ATTACHMENT H

REVISED MARKET AND FEASIBILITY STUDY FOR RAISING THE INCLUSIONARY HOUSING PERCENTAGE REQUIREMENT (AECOM STUDY)

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Market and Feasibility Study for Raising the Inclusionary Housing Percentage Requirement

City of Pasadena

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EXECUTIVE SUMMARY

Provenance of Study

The City of Pasadena engaged AECOM to prepare a market study and feasibility analysis to explore the economics of raising the City's inclusionary housing percentage requirement in order to increase affordable housing production. AECOM submitted a Report on May 2, 2019, which was presented to the Planning Commission on May 8, 2019.

This Revised Final report supercedes the prior Report. The Revised Final responds to comments from Staff and the Planning Commission and differs from the prior Final Report in a number of ways:

- It updates the proposed In-lieu fee schedule (from David Rosen Associates) to reflect 2018 rates, replacing the 2016 rates used in the prior Final. The analysis is further expanded to also include a comparison with current adopted in-lieu fees (for 2019).
- A second Workforce Housing tier is assessed, which lowers the rent basis from 180% AMI in the pror Final (now called Workforce A) to 150% AMI (called Workforce B).
- Four additional set-aside scenarios are considered: (1) Base Case + 5% Workforce at 150% AMI; (2) 10% Low Income + 10% Workforce at 150% AMI; (3) 10% Low Income + 10% Moderate Income; (4) 5% Very Low Income + 5% Low Income + 10% Moderate Income.
- A glossary of terms is included in the Appendix.
- A number of typographical errors are corrected, Labeling and diction is improved in a number of places.
- Pro forma S5, which was missing in the prior Final, has been added to the Appendix.
- Incentive packages have been revised to include a combination of expedited processing and parking reduction.
- Additional Information has been added regarding the inclusionary housing requirements of the Cities of Burbank and Glendale.

Market Context

The development community favors the Pasadena market because of its amenities and neighborhoods, which generate relatively high rents and for-sale prices. However, the lack of developable land, the typically lengthy approval process, and the high fee structure and parking requirements can make for a challenging and frequently unpredictable development process.

Regulatory Context

Pasadena's Inclusionary Housing Ordinance (IHO) requires a minimum set-aside of 10% Low Income and 5% Moderate Income units for all projects 10 units or greater. The IHO complements the State Density Bonus Law (SDBL) so that all complying developments may—by right—qualify for a 20 percent density bonus. A survey of recent residential developments in the City indicates that a large number of projects have indeed elected to use this incentive.

Pasadena's Inclusionary Housing set-aside requirements are slightly less stringent than those of Santa Monica, West Hollywood, Glendale, and Burbank, the only other cities in Los Angeles County (as of this writing) to operate mandatory Inclusionary Housing programs.

A literature survey suggests that inclusionary housing programs must be closely aligned with local economic conditions to be effective. In practice, this means the required inclusionary set-aside percentages for successful programs may differ widely between cities subject to land costs, market rents, and overall demand.

Key Findings

Increases in Inclusionary set-aside, which typically lower a project's revenue potential, may be "paid' for with a number of incentives, including the following tested in the this analysis:

- Density bonuses
- Reduced fees
- Reduced entitlement processing time
- Reduced parking requirements

Modest increases in the inclusionary set-aside, such as to add a 5 percent workforce component to the current minimum or to boost the minimum to 15 percent Low Income, could be absorbed within parameters of the existing density bonus law coupled with modest decreases in entitlement processing time. More aggressive scenarios, however, will require the City to offer incentive packages that combine incentives.

PROJECT APPROACH

The City of Pasadena is considering raising the City's inclusionary housing percentage requirement in order to increase affordable housing production. The City engaged AECOM to prepare a market study and feasibility analysis to explore the economics of changing the requirement with the goal of increasing inclusionary standards to a level that increase affordable unit development while also supporting continued market-rate development feasibility.

AECOM followed a multi-step process in conducting the analysis:

1. Surveyed literature to identify best practices and program elements that have been successful in other jurisdictions.
2. Interviewed land use professionals and advocacy groups knowledgeable about the development environment in the City to gain insights for program development.
3. Reviewed the Pasadena housing market to define a range of base case "prototypes" representing likely future residential typologies in the City.
4. Conducted development feasibility analysis, based on prototype pro forma models, to test the economic impacts of alternative inclusionary housing requirements and incentives.
5. Held a workshop with Staff to mold technical findings into draft policy recommendations.
6. Prepared Draft and Final Reports.
7. Presented to the Planning Commission on May 8, 2019.
8. Prepared a Revised Final report based on Staff and Planning Commission Comments.

POLICY CONTEXT

This section is a brief overview of existing Pasadena regulation and a review of literature on the subject to summarize best practices and to place Pasadena's existing program in a larger context.

Existing Regulation

State Density Bonus Law

The State of California adopted the State Density Bonus Law (SDBL) in in 1979 to provide incentive to developers to include on-site affordable housing. The law is found in California Government Code Sections 65915 – 65918 and is also described in Pasadena Municipal Code Zoning Code Chapter 17.43. The law includes the following elements:

- Projects entitled to a density bonus must include any of the following minimum in-project set-asides for affordability: 5 percent of rental units for Very Low Income residents; 10 percent rental units for Lower Income; 10 percent of for-sale units for Moderate Income; 10 percent at Very Low Income for transitional foster youth, disabled veterans or homeless persons; all senior citizen housing developments, including an age-restricted mobile home park (no affordable units required).
- Alternately, project developers may qualify by donating at least one acre of entitled land for Very Low Income units
- A density bonus of up to 35 percent increase in unit density is available on a sliding scale based on the percentage of affordable units at each income level.
- For-rent units are deed-restricted to a 55-year term of affordability, while for-sale units are to be maintained as affordable for initial occupants only.
- The presiding jurisdiction is required to provide one or more "incentives" or "concessions" to each qualifying project (except market-rate senior projects and land donated for Very Low Income housing). A concession or incentive is defined as: a reduction/modification in zoning or site development standards or other regulatory incentives resulting in cost reductions. The number of required incentives or concessions is based on the percentage of affordable units in the project: one concession for 5 percent Very Low Income or 10 percent Low Income/Moderate Income; two concessions for 10 percent Very Low Income or 20 percent Low Income/ Moderate Income; three concessions for 15 percent Very Low Income or 30 percent Low Income/ Moderate Income.
- A qualifying development receives two additional forms of assistance: waiver/reduction of development standards and reduced parking requirements. Specifically, onsite parking may be limited to 1 space for studio/1BR, 2 spaces for 2/3BR, and 2.5 spaces for 4BR. In addition, projects with minimum 11 percent Very Low Income or 20 percent Low Income may elect to provide 0.5 spaces per bedroom.

Inclusionary Housing Ordinance (IHO)

The City of Pasadena adopted the Inclusionary Housing Ordinance (IHO) in 2001, which is memorialized in Pasadena Municipal Code Zoning Code Chapter 17.42 and specifies:

- Residential and mixed-use projects of 10 units or more include a share of housing that is affordable to moderate and low income households.
- A minimum of 15 percent of units must be affordable, as follows: rental projects must include 10 percent Low Income and 5 percent Moderate Income units; for-sale projects must include 15 percent Moderate Income units

- Projects may also substitute units at lower affordability levels at lowered rates (also known as "trade-downs"), as follows: 1 Very Low-Income unit for every 1.5 Low Income units; 1 Very Low-Income unit for every 2 Moderate Income units; 1 Low Income unit for every 1.5 Moderate Income units.
- Alternative options to meet the requirement include: paying an in-lieu fee; construction of affordable units off-site; land donation.
- For-sale units are deed-restricted to a 45-year term of affordability, while rental units are to be maintained as affordable in perpetuity.
- Developers may request incentives to help offset project costs including a density bonus (discussed further below), fee waivers for inclusionary units (such as construction tax), technical assistance in marketing inclusionary units, financial assistance for units in excess of the 15 percent requirement, and additional incentives (considered by City Council on a case-by-case basis).

Assembly Bill 1505

The California Court Appeals ruled in 2009 that local inclusionary housing ordinances (Palmer v. City of Los Angeles) violated the Costa-Hawkins Act for new rental units, which resulted in application of the IHO to for-sale units only. In 2015, the California Supreme Court ruled in support of local government's right to adopt inclusionary housing ordinances (Building Industry Association v. City of San Jose), which led to California Assembly Bill 1505 (also called the "Palmer Fix"), which effectively reinstated the law as it stood prior to Palmer v. City of Los Angeles.

One conditional provision of AB 1505 is the requirement that the California Department of Housing and Community Development (HCD) review any ordinance adopted or amended after September 15, 2017 that requires more than 15 percent of the total number of units in a rental housing development to be affordable. Pursuant to such review, HCD may require an economic feasibility study. Jurisdictions are only subject to this review if they meet two conditions: (1) the jurisdiction has failed to meet at least 75% of its share of the regional housing need allocation as applicable for the above-moderate category, and (2) the jurisdiction has not submitted an annual housing element report for at least two consecutive years.

Comparison of IHO and SDBL

While Pasadena's IHO program is mandatory and the SDBL is voluntary, the two are complementary. Affordable units provided to fulfill the IHO requirement can also be counted towards a density bonus. Because IHO minimum compliance requirements are mostly higher than the SDBL minimums, all Pasadena residential projects of 10 units or greater that comply with IHO by providing units on-site automatically qualify for a density bonus.

For example, as demonstrated in Exhibit 1, a by-right 100-unit project at a density of 87 dwelling units per acre (DU/AC), which is the highest base density permitted in the City, must set aside 10 low-income units and 5 moderate-income units to comply with IHO. If the developer also elects to use the SDBL, the affordable units qualify for a 20 percent density bonus, which increases permitted density to 104 DU/AC (120% * 87). At this density, the project has 20 more market-rate units. The IHO may compel applicants to seek a density bonus as a way to "pay" for the affordable units and maximize return on investment.

Exhibit 1: Case Study: IHO vs. SDBL

	Base Case	With Density Bonus (1)
Acres	1.15	1.15
DU/AC	87	104
Units		
Low-Income	10	10
Moderate-Income	5	5
Market-Rate	85	85
Density Bonus Market-Rate	0	20
Total	**100**	**120**

(1) 10% LI units qualifies for a 20% density bonus

Trends in Inclusionary Housing

Literature Review

The first inclusionary housing program to be successfully implemented in the United States was in Fairfax County, Virginia, in 1971. Since then, hundreds of programs in 28 states have been developed. Counting and tracking these has been difficult, however. The authors of the most recent comprehensive study on the subject (*Inclusionary Housing in the United Sates: Prevalence, Impact, and Practices*, Thaden and Wang, 2017) qualify their findings heavily due to a lack of consistent and comprehensive data. Consequently, the study's findings indicate trends but are not definitive. Key findings from the study include the following:

- There are 1,379 programs in 791 jurisdictions spread over 28 states among survey respondents. Of these, the states of New Jersey (45%), Massachusetts (27%), and California (17%) contribute the majority. In Los Angeles County, Pasadena, Glendale, Burbank, West Hollywood, and Santa Monica have official inclusionary housing programs.[1,2]
- The first program was established in 1971. The 2000s decade saw the greatest increase in the number of programs.
- 40 percent of surveyed jurisdictions report having more than one inclusionary program. Pasadena's four program options make it one of the most varied in the set.
- Roughly half of all programs do not have a minimum development size. Pasadena's IHO program specifies that a minimum project size of 10 units triggers the inclusionary set-aside requirement.
- Surveyed jurisdictions indicate that inclusionary set-aside percentages vary widely and are typically staggered by affordability level. The range generally falls between 5% and 35%, which is consistent with Pasadena's requirements.
- Over 90% of inclusionary programs deed-restrict the affordable units to terms of 30 years or longer. Pasadena's term for rental units is perpetuity.
- A summary of affordable housing production from 675 responding jurisdictions over the full term that each inclusionary programs has been in operation is 173,707 total units, an average of 257 units per jurisdiction. Pasadena, by comparison, has generated 530 affordable units since 2001. In addition, the 373 responding jurisdictions reported generating $1.7 billion in in-lieu fees, equivalent to $4.6 million per jurisdiction. Pasadena, comparatively, has generated $17.4 million in in-lieu fees.[3]
- Many surveyed jurisdictions could not provide information on total affordable units and fees produced and how they were generated. Standardization of tracking and management is recommended.

