$685,500	0
Silver Lake/Echo Park/Elysian Valley	\$825,000	5	\$822,600	1
South Los Angeles	\$410,000	8	\$535,343	0
Southeast Los Angeles	\$226,146	1	\$251,345	0
Sun Valley/La Tuna Canyon	\$450,000	25	\$540,000	3
Sunland/Tujunga/Lake View Terrace/Shadow Hills/East La Tuna Canyon	\$400,000	18	\$485,000	3
Sylmar	\$375,000	43	\$490,000	13
Van Nuys/North Sherman Oaks	\$456,000	40	\$470,057	0
Venice	\$1,650,000	8	\$1,751,616	0
West Adams/Baldwin Hills/Leimert	\$452,126	2	\$496,171	0
West Los Angeles	\$935,000	47	\$999,750	6
Westchester/Playa Del Rey	\$660,000	8	\$803,014	1
Westlake	\$495,000	4	\$626,743	0
Westwood	\$1,292,000	25	\$1,122,914	2
Wilmington/Harbor City	\$391,250	18	\$540,000	5
Wilshire	\$693,500	36	\$773,636	0
Typical % Discount/Premium compared to a 2-bedroom unit		19%		31%

Note:

Figures in grey cells are interpolated values, based on the methodology described in this report.

Sources: CoreLogic, 2017; BAE, 2017.

Restricted Sale Price

The restricted sale prices for affordable units were calculated for the Affordability Gaps study because HCID does not calculate and publish standard restricted sale prices that would be analogous to the restricted rents in Land Use Schedule VI. Consistent with the income levels that would meet the on-site unit requirements stipulated in Measure JJJ, BAE calculated the affordable sale price for very low-, lower-, and moderate-income households of various sizes. Appendix B shows these calculations and the relevant assumptions. Table 8 shows the

affordable sale prices for single-family homes and condominiums. Condominiums have lower sale prices to account for homeowner association fees, which reduce the homeowner income available for mortgage payments.

Table 8: Restricted Affordable Sale Prices, City of Los Angeles, 2017

Household Income Level	Affordable Sale Price				
	Studio	1-Bdrm	2-Bdrm	3-Bdrm	4-Bdrm
Single-Family					
Very Low	\$ 134,144	\$ 153,339	\$ 172,534	\$ 191,508	\$ 206,953
Lower	\$ 160,973	\$ 184,007	\$ 207,041	\$ 229,810	\$ 248,343
Moderate	\$ 220,191	\$ 251,520	\$ 282,850	\$ 314,621	\$ 339,773
Condominium					
Very Low	\$69,415	\$88,087	\$106,759	\$125,216	\$140,240
Lower	\$95,513	\$117,919	\$140,326	\$162,475	\$180,503
Moderate	\$153,117	\$183,593	\$214,070	\$244,975	\$269,442

Source: BAE, 2017.

Affordability Gaps Calculation

Per the requirements of Measure JJJ, this study calculates the for-sale affordability gaps by subtracting the restricted sale prices at each affordability level by unit size from the median sale price by CPA, unit size, and building type. This results in a total of 1,050 for-sale affordability gaps (35 CPAs x 5 unit sizes x 2 building types x 3 affordability levels).⁵

Findings

The following tables show the for-sale affordability gaps. In cases where Table 9 or Table 10 display a zero value, this means that the market sale price for the unit type with a zero value is equal to or lower than the restricted sale price in that CPA. Generally, this occurs in instances where the CPA has market sales prices that are relatively low, and therefore affordable to some lower- and moderate-income households. In these cases, this should not necessarily be interpreted to mean that it is financially feasible for developers to build affordable units without subsidy. Rather, it likely means that it will be uncommon for market rate developers to build new housing in such areas, until such time as market conditions would support higher market rate sale prices. In such cases, the two-year update of the Affordability Gaps Analysis would be revised to reflect the increased market rate sales prices, and the updated affordability gaps calculation would likely indicate the need for subsidy, assuming that household income levels did not keep pace with the sub-market price increases.

⁵ Two of the 37 CPAs (Los Angeles World Airport and Port of Los Angeles) have no residential development and therefore no affordability gaps.

Table 9: For-Sale Affordability Gaps, Single-Family Homes, City of Los Angeles, 2017

Community Plan Area	Studio			One-Bedroom			Two-Bedroom		
	Very Low	Lower	Mod	Very Low	Lower	Mod	Very Low	Lower	Mod
Arleta/Pacoima	\$93,816	\$66,988	\$7,770	\$129,647	\$98,980	\$31,466	\$212,466	\$177,959	\$102,150
Bel Air/Beverly Crest	\$593,553	\$566,724	\$507,507	\$879,891	\$849,223	\$781,709	\$1,056,466	\$1,021,959	\$946,150
Boyle Heights	\$93,816	\$66,988	\$7,770	\$113,195	\$82,527	\$15,014	\$212,466	\$177,959	\$102,150
Brentwood/Pacific Palisades	\$1,020,461	\$993,632	\$934,415	\$1,371,826	\$1,341,159	\$1,273,645	\$1,777,466	\$1,742,959	\$1,667,150
Canoga Park/Winnetka/Woodland Hills/West Hills	\$250,132	\$223,303	\$164,086	\$267,192	\$236,524	\$169,011	\$476,466	\$441,959	\$366,150
Central City	\$576,520	\$549,691	\$490,474	\$701,969	\$671,301	\$603,788	\$1,027,699	\$993,192	\$917,383
Central City North	\$208,685	\$181,856	\$122,638	\$295,601	\$264,933	\$197,420	\$406,466	\$371,959	\$296,150
Chatsworth/Porter Ranch	\$189,293	\$162,465	\$103,247	\$219,479	\$188,811	\$121,298	\$373,716	\$339,209	\$263,400
Encino/Tarzana	\$342,501	\$315,672	\$256,454	\$514,641	\$483,973	\$416,459	\$632,466	\$597,959	\$522,150
Granada Hills/Knollwood	\$130,955	\$104,127	\$44,909	\$193,813	\$163,145	\$95,632	\$275,190	\$240,683	\$164,874
Harbor Gateway	\$155,987	\$129,159	\$69,941	\$179,993	\$149,325	\$81,811	\$317,466	\$282,959	\$207,150
Hollywood	\$552,698	\$525,869	\$466,652	\$556,661	\$525,993	\$458,480	\$987,466	\$952,959	\$877,150
Los Angeles World Airport	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mission Hills/Panorama City/North Hills	\$102,698	\$75,869	\$16,652	\$162,553	\$131,885	\$64,372	\$227,466	\$192,959	\$117,150
North Hollywood/Valley Village	\$267,007	\$240,178	\$180,961	\$327,080	\$296,412	\$228,899	\$504,966	\$470,459	\$394,650
Northeast Los Angeles	\$238,882	\$212,053	\$152,836	\$333,661	\$302,993	\$235,480	\$457,466	\$422,959	\$347,150
Northridge	\$156,580	\$129,751	\$70,533	\$236,919	\$206,251	\$138,738	\$318,466	\$283,959	\$208,150
Palms/Mar Vista/Del Rey	\$551,218	\$524,389	\$465,171	\$744,978	\$714,311	\$646,797	\$984,966	\$950,459	\$874,650
Port of Los Angeles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reseda/West Van Nuys	\$145,478	\$118,649	\$59,431	\$169,463	\$138,795	\$71,282	\$299,716	\$265,209	\$189,400
San Pedro	\$166,349	\$139,520	\$80,303	\$273,661	\$242,993	\$175,480	\$334,966	\$300,459	\$224,650
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$517,172	\$490,343	\$431,125	\$594,161	\$563,493	\$495,980	\$927,466	\$892,959	\$817,150
Silver Lake/Echo Park/Elysian Valley	\$386,908	\$360,080	\$300,862	\$486,661	\$455,993	\$388,480	\$707,466	\$672,959	\$597,150
South Los Angeles	\$99,737	\$72,909	\$13,691	\$201,661	\$170,993	\$103,480	\$222,466	\$187,959	\$112,150
Southeast Los Angeles	\$45,856	\$19,027	\$0	\$116,661	\$85,993	\$18,480	\$131,466	\$96,959	\$21,150
Sun Valley/La Tuna Canyon	\$124,310	\$97,481	\$38,263	\$171,437	\$140,769	\$73,256	\$263,966	\$229,459	\$153,650
Sunland/Tujunga/Lake View Terrace/Shadow Hills/E. La Tuna Canyon	\$144,145	\$117,316	\$58,099	\$250,161	\$219,493	\$151,980	\$297,466	\$262,959	\$187,150
Sylmar	\$96,777	\$69,948	\$10,730	\$159,262	\$128,594	\$61,081	\$217,466	\$182,959	\$107,150
Van Nuys/North Sherman Oaks	\$223,635	\$196,807	\$137,589	\$276,076	\$245,409	\$177,895	\$431,716	\$397,209	\$321,400
Venice	\$845,790	\$818,961	\$759,744	\$1,646,661	\$1,615,993	\$1,548,480	\$1,482,466	\$1,447,959	\$1,372,150
West Adams/Baldwin Hills/Leimert	\$227,040	\$200,211	\$140,994	\$238,661	\$207,993	\$140,480	\$437,466	\$402,959	\$327,150
West Los Angeles	\$681,185	\$654,356	\$595,138	\$833,823	\$803,155	\$735,642	\$1,204,466	\$1,169,959	\$1,094,150
Westchester/Playa Del Rey	\$443,158	\$416,330	\$357,112	\$636,391	\$605,723	\$538,209	\$802,466	\$767,959	\$692,150
Westlake	\$179,376	\$152,547	\$93,329	\$185,587	\$154,919	\$87,405	\$356,966	\$322,459	\$246,650
Westwood	\$942,599	\$915,770	\$856,553	\$1,191,669	\$1,161,002	\$1,093,488	\$1,645,966	\$1,611,459	\$1,535,650
Wilmington/Harbor City	\$67,172	\$40,343	\$0	\$147,087	\$116,419	\$48,906	\$167,466	\$132,959	\$57,150
Wilshire	\$593,553	\$566,724	\$507,507	\$800,918	\$770,250	\$702,736	\$1,056,466	\$1,021,959	\$946,150

