

# Pasadena Affordable Housing In Lieu Fee Analysis



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Public Review Draft



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## Affordability Gap and In Lieu Fee Calculation

The City of Pasadena’s (City) Inclusionary Housing Ordinance (IHO) requires that 15 percent of all newly constructed residential units be sold or rented to low and moderate income households at affordable [housing costs](#), as detailed in Table 1.

Deleted: prices

<b>Unit Type</b>	<b>Percent of Housing at Percent of AMI</b>	<b>Affordable Housing Cost</b>
Ownership	15% at ≤ 120% Los Angeles County Median Income (AMI) as determined by HUD (“Moderate Income”)	Total housing cost must not exceed 40% of 110% AMI.
Rental	10% at ≤ 80% AMI (“Low Income”) and 5% at ≤ 120% AMI (“Moderate Income”)	<b>Low Income Units:</b> Total housing cost must not exceed 30% of 80% AMI. <b>Moderate Income Units:</b> Total housing cost must not exceed 30% of 120% AMI.

As an alternative compliance option, the IHO allows developers to pay a fee in lieu of constructing new affordable units (“in lieu fee”). The City publishes an in lieu fee schedule that it periodically revises in accordance with changes in the Los Angeles County Area Median Income (AMI) and changes in market prices of newly constructed rental and ownership units in the City. DRA’s analysis determines in lieu fee amounts for rental and condominium housing. To account for local variances in housing market conditions, we have analyzed four rental and four homeownership housing market Sub-Areas (“Rental Sub-Area” and “For-Sale Sub-Area”) within Pasadena, calculating different in lieu fees for each Sub-Area.

DRA’s calculation of in lieu fees is derived from an affordability gap analysis that looks at the differential between market prices of new housing units (rental and ownership) and the prices low and moderate income households can afford to pay, as determined in accordance with the IHO affordable housing requirements and certain analytical assumptions detailed later in this analysis.

In the first part of the analysis, DRA examines the rental and condominium Sub-Areas within Pasadena and provides a detailed summary of rental and for-sale housing market

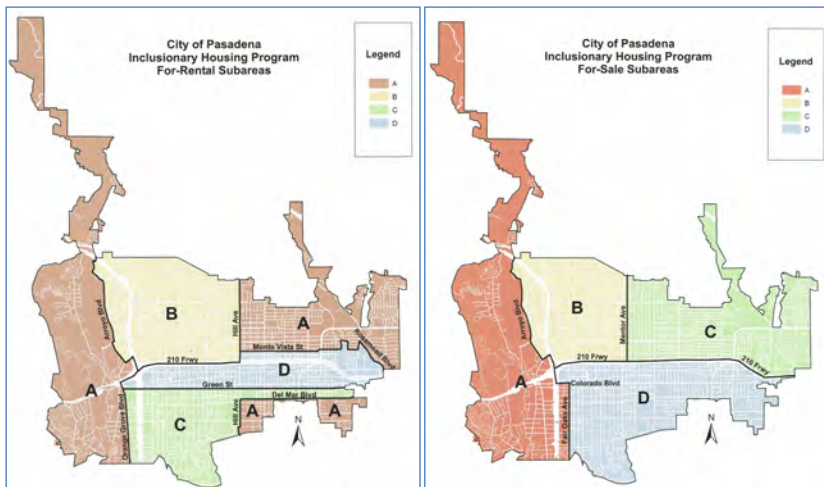




prices within each Sub-Area. Using information provided in the market survey, we then formulate new construction development prototypes for rental and condominium projects. In the final two sections of this analysis, we present our affordability gap and in lieu fee conclusions by Sub-Area for each of these housing product types.

### Housing Market Sub-Areas

This analysis uses the Rental Sub-Area and For-Sale Sub-Area maps shown below. Each map subdivides the Pasadena housing market into respective rental and for-sale Sub-Areas based on similarities and variations in housing market characteristics. We review market price data for new rental and condominium developments in order to establish market rent and sales prices for each Sub-Area. We then compare these market prices with the affordable rents and sales prices, as determined pursuant to the City's affordability requirements. This comparison allows DRA to quantify rental and condominium affordability gaps for each Sub-Area, which in turn form the basis for the in lieu fees for each housing product type in each Sub-Area.



## Housing Prototypes

Table 16 of [Appendix A](#) details three housing prototypes used in this affordability gap and in lieu analysis. These prototypes were developed by DRA based on our market analysis of recently built and proposed rental and condominium projects in the City of Pasadena. For purposes of this analysis, the prototypes serve to establish prototypical unit sizes and the mix of bedroom types for rental and condominium developments.

## Summary of Proposed In Lieu Fees

Table 2 details the in lieu fees calculated for this analysis in comparison to the rates adopted by the City for Fiscal Year 2016. The remainder of this report details DRA's analysis and assumptions underlying these conclusions.

<b>Table 2 City Of Pasadena In Lieu Fee Schedule</b>			
	<b>Adopted FY 2016 Rate</b>	<b>Proposed Rate</b>	<b>Percent Change</b>
10-49 Rental Units			
Sub-area A	TBD	<b>35.37</b>	NA
Sub-area B	1.14	<b>19.97</b>	1652%
Sub-area C	25.21	<b>32.89</b>	30%
Sub-area D	22.92	<b>35.37</b>	54%
50 + Rental Units			
Sub-area A	TBD	<b>49.12</b>	NA
Sub-area B	1.14	<b>27.74</b>	2333%
Sub-area C	34.39	<b>45.68</b>	33%
Sub-area D	32.1	<b>49.12</b>	53%
10-49 For Sale Units			
Sub-area A	43.56	<b>47.01</b>	8%
Sub-area B	16.04	<b>19.01</b>	19%
Sub-area C	26.36	<b>29.66</b>	13%
Sub-area D	20.63	<b>47.01</b>	128%
50 + For Sale Units			
Sub-area A	60.75	<b>65.30</b>	7%
Sub-area B	21.78	<b>26.40</b>	21%
Sub-area C	36.68	<b>41.20</b>	12%
Sub-area D	28.65	<b>65.30</b>	128%



## Rental Housing Affordability Gap Analysis

The rental housing affordability gap analysis compares estimated rent levels at hypothetical new apartment developments--located in each of the Rental Sub-Areas and based on the rental housing prototype--with the amount low, and moderate income households can afford to pay for rental housing.