The definitive survey of Inclusionary Housing best practices to date is *Inclusionary Housing: Creating and Maintaining Equitable Communities* (Lincoln Institute of Land Policy, 2014). The survey's conclusions regarding program economics are general in nature and mostly useful for jurisdictions contemplating

[1] A comprehensive inclusionary housing program may be reinstated in the City of Los Angeles due to the passage of AB1505, a state law that gives cities the power to mandate that developers include affordable units in all new residential developments. The Los Angeles City Council will need to officially reinstate their inclusionary zoning requirements before this becomes a mandated rather than discretionary program.

[2] City of Los Angeles Ballot Measure JJJ, passed in 2016, is not a mandatory Inclusionary Zoning program as defined here, although it does require developers to include affordable units in projects that receive a discretionary General Plan amendment, zone change, or height district change resulting in residential density increases greater than 35 percent or where residential use was not previously allowed..

[3] Note: the data used in this finding has not been qualified to assure that measured outcomes exclusively reflect only units and fees generated by mandatory inclusionary zoning programs. Furthermore, the data comes from different time periods, reflecting the unique start date for each jurisdiction. Source for national data: *Inclusionary Housing in the United Sates: Prevalence, Impact, and Practices*, Thaden and Wang, 2017. Source for Pasadena data: "Inclusionary Housing in Pasadena," by Bill Huang, Director of Housing and Career Services, 1/30/18.

inclusionary housing programs for the first time, and to Pasadena's program administrators, the findings may be less useful. The major findings are:

- Incentives and concessions such as fee waivers or density bonus can offset the additional costs of inclusionary requirements, which otherwise may lower land values, increase the cost of housing, and/or discourage development overall.
- The balance of inclusionary requirements and offsets must be carefully calibrated to the local market.
- Onsite affordable units integrated with market units may provide stronger socio-economic benefits than affordable units constructed off-site.

Local Programs

For Pasadena, a comparison with local programs may be more instructive than a review of national trends. West Hollywood, Santa Monica, Glendale and Burbank are other Los Angeles County jurisdictions currently operating inclusionary housing programs. A comparison of key program elements is shown in **Exhibit 2**.

In general, both West Hollywood and Santa Monica apply more stringent mandatory inclusionary housing standards than Pasadena. Where Santa Monica requires a minimum 20% Low Income set aside and West Hollywood a minimum 20% combination of Low Income and Moderate Income, Pasadena requires a minimum combination of 10% Low Income and 5% Moderate Income. Burbank's inclusionary policy is more aligned with Pasadena's, requiring a combinmation of 5% Very Low Income and 10% Low Income for rental properties and 15% Low Income and Moderate Income for for-sale properties. Glendale's policy is slightly less stringent, requiring 15% Low Income for rental projects and 11% Low Income or Moderate Income for for-sale projects.

In Pasadena, only projects 10 units or greater are required to comply with inclusionary housing requirements, whereas both Santa Monica and West Hollywood require projects with as few as two units to comply and Burbank and Glendale require projects with five units or greater to comply. In Santa Monica, the requirements also vary by defined tiers: Tier 1 are "by-right" projects, while Tier 2 developments allow higher density than the base zoning of a Tier 1 project. Santa Monica also has an income limit level of "Extremely Low Income," which is defined as 30 percent of AMI.

The deed restrictions on affordable units are highest in West Hollywood and Burbank, which require for-rent and for-sale units to be kept affordable in perpetuity. Pasadena allows for-sale units to revert to market-rate after 45 years, and Santa Monica and Glendale allow both for-rent and for-sale units to revert to market-rate after 55 years.

Exhibit 2: Inclusionary Zoning Program Comparison

Item	Pasadena	West Hollywood	Santa Monica	Burbank	Glendale
Year Established	2001	1986	1998	2006	2019
Type	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Inclusionary %[1]					
Rent	15% (10% LI+5% MI)[2]	1 unit for 2-10 unit projects (LI or MI); 20% Onsite for 11-20 unit projects (LI or MI); 21-40 units - 20% Onsite (LI or MI); if units are smaller than standard units 30% onsite (LI or MI); 41+ Units 20% of all units or 20% of Floor Area	Tier 1: 5% ELI; 10% VLI; 20% LI; or 100% MI. Tier 2: must include 50% more affordable units than Tier 1; 7.5% ELI or 15% VLI or 30% LI; no MI	5% - VLI; 10% LI.	15% - LI
Sale	15% MI	1 unit for 2-10 unit projects (LI or MI); 20% Onsite for 11-20 unit projects (LI or MI); 21-40 units - 20% Onsite (LI or MI); if units are smaller than standard units 30% onsite (LI or MI); 41+ Units 20% of all units or 20% of Floor Area	4-15 units: 20% LI, 10% VLI, 5% ELI; 16+ units: 25% LI; 15%VLI; 10% ELI	15% LI or MI	11% - LI or MI
Other Terms					
Minimum Project Size	10 units	2 units	2 units	5 units	5 units
Minimum Unit Size/Type	No	Yes (Comparable in size to on-site units or 650 SF for a 1 bdr unit)	Yes[3]		
Variance by sub-geographies?	Yes: 4 in-lieu fee areas	No	Yes: Downtown[4], remainder of city	No	No
Deed Restrictions					
For Rent	Perpetuity	Perpetuity	55 years	Perpetuity	55 years
For Sale	45 years	Perpetuity	55 years	Perpetuity	55 years
Compliance Options					
On-site units	Yes	Yes	Yes	Yes	Yes
In lieu fee	Yes	2-10-unit projects only	Tier 1 rental and 2-3 unit condo projects only	Yes: Tiered fee structure: highest for projects 14+ units with reductions for 10-13 and 5-9 unit tiers.	Yes, dollar amount per gross buildable area. Varied based on number of units and can be combined with providing some inclusionary units.
Off-site units	Yes	Yes	Tier 1 rental: 25% more units than onsite	Yes	Yes; Units must be rental and within 1 mile of the project and within the City of Glendale
Equivalent land value	Yes	No	Yes	Yes	No
Incentives					
State Density Bonus Law	Yes	Yes	Yes	Yes	Yes
Impact Fee Reduction	Yes	No	Yes	Yes	No
Building Permit Fee Reduction	Yes	No	No	No	No
Traffic Impact Fee Reduction	Yes	No	No	No	No

(1) MI=moderate income (120% AMI); LI=low income (80% AMI); VLI=very low income (50% AMI)

(2) Projects may also substitute units at lower affordability levels at lowered rates: 1 VLI/1.5 LI; 1 VLI/2 MI; 1 LI/1.5 MI.

(3) City of Santa Monica Minimum Affordable Unit Size Requirements - 0 bdr - 500 SF; 1 bdr - 600 SF; 2 bdr - 850 SF; 3 bdr - 1,080 sf; 4 bdr - 1,200

(4) Special Inclusionary Requirements for Downtown Santa Monica - Affordable ratio ranges from 20%-30%, depending on project height; Affordability mix must include ELI to MI; 20% ELI; 20% VLI; 30% LI; 30% MI

BASE CASE PROTOTYPES

The General Plan, Specific Plans, and zoning code, which governs density, height, parking, and uses, are the primary factor along with market support in shaping residential development in the City. Current Pasadena zoning standards indicate two major residential density tiers for residential-only projects (up to 32 and 48 DU/AC) and two additional tiers for mixed-use projects (up to 67 DU/AC and 87 DU/AC). Application of a density bonus under the State Density Bonus Law may increase unit density by 35 percent, extending the top tier limit from 87 to 117 DU/AC. In addition, the "high" density designation for mixed-use projects allows an increase in FAR density from 2.25 to 3.00. How developers have interpreted these regulations, as reflected in recent developments and proposed projects shown in the set in **Exhibit 3**, offers strong insight into future representative typologies.

Exhibit 3: Selected Recent and Proposed Residential Development in Pasadena, by Zoning Density[4]

Address	Name	Year	Sale/Rent	FAR	DU/AC	Units	Comm. Sq.Ft.	Geo. Area
Med-High Density Residential (32 DU/AC)								
1307 Lincoln	N/A	*Proposed*	*Sale*	0.70	27	54	No	Balance of City
879 Michigan Blvd	N/A	2009	Sale	0.73	25	20	No	Balance of City
High Density Residential (33-48 DU/AC)								
417-419 N Madison Ave	Madison Grove	*2020*	Rent	1.33	48	35	No	TOD
Low-Medium Mixed Use (33-48 DU/AC)								
690 E. Orange Grove	N/A	*Proposed*	*Sale (Rent Afford.)*	1.16	43	48	7,389	Balance of City
High-Density Residential with Density Bonus (49 - 67 DU/AC)								
3360 E Foothill Blvd	The Stuart	2007	Rent	1.30	63	188	No	TOD
3330 E Foothill Blvd	Bell Pasadena	2016	Rent	1.79	61	196	No	TOD
Low-Medium Mixed Use with Density Bonus (49 - 67 DU/AC)								
65 W Dayton St	Messina	2005	Rent	2.01	63	43	Yes	TOD - Central
150 E Colorado Blvd	N/A	*2021*	*Rent*	1.51	66	100	Yes	TOD - Central
3200 E Foothill Blvd	3200 East Foothill Blvd.	*2022*	*Rent*	1.66	66	550	Yes	TOD
Medium Mixed-Use (68 to 87 DU/AC)								
1769 E Walnut St	Luxe	2016	Rent	1.73	72	131	Yes	TOD
231 South De Lacey Ave	Westgate Apartments	2010	Rent	2.53	85	480	No	TOD - Central
261-291 N Madison Ave	Chang Commons	2006	Rent	1.27	84	189	No	TOD - Central
712 E Walnut St	The Encore	2004	Rent	2.24	78	28	Yes	TOD - Central
265-275 S Arroyo Pky	Avalon Del Mar Station	2003	Rent	2.30	68	343	Yes	TOD - Central
519 Mar Vista Ave	N/A	2002	Rent	1.98	79	10	No	TOD
290 N Hudson Ave	Pasadena Gateway	2002	Rent	2.07	88	140	No	TOD - Central
801 E Walnut St	City Place	2001	Rent	2.90	88	214	No	TOD - Central
399 E Del Mar	N/A	*Proposed*	*Sale*	*NA*	68	55	No	TOD - Central
130-140 N Fair Oaks Ave	N/A	*2020*	*Sale*	2.25	87	39	Yes	TOD - Central
Medium Mixed Use with Density Bonus (88 to 117 DU/AC, up to 2.25 FAR)								
262 N Los Robles	N/A	*Proposed*	*Rent*	*NA*	92	307	No	TOD - Central
177 E Del Mar Blvd	N/A	2017	Rent	1.82	99	17	No	TOD - Central
33 S Wilson Ave	The Bellevue Pasadena	2007	Rent	2.06	95	45	No	TOD - Central
75 W Walnut St	Greystar Avila	2018	Rent	2.21	120	201	Yes	TOD - Central
High Mixed Use with Density Bonus (88 to 117 DU/AC, up to 3.0 FAR)								
233 N Hudson Ave	N/A	*2020*	*Rent*	3.04	114	42	No	TOD
686 E Union St	The Andalucia	2016	Rent	2.35	100	118	Yes	TOD - Central
22 W Green St	The Palermo	2003	Rent	2.97	110	46	Yes	TOD - Central
245 S Los Robles	N/A	*Proposed*	*Sale*	*NA*	105	67.3	No	TOD - Central
253 S Los Robles	N/A	*Proposed*	*Sale*	*2.65*	113	92	No	TOD - Central
711 E Walnut	N/A	*Proposed*	*Sale (Rent Afford.)*	*3.08*	117	115	Yes	TOD - Central

Note: The set excludes properties that are either less than 10 units, 100% affordable, or of density greater than 131 DU/AC (indicating a non-by-right project)
Source: CoStar, City of Pasadena, AECOM January 2019

[4] "Year Built" data for proposed projects was provided by the City of Pasadena in the development pipeline report provided to AECOM in January 2019. Some under-construction and pipeline projects may not be completed by the dates noted.

The set includes most for-rent market-rate projects 10 units or greater constructed in the City since 2001, a selection of for-sale projects, and a number of proposed projects.[5] While the set is not comprehensive, it is strongly indicative of how market-sensitive developers have translated the zoning code into actual projects.

With this set as a reference, AECOM developed nine prototypes for testing inclusionary set-aside alternatives representing likely future development, as shown in **Exhibit 4**. Each prototype is loosely based on an existing project and represents a viable product that has been validated by the market.