Source: BAE, 2017.

(Continued on the following page)

Table 9: For-Sale Affordability Gaps, Single-Family Homes, City of Los Angeles, 2017 (continued)

Community Plan Area	Three-Bedroom			Four-Bedroom		
	Very Low	Lower	Mod	Very Low	Lower	Mod
Arleta/Pacoima	\$238,492	\$200,190	\$115,379	\$228,047	\$186,657	\$95,227
Bel Air/Beverly Crest	\$1,378,492	\$1,340,190	\$1,255,379	\$1,938,047	\$1,896,657	\$1,805,227
Boyle Heights	\$213,492	\$175,190	\$90,379	\$241,047	\$199,657	\$108,227
Brentwood/Pacific Palisades	\$2,125,992	\$2,087,690	\$2,002,879	\$2,705,547	\$2,664,157	\$2,572,727
Canoga Park/Winnetka/Woodland Hills/West Hills	\$447,492	\$409,190	\$324,379	\$478,047	\$436,657	\$345,227
Central City	\$1,094,022	\$1,055,720	\$970,909	\$1,275,840	\$1,234,449	\$1,143,019
Central City North	\$490,659	\$452,357	\$367,546	\$579,892	\$538,501	\$447,072
Chatsworth/Porter Ranch	\$374,992	\$336,690	\$251,879	\$440,047	\$398,657	\$307,227
Encino/Tarzana	\$823,492	\$785,190	\$700,379	\$1,255,547	\$1,214,157	\$1,122,727
Granada Hills/Knollwood	\$335,992	\$297,690	\$212,879	\$323,047	\$281,657	\$190,227
Harbor Gateway	\$314,992	\$276,690	\$191,879	\$422,047	\$380,657	\$289,227
Hollywood	\$1,318,492	\$1,280,190	\$1,195,379	\$1,598,547	\$1,557,157	\$1,465,727
Los Angeles World Airport	N/A	N/A	N/A	N/A	N/A	N/A
Mission Hills/Panorama City/North Hills	\$288,492	\$250,190	\$165,379	\$318,047	\$276,657	\$185,227
North Hollywood/Valley Village	\$538,492	\$500,190	\$415,379	\$708,047	\$666,657	\$575,227
Northeast Los Angeles	\$548,492	\$510,190	\$425,379	\$528,047	\$486,657	\$395,227
Northridge	\$401,492	\$363,190	\$278,379	\$493,047	\$451,657	\$360,227
Palms/Mar Vista/Del Rey	\$1,173,492	\$1,135,190	\$1,050,379	\$1,293,047	\$1,251,657	\$1,160,227
Port of Los Angeles	N/A	N/A	N/A	N/A	N/A	N/A
Reseda/West Van Nuys	\$298,992	\$260,690	\$175,879	\$338,047	\$296,657	\$205,227
San Pedro	\$458,492	\$420,190	\$335,379	\$490,547	\$449,157	\$357,727
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$1,104,492	\$1,066,190	\$981,379	\$1,343,047	\$1,301,657	\$1,210,227
Silver Lake/Echo Park/Elysian Valley	\$888,492	\$850,190	\$765,379	\$817,547	\$776,157	\$684,727
South Los Angeles	\$218,492	\$180,190	\$95,379	\$265,047	\$223,657	\$132,227
Southeast Los Angeles	\$129,992	\$91,690	\$6,879	\$140,047	\$98,657	\$7,227
Sun Valley/La Tuna Canyon	\$301,992	\$263,690	\$178,879	\$363,047	\$321,657	\$230,227
Sunland/Tujunga/Lake View Terrace/Shadow Hills/E. La Tuna Canyon	\$373,492	\$335,190	\$250,379	\$478,047	\$436,657	\$345,227
Sylmar	\$283,492	\$245,190	\$160,379	\$284,297	\$242,907	\$151,477
Van Nuys/North Sherman Oaks	\$460,992	\$422,690	\$337,879	\$574,047	\$532,657	\$441,227
Venice	\$1,808,492	\$1,770,190	\$1,685,379	\$2,378,297	\$2,336,907	\$2,245,477
West Adams/Baldwin Hills/Leimert	\$482,492	\$444,190	\$359,379	\$598,047	\$556,657	\$465,227
West Los Angeles	\$1,308,492	\$1,270,190	\$1,185,379	\$1,543,047	\$1,501,657	\$1,410,227
Westchester/Playa Del Rey	\$1,008,492	\$970,190	\$885,379	\$955,547	\$914,157	\$822,727
Westlake	\$323,492	\$285,190	\$200,379	\$387,073	\$345,683	\$254,253
Westwood	\$1,852,242	\$1,813,940	\$1,729,129	\$3,651,047	\$3,609,657	\$3,518,227
Wilmington/Harbor City	\$264,992	\$226,690	\$141,879	\$411,047	\$369,657	\$278,227
Wilshire	\$1,258,492	\$1,220,190	\$1,135,379	\$1,465,547	\$1,424,157	\$1,332,727

Source: BAE, 2017.