As summarized in Table 1, the IHO requires the developer of a rental project with 10 or more dwelling units to set aside 10 percent of the units for low income (80 percent AMI) households and 5 percent for moderate income (120 percent AMI) households.

### Rental Market Sub-Area Analysis

DRA conducted a rental market survey by compiling current rental data for newer studio, one- and two-bedroom rental units at apartment projects constructed since 2001. We identified 4 projects in Sub-Area C and 7 projects in Sub-Area D that meet these criteria. Our survey suggests that little if any new rental development occurred in Sub-Areas A and B since 2001, accordingly we do not provide a gap analysis for these Sub-Areas, [but used an alternate methodology as described on page 8](#). Table 3 summarizes the results of this analysis, with additional detail provided in Table 17 of Appendix A.

	<b>Studio</b>	<b>1-BR</b>	<b>2-BR</b>
Sub-Area C Average Rent	\$2,022	\$2,148	\$2,893
Sub-Area C Rent/SF	\$2.64	\$2.85	\$2.49
Sub-Area D Average Rent	\$1,981	\$2,232	\$2,780
Sub-Area D Rent/SF	\$3.12	\$2.88	\$2.50

Source: DRA survey of rental properties

Newly constructed rental projects can secure rent premiums relative to existing projects. Accordingly, we apply a 20 percent premium to estimate likely rents for new apartment developments, resulting in the following rents per square foot:



<b>Table 4</b>			
<b>Estimated New Apartment Rents/SF</b>			
	<b>Studio</b>	<b>1-BR</b>	<b>2-BR</b>
Sub-Area C Rent/SF	\$3.16	\$3.42	\$2.99
Sub-Area D Rent/SF	\$3.74	\$3.46	\$3.00

Table 5 presents estimated market-rate rents for new developments based on the rental prototype by multiplying the above rent-per-square foot figures by the unit square footage amounts indicated in the rental housing prototype.

<b>Table 5</b>			
<b>New Apartment Prototype Rents</b>			
	<b>Studio</b>	<b>1-BR</b>	<b>2-BR</b>
Unit Size: Sub-Areas C & D	700 SF	800 SF	1,100 SF
Sub-Area C Projected Rent	\$2,215	\$2,735	\$3,293
Sub-Area D Projected Rent	\$2,619	\$2,765	\$3,302

### Maximum Income and Rents

#### INCOME AND HOUSING COSTS

Using the 2015 HCD median income (effective March 2015) for Los Angeles County of \$64,800 for a family of 4, Table 6 shows current maximum annual household income and monthly rental housing cost for low and moderate income households, adjusted for family size and corresponding unit size. The calculation of maximum housing cost reflects the IHO requirement that no more than 30 percent of annual income be allocated to housing costs.



<b>Table 6</b> <b>Maximum Annual Income and Monthly Rental Affordable Housing Cost</b> 2015 AMI for Family of 4: \$64,800					
<b>Household Size</b>	<b>Unit Type</b>	<b>Low Income (80% AMI)</b>		<b>Moderate Income (120% AMI)</b>	
		<b>Income</b>	<b>Housing Cost</b>	<b>Income</b>	<b>Housing Cost</b>
1 Person	Studio	\$36,288	\$907	\$54,432	\$1,361
2 Persons	1-BR	\$41,472	\$1,037	\$62,208	\$1,555
3 Persons	2-BR	\$46,656	\$1,166	\$69,984	\$1,750

**UTILITY ALLOWANCES**

DRA calculated affordable net rents by subtracting allowances for the utilities paid directly by the tenants from the maximum affordable housing cost. For this calculation, DRA has used 2015 utility allowances published by the Housing Authority of Pasadena, summarized in Table 7 below. These utility allowances assume residents pay for gas heating and water heating, electric cooking, air conditioning, and general electricity. It assumes the landlord pays for trash, water and sewer service.

<b>Table 7</b> <b>Utility Allowances</b> Housing Authority of Pasadena (2015)	
<b>Unit Type</b>	<b>Monthly Utility Allowance</b>
Studio	\$38
One-Bedroom	\$55
Two-Bedroom	\$70

Assumes residents pay for gas heating and water heating, electric cooking, air conditioning, and general electricity

**MAXIMUM IHO RENTS**

Table 8 summarizes maximum low and moderate income rents based on the assumptions described above in Tables 6 and 7. Detailed calculations are shown in Table 18 of Appendix A.

<b>Table 8</b> <b>IHO Program Maximum Affordable Rents (June 2015)</b>		
<b>Unit Type</b>	<b>Maximum Rent</b>	
	<b>Low Income</b>	<b>Moderate Income</b>
Studio	\$869	\$1,323
1-BR	\$982	\$1,500
2-BR	\$1,096	\$1,680



## Rental Housing Affordability Gap

Apartment units subject to IHO rent restrictions have less value relative to comparable market-rate units, resulting in an “affordability gap” that can be quantified by calculating the differences in capitalized value between market-rate and affordable units as a result of differences in net operating income (NOI) arising from IHO rent restrictions. This analysis assumes that market-rate units achieve rents indicated in Table 5, and that the affordable rents are at the levels indicated in Table 8. Other key assumptions of the capitalized NOI analysis include:

- Operating expenses before reserves and property taxes of \$3,850 per unit per year;
- Property taxes equal to 1 percent of the value of a unit (and, accordingly, lower for the rent restricted units);
- Replacement reserves of \$350 per unit per year;
- Other income of \$10 per unit per month applied to all units;
- Vacancy rate of 5 percent, applied to all units; and
- Capitalization rate of 6 percent.