Exhibit 4: Test Prototypes

Prototype	R1	R2	R3	R4	R5	S1	S2	S3	S4
Zoning	High-Density Residential	High-Density Residential	Medium-Density Mixed Use	High-Density Mixed Use	High-Density Mixed Use	Medium-Density Residential	Medium-Density Mixed Use	Medium-Density Mixed Use	High-Density Mixed Use
Density Category	33-48 DU/AC	33-48 DU/AC	48-87 DU/AC	88-117 DU/AC, 2.25 FAR	88-117 DU/AC, 3.0 FAR	Up to 32 DU/AC	33-48 DU/AC	88-117 DU/AC, 2.25 FAR	88-117 DU/AC, 3.0 FAR
Geography	Remainder of City	Non-Central TOD	Non-Central TOD	Central/ Central TOD	Central/ Central TOD	Remainder of City	Remainder of City	Central/ Central TOD	Central/ Central TOD
Program									
Sale/Rent	Rent	Rent	Rent	Rent	Rent	Sale[1]	Sale[1]	Sale[1]	Sale[1]
Stories	3	4	4-5	5	5, 5+	3	4	5	5, 5+
Parking Type	Sub.	Sub.	Sub.	Sub.	Sub.	Struct./Sub.	Struct./Sub.	Struct./Sub.	Sub.
Parking Ratio	Standard	TOD	TOD	TOD	TOD	Standard	Standard	TOD	TOD
Density Bonus	0%	20%	20%	0%	0%	0%	20%	0%	20%
DU/AC	47	64	72	87	87	26	48	84	104
FAR	1.35	1.38	1.60	1.80	2.41	1.05	1.26	2.16	2.40
Units	35	192	144	152	153	64	48	84	83
GBA Sq.Ft.	43,984	179,969	139,146	137,500	183,774	114,526	54,785	93,957	83,556
Retail NLA Sq.Ft.	0	0	7,500	10,000	10,000	0	7,170	5,000	5,000

(1) Sale protototypes assume for-rent affordable units
Source: AECOM

The prototypes reflect a range of characteristics typical for Pasadena residential projects including:

- **For-rent and for-sale:** Prototypes R1 through R5 are for-rent products, and S1 through S4 are for-sale products.
- **All-residential and Mixed Use:** The all-residential prototypes include R1, R2, S1, while the remainder are mixed-use.
- **Different zoning densities:** Medium-density residential, high-density residential, medium-density mixed-use, and high-density mixed use are represented by prototypes.
- **Three geographies:** Central district prototypes (R4, R5, S3, and S4) are mixed-use TOD projects that feature the highest densities, command highest rents/sales prices, and carry the highest land costs. Non-Central TOD prototypes (R2 and R3) feature slightly lower densities, rents/sales prices, and land costs, and Remainder of City prototypes (R1, S1, S2) have the lowest density, rents/sales prices, and land costs in the set.

[5] Developers may also seek discretionary approval through a development agreement for projects that exceed permitted by-right densities. Because inclusionary housing terms for such projects are negotiated on a case-by-case basis, they are not subject to compliance with IHO and SDBL guidelines. Consequently, such higher-density projects are not considered in this analysis.

OUTREACH

Market Rate Developers

AECOM and members of Staff interviewed a group of market-rate developers and land use professionals selected by the City in February, 2019. (See **Appendix 1** for interviewee list.) The interviews offered practical insight into issues influencing economic feasibility for residential development in the City. General findings from the interviews are summarized below. (Note: not all the findings shown here achieved consensus from all participants.)

- The City should continue focusing on locating housing within the Central District and around Gold Line stations.
- The market will support housing in many areas of the City, so long as the right-sized lot can be found.
- While there are not many townhome projects in the City, high-quality townhomes would likely be a higher-density use the community would not object to.
- The affordable housing concession permit takes up to one-and-a-half years to obtain, which is too long and adds financing costs that impacts project feasibility. Paying an in-lieu fee, on the other hand, is simple, which often makes it a more prudent option for the developer.
- Permitting process should ideally take six-to-nine months and never more than a year.
- Fee reduction as an affordable housing concession would be very compelling.
- Parking reduction is not always a desireable incentive, as the market still strongly desires parking as an amenity.

Affordable Housing Developers and Advocates

City Staff members organized an Inclusionary Housing Advocate Meeting in February, 2019 attended by affordable housing developers, real estate professionals and advocates. General findings from the meeting are summarized below. (Note: not all the findings shown here achieved consensus from all participants.)

- From a cost perspective, it's more advantageous to build affordable units on-site than to pay in-lieu fees. However, the City should still maintain an in-lieu fee option.
- It is critical to make as many options as possible available to developers to meet affordability requirements, because every deal is different and flexibility is key.
- The City should be cautious when proposing a high inclusionary set-aside, because top priority should be continued development of housing, and increasing requirements can be overly burdensome to developers.

During the meeting, which included members of the Greater Pasadena Affordable Housing Group (GPAHG), recommendations submitted by GPAHG at the December 12, 2018 Planning Commission study session were reiterated and further discussed. Their recommendations included the following:

- Increase the total inclusionary set-aside to 25 percent in the City of Pasadena, broken down as follows:
  - Extremely Low – 5%
  - Very Low – 5%

  - Low – 7%
  - Moderate – 8%

- In the areas within a quarter mile of a transit station, the set-aside should be 30 percent, broken down as follows:
  - Extremely Low – 6%
  - Very Low – 6%
  - Low – 9%
  - Moderate – 9%

(The GPAHG recommendation memo is included in **Appendix 7**.) AECOM modeled these recommendations as part of the analysis in the following section.

ANALYSIS

Key Assumptions

The prototype analysis rests on a series of market assumptions and parameters, as follows.

Market Geographies

At the City's direction, the analysis considered three market geographies within the City of Pasadena. These include: the half-mile radius surrounding the five Gold Line Stations, the Central District Specific Planning area (outside the Gold Line station radii), and the Balance of the City (i.e. projects not located in the prior two geographies).

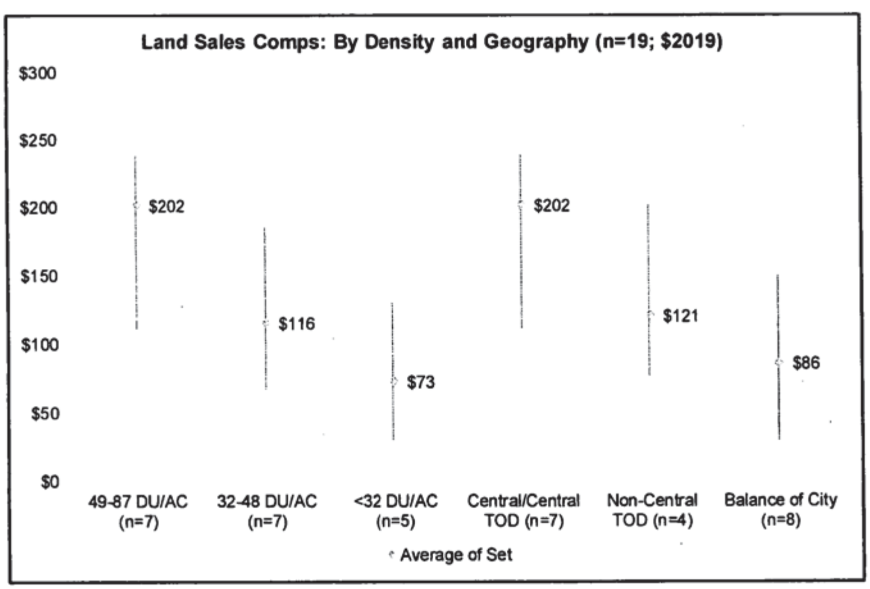
Land Costs

Land costs are derived from an analysis of recent Pasadena project transactions that occurred between 2015 and 2018, sourced from CoStar and several KMA reports analyzing density bonus applications. (Note: the land costs in the KMA reports are developer-reported and not independently verified.) All transactions in the set are parcels and parcel assemblies purchased as development sites, even though existing improvements may have generated income. The derived land costs are normalized for inflation to 2019 through application of a 3 percent annual land appreciation rate. (See **Appendix 2** for the full set.)

A breakdown of the set by allowable density and geographical location, summarized in **Exhibit 5**, indicates a wide range of land values. For example, the 7 transactions for high-density residential and mixed-use land (all in the Central District) average $202 per square foot with a high of $238 and a low of $110.

This variability can be attributed to a number of factors. The City is built out, and when land becomes available it typically has existing uses. In some cases, owners expect to be compensated for these improvements, while in other cases the parcels may require environmental remediation that lowers land value. Sometimes land is exchanged in an-arms-length transaction between collaborating parties, in which land value is marked down from market rate to help subsidize the project. Finally, recent land transactions feature parcels that vary widely by size, which adds further variability to valuations on a per-square-foot basis.

Exhibit 5: Land Value Analysis



Source: CoStar, City of Pasadena, AECOM

For the pro forma analysis, AECOM assumed the land costs shown in **Exhibit 6**. These were derived by averaging costs observed in the comp set broken out by geography and allowable density.

Exhibit 6: Land Cost Assumptions

Category	$/Sq.Ft.	Application
High	$202	High-density prototypes in Central/Central TOD areas.
Medium	$121	Medium- and high-density prototypes in non-Central TOD areas
Low	$86	Low- and medium-density prototypes outside the Central and TOD areas

Market Rents and For-Sale Pricing

Residential market rents are derived from a survey of existing asking rents at a number of recent Pasadena residential projects, inluding the Luxe, Andalucia, Hudson, Bell, and Greystar Avila developments.

For-sale pricing assumptions are based on an analysis of a set of 63 condominium and townhome sales transactions from 2017 and 2018 in Pasadena. (See **Appendices 3** and **4** for full set.)

Exhibit 7: Market Rent and Sales Prices

	Pricing Tier		
	High (Central)	Mid (e.g. non-Central TOD)	Low (e.g. Non-Central Non-TOD)
Residential Rent/NLA Sq.Ft.			
Studio	$4.50	$4.00	$3.70
One-Bedroom	$4.00	$3.40	$3.20
Two-Bedroom	$3.40	$3.20	$3.00
Three-Bedroom	$3.00	$2.90	$2.80
Residential Sale/Sq.Ft.			
Med-High Density Residential Townhomes, Tuck Parking (To 32 DU/AC)			
Two-Bedroom	$680	$650	$620
Three-Bedroom	$680	$650	$620
Condominiums (33-87 DU/AC)			
Studio	$740	$700	$670
One-Bedroom	$740	$700	$670
Two-Bedroom	$720	$690	$660
Three-Bedroom	$720	$690	$660
Retail NNN Rent/Sq.Ft.	$2.50	$2.35	$2.25
Source: AECOM			

Affordable Rents

Affordable rent is calculated, based on HUD methodology, as a share of Area Median Income (AMI) multiplied by 30 percent. Different tiers of affordability are calculated as different AMI percentages. Six income tiers are considered in this analysis: Extremely Low, Very Low, Low, Moderate, Workforce at 180% of AMI, and Workforce at 150% of AMI. Affordable rent is further adjusted by deducting a monthly utility allowance to yield a Monthly Contract Rent, as shown in **Exhibit 7**.

Exhibit 8: Derivation of Affordable Monthly Contract Rent

	Workforce A 180% of AMI	Workforce B 150% of AMI	Moderate 120% of AMI	Low 80% of AMI	Very Low 50% of AMI	Extremely Low 30% of AMI
	$124,740	$103,950	$83,160	$55,440	$34,650	$20,790
			Monthly Affordable Rent[1]			
Studio	$2,183	$1,819	$1,455	$970	$606	$364
1BR	$2,495	$2,079	$1,663	$1,109	$693	$416
2BR	$2,807	$2,339	$1,870	$1,247	$779	$468
3BR	$3,119	$2,599	$2,079	$1,386	$866	$520
			Monthly Utility Allowance[2]			
Studio	$77	$77	$77	$77	$77	$77
1BR	$101	$101	$101	$101	$101	$101
2BR	$128	$128	$128	$128	$128	$128
3BR	$157	$157	$157	$157	$157	$157
			Monthly Contract Rents[3]			
Studio	$2,106	$1,742	$1,378	$893	$529	$287
1BR	$2,394	$1,978	$1,562	$1,008	$592	$315
2BR	$2,679	$2,211	$1,742	$1,119	$651	$340
3BR	$2,962	$2,442	$1,922	$1,229	$709	$363

(1) Moderate, Low, and Very Low from City of Pasadena; Workforce and Extremely Low calculation based on 2018 Los Angeles-Long Beach-Glendale, CA HUD Metro FMR Area AMI of $69,300, * 30% (adjusted for Studio, 1BR, and 2BR units by applying (HUD guidelines) 70%, 80%, and 90% discount factors)

(2) Monthly Utility Allowance from City of Pasadena, based on HUD schedule HUD-52667 (04/15) for Garden & Highrise Apartments.