Table 10: For-Sale Affordability Gaps, Condominiums, City of Los Angeles, 2017

Community Plan Area	Studio			One-Bedroom			Two-Bedroom		
	Very Low	Lower	Mod	Very Low	Lower	Mod	Very Low	Lower	Mod
Arleta/Pacoima	\$71,210	\$45,112	\$0	\$95,540	\$65,708	\$33	\$130,741	\$97,174	\$23,430
Bel Air/Beverly Crest	\$573,797	\$547,699	\$490,094	\$582,364	\$552,532	\$486,858	\$979,554	\$945,987	\$872,243
Boyle Heights	\$74,932	\$48,834	\$0	\$84,864	\$55,032	\$0	\$137,027	\$103,460	\$29,716
Brentwood/Pacific Palisades	\$313,835	\$287,737	\$230,133	\$450,913	\$421,081	\$355,407	\$756,741	\$723,174	\$649,430
Canoga Park/Winnetka/Woodland Hills/West Hills	\$166,687	\$140,589	\$82,985	\$204,413	\$174,581	\$108,907	\$291,991	\$258,424	\$184,680
Central City	\$380,585	\$354,487	\$296,883	\$466,913	\$437,081	\$371,407	\$653,241	\$619,674	\$545,930
Central City North	\$625,585	\$599,487	\$541,883	\$465,913	\$436,081	\$370,407	\$607,241	\$573,674	\$499,930
Chatsworth/Porter Ranch	\$137,822	\$111,724	\$54,120	\$153,831	\$123,998	\$58,324	\$243,241	\$209,674	\$135,930
Encino/Tarzana	\$167,427	\$141,329	\$83,725	\$158,913	\$129,081	\$63,407	\$293,241	\$259,674	\$185,930
Granada Hills/Knollwood	\$98,449	\$72,351	\$14,747	\$137,176	\$107,344	\$41,670	\$176,744	\$143,178	\$69,434
Harbor Gateway	\$127,460	\$101,362	\$43,758	\$160,413	\$130,581	\$64,907	\$225,741	\$192,174	\$118,430
Hollywood	\$318,335	\$292,237	\$234,633	\$416,913	\$387,081	\$321,407	\$512,741	\$479,174	\$405,430
Los Angeles World Airport	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mission Hills/Panorama City/North Hills	\$84,533	\$58,435	\$830	\$81,913	\$52,081	\$0	\$153,241	\$119,674	\$45,930
North Hollywood/Valley Village	\$184,598	\$158,500	\$100,896	\$218,913	\$189,081	\$123,407	\$322,241	\$288,674	\$214,930
Northeast Los Angeles	\$155,585	\$129,487	\$71,883	\$223,913	\$194,081	\$128,407	\$273,241	\$239,674	\$165,930
Northridge	\$164,467	\$138,369	\$80,764	\$165,147	\$135,315	\$69,641	\$288,241	\$254,674	\$180,930
Palms/Mar Vista/Del Rey	\$337,658	\$311,560	\$253,955	\$316,413	\$286,581	\$220,907	\$580,741	\$547,174	\$473,430
Port of Los Angeles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reseda/West Van Nuys	\$115,618	\$89,520	\$31,916	\$126,913	\$97,081	\$31,407	\$205,741	\$172,174	\$98,430
San Pedro	\$147,444	\$121,346	\$63,741	\$191,913	\$162,081	\$96,407	\$259,491	\$225,924	\$152,180
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$241,441	\$215,343	\$157,738	\$301,913	\$272,081	\$206,407	\$418,241	\$384,674	\$310,930
Silver Lake/Echo Park/Elysian Valley	\$303,612	\$277,514	\$219,909	\$327,202	\$297,370	\$231,695	\$523,241	\$489,674	\$415,930
South Los Angeles	\$173,348	\$147,250	\$89,646	\$84,413	\$54,581	\$0	\$303,241	\$269,674	\$195,930
Southeast Los Angeles	\$44,563	\$18,465	\$0	\$87,113	\$57,281	\$0	\$85,737	\$52,170	\$0
Sun Valley/La Tuna Canyon	\$155,585	\$129,487	\$71,883	\$89,913	\$60,081	\$0	\$273,241	\$239,674	\$165,930
Sunland/Tujunga/Lake View Terrace/Shadow Hills/E. La Tuna Canyon	\$155,585	\$129,487	\$71,883	\$173,740	\$143,907	\$78,233	\$273,241	\$239,674	\$165,930
Sylmar	\$90,158	\$64,060	\$6,455	\$104,772	\$74,940	\$9,266	\$162,741	\$129,174	\$55,430
Van Nuys/North Sherman Oaks	\$143,743	\$117,645	\$60,041	\$231,913	\$202,081	\$136,407	\$253,241	\$219,674	\$145,930
Venice	\$724,894	\$698,796	\$641,192	\$1,079,913	\$1,050,081	\$984,407	\$1,234,741	\$1,201,174	\$1,127,430
West Adams/Baldwin Hills/Leimert	\$155,585	\$129,487	\$71,883	\$300,913	\$271,081	\$205,407	\$273,241	\$239,674	\$165,930
West Los Angeles	\$396,868	\$370,770	\$313,166	\$516,413	\$486,581	\$420,907	\$680,741	\$647,174	\$573,430
Westchester/Playa Del Rey	\$294,730	\$268,632	\$211,028	\$334,913	\$305,081	\$239,407	\$508,241	\$474,674	\$400,930
Westlake	\$280,585	\$254,487	\$196,883	\$250,913	\$221,081	\$155,407	\$373,241	\$339,674	\$265,930
Westwood	\$329,085	\$302,987	\$245,383	\$432,913	\$403,081	\$337,407	\$753,241	\$719,674	\$645,930
Wilmington/Harbor City	\$125,980	\$99,882	\$42,278	\$106,857	\$77,024	\$11,350	\$223,241	\$189,674	\$115,930
Wilshire	\$165,085	\$138,987	\$81,383	\$285,413	\$255,581	\$189,907	\$485,741	\$452,174	\$378,430

Source: BAE, 2017.

(Continued on following page)

Table 10: For-Sale Affordability Gaps, Condominiums, City of Los Angeles, 2017 (continued)

Community Plan Area	Three-Bedroom			Four-Bedroom		
	Very Low	Lower	Mod	Very Low	Lower	Mod
Arleta/Pacoima	\$203,534	\$166,275	\$83,775	\$257,260	\$216,997	\$128,058
Bel Air/Beverly Crest	\$1,167,284	\$1,130,025	\$1,047,525	\$1,278,174	\$1,237,911	\$1,148,972
Boyle Heights	\$159,664	\$122,405	\$39,905	\$213,228	\$172,965	\$84,026
Brentwood/Pacific Palisades	\$1,144,784	\$1,107,525	\$1,025,025	\$987,244	\$946,981	\$858,042
Canoga Park/Winnetka/Woodland Hills/West Hills	\$309,784	\$272,525	\$190,025	\$307,510	\$267,247	\$178,308
Central City	\$779,035	\$741,777	\$659,276	\$852,103	\$811,840	\$722,901
Central City North	\$588,784	\$551,525	\$469,025	\$792,040	\$751,777	\$662,838
Chatsworth/Porter Ranch	\$268,784	\$231,525	\$149,025	\$316,760	\$276,497	\$187,558
Encino/Tarzana	\$394,784	\$357,525	\$275,025	\$382,046	\$341,783	\$252,844
Granada Hills/Knollwood	\$245,831	\$208,573	\$126,072	\$277,925	\$237,662	\$148,723
Harbor Gateway	\$304,784	\$267,525	\$185,025	\$419,760	\$379,497	\$290,558
Hollywood	\$644,284	\$607,025	\$524,525	\$668,650	\$628,387	\$539,448
Los Angeles World Airport	N/A	N/A	N/A	N/A	N/A	N/A
Mission Hills/Panorama City/North Hills	\$184,784	\$147,525	\$65,025	\$303,510	\$263,247	\$174,308
North Hollywood/Valley Village	\$415,534	\$378,275	\$295,775	\$419,912	\$379,649	\$290,709
Northeast Los Angeles	\$389,784	\$352,525	\$270,025	\$464,760	\$424,497	\$335,558
Northridge	\$314,284	\$277,025	\$194,525	\$257,260	\$216,997	\$128,058
Palms/Mar Vista/Del Rey	\$638,534	\$601,275	\$518,775	\$757,439	\$717,176	\$628,237
Port of Los Angeles	N/A	N/A	N/A	N/A	N/A	N/A
Reseda/West Van Nuys	\$227,284	\$190,025	\$107,525	\$289,760	\$249,497	\$160,558
San Pedro	\$384,784	\$347,525	\$265,025	\$398,760	\$358,497	\$269,558
Sherman Oaks/Studio City/Toluca Lake/Cahuenga Pass	\$602,284	\$565,025	\$482,525	\$545,260	\$504,997	\$416,058
Silver Lake/Echo Park/Elysian Valley	\$699,784	\$662,525	\$580,025	\$682,360	\$642,097	\$553,158
South Los Angeles	\$284,784	\$247,525	\$165,025	\$395,103	\$354,840	\$265,901
Southeast Los Angeles	\$100,929	\$63,671	\$0	\$111,105	\$70,842	\$0
Sun Valley/La Tuna Canyon	\$324,784	\$287,525	\$205,025	\$399,760	\$359,497	\$270,558
Sunland/Tujunga/Lake View Terrace/Shadow Hills/E. La Tuna Canyon	\$274,784	\$237,525	\$155,025	\$344,760	\$304,497	\$215,558
Sylmar	\$249,784	\$212,525	\$130,025	\$349,760	\$309,497	\$220,558
Van Nuys/North Sherman Oaks	\$330,784	\$293,525	\$211,025	\$329,817	\$289,554	\$200,615
Venice	\$1,524,784	\$1,487,525	\$1,405,025	\$1,611,376	\$1,571,113	\$1,482,174
West Adams/Baldwin Hills/Leimert	\$326,909	\$289,651	\$207,151	\$355,932	\$315,669	\$226,729
West Los Angeles	\$809,784	\$772,525	\$690,025	\$859,510	\$819,247	\$730,308
Westchester/Playa Del Rey	\$534,784	\$497,525	\$415,025	\$662,774	\$622,511	\$533,572
Westlake	\$369,784	\$332,525	\$250,025	\$486,503	\$446,240	\$357,301
Westwood	\$1,166,784	\$1,129,525	\$1,047,025	\$982,674	\$942,411	\$853,472
Wilmington/Harbor City	\$266,034	\$228,775	\$146,275	\$399,760	\$359,497	\$270,558
Wilshire	\$568,284	\$531,025	\$448,525	\$633,396	\$593,133	\$504,194