Table 9 summarizes the conclusions of the affordability gap analysis, with the complete analysis presented in Tables 19 and 20 of Appendix A.

<b>Table 9</b>		
<b>Rental Housing Affordability Gap by Sub-Area</b>		
Capitalized NOI Valuation		
	<u>Sub-Area C</u>	<u>Sub-Area D</u>
Assumed Cap Rate	6%	6%
<u>Market-Rate</u>		
NOI per Unit	23,302	24,473
Capitalized Value per Unit	388,368	407,878
<u>Moderate Income</u>		
NOI per Unit	11,163	11,163
Capitalized Value per Unit	186,043	186,043
<b>Moderate Income Gap to Market</b>	<b>202,325</b>	<b>221,836</b>
<u>Low Income</u>		
NOI per Unit	6,102	6,102
Capitalized Value per Unit	101,694	101,694
<b>Low Income Gap to Market</b>	<b>286,673</b>	<b>306,184</b>

## In Lieu Fee Calculation

The low and moderate income affordability gap figures in Table 9 serve as the basis for calculating appropriate in lieu fees for Rental Sub-Areas C and D. Table 10 presents these calculations on per-unit and per-square-foot basis, with additional detail provided in Table 21 of the Appendix. The in lieu fee calculations use the weighted average affordability gap as determined by applying the IHO affordability set-aside requirement of 10 percent low income and 5 percent moderate income. This calculation is detailed in Table 21 of Appendix A. Table 10 also presents in lieu fees for Sub-Areas A and B. Due to the absence of new construction apartment development (and corresponding new construction rents) in these areas, DRA used the following procedures [instead of the gap analysis described above](#) for determining rental housing in lieu fees for these Sub-Areas:

- Given the housing market similarities between Sub-Areas A and D, DRA set the apartment in lieu fee for Sub-Area A equal to the Sub-Area D in lieu fee.
- DRA determined the Sub-Area B in lieu fee by calculating the following ratio: Sub-Area B condo in lieu fee divided by Sub-Area C condo in lieu fee. We then multiplied this ratio (0.61) by the rental in lieu fee calculated for Sub-Area C (\$45.68), yielding a rental in lieu fee of \$27.74 for Sub-Area B. In employing this methodology, we assume that the relationship between apartment prices in the two areas, as expressed in terms of a ratio, will be similar to the relationship between condo prices in the two areas.

As indicated in Table 10, the City's in lieu fee policy calls for a 28 percent reduction in fees for projects with 10-49 units compared to projects with 50 or more units. The assessment of lower fees for smaller projects reflects long-standing City policy and is based on previous analysis conducted by the City.

<b>Table 10</b>				
<b>Rental In Lieu Fee by Sub-Area for Projects with 50 or More Units</b>				
	<b>Sub-Area A</b>	<b>Sub-Area B</b>	<b>Sub-Area C</b>	<b>Sub-Area D</b>
Weighted Average Affordability Gap			\$258,838	\$278,349
In Lieu Fee per Market-rate Unit			\$38,826	\$41,752
In Lieu Fee per Square Foot	\$49.12	\$27.74	\$45.68	\$49.12
<b>Rental In Lieu Fee by Sub-Area for Projects with 10-49 Units</b>				
In Lieu Fee per Square Foot	\$35.37	\$19.97	\$32.89	\$35.37



## Ownership Units Affordability Gap Analysis—Condominiums

### Condominium Market Sub-Area Analysis

DRA surveyed condominium sales of units built and sold between 2009 and 2014, identifying no new projects in Sub-Area A, three projects in Sub-Area B recording 12 sales, five projects in Sub-Area C also with a total of 12 sales, and 12 projects in Sub-Area D with a total of 168 sales. These sales data are detailed in Table 22 of Appendix A.

Due to limited new construction condominium sales activity in Sub-Areas B and C, DRA applied an inflation factor to the specific year that experienced the highest volume of sale activity in these respective Sub-Areas. Specifically, using the condominium market survey, DRA selected a *base year* for each Sub-Area, which for Sub-Areas B and C was the calendar year during the survey period (2009-2014) in which most sales of newly constructed condominiums occurred. The base year for Sub-Area B was 2013, during which there were 6 sales, and the base year for Sub-Area C was 2011, during which there were 8 sales. DRA determined that the 32 sales in Sub-Area D during 2014 represented an adequate sample size, making it unnecessary to use an alternative base year, even though there were two years during the survey period that experienced more sales (2010 had 47 sales and 2013 had 46 sales). The Inflation factors used to determine average price and average price per square foot in Sub-Areas B and C are based on the rate of change in median condominium sale price in Pasadena as a whole, as reported on the Zillow.com website from the applicable base year through 2014. Accordingly, the inflation factor for Sub-Area D is 1.00 since DRA used 2014 sales data for this Sub-Area.

Table 11 summarizes the conclusions of this analysis.

Sub-Area	Base Year	Base Year Sales	Base Year Avg. Sale Price	Base Year Avg. Price/Sq.Ft	Inflated from Base Year to 2014		
					Inflation Factor	Adjusted Avg. Price	Adjusted Avg. Price/Sq.Ft
Sub-Area B	2013	6	\$499,500	\$338.76	<b>110%</b>	\$549,404	<b>\$372.64</b>
Sub-Area C	2011	8	\$843,563	\$326.95	<b>122%</b>	\$1,029,526	<b>\$398.88</b>
Sub-Area D	2014	32	\$1,179,097	\$631.95	<b>100%</b>	\$1,179,097	<b>\$631.95</b>

Using the condominium prototype, we estimated market sales prices for each Sub-Area by multiplying the unit square footage indicated for each bedroom type in the prototype by the adjusted average sale price per square foot (shown in Table 11) for the applicable Sub-Area. Table 12 gives the results of this analysis.