(3) Monthly Contract Rents = Monthly Affordable rent less Utility Allowance

Other Key Assumptions

Fees, both developer impact fees and plan fees, are calculated based on the City's schedule and summarized in **Appendix 5** (which also includes as a reference a hypothetical schedule of fee reductions). All other pro forma assumptions, such as for direct costs, indirect costs, capitalization rates, and fees, may be seen in the Base Case pro formas in **Appendix 6** and **Appendix 7**.

Base Case

For each of the 9 prototype alternatives, AECOM created a "Base Case" with which to compare impacts of different set-asides and incentives. Each Base Case alternative is feasible from a development perspective for two reasons. Firstly, each Base Case is based on a market-validated prototype derived from a recent successful project. Secondly, each Base Case generates an unleveraged Return on Costs of between 10 and 12 percent (calculated as total project value at stabilization less total development costs (i.e., net value) divided by total development costs).

This threshold range is within a typical range of returns a developer will consider in making a go/no-go project decision. In practice, return expectations can vary widely depending on the developer, the developer's investors, the market, and the perceived risks particular to the site under consideration. The Base Case input assumptions and outputs for each of the nine Prototype uses is shown in **Exhibit 9**.

Exhibit 9: Base Case Assumptions and Outputs

Prototype	R1	R2	R3	R4	R5	S1	S2	S3	S4
Zoning	High-Density Residential	High-Density Residential	Medium-Density Mixed Use	High-Density Mixed Use	High-Density Mixed Use	Medium-Density Residential	Medium-Density Mixed Use	Medium-Density Mixed Use	High-Density Mixed Use
Density Category	33-48 DU/AC	33-48 DU/AC	48-87 DU/AC	88-117 DU/AC, 2.25 FAR	88-117 DU/AC, 3.0 FAR	Up to 32 DU/AC	33-48 DU/AC	88-117 DU/AC, 2.25 FAR	88-117 DU/AC, 3.0 FAR
Geography	Remainder of City	Non-Central TOD	Non-Central TOD	Central/ Central TOD	Central/ Central TOD	Remainder of City	Remainder of City	Central/ Central TOD	Central/ Central TOD
Market Assumptions									
Avg. Market Rent/Sq.Ft.	$3.20	$3.37	$3.40	$4.17	$3.67	NA	NA	NA	NA
Market Sale Price/Sq.Ft.	NA	NA	NA	NA	NA	$620	$697	$724	$733
Land Cost/Sq.Ft.	$86	$121	$121	$202	$202	$86	$86	$202	$202
Outputs									
Value/GBA Sq.Ft.	$497	$514	$497	$567	$504	$512	$517	$532	$546
Cost/GBA Sq.Ft.	$452	$467	$452	$508	$448	$463	$470	$477	$489
Return on Cost	**10.1%**	**10.1%**	**10.1%**	**11.7%**	**12.3%**	**10.6%**	**10.1%**	**11.6%**	**11.7%**

(1) Sale protototypes assume for-rent affordable units
Source: AECOM

The highest-density uses (R4, R5, S3, S4) are located in the Central District within TOD areas, where they command the highest rents and sales prices and support the highest land costs. On the other end of the spectrum, R1, S1, and S2 are lower-density typologies found outside the Central and TOD areas, and these command lower rents and prices and support lower land costs.

Each base case prototype is programmed with the minimum required Inclusionary Zoning set-aside of 10 percent low-income units and 5 percent moderate units. Under the State Density Bonus Law, this qualifies the project for a 20 percent density bonus. Four of the nine prototypes (R2, R3, S2, and S4) require this 20 percent density bonus to be feasible under Base Case conditions.

Finally, parking assumptions reflect City regulations (shown in **Exhibit 10**) that allow lower parking rates in TOD areas (R2, R3, R4, R5, S3, S4) than in non-TOD areas (R1, S1, S2).

Exhibit 10: City Parking Requirements

	TOD	Non-TOD	
		Central	Remainder
Per unit (<650 Sq.Ft.)	1	1	1
Per unit (>650 Sq.Ft.)	1.5	1.5	2
Guest parking per unit (projects >9 units)	0	0.1	0.1
Per 1,000 Commercial Sq.Ft.	2.70	3	3

Source: City of Pasadena

A key hypothesis going in to the analysis posited that under current market conditions and the City's regulatory regime, developers enjoy windfall returns reflecting surplus profitability that could be put towards supporting a higher inclusionary zoning set-aside. While there have been recent examples of projects that performed very strongly in the capital markets, AECOM's pro forma analysis found the extreme variability in actual land costs generates an equally extreme range of estimated project returns.

For example, as shown in **Exhibit 11**, Base Case scenarios for each prototype are compared with alternative scenarios that assume land costs at the high and low end of the observed range of transactions. On the high end of land costs, returns average -0.7 percent, and on the low end, they average 29%.

Consequently, AECOM can't confirm the windfall profits hypothesis. In fact, pro forma analysis suggests the opposite, that because of high development costs in the City, a typical Pasadena project is very sensitive to small changes in land costs, direct costs, rents, entitlement timing, and market capitalizati on rates, which are all factors largely out of the the developer's realm of control. While projects may generate surplus value, this outcome is not predictable, reliable, or—with even small shifts in market rates, capitalization rates, or entitlement timing—likely.

Exhibit 11: Base Case vs. High and Low Land Costs

Prototype	R1	R2	R3	R4	R5	S1	S2	S3	S4	Avg.
Geography	Remainder of City	Non-Central TOD	Non-Central TOD	Central/ Central TOD	Central/ Central TOD	Remainder of City	Remainder of City	Central/ Central TOD	Central/ Central TOD	All
Base Case										
Land Cost/Sq.Ft	$86	$121	$121	$202	$202	$86	$121	$202	$202	**$149**
Return on Cost	**10.1%**	**10.1%**	**10.1%**	**11.7%**	**12.3%**	**10.6%**	**10.1%**	**11.6%**	**11.7%**	**10.9%**
High Land Cost Scenario[1]										
Land Cost/Sq.Ft	$150	$186	$186	$238	$238	$150	$150	$238	$238	**$197**
Return on Cost	**-5.8%**	**-5.3%**	**-3.8%**	**5.1%**	**6.7%**	**-8.7%**	**-6.2%**	**5.6%**	**6.4%**	**-0.7%**
Low Land Cost Scenario[2]										
Land Cost/Sq.Ft	$30	$75	$75	$110	$110	$30	$30	$110	$110	**$76**
Return on Cost	**29.2%**	**24.4%**	**22.7%**	**33.2%**	**30.1%**	**35.6%**	**29.8%**	**30.3%**	**27.8%**	**29%**

(1) Highest observed land cost within geography category, based on Market Analysis of transactions from 2015-2018
(2) Lowest observed land cost within geography category, based on Market Analysis of transactions from 2015-2018
Source: AECOM

With this finding as a basis, the analysis is structured to illustrate how increased inclusionary set-aside requirements can be supported through incentives such as fee waivers, density bonuses, expedited entitlement processing, and reductions in required parking that improve the underlying project economics enough to "pay" for the incremental costs of additional affordable housing.

Base Case Compared with In-Lieu Fees

The in-lieu fee presents an alternative option for developers to comply with the inclusionary set-aside requirement. Two sets of in-lieu fees are considered in the analysis: proposed fees based on recommendations from a David Rosen Associates (DRA) analysis, and current fees adopted for 2019[6]. The schedule of fee assuptions is shown in **Exhibit 12.** (Note: prototypes R2, R3, S2, and S4 assume a density bonus with on-site units in the base case and are thus ineligible to use the in-lieu fee alternative. Consequently, the in-lieu fee analysis is applied only to prototypes R1, R4, R5, S1, and S3.)

Exhibit 12: In-Lieu Fee Assumptions

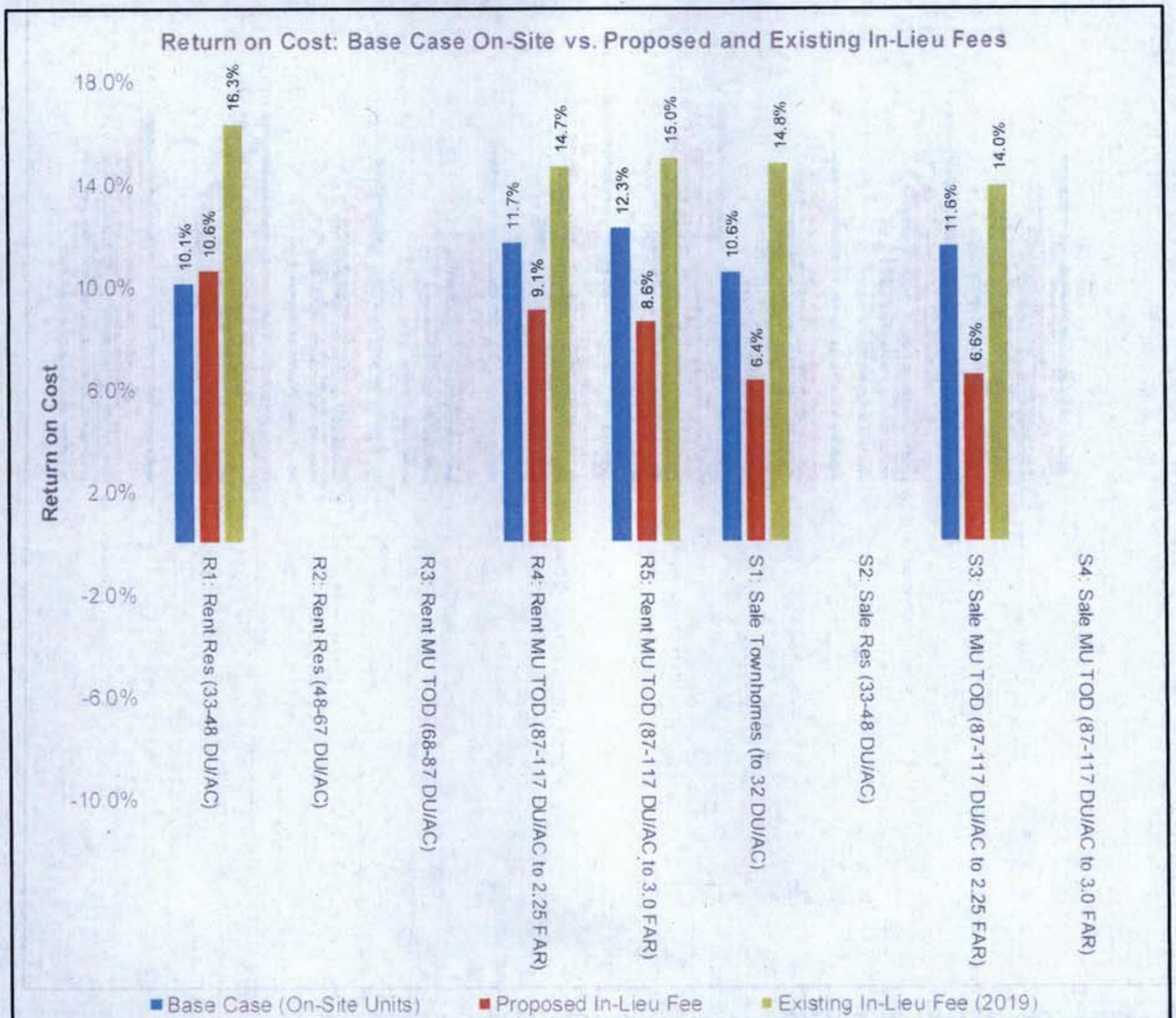
	Fee/Res.NLA Square Foot[1]	
	Existing	Proposed
For-Rent		
10-49-unit Projects	$24.97	$50.92
>49-unit Projects	$34.98	$70.72
For-Sale		
10-49-unit Projects	$22.47	$52.43
>49-unit Projects	$31.22	$72.82

(1) *Area "D"; Source: Pasadena Affordable Housing In Lieu Fee Analysis*, David Paul Rosen & Associates, 8/13/18

[6] Proposed in-lieu fee assumptions are drawn from the most recent David Rosen Associates report from August, 2018. The Adopted in-lieu fee assumptions are for 2019. The fee assumes location in Sub-Area "D" for both for-rent and for-sale prototypes.