Source: BAE, 2017.

IMPLEMENTATION

This section provides information on the manner in which the affordability gaps identified in this study would apply to the calculation of an in-lieu fee, in accordance with Measure JJJ. For projects that meet the Measure JJJ affordable housing requirements through payment of an in-lieu fee, Measure JJJ stipulates that the fee amount is equal to 1.1 times the number of affordable units that the developer would provide if the project were to provide units on site, multiplied by the applicable affordability gap. This formula requires project-specific in-lieu fee calculations to account for the unit mix by number of bedrooms, whether the Measure JJJ affordability requirements are due to an increase in density or a zone change to residential use (for rental developments), the building type (for for-sale developments), and the CPA (for for-sale developments).

Rental In-Lieu Fee Calculations

Measure JJJ applies lower affordability requirements to projects that receive discretionary approvals for a General Plan amendment, zone change, or height district change resulting in an increase in density over 35 percent than for discretionary approvals that result in a change to a residential use where not previously permitted. This section shows the in-lieu fee calculations for sample projects that receive each type of discretionary approval.

Over 35 Percent Added Density

Table 11 shows the in-lieu fee calculations for a sample rental project that receives discretionary approvals for a General Plan amendment, zone change, or height district change resulting in an increase in density of more than 35 percent. Per Measure JJJ, in order to meet affordability requirements through units on site, projects receiving these types of approvals must provide at least five percent of the total number of units in the project at rents affordable to extremely low-income households, plus either six percent of units to very low-income households or 15 percent of units to lower-income households.

For a 100-unit project, these requirements translate to either five extremely low-income units and six very low-income units (option 1 in Table 11) or five extremely low-income units and 15 lower-income units (option 2 in Table 11). Measure JJJ requires that affordable units are “comparable to the market-rate units in the Project... in terms of unit type, number of bedrooms per unit,” and other factors. Therefore, the figures in Table 11 apply the affordability requirements to each unit type individually to determine the number of units at each affordability level by number of bedrooms. Per the requirements of Measure JJJ, the table multiplies the number of units at each affordability level and unit size by 1.1, then by the applicable affordability gap based on affordability level and number of bedrooms.

Table 11: In-Lieu Fee Calculation for Sample 100-Unit Rental Project with Over 35 Percent Added Density

	<u>Studio</u>	<u>One-Bedroom</u>	<u>Two-Bedroom</u>	<u>Three-Bedroom</u>	<u>Project Total</u>
Units in Project	10	30	40	20	100
Affordable Units if Provided on Site (a)					
Option 1					
Extremely Low-Income	0.50	1.50	2.00	1.00	5.00
Very Low-Income	0.60	1.80	2.40	1.20	6.00
Lower-Income	0.00	0.00	0.00	0.00	0.00
Option 2					
Extremely Low-Income	0.50	1.50	2.00	1.00	5.00
Very Low-Income	0.00	0.00	0.00	0.00	0.00
Lower-Income	1.50	4.50	6.00	3.00	15.00
Affordable Units if Provided on Site x 1.1					
Option 1					
Extremely Low-Income	0.55	1.65	2.20	1.10	5.50
Very Low-Income	0.66	1.98	2.64	1.32	6.60
Lower-Income	0.00	0.00	0.00	0.00	0.00
Option 2					
Extremely Low-Income	0.55	1.65	2.20	1.10	5.50
Very Low-Income	0.00	0.00	0.00	0.00	0.00
Lower-Income	1.65	4.95	6.60	3.30	16.50
In-Lieu Fee Payment (b)					
Option 1					
Extremely Low-Income	\$207,366	\$662,044	\$977,785	\$542,839	\$2,390,034
Very Low-Income	\$229,581	\$728,460	\$1,074,751	\$596,458	\$2,629,250
Lower-Income	\$0	\$0	\$0	\$0	\$0
Total In-Lieu Fee	\$436,947	\$1,390,504	\$2,052,536	\$1,139,297	\$5,019,284
<i>Fee Per Market-Rate Unit</i>	<i>\$43,695</i>	<i>\$46,350</i>	<i>\$51,313</i>	<i>\$56,965</i>	<i>\$50,193</i>
Option 2					
Extremely Low-Income	\$207,366	\$662,044	\$977,785	\$542,839	\$2,390,034
Very Low-Income	\$0	\$0	\$0	\$0	\$0
Lower-Income	\$549,879	\$1,738,992	\$2,563,198	\$1,422,680	\$6,274,748
Total In-Lieu Fee	\$757,245	\$2,401,036	\$3,540,982	\$1,965,519	\$8,664,782
<i>Fee Per Market-Rate Unit</i>	<i>\$75,725</i>	<i>\$80,035</i>	<i>\$88,525</i>	<i>\$98,276</i>	<i>\$86,648</i>
Measure JJJ Requirements					
% Affordable Units if Provided on Site	<u>ELI</u>	<u>VLI</u>	<u>LI</u>		
Option 1	5%	6%	0%		
Option 2	5%	0%	15%		
Affordability Gaps	<u>Studio</u>	<u>1BR</u>	<u>2BR</u>	<u>3BR</u>	
Extremely Low-Income	\$377,030	\$401,239	\$444,448	\$493,490	
Very Low-Income	\$347,850	\$367,909	\$407,103	\$451,862	
Lower-Income	\$333,260	\$351,312	\$388,363	\$431,115	

Notes:

Table shows in-lieu fee calculations for rental projects that receive discretionary approvals for General Plan amendments, zone changes, or height district changes resulting in an increase in density of more than 35 percent.

(a) On-site affordability requirement calls for five percent of units affordable to extremely low-income households, plus either six percent affordable to very low-income households (shown here as Option 1) or 15 percent affordable to lower-income households (shown here as Option 2).

(b) In-lieu fee payment is equal to 1.1 times the on-site unit requirement, multiplied by the affordability gap.

Source: BAE, 2017.

For option 1, which represents a fee in-lieu of providing five percent of units affordable to extremely low-income households and six percent of units affordable to very low-income households, the resulting in-lieu fees per unit are:

- \$43,695 per studio unit
- \$46,350 per one-bedroom unit
- \$51,313 per two-bedroom unit
- \$56,965 per three-bedroom unit

These fee rates by number of bedrooms would apply to all rental developments that receive discretionary approvals for General Plan amendments, zone changes, or height district changes resulting in an increase in density of more than 35 percent. The average fee per unit across an entire project would vary based on the unit mix by number of bedrooms.

Option 2, which represents a fee in-lieu of providing five percent of units affordable to extremely low-income households and 15 percent of units affordable to lower-income households, results in a higher in-lieu fee payment. Measure JJJ does not specify which of the two on-site affordability options will be used to calculate the in-lieu fees. Consequently, developers that choose to pay the in-lieu fee are likely to base the fee calculation on the five percent at extremely low-income/six percent at very low-income option, which leads to a lower fee amount, unless the City adopts additional policies to require that in-lieu fee calculations will be based on the higher fee rate.