<b>Table 12</b>			
<b>Market Price Estimates of New Condominiums Based on Sizes of Prototypes Units</b>			
	<b>1-Bedroom Units</b>	<b>2-Bedroom Units</b>	<b>3-Bedroom Units</b>
Unit Size per Prototype Sub-Areas B & D	710 SF	1,500 SF	1,750 SF
Sub-Area B	\$264,571	\$558,953	\$652,111
Sub-Area D	\$448,686	\$947,929	\$1,105,917
Unit Size per Prototype Sub-Area C	NA	NA	2,616 SF
Sub-Area C	NA	NA	\$1,043,472

**Maximum Income and Sales Prices**

**INCOME AND HOUSING COSTS**

Using the 2015 median income (effective March 2015) for Los Angeles County of \$64,800 for a family of four, Table 13 indicates current maximum annual household incomes and maximum affordable home purchase prices for moderate income households, adjusted for family size and corresponding unit size. The calculation of maximum affordable sale price reflects the IHO requirement that a household earning 110 percent of AMI allocate no more than 40 percent of annual income toward housing costs. In addition, the calculation includes the following assumptions:

1. Annual property tax equal to 1 percent of the restricted sale price;
2. Other housing expenditures (HOA dues, insurance, maintenance and utilities) of between \$3,600 and \$4,867 per year depending on unit size;
3. 5 percent down payment;
4. A 30-year, fully amortizing loan with an interest rate of 4.48 percent; and
5. Private mortgage insurance (PMI) of .75% of loan balance.





<b>Table 13</b>			
<b>Maximum Annual Income and Affordable Sale Price</b>			
2015 AMI for Family of 4: \$64,800			
<b>Household Size</b>	<b>Unit Type</b>	<b>Moderate Income (120% AMI)</b>	<b>Maximum Affordable Sale Price</b>
2 Person	1-BR	\$62,208	\$263,865
3 Person	2-BR	\$69,984	\$294,880
4 Person	3-BR	\$77,760	\$324,752

Maximum affordable sale price based on 110% AMI.

Calculations of maximum sales prices are shown in Table 23 of Appendix A.

### Condominium Ownership Affordability Gap

Table 14 details the affordability gap by unit size for each Sub-Area, and then provides the calculation of the average affordability gap for the condominium prototype project assuming a unit distribution of 10 percent 1-bedroom units, 25 percent 2-bedroom units and 65 percent 3-bedroom units. (Table 24 provides additional detail on the affordability gap calculations.

<b>Table 14</b>			
<b>Condominium Affordability Gap for Moderate Income Households (120% AMI)</b>			
	<b>Sub-Area B</b>	<b>Sub-Area C</b>	<b>Sub-Area D</b>
<b>1-Bedroom Units</b>			
Market Price	\$264,571	NA	\$448,686
Affordable Price	\$264,000	\$264,000	\$264,000
Affordability Gap	(\$19,429)	NA	\$184,686
<b>2-Bedroom Units</b>			
Market Price	\$558,953	NA	\$947,929
Affordable Price	\$295,000	\$295,000	\$295,000
Affordability Gap	\$263,953	NA	\$652,929
<b>3-Bedroom Units</b>			
Market Price	\$652,111	\$1,043,472	\$1,105,917
Affordable Price	\$325,000	\$325,000	\$325,000
Affordability Gap	\$327,111	\$718,472	\$780,917
<b>Weighted Average</b>			
Market Price	\$590,068	\$1,043,472	\$1,000,697
Affordable Price	\$311,000	\$325,000	\$311,000
<b>Affordability Gap</b>	<b>\$278,700</b>	<b>\$718,500</b>	<b>\$689,300</b>

### Condominium In Lieu Fee Calculation

The affordability gap results presented in Table 14 serves as the basis for calculating an appropriate in lieu fee. Table 15, which presents in lieu fees by Sub-Area on both a per-unit and per-square-foot basis, summarizes DRA's in lieu fee calculation, which is presented in additional detail in Table 25 of Appendix A.

Due to the absence of new construction condominium development sales data in Sub-Area A, DRA used the Sub-Area D in lieu fee for Sub-Area A, given the housing market similarities between the two areas.

<b>Table 15</b>				
<b>Condominium In Lieu Fees by Sub-Area Projects with 50 or More Units</b>				
	<b>Sub-Area A</b>	<b>Sub-Area B</b>	<b>Sub-Area C</b>	<b>Sub-Area D</b>
Affordability Gap	\$689,300	\$278,700	\$718,500	\$689,300
In Lieu Fee per Unit	\$103,395	\$41,805	\$107,775	\$103,395
<b><i>In Lieu Fee per Square Foot</i></b>	<b><i>\$65.30</i></b>	<b><i>\$26.40</i></b>	<b><i>\$41.20</i></b>	<b><i>\$65.30</i></b>
<b>Condominium In Lieu Fees by Sub-Area for Projects with 10-49 Units</b>				
In Lieu Fee per Square Foot	<b><i>47.01</i></b>	<b><i>19.01</i></b>	<b><i>29.66</i></b>	<b><i>47.01</i></b>