As demonstrated by **Exhibit 13**, the existing in-lieu fee schedule offers developers substantially better returns than the on-site affordable development option. The proposed new fees, on the other hand, generate returns significantly lower than the on-site affordable development option. While this suggests a prudent developer will always choose the on-site option, in practice, some developers interviewed prefer to pay the in-lieu fee, which allows a more streamlined entitlement process. By comparison, the City's processing for on-site units is perceived to be prolonged and unpredictable, which increases entitlement risk significantly.

Exhibit 13: Base Case On-Site Units vs. Proposed and Existing In-Lieu Fees



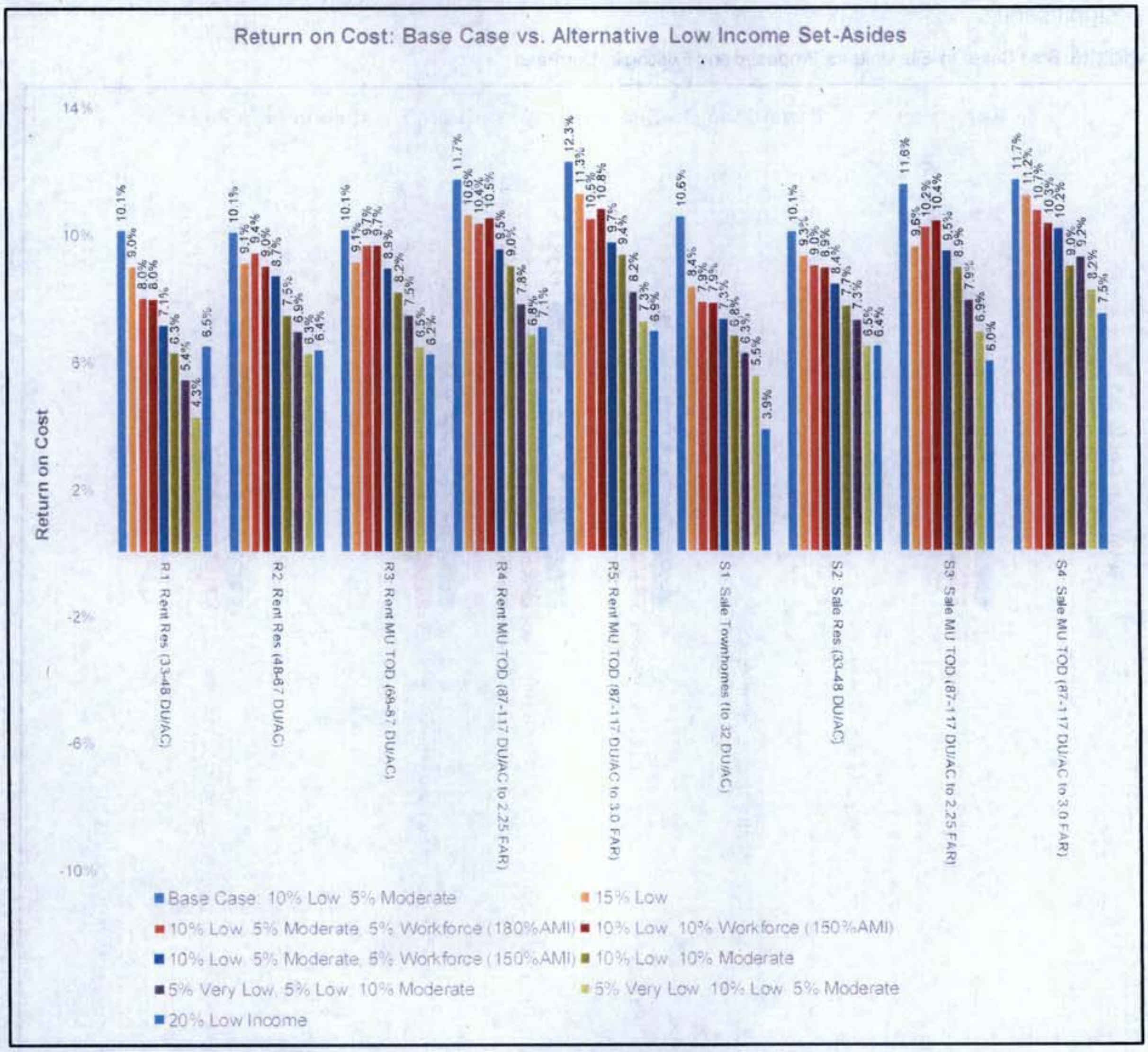
Base Case Compared with Alternative Low Income Set-Asides

In **Exhibit 14**, the Base Case (10% Low Income, 5% Moderate Income) is compared with eight alternative inclusionary set-aside scenarios. Return on Cost declines from the Base Case in each scenario. A ranking of alternative inclusionary scenarios by the decline in Return on Cost, from smallest to largest decline, is shown below:

1. 10% Low, 5% Moderate, 5% Workforce A (180% AMI)
2. 15% Low
3. 10% Low, 10% Workforce B (150% AMI)
4. 10% Low, 5% Moderate, 5% Workforce B (150% AMI)

5. 10% Low, 10% Moderate
6. 5% Very Low, 5% Low, 10% Moderate
7. 5% Very Low, 10% Low, 5% Moderate
8. 20% Low Income

Exhibit 14: Base Case Compared With Eight Alternative Set-Aside Scenarios



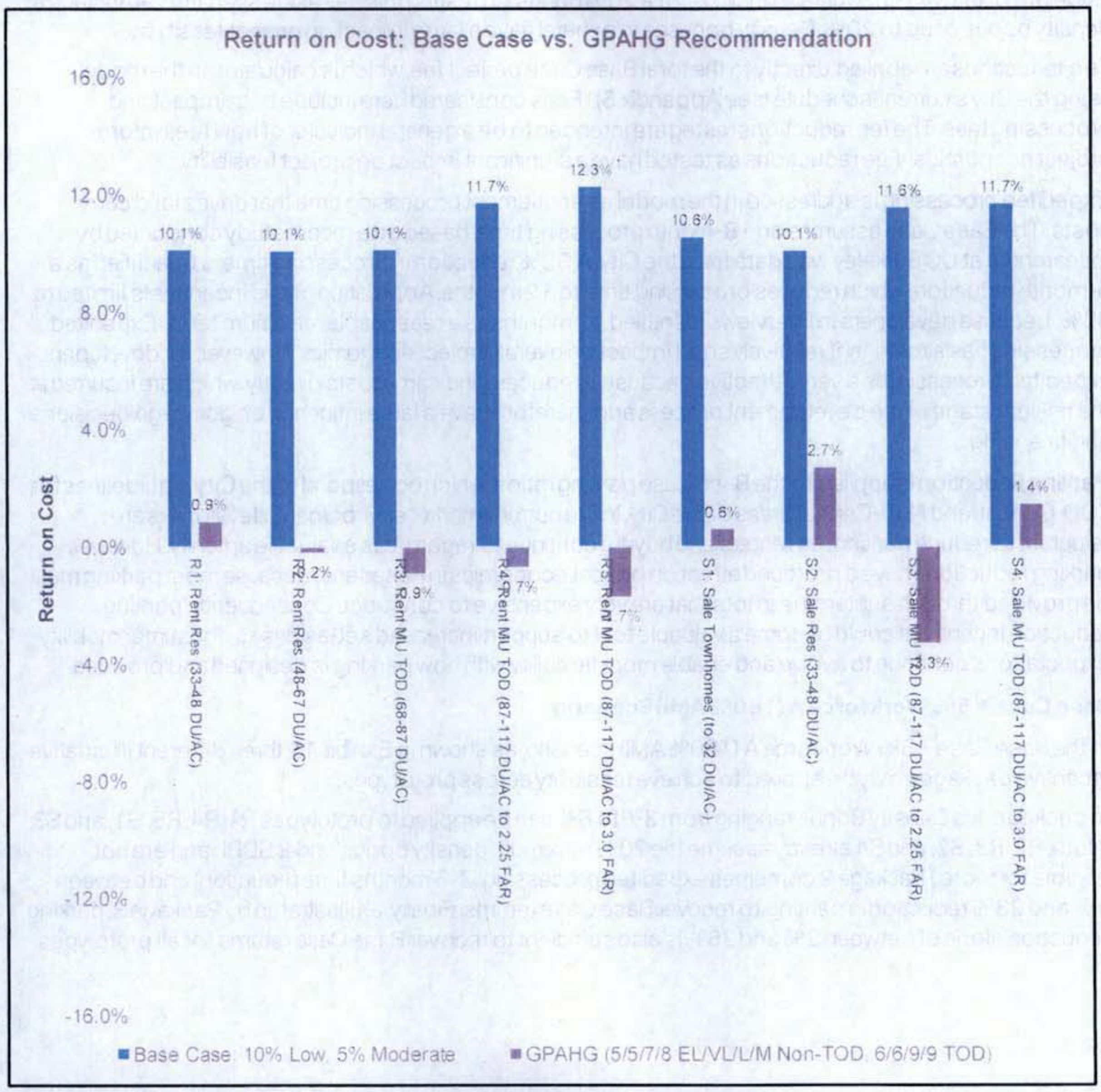
Base Case Compared with GPAHG-Recommended Set-Asides

In February 2019, the Greater Pasadena Affordable Housing Group (GPAHG) made recommendations to the City for inclusionary zoning set-asides consisting of:

- 25 percent total in non-TOD areas broken down as: Extremely Low 5%, Very Low 5%, Low 7%, and Moderate 8%.
- 30 percent in TOD areas broken down as: Extremely Low 6%, Very Low 6%, Low 9%, and Moderate 9%.

The outcome of this alternative is compared with the Base Case and shown on **Exhibit 15,** which indicates a steep decline in Return on Costs for all nine prototypes, five of which generate negative returns.

Exhibit 15: Base Case Vs. GPAHG-Recommended Set-Aside



Off-Set Analysis

Off-Sets to Increased Set-Asides

As noted above, each set-aside scenario lowers Return on Costs from the Base Case. These set-asides can be potentially "paid" for using off-sets that either increase revenues or lower costs. At the City's request, AECOM considered four approaches to off-setting costs posed by increasing the inclusionary requirement: density bonuses, fee reductions, expedited processing, and parking reductions.

These off-set approaches are applied to the same nine set-aside scenarios shown in the exhibits above. The off-sets have been calibrated to show how much offset is required to recover the Base Case return. For example, if a return on cost falls from 10% in the Base Case to 8% in a set-aside scenario, the off-set testing explores how much offset is required to restore the 10% return. The four offset approaches are further described below.

Density bonuses are applied when qualified by the inclusionary set-aside. For example, the minimum set-aside of 10% Low/5% Moderate qualifies for a 20% bonus, so testing this set-aside scenario can include a density bonus of up to 20%. Density bonuses in general have a large impact on project feasibility.

Fee reductions are applied directly to the total Base Case project fee, which is calculated in the model using the City's current schedule (see **Appendix 5**). Fees considered here include both impact and processing fees. The fee reductions tested are intended to be a general indicator of how fees inform project economics. Fee reductions as tested have a significant impact on project feasibility.

Expedited processing is addressed in the model as entitlement processing time that drives land carry costs. The Base Case assumes an 18-month processing time, based on a recent study conducted by researchers at UC Berkeley with data from the City. A 33% reduction in processing time is quantified as a 6-month reduction, which reduces processing time to 12 months. Application of this incentive is limited to 33%, because developers in interviews identified 12 months as a reasonable maximum term. Expedited processing has a material if relatively small impact on overall project economics. However, for developers, expedited processing is a very attractive because it reduces land carry costs directly, which are incurred at the riskiest stage of the development process and therefore have a large influence on go/no-go decisions and financing.

Parking Reduction is applied to the Base Case parking ratios, which correspond to the City's guidelines for TOD, Central, and Non-Central areas of the City. In the current market environment, developers are reluctant to reduce parking, as renters and buyers continue to regard it as a valuable amenity. However, parking reductions have a profound effect on project economics in Pasadena, because most parking must be provided through subterranean lots that are very expensive to construct. Consequently, parking reduction incentives could become a valuable tool to support increased set-asides as consumer mobility expectations continue to evolve and enable more flexibility with how parking is designed and provided.

Base Case + 5% Workforce A (180% AMI) Scenario

In the Base Case + 5% Workforce A (180% AMI) scenario, as shown in **Exhibit 16**, three different illustrative incentive packages may be applied to achieve feasibility across prototypes.

In package 1, a Density Bonus ranging from 3% to 6% can be applied to prototypes R1, R4, R5, S1, and S3. (Note: R2, R3, S2, and S4 already assume the 20% maximum density bonus under SDBL and are not eligible for more.) Package 2 combines expedited processing (3-6 months time reduction) and between 1% and 23% reduction in parking to recover Base Case returns. Finally, as illustrated by Package 3, parking reduction alone of between 2% and 36% is also sufficient to recover Base Case returns for all prototypes.