Change to Residential Use

Table 12 shows the in-lieu fee calculations for a sample rental project that receives discretionary approvals to allow residential uses in an area where not previously allowed. Per Measure JJJ, in order to meet affordability requirements through units on site, projects receiving these types of approvals must provide at least five percent of units affordable to extremely low-income households, plus either 11 percent of units affordable to very low-income households or 20 percent of units affordable to lower-income households.

For a 100-unit project, these requirements translate to either five extremely low-income units and 11 very low-income units (option 1 in Table 12) or five extremely low-income units and 20 lower-income units (option 2 in Table 12). As with the figures in Table 11, the figures in Table 12 apply the affordability requirements to each unit type individually to calculate the required number of units at each affordability level by number of bedrooms. The figures in Table 12 multiply the number of units at each affordability level and unit size by 1.1, then by the applicable affordability gap based on affordability level and number of bedrooms.

Table 12: In-Lieu Fee Calculation for Sample 100-Unit Rental Project with a Change to Residential Use

	<u>Studio</u>	<u>One-Bedroom</u>	<u>Two-Bedroom</u>	<u>Three-Bedroom</u>	<u>Project Total</u>
Units in Project	10	30	40	20	100
Affordable Units if Provided on Site (a)					
Option 1					
Extremely Low-Income	0.50	1.50	2.00	1.00	5.00
Very Low-Income	1.10	3.30	4.40	2.20	11.00
Lower-Income	0.00	0.00	0.00	0.00	0.00
Option 2					
Extremely Low-Income	0.50	1.50	2.00	1.00	5.00
Very Low-Income	0.00	0.00	0.00	0.00	0.00
Lower-Income	2.00	6.00	8.00	4.00	20.00
Affordable Units if Provided on Site x 1.1					
Option 1					
Extremely Low-Income	0.55	1.65	2.20	1.10	5.50
Very Low-Income	1.21	3.63	4.84	2.42	12.10
Lower-Income	0.00	0.00	0.00	0.00	0.00
Option 2					
Extremely Low-Income	0.55	1.65	2.20	1.10	5.50
Very Low-Income	0.00	0.00	0.00	0.00	0.00
Lower-Income	2.20	6.60	8.80	4.40	22.00
In-Lieu Fee Payment (b)					
Option 1					
Extremely Low-Income	\$207,366	\$662,044	\$977,785	\$542,839	\$2,390,034
Very Low-Income	\$420,898	\$1,335,511	\$1,970,377	\$1,093,506	\$4,820,292
Lower-Income	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total In-Lieu Fee	\$628,265	\$1,997,554	\$2,948,161	\$1,636,346	\$7,210,326
<i>Fee Per Market-Rate Unit</i>	<i>\$62,826</i>	<i>\$66,585</i>	<i>\$73,704</i>	<i>\$81,817</i>	<i>\$72,103</i>
Option 2					
Extremely Low-Income	\$207,366	\$662,044	\$977,785	\$542,839	\$2,390,034
Very Low-Income	\$0	\$0	\$0	\$0	\$0
Lower-Income	<u>\$733,172</u>	<u>\$2,318,656</u>	<u>\$3,417,597</u>	<u>\$1,896,906</u>	<u>\$8,366,331</u>
Total In-Lieu Fee	\$940,538	\$2,980,700	\$4,395,382	\$2,439,745	\$10,756,365
<i>Fee Per Market-Rate Unit</i>	<i>\$94,054</i>	<i>\$99,357</i>	<i>\$109,885</i>	<i>\$121,987</i>	<i>\$107,564</i>
Measure JJJ Requirements					
% Affordable Units if Provided on Site	<u>ELI</u>	<u>VLI</u>	<u>LI</u>		
Option 1	5%	11%	0%		
Option 2	5%	0%	20%		
Affordability Gaps					
	<u>Studio</u>	<u>1BR</u>	<u>2BR</u>	<u>3BR</u>	
Extremely Low-Income	\$377,030	\$401,239	\$444,448	\$493,490	
Very Low-Income	\$347,850	\$367,909	\$407,103	\$451,862	
Lower-Income	\$333,260	\$351,312	\$388,363	\$431,115	

Notes:

Table shows in-lieu fee calculations for rental projects that receive discretionary approvals to allow residential uses in an area where not previously allowed.

(a) On-site affordability requirement calls for five percent of units affordable to extremely low-income households, plus either 11 percent affordable to very low-income households (shown here as Option 1) or 20 percent affordable to lower-income households (shown here as Option 2).

(b) In-lieu fee payment is equal to 1.1 times the on-site unit requirement, multiplied by the affordability gap.

Source: BAE, 2017.

The on-site requirements for rental projects receiving approvals for a change to a residential use are higher than the on-site requirements for projects receiving approvals for an increase in density over 35 percent, resulting in higher in-lieu fee amounts. For option 1, which represents a fee in-lieu of providing five percent of units affordable to extremely low-income households and 11 percent of units affordable to very low-income households, the resulting per-unit in-lieu fees are:

- \$62,826 per studio unit
- \$66,585 per one-bedroom unit
- \$73,704 per two-bedroom unit
- \$81,817 per three-bedroom unit

These fee rates by number of bedrooms would apply to all rental developments that receive discretionary approvals for General Plan amendments, zone changes, or height district changes resulting in residential uses where not previously allowed, while the average fee per unit for an entire project would vary based on the unit mix.

Option 2, which represents a fee in-lieu of providing five percent of units affordable to extremely low-income households and 20 percent of units affordable to lower-income households, results in a higher in-lieu fee payment. As with the in-lieu fee calculations for projects receiving approvals for more than 35 percent additional density, Measure JJJ does not specify which of the two on-site affordability options will be used to calculate the in-lieu fees for projects receiving approvals for a change to a residential use. As a result, developers that choose to pay the in-lieu fee are likely to base the fee calculation on the five percent at extremely low-income/11 percent at very low-income option, unless the City adopts additional policies to require that in-lieu fee calculations will be based on the higher rate.

For-Sale In-Lieu Fee Calculations

For-sale developments that are subject to the Measure JJJ affordability requirements have three options for meeting the requirements on site; developers can provide 11 percent of units affordable to very low-income households, 20 percent affordable to lower-income households, or 40 percent affordable to moderate-income households. The requirements are the same for projects that are subject to the affordability requirements due an increase in density and for projects that are subject to the requirements due to a change to a residential use.

Table 13 and Table 14 below show the in-lieu fee calculations for sample for-sale projects per the requirements of Measure JJJ. Table 13 shows the calculations for sample developments in the Westwood CPA, which has some of the highest affordability gaps in the City, and Table 14 shows the calculations for sample developments in the Mission Hills - Panorama City - North Hills CPA, which has some of the lowest affordability gaps in the City. Each table shows the calculations for a sample single-family development and a condominium development with the same mix of units by number of bedrooms.

For a 100-unit project, the Measure JJJ requirements translate to either 11 very low-income units (option 1 in Table 13 and Table 14), 20 lower-income units (option 2 in Table 13 and Table 14), or 40 moderate-income units (option 3 in Table 13 and Table 14). Since Measure JJJ requires that affordable units are comparable to the market-rate units in a project in terms of unit type, the figures in Table 13 and Table 14 apply the affordability requirements to each unit type individually to determine the number of units at each affordability level by number of bedrooms. Per the requirements of Measure JJJ, the table multiplies the number of units at each affordability level and unit size by 1.1, then by the applicable affordability gap based on affordability level and number of bedrooms.

The in-lieu fee for the sample 100-unit projects in the Westwood CPA (shown in Table 13) would range from \$22.1 million to \$75.3 million for a single-family development, or \$10.6 million to \$33.5 million for a condominium development. The lower end of each range represents the fees in-lieu of providing 11 percent of units affordable to very low-income households, while the higher end of each range represents the fees in-lieu of providing 40 percent of units affordable to moderate-income households. Since Measure JJJ does not specify which of the three on-site affordability options will be used to calculate the in-lieu fees, a developer of the sample projects in Table 13 would likely calculate the fee based 11 percent of units affordable to very low-income households, unless the City adopts additional policies to require that in-lieu fee calculations will be based on one of the higher rates.