# Appendix A: Detailed Data and Calculation Tables



Table 16 Housing Prototype Projects City of Pasadena Gap Study 2015			
PROTOTYPE	Stacked Flats UG/Structured Pkg	Stacked Flats Condos Underground Parking	Detached Condo
Tenure	Rental	Sub-Areas B & D Owner-Condo	Sub Area C Owner-Condo
Unit Count	200 Units	100 Units	20 Units
Type of Product	Stacked flats with subterranean and structured parking	Stacked flats with subterranean and structured parking	Single Family
Number of Stories	5 Stories	5 Stories	2 Stories
Type of Parking	Structured/ Subterranean	Structured/ Subterranean	Garage
Construction Type	Type V	Type V	Type V
Density (DU's/Net Acre)	70.0	60.0	N/A
Land Area (Acres)	2.86	1.67	0.15
<b>Units by Bedroom Count</b>			
Studio	50	0	0
One Bedroom	100	10	0
Two Bedroom	50	25	0
Three Bedroom	0	65	20
Four Bedroom	0	0	0
<b>Percent of Units by Bedroom Count</b>			
Studio	25%	0%	0%
One Bedroom	50%	10%	0%
Two Bedroom	0%	0%	0%
Two Bedroom	25%	25%	0%
Three Bedroom	0%	65%	100%
Four Bedroom	0%	0%	0%
<b>Unit Size (Net Square Feet)</b>			
Studio	700		0
One Bedroom	800	710	0
Two Bedroom			0
Two Bedroom	1,100	1,500	0
Three Bedroom		1,750	2,616
Four Bedroom			0
Average Unit Square Feet	850	1,584	2,616
<b>Building Square Feet</b>			
Net Living Area	170,000	158,350	52,320
Community Space	Community Space	15,000	15,000
Total Net Bldg. Square Feet	170,000	173,350	67,320
Number of Parking Spaces	360	180	36
Parking Spaces Per Housing Unit	1.80	1.80	1.80

**Table 17**  
**Rental Market Survey of Apartment Projects Constructed Since 2001**  
**City of Pasadena Gap Study**  
**2015**

<b>Sub-Area C Current Market Rents</b>						
<b>Project</b>	<b>Year Built</b>	<b>Total Units</b>	<b>Unit Type</b>	<b>Monthly Rent (Avg)</b>	<b>Unit Square Feet (Avg)</b>	<b>Rent/Square Foot (Avg)</b>
<b>Arpeggio</b> 325 Cordova Street	2002	135	1/1	\$2,131	703	\$3.03
			2/2	\$2,761	1,066	\$2.59
<b>Avalon Del Mar Station</b> 265 Arroyo Parkway	2006	347	Studio/1	\$2,040	954	\$2.14
			1/1	\$2,082	831	\$2.50
			2/2	\$3,047	1,414	\$2.15
<b>Eaves Old Town Pasadena</b> 350 East Del Mar Blvd.	2004	120	1/1	\$2,176	682	\$3.19
			2/2	\$2,587	1,075	\$2.41
<b>Westgate</b> 231 South De Lacey Avenue	2010	480	Studio/1	\$2,003	639	\$3.13
			1/1	\$2,231	741	\$3.01
			2/2	\$2,871	1,049	\$2.74
<b>Sub-Area C Average</b>			<b>Studio/1</b>	<b>\$2,022</b>	<b>796</b>	<b>\$2.64</b>
			<b>1/1</b>	<b>\$2,148</b>	<b>758</b>	<b>\$2.85</b>
			<b>2/2</b>	<b>\$2,893</b>	<b>1,176</b>	<b>\$2.49</b>
<b>Sub-Area D Current Market Rents</b>						
<b>Project</b>	<b>Year Built</b>	<b>Total Units</b>	<b>Unit Type</b>	<b>Monthly Rent (Avg)</b>	<b>Unit Square Feet (Avg)</b>	<b>Rent/Square Foot (Avg)</b>
<b>Acappella Pasadena</b> 160 Corson Street	2002	143	1/1	\$1,923	623	\$3.09
			2/2	\$2,618	1,032	\$2.54
<b>Avalon Pasadena</b> 25 South Oak Knoll Ave.	2004	120	1/1	\$2,176	682	\$3.19
			2/2	\$2,690	1,106	\$2.43
<b>City Place</b> 801 East Walnut Street	2001	214	1/1	\$2,360	836	\$2.82
			2/2	\$3,046	1,146	\$2.66
<b>TRIO</b> 44 North Madison	2006	304	Studio/1	\$1,978	790	\$2.50
			1/1	\$2,423	915	\$2.65
			2/2	\$3,037	1,209	\$2.51
<b>Pasadena Gateway Villas</b> 290 North Hudson Ave.	2003	140	Studio/1	\$1,790	637	\$2.81
			1/1	\$2,155	851	\$2.53
			2/2	\$2,980	1,206	\$2.47
<b>Stuart at Sierra Madre Villa Apt. Homes</b> 3360 East Foothill Blvd.	2007	188	1/1	\$2,049	737	\$2.78
			2/2	\$2,548	1,112	\$2.29
<b>Terraces at Paseo Colorado</b> 375 East Green Street	2002	391	Studio/1	\$2,175	538	\$4.04
			1/1	\$2,538	818	\$3.10
			2/2	\$2,540	974	\$2.61
<b>Sub-Area D Average</b>			<b>Studio/1</b>	<b>\$1,981</b>	<b>655</b>	<b>\$3.12</b>
			<b>1/1</b>	<b>\$2,232</b>	<b>780</b>	<b>\$2.88</b>
			<b>2/2</b>	<b>\$2,780</b>	<b>1,112</b>	<b>\$2.50</b>

**Table 18**  
**Affordable Rents by Income Level**  
**City of Pasadena Gap Study**  
**2015**

2015 HUD Median Income, Los Angeles County	\$64,800		
Affordable Housing Cost As a % of Income	30%		
	<b><u>Studio</u></b>	<b><u>One-Bedroom</u></b>	<b><u>Two-Bedroom</u></b>
<b>80% of Median</b>			
Annual Gross Income	\$36,288	\$41,472	\$46,656
Affordable Monthly Housing Cost (30% of gross income)	\$907	\$1,037	\$1,166
Less: Monthly Utility Allowance	(\$38)	(\$55)	(\$70)
<b>Affordable Monthly Rent</b>	<b>\$869</b>	<b>\$982</b>	<b>\$1,096</b>
<b>Moderate Income</b>			
<b>120% of Median</b>			
Annual Gross Income	\$54,432	\$62,208	\$69,984
Affordable Monthly Housing Cost (30% of gross income)	\$1,361	\$1,555	\$1,750
Less: Monthly Utility Allowance	(\$38)	(\$55)	(\$70)
<b>Affordable Monthly Rent</b>	<b>\$1,323</b>	<b>\$1,500</b>	<b>\$1,680</b>