Exhibit 16: Base Case + 5% Workforce A (180% AMI) Incentive Packages

Incentive Option Packages[1]	By Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*8.0%*	*9.4%*	*9.7%*	*10.4%*	*10.5%*	*7.9%*	*9.0%*	*10.2%*	*10.7%*
1. Density Bonus	4%	NA[2]	NA[2]	3%	3%	6%	NA[2]	3%	NA[2]
Density Bonus if SDBL Limit Removed[3]		*22%*	*22%*				*22%*		*23%*
2. Expedited Processing (months saved)[4]	6	4	3	6	6	6	6	6	6
+ Parking Reduction	7%	NA[5]	NA[5]	1%	4%	23%	2%	2%	NA[5]
3. Parking Reduction	11%	4%	2%	7%	6%	36%	5%	9%	5%

(1) Each option package indicates the mix and levels of incentive required for each prototype to recover Base Case returns

(2) Prototypes R1, R2, S2, and S4 already assume a 20% density bonus in the base case, which is the maximum available per SDBL. To achieve feasibility, these prototypes would require additional bonus beyond what's currently permitted.

(3) Indicates required density if the 20% SDBL limit is removed for prototypes R2, R3, S2, S3, which otherwise cannot recover Base Case returns by means of density bonus alone.

(4) Base Case assumes 18 months of processing; maximum achievable reduction assumed to be 33% or 6 months.

(5) Expedited processing alone without additional parking reduction sufficient to achieve feasibility

Source: AECOM

15% Low Income Scenario

In the 15% Low Income Scenario, as shown in **Exhibit 17**, four illustrative incentive packages may be applied separately to achieve feasibility across all nine prototypes.

A density bonus of between 1% and 22%, which is below the permissible 27.5% limit for a 15% Low Income set-aside, will recover Base Case returns for all prototypes. (Note that prototypes R2, R3, S2, and S4 already assume a 20% Density Bonus in the Base Case, and so the incremental range of new bonus required in this scenario would be between 1% and 5%.) Alternatively in Package 2, expedited processing (limited to a maximum of 6 months saved out of the typical 18-month process) can boost prototypes R2, R4, R5, S2, and S4 to feasibility. In Package 3, fee reductions in the range of 5% to 28% are required for feasibility for all prototypes. Lastly, all prototypes may achieve feasibility by reducing parking requirements between 2% and 30%, depending on the prototype.

Exhibit 17: 15% Low Income Incentive Packages

Incentive Option Packages[1]	Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*9.0%*	*9.1%*	*9.1%*	*10.6%*	*11.3%*	*8.4%*	*9.3%*	*9.6%*	*11.2%*
1. Density Bonus	3%	22%	23%	2%	1%	5%	22%	5%	22%
(Net Above Base Case[2])	*3%*	*2%*	*3%*	*2%*	*1%*	*5%*	*2%*	*5%*	*2%*
2. Expedited Processing (months saved)[3]	NA[4]	6	NA[4]	5	6	NA[4]	6	NA[4]	3
3. Fee Reduction	12%	10%	10%	12%	12%	28%	8%	22%	5%
4. Parking Reduction	7%	6%	5%	9%	3%	30%	3%	12%	2%

(1) Each option package indicates the mix and levels of incentive required for each prototype recover Base Case Returns

(2) Indicates additional density beyond that assumed in the Base Case for each prototype. For Prototypes R2, R3, S2, and S4, the Base Case assumed 20% density bonus.

(3) Base Case assumes 18 months of processing; maximum achievable reduction assumed to be 33% or 6 months.

(4) Prototype requires greater than the 33% reduction in processing time to recover Base Case Returns

Source: AECOM

10% Low, 10% Workforce B (150%AMI)

In the 10 % Low + 10% Workforce B Scenario, as shown in **Exhibit 18**, four illustrative incentive packages may be applied separately to achieve feasibility across all nine prototypes.

In Package 1, a Density Bonus ranging from 2% to 6% can be applied to prototypes R1, R4, R5, S1, and S3. (Note: R2, R3, S2, and S4 already assume the 20% maximum density bonus under SDBL and are not eligible for more.)

Alternatively in Package 2, expedited processing (between 3 and 6 months in reduced processing time) can boost prototypes R2, R3, R4, and S3 to feasibility. In Package 3, fee reductions in the range of 4% to 34% are required for feasibility for all prototypes. Lastly, all prototypes may achieve feasibility by reducing parking requirements between 2% and 36%, depending on the prototype.

Exhibit 18: 10% Low Income + 10% Workforce B (150% AMI) Incentive Packages

Incentive Option Packages[1]	Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*8.0%*	*9.0%*	*9.7%*	*10.5%*	*10.8%*	*7.9%*	*8.9%*	*10.4%*	*10.3%*
1. Density Bonus	4%	NA[2]	NA[2]	2%	3%	6%	NA[2]	3%	NA[2]
Density Bonus if SDBL Limit Removed[3]		*23%*	*22%*				*22%*		*24%*
2. Expedited Processing (months saved)[4]	NA[5]	6	3	6	NA[5]	NA[5]	NA[5]	6	NA[5]
3. Fee Reduction	22%	11%	4%	13%	17%	34%	12%	13%	15%
4. Parking Reduction	11%	6%	2%	6%	8%	36%	5%	7%	8%

(1) Each option package indicates the mix and levels of incentive required for each prototype recover Base Case Returns

(2) Prototypes R2, R3, S2, and S4 already assume a 20% density bonus in the base case, which is the maximum available per SDBL. To achieve feasibility, these prototypes would require additional bonus beyond what's currently permitted.

(3) Indicates required density if the 20% SDBL limit is removed for prototypes R2, R3, S2, S3, which otherwise cannot recover Base Case returns by means of density bonus alone.

(4) Base Case assumes 18 months of processing; maximum achievable reduction assumed to be 33% or 6 months.

(5) Prototype requires greater than the 33% reduction in processing time to recover Base Case Returns

Source: AECOM

Base Case + 5% Workforce B (150% AMI) Scenario

In the Base Case + 5% Workforce B (150% AMI) scenario, as shown in **Exhibit 19**, four different illustrative incentive packages may be applied to achieve feasibility across prototypes.

In package 1, a Density Bonus ranging from 4% to 7% can be applied to prototypes R1, R4, R5, S1, and S3. (Note: R2, R3, S2, and S4 already assume the 20% maximum density bonus under SDBL and are not eligible for more.) Package 2 combines expedited processing (6 months time reduction) and between 2% and 31% reduction in required parking to recover Base Case returns. In Package 3, fee reductions alone in the range of 12% to 41% are required for feasibility for all prototypes. Lastly, as illustrated by Package 4, parking reduction between 6% and 43% will be required to recover Base Case returns for all prototypes.

Exhibit 19: Base Case + 5% Workforce B (150% AMI) Incentive Packages

Incentive Option Packages[1]	Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*7.1%*	*8.7%*	*8.9%*	*9.5%*	*9.7%*	*7.3%*	*8.4%*	*9.5%*	*10.2%*
1. Density Bonus	7%	NA[2]	NA[2]	5%	5%	7%	NA[2]	4%	NA[2]
Density Bonus if SDBL Limit Removed[3]		*24%*	*23%*				*22%*		*24%*
2. Expedited Processing (months saved)[4]	6	6	6	6	6	6	6	6	6
+ Parking Reduction	12%	2%	2%	5%	10%	31%	4%	6%	3%
3. Fee Reduction	31%	15%	12%	24%	28%	41%	18%	23%	16%
4. Parking Reduction	15%	8%	6%	12%	14%	43%	7%	13%	8%

(1) Each option package indicates the mix and levels of incentive required for each prototype recover Base Case Returns

(2) Prototypes R2, R3, S2, and S4 already assume a 20% density bonus in the base case, which is the maximum available per SDBL. To achieve feasibility, these prototypes would require additional bonus beyond what's currently permitted.

(3) Indicates required density if the 20% SDBL limit is removed for prototypes R2, R3, S2, S3, which otherwise cannot recover Base Case returns by means of density bonus alone.

(4) Base Case assumes 18 months of processing; maximum achievable reduction assumed to be 33% or 6 months.

Source: AECOM

10% Low, 10% Moderate Income Scenario

In the 10% Low Income + 10% Moderate Income scenario, as shown in **Exhibit 20**, four different illustrative incentive packages may be applied to achieve feasibility across prototypes.

In package 1, a Density Bonus ranging from 5% to 10% can be applied to prototypes R1, R4, R5, S1, and S3. (Note: R2, R3, S2, and S4 already assume the 20% maximum density bonus under SDBL and are not eligible for more.) Package 2 combines expedited processing (6 months time reduction) and between 5% and 37% reduction in required parking to recover Base Case returns. In Package 3, fee reductions alone in the range of 19% to 48% are required for feasibility for all prototypes. Finally, as shown in Package 4, parking reduction alone from 10% to 50% will be required to recover Base Case returns for all prototypes.

Exhibit 20: 10% Low Income + 10% Moderate Income Incentive Packages

Incentive Option Packages[1]	Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*6.3%*	*7.5%*	*8.2%*	*9.0%*	*9.4%*	*6.8%*	*7.7%*	*8.9%*	*9.0%*
1. Density Bonus	10%	NA[2]	NA[2]	5%	7%	8%	NA[2]	6%	NA[2]
Density Bonus if SDBL Limit Removed[3]		*28%*	*26%*				*29%*		*29%*
2. Expedited Processing (months saved)[4]	6	6	6	6	6	6	6	6	6
+ Parking Reduction	16%	9%	5%	8%	10%	37%	6%	10%	9%
3. Fee Reduction	41%	28%	19%	30%	33%	48%	25%	29%	29%
4. Parking Reduction	20%	15%	10%	14%	16%	50%	10%	17%	13%

(1) Each option package indicates the mix and levels of incentive required for each prototype recover Base Case Returns

(2) Prototypes R2, R3, S2, and S4 already assume a 20% density bonus in the base case, which is the maximum available per SDBL. To achieve feasibility, these prototypes would require additional bonus beyond what's currently permitted.

(3) Indicates required density if the 20% SDBL limit is removed for prototypes R2, R3, S2, S3, which otherwise cannot recover Base Case returns by means of density bonus alone.

(4) Base Case assumes 18 months of processing; maximum achievable reduction assumed to be 33% or 6 months.

Source: AECOM

5% Very Low, 5% Low, 10% Moderate Income Scenario

In the 5% Very Low + 5% Low + 10% Moderate Income scenario, as shown in **Exhibit 21**, four different illustrative incentive packages may be applied to achieve feasibility across prototypes.

In package 1, a Density Bonus ranging from 8% to 20% can be applied to prototypes R1, R4, R5, S1, and S3. (Note: R2, R3, S2, and S4 already assume the 20% maximum density bonus under SDBL and are not eligible for more.) Package 2 combines expedited processing (6 months time reduction) and between 7% and 45% reduction in required parking to recover Base Case returns. In Package 3, fee reductions alone in the range of 16% to 55% are required for feasibility for all prototypes. Finally, as shown in Package 4, parking reduction between 12% and 57% will be required to recover Base Case returns for all prototypes.

Exhibit 21: 5% Very Low + 5% Low + 10% Moderate Income Incentive Packages

Incentive Option Packages[1]	Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*5.4%*	*6.9%*	*7.5%*	*7.8%*	*8.2%*	*6.3%*	*7.3%*	*7.9%*	*9.2%*
1. Density Bonus	20%	NA[2]	NA[2]	8%	9%	9%	NA[2]	9%	NA[2]
Density Bonus if SDBL Limit Removed[3]		*29%*	*28%*				*31%*		*27%*
2. Expedited Processing (months saved)[4]	6	6	6	6	6	6	6	6	6
+ Parking Reduction	20%	12%	9%	14%	17%	45%	8%	16%	7%
3. Fee Reduction	50%	33%	27%	43%	45%	55%	29%	40%	16%
4. Parking Reduction	24%	18%	14%	21%	22%	57%	11%	22%	12%

(1) Each option package indicates the mix and levels of incentive required for each prototype recover Base Case Returns

(2) Prototypes R2, R3, S2, and S4 already assume a 20% density bonus in the base case, which is the maximum available per SDBL. To achieve feasibility, these prototypes would require additional bonus beyond what's currently permitted.

(3) Indicates required density if the 20% SDBL limit is removed for prototypes R2, R3, S2, S3, which otherwise cannot recover Base Case returns by means of density bonus alone.