The in-lieu fees for for-sale units in the Mission Hills - Panorama City - North Hills CPA are substantially lower than the in-lieu fees for the Westwood CPA, which corresponds to the lower median sale prices and affordability gaps the Mission Hills - Panorama City - North Hills CPA. The affordability gap for one-bedroom, moderate-income condominium units in the Mission Hills - Panorama City - North Hills CPA is negative. However, because Measure JJJ requires that developers pay a fee for all applicable projects, the City requires developers to apply the next highest income level with a positive affordability gap for the same unit type in any case where an affordability gap is negative or zero. In this example, developers would be required to apply the lower-income affordability gap for one-bedroom condominiums (i.e., the highest income level with a positive affordability gap for this unit type) to calculate the in-lieu fee for one-bedroom, moderate-income condominiums in this CPA.

The in-lieu fee for the sample 100-unit projects in the Mission Hills - Panorama City - North Hills CPA shown in Table 14 would range from \$3.0 million to \$5.7 million for a single-family development and \$2.0 million to \$2.9 million for a condominium development. As with the sample projects in the Westwood CPA, the lower end of each ranges represents the fees in-lieu of providing 11 percent of units affordable to very low-income households, while the higher end of each range represents the fees in-lieu of providing 40 percent of units affordable to moderate-income households. A developer of the sample projects in Table 14 would likely calculate the fee based the very low-income affordability option, unless the City adopts

additional policies to require that in-lieu fee calculations will be based on one of the higher rates.

Table 13: In-Lieu Fee Calculation for Sample 100-Unit For-Sale Project in the Westwood CPA

	Studio	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom	Project Total
Units in Project	5	15	30	40	10	100
Affordable Units if Provided on Site (a)						
Option 1 - Very Low-Income Units	0.55	1.65	3.30	4.40	1.10	11.00
Option 2 - Lower-Income Units	1.00	3.00	6.00	8.00	2.00	20.00
Option 3 - Moderate-Income Unit	2.00	6.00	12.00	16.00	4.00	40.00
Affordable Units if Provided on Site x 1.1						
Option 1 - Very Low-Income Units	0.61	1.82	3.63	4.84	1.21	12.10
Option 2 - Lower-Income Units	1.10	3.30	6.60	8.80	2.20	22.00
Option 3 - Moderate-Income Unit	2.20	6.60	13.20	17.60	4.40	44.00
In-Lieu Fee Payment (b)						
Single-Family Development						
Option 1 - Very Low-Income Units	\$570,273	\$2,162,880	\$5,974,856	\$8,964,849	\$4,417,767	\$22,090,625
<i>Fee Per Market-Rate Unit</i>	<i>\$114,055</i>	<i>\$144,192</i>	<i>\$199,162</i>	<i>\$224,121</i>	<i>\$441,777</i>	<i>\$220,906</i>
Option 2 - Lower-Income Units	\$1,007,347	\$3,831,305	\$10,635,630	\$15,962,671	\$7,941,245	\$39,378,199
<i>Fee Per Market-Rate Unit</i>	<i>\$201,469</i>	<i>\$255,420</i>	<i>\$354,521</i>	<i>\$399,067</i>	<i>\$794,124</i>	<i>\$393,782</i>
Option 3 - Moderate-Income Unit	\$1,884,416	\$7,217,022	\$20,270,580	\$30,432,671	\$15,480,199	\$75,284,888
<i>Fee Per Market-Rate Unit</i>	<i>\$376,883</i>	<i>\$481,135</i>	<i>\$675,686</i>	<i>\$760,817</i>	<i>\$1,548,020</i>	<i>\$752,849</i>
Condominium Development						
Option 1 - Very Low-Income Units	\$199,097	\$785,737	\$2,734,265	\$5,647,233	\$1,189,036	\$10,555,368
<i>Fee Per Market-Rate Unit</i>	<i>\$39,819</i>	<i>\$52,382</i>	<i>\$91,142</i>	<i>\$141,181</i>	<i>\$118,904</i>	<i>\$105,554</i>
Option 2 - Lower-Income Units	\$333,286	\$1,330,167	\$4,749,850	\$9,939,823	\$2,073,305	\$18,426,431
<i>Fee Per Market-Rate Unit</i>	<i>\$66,657</i>	<i>\$88,678</i>	<i>\$158,328</i>	<i>\$248,496</i>	<i>\$207,331</i>	<i>\$184,264</i>
Option 3 - Moderate-Income Unit	\$539,842	\$2,226,884	\$8,526,281	\$18,427,637	\$3,755,278	\$33,475,922
<i>Fee Per Market-Rate Unit</i>	<i>\$107,968</i>	<i>\$148,459</i>	<i>\$284,209</i>	<i>\$460,691</i>	<i>\$375,528</i>	<i>\$334,759</i>
Measure JJJ Requirements						
% Affordable Units if Provided on Site	VLI	LI	MI			
Option 1	11%	0%	0%			
Option 2	0%	20%	0%			
Option 3	0%	0%	40%			
Affordability Gaps						
Single-Family	Studio	1BR	2BR	3BR	4BR	
Very Low-Income Units	\$942,599	\$1,191,669	\$1,645,966	\$1,852,242	\$3,651,047	
Lower-Income Units	\$915,770	\$1,161,002	\$1,611,459	\$1,813,940	\$3,609,657	
Moderate-Income Unit	\$856,553	\$1,093,488	\$1,535,650	\$1,729,129	\$3,518,227	
Condominium						
Very Low-Income Units	\$329,085	\$432,913	\$753,241	\$1,166,784	\$982,674	
Lower-Income Units	\$302,987	\$403,081	\$719,674	\$1,129,525	\$942,411	
Moderate-Income Unit	\$245,383	\$337,407	\$645,930	\$1,047,025	\$853,472	

Notes:

Table shows in-lieu fee calculations for rental projects that receive discretionary approvals for General Plan amendments, zone changes, or height district changes resulting in an increase in density of more than 35 percent or discretionary approvals to allow residential uses in an area where not previously allowed.

(a) On-site affordability requirement calls for 11 percent of units affordable to very low-income households (shown here as Option 1), 20 percent affordable to lower-income households (shown here as Option 2) or 40 percent affordable to moderate-income households (shown here as Option 3).

(b) In-lieu fee payment is equal to 1.1 times the on-site unit requirement, multiplied by the affordability gap.

Source: BAE, 2017.

Table 14: In-Lieu Fee Calculation for Sample 100-Unit For-Sale Project in the Mission Hills - Panorama City - North Hills CPA