**Table 19**  
**Rental Housing Capitalized NOI and Affordability Gap: Sub-Area C**  
**City of Pasadena Gap Study**  
**2015**

**Sub-Area C**

<b>Market Rate NOI Analysis</b>				<b>120 Percent AMI NOI Analysis</b>			
<b>Income</b>	<b>Units</b>	<b>Rents/Month</b>	<b>Income/year</b>	<b>Income</b>	<b>Units</b>	<b>Rents/Month</b>	<b>Income/year</b>
Studio	50	2,215	1,328,893	Studio	50	1,323	793,800
1-bedroom	100	2,735	3,282,424	1-bedroom	100	1,500	1,800,000
2-bedroom	50	3,293	1,975,642	2-bedroom	50	1,680	1,008,000
	<b>200</b>				<b>200</b>		
Laundry/Misc		\$10 per unit	24,000	Laundry/Misc		\$10 per unit	24,000
Gross Income			6,610,959	Gross Income			3,625,800
Vacancy			(330,548)	Vacancy			(181,290)
Gross Effective Income			6,280,411	Gross Effective Income			3,444,510
<b>Operating Expenses</b>				<b>Operating Expenses</b>			
Operating Expenses		\$3,850 per unit	770,000	Operating Expenses		\$3,850 per unit	770,000
Property Taxes (1%)	\$390,000 val/unit	\$78,000,000 value	780,000	Property Taxes (1%)	\$186,000 val/unit	\$37,200,000 value	372,000
Reserves		\$350 per unit	70,000	Reserves		\$350 per unit	70,000
Net Operating Income			4,660,411	Net Operating Income			2,232,510
<b>NOI Per Unit-Market</b>			<b>23,302</b>	<b>NOI Per Unit</b>			<b>11,163</b>

<b>80 Percent AMI NOI Analysis</b>			
<b>Income</b>	<b>Units</b>	<b>Rents/Month</b>	<b>Income/year</b>
Studio	50	869	521,400
1-bedroom	100	982	1,178,400
2-bedroom	50	1,096	657,600
	<b>200</b>		
Laundry/Misc		\$10 per unit	24,000
Gross Income			2,381,400
Vacancy			(119,070)
Gross Effective Income			2,262,330
<b>Operating Expenses</b>			
Operating Expenses		\$3,850 per unit	770,000
Property Taxes (1%)	\$101,000 val/unit	20,200,000 value	202,000
Reserves		\$350 per unit	70,000
Net Operating Income			1,220,330
<b>NOI Per Unit-80% AMI</b>			<b>6,102</b>

<b>Sub-Area C Affordability Gap</b>			
CAP RATE	6.0%		
		<b>NOI/unit</b>	<b>Capitalized Value</b>
<b>80% AMI Gap</b>			
Market Rate		23,302	388,368
80% AMI		6,102	101,694
80% AMI Gap			<b>286,673</b>
<b>120% AMI Gap</b>			
Market Rate		23,302	388,368
120% AMI		11,163	186,043
120% AMI Gap			<b>202,325</b>





**Table 20**  
**Rental Housing Capitalized NOI and Affordability Gap: Sub-Area D**  
**City of Pasadena Gap Study**  
**2015**

**Sub-Area D**

<b>Market Rate NOI Analysis</b>				<b>120 Percent AMI NOI Analysis</b>			
<b>Income</b>	<b>Units</b>	<b>Rents/Month</b>	<b>Income/year</b>	<b>Income</b>	<b>Units</b>	<b>Rents/Month</b>	<b>Income/year</b>
Studio	50	<b>2,619</b>	1,571,582	Studio	50	1,323	793,800
1-bedroom	100	<b>2,765</b>	3,318,440	1-bedroom	100	1,500	1,800,000
2-bedroom	50	<b>3,302</b>	1,981,285	2-bedroom	50	1,680	1,008,000
	<b>200</b>				<b>200</b>		
Laundry/Misc		\$10 per unit	24,000	Laundry/Misc		\$10 per unit	24,000
Gross Income			6,895,307	Gross Income			3,625,800
Vacancy			(344,765)	Vacancy			(181,290)
Gross Effective Income			<u>6,550,542</u>	Gross Effective Income			<u>3,444,510</u>
<b>Operating Expenses</b>				<b>Operating Expenses</b>			
Operating Expenses		\$3,850 per unit	770,000	Operating Expenses		\$3,850 per unit	770,000
Property Taxes (1%)	\$408,000 val/unit	\$81,600,000 value	816,000	Property Taxes (1%)	\$186,000 val/unit	\$37,200,000 value	372,000
Reserves		\$350 per unit	70,000	Reserves		\$350 per unit	70,000
Net Operating Income			<u>4,894,542</u>	Net Operating Income			<u>2,232,510</u>
<b>NOI Per Unit-Market</b>			<b><u>24,473</u></b>	<b>NOI Per Unit</b>			<b><u>11,163</u></b>

<b>80 Percent AMI NOI Analysis</b>			
<b>Income</b>	<b>Units</b>	<b>Rents/Month</b>	<b>Income/year</b>
Studio	50	869	521,400
1-bedroom	100	982	1,178,400
2-bedroom	50	1,096	657,600
	<b>200</b>		
Laundry/Misc		\$10 per unit	24,000
Gross Income			2,381,400
Vacancy			(119,070)
Gross Effective Income			<u>2,262,330</u>
<b>Operating Expenses</b>			
Operating Expenses		\$3,850 per unit	770,000
Property Taxes (1%)	\$101,000 val/unit	\$20,200,000 value	202,000
Reserves		\$350 per unit	70,000
Net Operating Income			<u>1,220,330</u>
<b>NOI Per Unit-80% AMI</b>			<b><u>6,102</u></b>