(4) Base Case assumes 18 months of processing; maximum achievable reduction assumed to be 33% or 6 months.

Source: AECOM

5% Very Low + 10% Low + 5% Moderate Scenario

The 5/10/5 VL/L/M scenario shown in **Exhibit 22** presents a high hurdle to feasibility.

In illustrative Package 1, a density bonus ranging from 10% to 25% will achieve project feasibility for prototypes R1, R4, R5, S1, and S3. Package 2 combines the maximum 27.5% density bonus, expedited processing with 6 months saved, and required parking reduction between 1% and 3% to achieve feasibility for prototypes R2, R3, S2, and S4. In Package 3, all prototypes may achieve feasibility by reducing parking between 15% and 66%.

Exhibit 22: 5% Very Low Income/10% Low Income/5% Moderate Income Incentive Packages

Incentive Option Packages[1]	Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*4.3%*	*6.3%*	*6.5%*	*6.8%*	*7.3%*	*5.5%*	*6.5%*	*6.9%*	*8.2%*
1. Density Bonus	25%	*NA*[2]	*NA*[2]	10%	11%	11%	*NA*[2]	11%	*NA*[2]
Density Bonus if SDBL Limit Removed[3]		*30%*	*31%*				*35%*		*30%*
2. Density Bonus[4]		27.5%	27.5%				27.5%		27.5%
+ Expedited Processing (months saved)[5]		6	6				6		6
+ Parking Reduction		1%	0%				3%		0%
3. Parking Reduction	30%	22%	19%	27%	27%	66%	15%	28%	17%

(1) Each option package indicates the mix and levels of incentive required for each prototype to recover Base Case Returns

(2) 27.5% is the maximum available per SDBL. Prototypes R2, R3, S2, and S4 require more than the permitted 27.5% density bonus to achieve feasibility in this scenario.

(3) Indicates required density if the 27.5% SDBL limit is removed for prototypes R2, R3, S2, and S4, which otherwise cannot recover Base Case returns by means of density bonus alone.

(4) This package is applied only to R2, R3, S2, and S4, which at maximum permitted density bonus (27.5%) also require additional incentives to recoup Base Case returns. Prototypes R1, R4, R5, S1, and S3 can recover Base Case returns using the Density Bonus alone, as shown in the first package.

(5) Base Case assumes 18 months of processing; maximum achievable reduction assumed to be 33% or 6 months.

Source: AECOM

20% Low Income Scenario

In the 20% Low Income Scenario shown in **Exhibit 23**, three illustrative incentive packages may be applied to achieve feasibility across all nine prototypes. Compared with most other set-aside scenarios tested, a 20% inclusionary set-aside presents a high hurdle to feasibility.

For example, in Package 1 a density bonus of between 13% and 35% (below or at the permissible 35% limit for a 20% Low Income set-aside), will recover Base Case returns for all prototypes. (Note that prototypes R2, R3, S2, and S4 already assume a 20% Density Bonus in the Base Case, and so the incremental range of new bonus required in this scenario would be between 9% and 22%.)

Package 2 combining maximum expedited processing and required parking reduction between 11% and a very high 76% is required to recover Base Case returns. Finally, in Package 3, all prototypes may achieve feasibility by reducing parking alone between 15% and 88% percent, depending on the prototype.

Exhibit 23: 20% Low Income Incentive Packages

Incentive Option Packages[1]	Prototype								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*6.5%*	*6.4%*	*6.2%*	*7.1%*	*6.9%*	*3.9%*	*6.4%*	*6.0%*	*7.5%*
1. Density Bonus	22%	32%	33%	9%	13%	13%	35%	13%	33%
(Net Above Base Case[2])	*22%*	*12%*	*13%*	*9%*	*13%*	*13%*	*15%*	*13%*	*13%*
2. Expedited Processing (months saved)[3]	6	6	6	6	6	6	6	6	6
+ Parking Reduction	15%	16%	16%	18%	23%	76%	11%	27%	16%
3. Parking Reduction	19%	21%	21%	25%	28%	88%	15%	34%	21%

(1) Each option package indicates the mix and levels of incentive required for each prototype recover Base Case Returns

(2) Indicates additional density beyond that assumed in the Base Case for each prototype. For Prototypes R2, R3, S2, and S4, the Base Case assumed 20% density bonus.

(3) Base Case assumes 18 months of processing; maximum reasonable reduction assumed to be 33% or 6 months.

Source: AECOM

GPAHG Set-Aside Scenario

The GPAHG scenario imposes much higher set-aside requirements than other scenarios under consideration, and as a result it presents the highest challenge to development feasibility under current market conditions.

As shown in **Exhibit 24**, four illustrative incentive packages require combining and maxing out multiple incentive sources to recoup Base Case returns. For example, in Package 1, Density Bonuses exceeding what's currently permitted under SDBL are required to achieive feasibility for for 5 of 9 prototypes. At SDBL density bonus limits, as shown in Package 2, these five prototypes also require expedited entitlement processing to become feasible. In Package 3, most prototypes need maximum or close to maximum impact fee reduction, expedited processing, and even some parking reduction to achieve feasibility. Finally, for Package 4, feasibility for eight of nine prototypes requires a radical reduction in required parking ranging from 47% to 87% of the requirement, and for the remaining prototype, no amount of parking reduction will recoup Base Case returns.

Exhibit 24: GPAHG Set-Aside Recommendations Incentives Incentive Packages

Incentive Option Packages[1]	**Prototype**								
	R1	R2	R3	R4	R5	S1	S2	S3	S4
ROC Before Incentives Applied	*0.9%*	*-0.2%*	*-0.9%*	*-0.7%*	*-1.7%*	*0.6%*	*2.7%*	*-3.3%*	*1.4%*
1. Density Bonus	*NA*[2]	*NA*[2]	*NA*[2]	24%	28%	22%	*NA*[2]	35%	*NA*[2]
Density Bonus if SDBL Limit Removed[3]	33.0%	49%	52%				49%		50%
2. Density Bonus[4]	32.5%	35%	35%				32.5%		35%
+ Expedited Processing (months saved)[5]	3	6	6				6		6
3. Fee Reduction	98%	99%	99%	99%	99%	99%	69%	99%	98%
+ Expedited Processing (months saved)[5]		5	6	6	6	6	6	6	6
+ Parking Reduction[5]			2%	12%	22%	15%		29%	
4. Parking Reduction	47%	57%	59%	72%	80%	*NA*[6]	29%	89%	51%

(1) Each option package indicates the mix and levels of incentive required for each prototype to recover Base Case Returns

(2) Per SDBL, 32.5% is the maximum bonus available for R1, S1, and S2, while the others are allowed up to a 35% bonus. Under these limits, prototypes R1, R2, R2, S2, and S4 require more than what is allowed to achieve feasibility in this scenario, while R4, R5, S1, and S3 are feasible at the bonuses shown.

(3) Indicates required density if the SDBL limit is removed for prototypes R1, R2, R3, S2, and S4, which otherwise cannot recover Base Case returns by means of density bonus alone.

(4) This package is applied only to R1, R2, R3, S2, and S4, which at maximum permitted density bonus also require additional incentives to recoup Base Case returns. Prototypes R4, R5, S1, and S3 can recover Base Case returns using the Density Bonus alone, as shown in the first package.

(5) Base Case assumes 18 months of processing; maximum reasonable reduction assumed to be 33% or 6 months.

(6) Indicates that even after 100% parking reduction, S1 will not be feasible.

Source: AECOM

SUMMARY FINDINGS

Analysis

A number of conditions particular to Pasadena make development challenging and costly.

- The City's fee structure, including both impact and processing fees, is high.
- Parking requirements, even in TOD areas, are high and costly due to height limits that force much parking to be subterranean, which is much more expensive to construct than surface or structured parking.
- Entitlement processing is slow, especially for incentives and concessions that might help fund additional inclusionary units. This typically adds market risk, financing risk, and land carrying cost that often must be funded directly through developer out-of-pocket equity.
- Land is scarce and expensive, land assembly is challenging, and existing improvements add costs and unknowns regarding site conditions.

Nonetheless, when project developers successfully manage costs and risks, they can rent or sell at high rates and achieve strong returns in Pasadena. These returns are neither automatic nor predictable, however, for a number of reasons:

- An analysis of recent transactions in the City for land shows land costs to be extremely variable and unpredictable, so much so that most projects likely succed or fail on the land deal alone.
- Capitalization rates have shrunk to 3.5%-4% range and are historically low. Many successful recent projects that sold in that range were underwritten assuming higher rates. After the recent cycle of transactions, land costs have likely now risen to reflect these rates.
- The Recession offered a one-time opportunity for investors to acquire development parcels at discounted costs, and the resulting projects include many that, if developed at today's costs, would not pencil.
- The City's fee, parking, and entitlement requirements and processes introduce risk and cost that reduce a project's ability to weather market or other fluctuations.

Consequently, there is little reliable surplus in project returns to fund additional inclusionary zoning requirements, which should instead be supported through incentives that off-set the additional economic pressures.

Analysis of nine representative residential and mixed-use prototypes under a number of potential revised Inclusionary Housing set-aside scenarios yielded a number of observations that could support new policy development.

Modest increases in the Inclusionary Requirement, such as adding a 5 percent workforce component to the current minimum or to boost the current minimum to 15 percent Low Income may be "paid" for with a number of incentives, namely:

- Density bonuses. There is unused capacity in Pasadena under the State Density Bonus law framework, if the community is willing to accept the additional height, density, and traffic. At the current minimum, all complying projects over 10 units automatically qualify for a 20 percent bonus.
- A reduction in the City's fee schedule. The fee component (both impact and processing fees) of any development project in Pasadena is high as a percentage of total costs. Converversly, fee reductions could make a major contribution to project feasibility.
- A reduction in entitlement processing time. The average entitlement process in the City takes 18 months and often longer. Land carry costs associated with prolonged processing have a major

impact on underwriting and the go/no-go project decision, because they typically increase out-of-pocket equity costs.

- As attitudes about mobility continue to evolve, demand for parking is likely to decrease. Reduced parking requirements represent a huge opportunity for development cost savings that can be put toward paying for inclusionary units.

The scenarios with the greatest increases in the set-aside requirement, including 20% Low Income, 5%/10%/5% Very Low/Low/Moderate, and the GPAGH recommendations (5%/5%/7%/8% and 6%/6%/9%/9% Extremely Low/Very Low/Low/Moderate affordability in TOD and non-TOD areas respectively) present a much greater challenge to feasibility and require combining and packaging several incentive options together.

Next Steps

The nine set-aside scenarios assessed in the analysis are intended to illustrate the general dynamics of development economics in the City as they pertain to affordable housing set-asides. Further investigation and refinement to explore additional opportunities for Workforce, Very Low, and Extremely Low set-asides may be necessary to develop a full set-aside schedule.

The success of any increased set-aside program will likely depend on the availability and usability of a wide range of off-set incentives. The findings of this analysis point toward opportunities in the SDBL, in fee reduction, in expedited processing, and in parking reduction. If these incentive tools are to become available and effective, the City must first define and develop them further so they are clear, predictable, and fiscally and legally supportable. Different "packaging" options must also be developed that facilitate effective combinations of incentives.