	<u>Studio</u>	<u>One-Bedroom</u>	<u>Two-Bedroom</u>	<u>Three-Bedroom</u>	<u>Four-Bedroom</u>	<u>Project Total</u>
Units in Project	5	15	30	40	10	100
<u>Affordable Units if Provided on Site (a)</u>						
Option 1 - Very Low-Income Units	0.55	1.65	3.30	4.40	1.10	11.00
Option 2 - Lower-Income Units	1.00	3.00	6.00	8.00	2.00	20.00
Option 3 - Moderate-Income Unit	2.00	6.00	12.00	16.00	4.00	40.00
<u>Affordable Units if Provided on Site x 1.1</u>						
Option 1 - Very Low-Income Units	0.61	1.82	3.63	4.84	1.21	12.10
Option 2 - Lower-Income Units	1.10	3.30	6.60	8.80	2.20	22.00
Option 3 - Moderate-Income Unit	2.20	6.60	13.20	17.60	4.40	44.00
<u>In-Lieu Fee Payment (b)</u>						
<u>Single-Family Development</u>						
Option 1 - Very Low-Income Units	\$62,132	\$295,033	\$825,701	\$1,396,299	\$384,837	\$2,964,003
<i>Fee Per Market-Rate Unit</i>	<i>\$12,426</i>	<i>\$19,669</i>	<i>\$27,523</i>	<i>\$34,907</i>	<i>\$38,484</i>	<i>\$29,640</i>
Option 2 - Lower-Income Units	\$83,456	\$435,220	\$1,273,530	\$2,201,671	\$608,645	\$4,602,522
<i>Fee Per Market-Rate Unit</i>	<i>\$16,691</i>	<i>\$29,015</i>	<i>\$42,451</i>	<i>\$55,042</i>	<i>\$60,864</i>	<i>\$46,025</i>
Option 3 - Moderate-Income Unit	\$36,633	\$424,853	\$1,546,380	\$2,910,671	\$814,999	\$5,733,535
<i>Fee Per Market-Rate Unit</i>	<i>\$7,327</i>	<i>\$28,324</i>	<i>\$51,546</i>	<i>\$72,767</i>	<i>\$81,500</i>	<i>\$57,335</i>
<u>Condominium Development</u>						
Option 1 - Very Low-Income Units	\$51,142	\$148,672	\$556,265	\$894,353	\$367,247	\$2,017,680
<i>Fee Per Market-Rate Unit</i>	<i>\$10,228</i>	<i>\$9,911</i>	<i>\$18,542</i>	<i>\$22,359</i>	<i>\$36,725</i>	<i>\$20,177</i>
Option 2 - Lower-Income Units	\$64,278	\$171,867	\$789,850	\$1,298,223	\$579,144	\$2,903,362
<i>Fee Per Market-Rate Unit</i>	<i>\$12,856</i>	<i>\$11,458</i>	<i>\$26,328</i>	<i>\$32,456</i>	<i>\$57,914</i>	<i>\$29,034</i>
Option 3 - Moderate-Income Unit	\$1,827	\$343,733	\$606,281	\$1,144,437	\$766,955	\$2,863,233
<i>Fee Per Market-Rate Unit</i>	<i>\$365</i>	<i>\$22,916</i>	<i>\$20,209</i>	<i>\$28,611</i>	<i>\$76,696</i>	<i>\$28,632</i>
<u>Measure JJJ Requirements</u>						
<u>% Affordable Units if Provided on Site</u>	<u>VLI</u>	<u>LI</u>	<u>MI</u>			
Option 1	11%	0%	0%			
Option 2	0%	20%	0%			
Option 3	0%	0%	40%			
<u>Affordability Gaps</u>						
<u>Single-Family</u>						
	<u>Studio</u>	<u>1BR</u>	<u>2BR</u>	<u>3BR</u>	<u>4BR</u>	
Very Low-Income Units	\$102,698	\$162,553	\$227,466	\$288,492	\$318,047	
Lower-Income Units	\$75,869	\$131,885	\$192,959	\$250,190	\$276,657	
Moderate-Income Unit	\$16,652	\$64,372	\$117,150	\$165,379	\$185,227	
<u>Condominium</u>						
Very Low-Income Units	\$84,533	\$81,913	\$153,241	\$184,784	\$303,510	
Lower-Income Units	\$58,435	\$52,081	\$119,674	\$147,525	\$263,247	
Moderate-Income Unit	\$830	\$52,081	\$45,930	\$65,025	\$174,308	

Notes:

Table shows in-lieu fee calculations for rental projects that receive discretionary approvals for General Plan amendments, zone changes, or height district changes resulting in an increase in density of more than 35 percent or discretionary approvals to allow residential uses in an area where not previously allowed.

(a) On-site affordability requirement calls for 11 percent of units affordable to very low-income households (shown here as Option 1), 20 percent affordable to lower-income households (shown here as Option 2) or 40 percent affordable to moderate-income households (shown here as Option 3).

(b) In-lieu fee payment is equal to 1.1 times the on-site unit requirement, multiplied by the affordability gap.

(c) The moderate-income affordability gap for one-bedroom units is negative, and therefore the City would apply the lower-income affordability gap to calculate the in-lieu fee for one-bedroom moderate-income units.

Source: BAE, 2017.

While the lowest in-lieu fees for the developments in Table 13 and Table 14 are the fees that represent a fee payment in lieu of providing 11 percent of units to very low-income households, a different unit mix could result in lower fee rates based on the in-lieu fees associated with one of the other on-site affordability options. For example, in the in the Mission Hills - Panorama City - North Hills CPA, a 100-unit condominium development with 50 studios, ten one-bedroom units, and 40 two-bedroom units would have the lowest in-lieu fee if the fee calculations are based on a fee in lieu of providing 40 percent of units affordable to moderate-income households. Consequently, a developer of a condominium project with this unit mix would calculate the fee based on the moderate-income option, unless the City adopts a policy to require that fees will be calculated based on one of the higher rates. This means that the fee rates for each unit size could vary between projects in the same CPA, depending on the on-site affordability options that the fee calculations represent. As a result, the for-sale in-lieu fees must be calculated on a project-by-project basis.

APPENDIX A: CONDOMINIUM COST DIFFERENTIALS

Table A.1: Sale Price Differential for a Condominium, as Compared to a Single-Family Home, City of Los Angeles, 2017

Community Plan Area	% Discount for a Condo (compared to SFR)				
	Studio	1 BR	2 BR	3 BR	4 BR
Arleta - Pacoima	N/A	N/A	-38%	-24%	-9%
Bel Air - Beverly Crest	N/A	N/A	N/A	-18%	N/A
Boyle Heights	N/A	N/A	N/A	N/A	N/A
Brentwood - Pacific Palisades	N/A	N/A	-56%	-45%	N/A
Canoga Park - Winnetka - Woodland Hills - West Hills	N/A	N/A	-39%	-32%	-35%
Central City	N/A	N/A	N/A	N/A	N/A
Central City North	N/A	N/A	23%	N/A	N/A
Chatsworth - Porter Ranch	N/A	N/A	-36%	-30%	-29%
Encino - Tarzana	N/A	N/A	-50%	-49%	N/A
Granada Hills - Knollwood	N/A	N/A	N/A	N/A	N/A
Harbor Gateway	N/A	N/A	N/A	N/A	N/A
Hollywood	N/A	-29%	-47%	-49%	N/A
Los Angeles World Airport	N/A	N/A	N/A	N/A	N/A
Mission Hills - Panorama City - North Hills	N/A	N/A	-35%	-35%	-15%
North Hollywood - Valley Village	N/A	N/A	-37%	-26%	N/A
Northeast Los Angeles	N/A	-36%	-40%	-30%	-18%
Northridge	N/A	N/A	-20%	-26%	-43%
Palms - Mar Vista - Del Rey	N/A	N/A	-41%	-44%	N/A
Port of Los Angeles	N/A	N/A	N/A	N/A	N/A
Reseda - West Van Nuys	N/A	N/A	-34%	-28%	-21%
San Pedro	N/A	-34%	-28%	-22%	-23%
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	N/A	-48%	-52%	-44%	N/A
Silver Lake - Echo Park - Elysian Valley	N/A	N/A	-28%	-24%	N/A
South Los Angeles	N/A	-51%	4%	0%	N/A
Southeast Los Angeles	N/A	N/A	N/A	N/A	N/A
Sun Valley - La Tuna Canyon	N/A	N/A	-13%	-9%	-5%
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon	N/A	N/A	-19%	-29%	-29%
Sylmar	N/A	N/A	-31%	-21%	0%
Van Nuys - North Sherman Oaks	N/A	N/A	-40%	-30%	N/A
Venice	N/A	-35%	-19%	-18%	N/A
West Adams - Baldwin Hills - Leimert	N/A	-1%	-38%	N/A	N/A
West Los Angeles	N/A	N/A	-43%	-38%	-43%
Westchester - Playa Del Rey	N/A	N/A	-37%	-45%	N/A
Westlake	N/A	N/A	-9%	-4%	N/A
Westwood	N/A	N/A	-53%	-37%	N/A
Wilmington - Harbor City	N/A	N/A	-3%	-14%	-13%
Wilshire	N/A	N/A	-52%	-52%	N/A
Median	N/A	-35%	-37%	-30%	-21%

Sources: CoreLogic, 2017; BAE, 2017.