<b>Sub-Area D Affordability Gap</b>			
	<b>CAP RATE</b>	<b>NOI/unit</b>	<b>Capitalized Value</b>
	6.0%		
<b>80% AMI Gap</b>			
	Market Rate	24,473	407,878
	80% AMI	6,102	101,694
	80% AMI Gap		<b>306,184</b>
<b>120% AMI Gap</b>			
	Market Rate	24,473	407,878
	120% AMI	11,163	186,043
	120% AMI Gap		<b>221,836</b>



**Table 21**  
**Rental Housing In-Lieu Fees**  
**2015**

Sub-Area C In Lieu Fee (also applicable to Sub-Area B) (1)			
	<u>Gap/Unit</u>	<u>Allocation of Affordable Units</u>	<u>Weighted Average</u>
50% AMI	\$ 349,369	0%	\$ -
80% AMI	\$ 286,673	67%	\$ 192,071
120 % AMI	\$ 202,325	33%	\$ 66,767
			\$ 258,838
Affordability Set-aside		15%	
<b>In-Lieu Fee per Market Rate Unit</b>			<b>\$ 38,826</b>
<b>In-Lieu Fee per Square Foot</b>			<b>\$ 45.68</b>

(1) DRA determined the Sub-Area B in lieu fee by calculating the following ratio: Sub Area B condo in lieu fee divided by Sub-Area C condo in lieu fee. We then multiplied this ratio (.61) by the rental in-lieu fee calculated for Sub-Area C (\$45.68), yielding a rental in-lieu fee of \$27.74 for Sub-Area B. In employing this methodology, we assume that the relationship between apartment prices in the 2 areas, as expressed in terms of a ratio, will be similar to the relationship between condo prices.

Sub-Area D In Lieu Fee (also applicable to Sub-Area A) (2)			
	<u>Gap/Unit</u>	<u>Allocation of Affordable Units</u>	<u>Weighted Average</u>
50% AMI	\$ 368,880	0%	\$ -
80% AMI	\$ 306,184	67%	\$ 205,143
120 % AMI	\$ 221,836	33%	\$ 73,206
			\$ 278,349
Affordability Set-aside		15%	
<b>In-Lieu Fee per Market Rate Unit</b>			<b>\$ 41,752</b>
<b>In-Lieu Fee per Square Foot</b>			<b>\$ 49.12</b>

(2) Given the similarities between Sub-Areas A and D, DRA set the apartment in lieu fee for Sub-Area A to equal the Sub Area D in-lieu fee.



**Table 22**  
**Condominium Sales Data**  
**Units Built and Sold Between 2009 and 2014**

Year of Sale	Average of Price			Average of Unit Sq. Ft.			Average of Price/Sq. Ft.			Number of Sales		
	SA B	SA C	SA D	SA B	SA C	SA D	SA B	SA C	SA D	SA B	SA C	SA D
2009	\$655,000		\$539,833	1,620		1,597	\$404		\$339	1		3
2010	\$523,000	\$878,167	\$745,872	1,580	2,712	1,646	\$331	\$324	\$431	1	3	47
2011	\$486,000	\$843,563	\$744,400	1,280	2,581	1,591	\$380	\$327	\$458	1	8	10
2012	\$403,000	\$895,000	\$579,467	1,470	2,612	1,375	\$273	\$343	\$425	3	1	30
2013	\$499,500		\$963,163	1,697		1,759	\$339		\$557	6		46
2014			\$1,179,097			1,866			\$632			32
<b>Grand Total</b>	<b>\$489,167</b>	<b>\$856,500</b>	<b>\$854,405</b>	<b>1,589</b>	<b>2,616</b>	<b>1,666</b>	<b>\$331</b>	<b>\$327</b>	<b>\$503</b>	<b>12</b>	<b>12</b>	<b>168</b>



**Table 23**  
**Affordable Mortgage By Income Level**  
**Condominium and Single-Family Housing Prototypes**  
**City of Pasadena Gap Study**  
**2015**

**ASSUMPTIONS**

2015 HUD Median Income, Los Angeles County	\$64,800		
Affordable Housing Cost As a % of Income			
Low Income (Up to 80% AMI)	30%		
Moderate Income (Above 80% AMI)	40%		
No. of Bedrooms	1 Bedroom	2 Bedroom	3 Bedroom
Household Size, Health and Safety Code	2 Persons	3 Persons	4 Persons
Household Size Income Adjust. Factor (1)	80%	90%	100%
Unit Size Housing Expense Adjustment (2)	16%		
Monthly HOA Fee/Maint. Cost	\$200	233	270
Monthly Property Insurance	\$100	116	135
Property Tax Rate	1.00%		
Downpayment as a % of Affordable Home Price	5.00%		
Mortgage Interest Rate	4.48%		
Private Mortgage Insurance (% of Loan Amount)	0.75%		
All-in Mortgage Interest Rate	5.23%		
Term (Years)	30		

**Moderate Income**

<b>110% AMI</b>				
Annual Gross Income		\$57,024	\$64,152	\$71,280
Affordable Monthly Housing Cost	40%	\$1,901	\$2,138	\$2,376
Less: Special Assessments		\$0	\$0	\$0
Less: HOA/Maintenance Expense/Utilities		(\$200)	(\$233)	(\$270)
Less: Property Insurance		(\$100)	(\$116)	(\$135)
Less: Property Taxes (3)	1.00%	(\$220)	(\$246)	(\$271)
Available for Principal, Interest, Taxes		\$1,381	\$1,543	\$1,700
Supportable Mortgage		\$250,671	\$280,137	\$308,515
Assumed Assessed Value at Sale	95.00%	\$263,865	\$294,881	\$324,752
Available for Mortg. Principal and Interest		\$1,381	\$1,543	\$1,700
Afford. Sales Price w/ Downpayment. @	5.00%	\$263,865	\$294,880	\$324,752

(1) HUD published factors for adjusting household income by household  
(2) Adjustment for expenses based on unit type. Estimate based on increase in utility allowance by unit type.  
(3) Property taxes calculated based on assessed value equal to affordable sales price.  
Source: DRA.



**Table 24**  
**Owner Housing Affordability Gap to Price Calculations**  
**Condominium Prototype**  
**City of Pasadena Gap Study**  
**2015**

Income Level	No. of BR	Unit SF	Maximum Monthly Housing Cost	Affordable Sales Price Per Unit (2)	Estimated Market Sales Price Per Unit (3)	Total Units	Total Affordable Sales Price	Total Market Sales Price (3)	Affordability Gap	Affordability Gap Per Unit
<b>SUB-AREA B</b>										
Moderate Income	1	710	\$1,901	\$264,000	\$264,571	10	\$2,640,000	\$2,645,709	\$5,709	\$571
Moderate Income	2	1,500	\$2,138	\$295,000	\$558,953	25	\$7,375,000	\$13,973,813	\$6,598,813	\$263,953
Moderate Income	3	1,750	\$2,376	\$325,000	\$652,111	65	\$21,125,000	\$42,387,233	\$21,262,233	\$327,111
<b>Moderate Income</b>	<b>Weighted Average (1)</b>	<b>1,584</b>	<b>\$2,269</b>	<b>\$311,000</b>	<b>\$590,068</b>	<b>100</b>	<b>\$31,140,000</b>	<b>\$59,006,755</b>	<b>\$27,866,755</b>	<b>\$278,700</b>
<b>SUB-AREA C</b>										
Moderate Income	3	2,616	\$2,376	\$325,000	\$1,043,472	20	\$6,500,000	\$20,869,433	\$14,369,433	\$718,472
<b>Moderate Income</b>	<b>Weighted Average (1)</b>	<b>2,616</b>	<b>\$2,376</b>	<b>\$325,000</b>	<b>\$1,043,472</b>	<b>20</b>	<b>\$6,500,000</b>	<b>\$20,869,433</b>	<b>\$14,369,433</b>	<b>\$718,500</b>
<b>SUB-AREA D</b>										
Income Level	No. of BR	Unit SF	Maximum Monthly Housing Cost	Affordable Sales Price Per Unit (2)	Estimated Market Sales Price Per Unit (3)	Total Units	Total Affordable Sales Price	Total Market Sales Price (3)	Affordability Gap	Affordability Gap Per Unit
Moderate Income	1	710	\$1,901	\$264,000	\$448,686	10	\$2,640,000	\$4,486,865	\$1,846,865	\$184,686
Moderate Income	2	1,500	\$2,138	\$295,000	\$947,929	25	\$7,375,000	\$23,698,229	\$16,323,229	\$652,929
Moderate Income	3	1,750	\$2,376	\$325,000	\$1,105,917	65	\$21,125,000	\$71,884,628	\$50,759,628	\$780,917
<b>Moderate Income</b>	<b>Weighted Average (1)</b>	<b>1,584</b>	<b>\$2,269</b>	<b>\$311,000</b>	<b>\$1,000,697</b>	<b>100</b>	<b>\$31,140,000</b>	<b>\$100,069,722</b>	<b>\$68,929,722</b>	<b>\$689,300</b>

(1) Weighted average based on unit distribution by bedroom count for the condominium prototype.



**Table 25**  
**Condominium In-Lieu Fee Calculations by For-Sale Sub-Area**  
**Based on affordability gap at 110% AMI**  
**City of Pasadena Gap Study**  
**2015**

**Condominium Affordability Gap at 110% AMI by For-Sale Sub-Area**

	Sub-Area A: West (1)	Sub-Area B: Northwest	Sub-Area C: Northcentral	Sub-Area D: Downtown & South
<b>Condominium Affordability Gap</b>				
1-Bedroom Units	10%	10%	0%	10%
Market Price	\$448,686	\$264,571	NA	\$448,686
Affordable Price	\$264,000	\$264,000	\$264,000	\$264,000
Affordability Gap	\$184,686	\$571	NA	\$184,686
2-Bedroom Units	25%	25%	0%	25%
Market Price	\$947,929	\$558,953	NA	\$947,929
Affordable Price	\$295,000	\$295,000	\$295,000	\$295,000
Affordability Gap	\$652,929	\$263,953	NA	\$652,929
3-Bedroom Units	65%	65%	100%	65%
Market Price	\$1,105,917	\$652,111	\$1,043,472	\$1,105,917
Affordable Price	\$325,000	\$325,000	\$325,000	\$325,000
Affordability Gap	\$780,917	\$327,111	\$718,472	\$780,917
Weighted Average				
Market Price	\$1,000,697	\$590,068	\$1,043,472	\$1,000,697
Affordable Price	\$311,000	\$311,000	\$325,000	\$311,000
Affordability Gap	\$689,300	\$278,700	\$718,500	\$689,300
<b>Condominium In-Lieu Fee</b>				
Per Affordable Unit	\$689,300	\$278,700	\$718,500	\$689,300
In-Lieu Fee Percent	15%	15%	15%	15%
In-Lieu Fee per Unit	\$103,395	\$41,805	\$107,775	\$103,395
<b><i>In-Lieu Fee per Sq. Ft.</i></b>	<b>\$65.30</b>	<b>\$26.40</b>	<b>\$41.20</b>	<b>\$65.30</b>

Due to the absence of new construction condominium development sales data in Sub-Area A, DRA used the Sub-Area D in lieu fee for Sub-Area A, given the housing market similarities between the two areas.