APPENDIX B: AFFORDABLE SALE PRICE CALCULATIONS

Table B.1: Affordable Housing Mortgage Calculator for Single-Family Units, City of Los Angeles, 2017

	Household	Sale	Down	Total	Monthly	Monthly	Mortgage	Homeowner's	Homeowner's	Total
	Income (a)	Price	Payment (b)	Mortgage (b)	Payment	Property	Insurance (d)	Insurance (e)	Association	Monthly
						Tax (c)			Fee (f)	PITI (g)
1-Person HH										
Very Low Income	\$30,400	\$134,144	\$4,695	\$129,449	\$607.76	\$133.03	\$91.69	\$54.19	\$0.00	\$886.67
Lower Income	\$36,480	\$160,973	\$5,634	\$155,339	\$729.31	\$159.63	\$110.03	\$65.03	\$0.00	\$1,064.00
Moderate Income	\$49,900	\$220,191	\$7,707	\$212,484	\$997.60	\$218.36	\$150.51	\$88.95	\$0.00	\$1,455.42
2-Person HH										
Very Low Income	\$34,750	\$153,339	\$5,367	\$147,972	\$694.72	\$152.06	\$104.81	\$61.95	\$0.00	\$1,013.54
Lower Income	\$41,700	\$184,007	\$6,440	\$177,567	\$833.66	\$182.47	\$125.78	\$74.34	\$0.00	\$1,216.25
Moderate Income	\$57,000	\$251,520	\$8,803	\$242,717	\$1,139.54	\$249.42	\$171.92	\$101.61	\$0.00	\$1,662.50
3-Person HH										
Very Low Income	\$39,100	\$172,534	\$6,039	\$166,495	\$781.69	\$171.10	\$117.93	\$69.70	\$0.00	\$1,140.42
Lower Income	\$46,920	\$207,041	\$7,246	\$199,794	\$938.02	\$205.32	\$141.52	\$83.64	\$0.00	\$1,368.50
Moderate Income	\$64,100	\$282,850	\$9,900	\$272,950	\$1,281.48	\$280.49	\$193.34	\$114.27	\$0.00	\$1,869.58
4-Person HH										
Very Low Income	\$43,400	\$191,508	\$6,703	\$184,806	\$867.65	\$189.91	\$130.90	\$77.37	\$0.00	\$1,265.83
Lower Income	\$52,080	\$229,810	\$8,043	\$221,767	\$1,041.18	\$227.90	\$157.08	\$92.84	\$0.00	\$1,519.00
Moderate Income	\$71,300	\$314,621	\$11,012	\$303,609	\$1,425.43	\$312.00	\$215.06	\$127.10	\$0.00	\$2,079.58
5-Person HH										
Very Low Income	\$46,900	\$206,953	\$7,243	\$199,709	\$937.62	\$205.23	\$141.46	\$83.61	\$0.00	\$1,367.92
Lower Income	\$56,280	\$248,343	\$8,692	\$239,651	\$1,125.15	\$246.27	\$169.75	\$100.33	\$0.00	\$1,641.50
Moderate Income	\$77,000	\$339,773	\$11,892	\$327,881	\$1,539.38	\$336.94	\$232.25	\$137.26	\$0.00	\$2,245.83

Notes:

(a) Income limits from Los Angeles HCID 2016 Land Use Schedule VI.

(b) Mortgage terms:

Annual Interest Rate (fixed)

3.86% Freddie Mac historical monthly Primary Mortgage Market Survey data tables. 2012-2016 average.

Term of mortgage (years)

30

Percent of sale price as down payment

3.5% Typical FHA loan down payment

(c) Initial property tax (annual)

1.2% Los Angeles County Assessor's Office

(d) Mortgage Insurance as percent of loan amount

0.85% Current FHA rate based on mortgage terms and sale price

(e) Annual homeowner's insurance rate as percent of sale price

0.48% CA Dept. of Insurance website, based on average of all quotes.

(f) Homeowners Association Fee (monthly)

\$0 Assumes no HOA for single-family homes.

(g) Percent of household income available for principal, interest, taxes, and insurance (PITI)

35%

Sources: City of Los Angeles, 2016; Freddie Mac, 2012-2016; Los Angeles Co. Assessor's Office, 2017; CA Dept. of Insurance, 2017; FHA, 2017; BAE, 2017.

Table B.2: Affordable Housing Mortgage Calculator for Condominiums, City of Los Angeles, 2017

	Household	Sale	Down	Total	Monthly	Monthly	Mortgage	Homeowner's	Homeowner's	Total
	Income (a)	Price	Payment (b)	Mortgage (b)	Payment	Property	Insurance (d)	Insurance (e)	Association	Monthly
						Tax (c)			Fee (f)	PITI (g)
1-Person HH										
Very Low Income	\$30,400	\$69,415	\$2,430	\$66,985	\$314.49	\$68.84	\$47.45	\$40.89	\$415.00	\$886.67
Lower Income	\$36,480	\$95,513	\$3,343	\$92,170	\$432.73	\$94.72	\$65.29	\$56.26	\$415.00	\$1,064.00
Moderate Income	\$49,900	\$153,117	\$5,359	\$147,758	\$693.71	\$151.84	\$104.66	\$90.20	\$415.00	\$1,455.42
2-Person HH										
Very Low Income	\$34,750	\$88,087	\$3,083	\$85,004	\$399.09	\$87.35	\$60.21	\$51.89	\$415.00	\$1,013.54
Lower Income	\$41,700	\$117,919	\$4,127	\$113,792	\$534.25	\$116.94	\$80.60	\$69.46	\$415.00	\$1,216.25
Moderate Income	\$57,000	\$183,593	\$6,426	\$177,168	\$831.79	\$182.06	\$125.49	\$108.15	\$415.00	\$1,662.50
3-Person HH										
Very Low Income	\$39,100	\$106,759	\$3,737	\$103,022	\$483.68	\$105.87	\$72.97	\$62.89	\$415.00	\$1,140.42
Lower Income	\$46,920	\$140,326	\$4,911	\$135,414	\$635.76	\$139.16	\$95.92	\$82.66	\$415.00	\$1,368.50
Moderate Income	\$64,100	\$214,070	\$7,492	\$206,577	\$969.87	\$212.29	\$146.33	\$126.10	\$415.00	\$1,869.58
4-Person HH										
Very Low Income	\$43,400	\$125,216	\$4,383	\$120,834	\$567.31	\$124.17	\$85.59	\$73.76	\$415.00	\$1,265.83
Lower Income	\$52,080	\$162,475	\$5,687	\$156,788	\$736.11	\$161.12	\$111.06	\$95.71	\$415.00	\$1,519.00
Moderate Income	\$71,300	\$244,975	\$8,574	\$236,401	\$1,109.89	\$242.93	\$167.45	\$144.31	\$415.00	\$2,079.58
5-Person HH										
Very Low Income	\$46,900	\$140,240	\$4,908	\$135,331	\$635.37	\$139.07	\$95.86	\$82.61	\$415.00	\$1,367.92
Lower Income	\$56,280	\$180,503	\$6,318	\$174,185	\$817.79	\$179.00	\$123.38	\$106.33	\$415.00	\$1,641.50
Moderate Income	\$77,000	\$269,442	\$9,430	\$260,012	\$1,220.74	\$267.20	\$184.17	\$158.72	\$415.00	\$2,245.83

Notes:

(a) Income limits from Los Angeles HCID 2016 Land Use Schedule VI.

(b) Mortgage terms:

Annual Interest Rate (fixed)

3.86% Freddie Mac historical monthly Primary Mortgage Market Survey data tables. 2012-2016 average.

Term of mortgage (years)

30

Percent of sale price as down payment

3.5% Typical FHA loan down payment

(c) Initial property tax (annual)

1.2% Los Angeles County Assessor's Office

(d) Mortgage Insurance as percent of loan amount

0.85% Current FHA rate based on mortgage terms and sale price

(e) Annual homeowner's insurance rate as percent of sale price

0.71% CA Dept. of Insurance website, based on average of all quotes

(f) Homeowners Association Fee (monthly)

\$415 Median taken from survey of currently selling condos.

(g) Percent of household income available for principal, interest, taxes, and insurance (PITI)

35%

Sources: City of Los Angeles, 2016; Freddie Mac, 2012-2016; Los Angeles Co. Assessor's Office, 2017; CA Dept. of Insurance, 2017; FHA, 2017; Redfin, 2017; BAE, 2017.