APPENDIX 1: Developer Interviews

February 14, 2019
Pasadena City Hall

Participants:

- Joel Bryant, Hill Companies
- Burke Farrar, Odyssey Development Services
- Ken McCormick, Mill Creek Development
- Richard McDonald, Esq., Carlson & Nicholson
- Robert Montano, Octane Realty & Development
- Tim Piasky, Building Industry Association LA/Ventura Chapter

APPENDIX 2: Land Sale Transactions

Land Value Comps

Address	Lot Size (SF)	Transaction Date[1]	Total Sale Price	Sale Price/Sq.Ft.	Adjusted (2019) Sale Price/Sq.Ft.[2]	Geography	Zoning	Theshold DU/AC	Source
127-141 Madison Ave	32,000	1/1/2015	$6,500,000	$203	$229	Central/Central TOD	CD-3	87	KMA
233 N Hudson Ave	16,335	9/10/2018	$3,607,000	$221	$221	Central/Central TOD	CD-3	87	CoStar
253 South Los Robles Ave	35,502	7/20/2018	$8,220,000	$232	$232	Central/Central TOD	CD-3	87	KMA
535 East Union St	50,848	4/4/2017	$11,200,000	$220	$234	Central/Central TOD	CD-3	87	KMA
54 N Oakland	26,602	4/3/2017	$2,770,000	$104	$110	Central/Central TOD	CD-4	87	KMA
711 East Walnut St	42,745	12/8/2016	$9,600,000	$225	$238	Central/Central TOD	CD-3	87	KMA
747 East Green St	35,544	8/2/2017	$5,300,000	$149	$154	Central/Central TOD	CD-4	87	KMA
170 N Michigan Ave	7,723	11/20/2017	$681,727	$88	$91	Non-Central TOD	RM48-PK	48	CoStar
1027 N Altadena Dr	12,977	11/9/2018	$1,200,000	$92	$92	Balance of the City	RM-32	32	CoStar
1135-1137 E Villa St	6,260	10/1/2018	$470,000	$75	$75	Non-Central TOD	RM-32	32	CoStar
200 S Sierra Madre Blvd	109,984	8/4/2015	$15,050,000	$137	$150	Balance of the City	RM-32	32	CoStar
690 N. Orange Grove Blvd	48,867	6/25/2018	$3,205,000	$66	$68	Balance of the City	RM-32	32	KMA
704 S Marengo Ave	12,462	12/22/2017	$2,250,000	$181	$186	Non-Central TOD	RM-32	32	CoStar
85 N Grand Oaks Ave	8,501	4/5/2017	$1,200,000	$141	$150	Balance of the City	RM-32	32	CoStar
154 N Parkwood Ave	8,852	8/7/2015	$1,055,000	$119	$130	Non-Central TOD	RM -16	16	CoStar
244 W Howard St	18,657	2/14/2017	$680,000	$36	$39	Balance of the City	RM16	16	CoStar
909 Cypress Ave	11,949	5/12/2017	$909,000	$76	$81	Balance of the City	RM12	12	CoStar
1918 Linda Vista Ave	14,488	6/23/2017	$399,000	$28	$29	Balance of the City	RS4-HD	6	CoStar
466 W Washington Blvd	19,636	11/21/2017	$1,600,000	$81	$84	Balance of the City	RS6	6	CoStar

Sources: CoStar, KMA, AECOM

APPENDIX 3: Townhome Sale Transactions

Pasadena Townhome Transactions 2017-2018

Address	Built	Geography	Sold	Beds	Baths	Sq.Ft.	Price	$/Sq.Ft.	$2019/ Sq.Ft.[1]
168 S Sierra Madre Blvd #107	2018	Balance of the City	6/7/2018	3	2.5	1,682	$1,060,000	$630	$641
168 S Sierra Madre Blvd #108	2018	Balance of the City	6/8/2018	3	2.5	1,682	$1,060,000	$630	$641
168 S Sierra Madre Blvd #109	2018	Balance of the City	5/4/2018	3	2.5	1,688	$1,053,000	$624	$636
168 S Sierra Madre Blvd #111	2018	Balance of the City	5/31/2018	3	2.5	1,691	$1,046,000	$619	$629
168 S Sierra Madre Blvd #101	2018	Balance of the City	6/1/2018	3	2.5	1,716	$1,084,000	$632	$643
168 S Sierra Madre Blvd #106	2018	Balance of the City	8/26/2018	3	2.5	1,750	$1,097,000	$627	$633
168 S Sierra Madre Blvd #103	2018	Balance of the City	4/13/2018	3	2.5	1,758	$1,079,000	$614	$627
168 S Sierra Madre Blvd #102	2018	Balance of the City	6/7/2018	3	2.5	1,764	$1,080,000	$612	$623
168 S Sierra Madre Blvd #110	2018	Balance of the City	6/21/2018	3	2.5	1,968	$1,208,000	$614	$624
382 West Green St #139	2018	Balance of the City	9/28/2018	3	3.5	2,904	$1,965,990	$677	$682
382 West Green St #138	2018	Balance of the City	9/28/2018	3	3.5	3,043	$1,965,990	$646	$651
378 West Green St #126	2018	Balance of the City	7/28/2018	3	3.5	3,044	$2,191,990	$720	$729
188 S Sierra Madre Blvd Blvd #10	2017	Balance of the City	9/26/2017	3	2.5	1,400	$861,000	$615	$638
188 S Sierra Madre Blvd #3	2017	Balance of the City	9/18/2017	3	2.5	1,677	$1,254,000	$748	$777
188 S Sierra Madre Blvd #9	2017	Balance of the City	7/12/2018	3	2.5	1,677	$1,060,000	$632	$641
188 S Sierra Madre Blvd #11	2017	Balance of the City	6/1/2018	3	2.5	1,708	$1,075,000	$629	$640
188 Sierra Madre Blvd #4	2017	Balance of the City	9/25/2017	3	2.5	1,988	$1,243,000	$625	$649
188 S Sierra Madre Blvd #1	2017	Balance of the City	5/30/2018	3	2.5	1,988	$1,241,000	$624	$635
188 Sierra Madre Blvd #3	2017	Balance of the City	8/18/2017	3	2.5	1,989	$1,254,000	$630	$656
188 Sierra Madre Blvd #2	2017	Balance of the City	8/21/2017	3	2.5	1,989	$1,254,000	$630	$656
188 S Sierra Madre Blvd #2	2017	Balance of the City	9/21/2017	3	2.5	1,989	$1,254,000	$630	$655
2428 E Del Mar Blvd #201	2017	Balance of the City	2/23/2018	3	3.5	2,033	$1,174,890	$578	$593
2428 E Del Mar Blvd #201	2017	Balance of the City	2/23/2018	3	3.5	2,033	$1,174,890	$578	$593
188 S Sierra Madre Blvd #8	2017	Balance of the City	11/1/2017	3	2.5	2,396	$1,479,000	$617	$639
378 West Green St #130	2017	Balance of the City	9/28/2018	3	3.5	2,903	$2,281,374	$786	$792
378 West Green St #129	2017	Balance of the City	10/5/2018	3	3.5	3,044	$2,160,990	$710	$715
382 Green St #137	2017	Balance of the City	12/18/2018	3	3.5	3,126	$2,559,990	$819	$820
378 West Green St #128	2017	Balance of the City	10/23/2018	3	3.5	3,126	$2,456,990	$786	$791
633 S Lake Ave #5	2010	Balance of the City	4/5/2018	2	3	2,220	$1,290,000	$581	$594
633 S Lake Ave #4	2010	Balance of the City	8/31/2017	2	2.5	2,227	$1,258,000	$565	$588
257 S Hudson Ave #306	2009	Balance of the City	7/12/2017	2	2.25	1,619	$900,000	$556	$581
257 S Hudson Ave #301	2009	Balance of the City	2/16/2018	2	2.25	1,993	$1,100,000	$552	$566
65 S San Gabriel Blvd #2	2008	Balance of the City	8/25/2017	3	2.5	1,530	$670,000	$438	$456
65 S San Gabriel Blvd #5	2008	Balance of the City	11/14/2017	3	2.5	1,560	$663,000	$425	$439
985 N Michillinda Ave #203	2007	Balance of the City	9/29/2017	2	2.25	1,376	$652,000	$474	$492
1705 N Fair Oaks Ave #106	2007	Balance of the City	11/15/2017	3	2.5	1,619	$565,000	$349	$361
1701 N Fair Oaks Ave #104	2007	Balance of the City	3/14/2018	3	2.5	1,639	$595,000	$363	$372
Built 2017-18 (n=28)									
Average				3.00	2.82	2,134	$1,416,968	$653	$666
Median				3.00	2.50	1,988	$1,224,500	$630	$641
Max								$819	$820
Min								$578	$593
Built 2007-2010 (n=9)									
Average				2.44	2.47	1,754	$854,778	$478	$494
Median				2.00	2.50	1,619	$670,000	$474	$492
Max								$581	$594
Min								$349	$361

(1) Assume 3% annual market appreciation
Source: Trulia, AECOM

APPENDIX 4: Condo Sale Transactions

Pasadena Condominium Transactions 2017-2018

Address	Built	Geography	Sold	Beds	Baths	Sq.Ft.	Price	$/Sq.Ft.	$2019/ Sq.Ft.[1]
125 Hurlbut St #112	2018	Non-Central TOD	10/17/2018	2	2	1,160	$828,000	$714	$718
125 Hurlbut St #209	2018	Non-Central TOD	10/26/2018	2	2	1,237	$899,000	$727	$731
2428 E Del Mar Blvd #109	2017	Balance of the City	1/10/2018	2	2.5	1,804	$949,000	$526	$541
2428 E Del Mar Blvd #109	2017	Balance of the City	1/10/2018	2	2.5	1,804	$949,000	$526	$541
2428 E Del Mar Blvd #108	2017	Balance of the City	12/30/2017	0	1	643	$418,890	$651	$671
2428 E Del Mar Blvd #108	2017	Balance of the City	12/30/2017	0	1	643	$418,890	$651	$671
2428 E Del Mar Blvd #103	2017	Balance of the City	5/2/2018	1	1	752	$512,890	$682	$696
2428 E Del Mar Blvd #103	2017	Balance of the City	5/2/2018	1	1	752	$512,890	$682	$696
2428 E Del Mar Blvd #106	2017	Balance of the City	11/30/2017	1	1	752	$512,890	$682	$704
2428 E Del Mar Blvd #106	2017	Balance of the City	11/30/2017	1	1	752	$512,890	$682	$704
2428 E Del Mar Blvd #107	2017	Balance of the City	12/30/2017	0	1	582	$399,890	$687	$708
2428 E Del Mar Blvd #107	2017	Balance of the City	12/30/2017	0	1	582	$399,890	$687	$708
288 S Oakland Ave #205	2016	Balance of the City	9/14/2018	2	2.25	1,437	$878,000	$611	$616
288 S Oakland Ave #101	2016	Balance of the City	5/29/2018	2	2	1,289	$835,000	$648	$660
288 S Oakland Ave #211	2016	Balance of the City	5/29/2018	2	2.25	1,404	$935,000	$666	$678
288 Oakland Ave S #212	2016	Balance of the City	9/16/2017	2	3.25	1,403	$1,010,000	$720	$748
192 S Orange Grove Blvd #101	2015	Balance of the City	9/5/2018	2	2.5	2,749	$1,880,000	$684	$691
192 Orange Grove Blvd #102	2015	Balance of the City	7/19/2017	2	2.5	2,586	$1,875,000	$725	$757
196 S Orange Grove Blvd #203	2015	Balance of the City	3/29/2018	2	2.5	2,500	$2,000,000	$800	$818
480 N Catalina Ave #302	2007	Balance of the City	11/13/2017	2	2	1,050	$465,000	$443	$458
480 N Catalina Ave #303	2007	Balance of the City	9/24/2018	2	2	1,050	$501,058	$477	$481
480 N Catalina Ave #102	2007	Balance of the City	9/11/2017	2	2.5	990	$489,900	$495	$514
480 N Catalina Ave #110	2007	Balance of the City	5/19/2017	2	3	1,008	$500,000	$496	$520
333 Hill Ave #309	2007	Non-Central TOD	5/11/2017	2	2	949	$525,000	$553	$580
480 N Catalina Ave #107	2007	Balance of the City	4/20/2018	1	1	710	$425,000	$599	$612
333 North Hill Ave #401	2007	Non-Central TOD	9/29/2017	1	1	660	$440,000	$667	$692
Built 2015-18 (n=19)									
Average				1.37	1.80	1,307	$880,375	$671	$687
Median				2.00	2.00	1,237	$835,000	$682	$696
Max								$800	$818
Min								$526	$541
Built 2007-2014 (n=7)									
Average				1.71	1.93	917	$477,994	$533	$551
Median				2.00	2.00	990	$489,900	$496	$520
Max								$667	$692
Min								$443	$458
Built 2015-18 Studio and 1BR (n=8)									
Average					1.00	682	$461,140	$676	$695
Median					1.00	698	$465,890	$682	$700
Max								$687	$708
Min								$651	$671
Built 2015-18 2BR (n=11)									
Average					2.39	1,761	$1,185,273	$668	$682
Median					2.50	1,437	$949,000	$684	$691
Max								$800	$818
Min								$526	$541

(1) Assume 3% annual market appreciation
Source: Trulia, AECOM

APPENDIX 5: City Fee Calculation

City Fee Calculations (Base Case Program Scenario)	R1: Low-Rise High Density Residential, Sub. Parking (33-48 DU/AC)	R2: Mid-Rise High-Density Residential, Sub. Parking (48 - 67 DU/AC)	R3: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (68 to 87 DU/AC)	R4: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 2.25 FAR)	S1: Med-High Density Residential Townhomes, Tuck Parking (To 32 DU/AC)	S2: Mid-Rise Low-Medium Mixed-Use, Part Sub. Parking, Density Bonus (33-48 DU/AC)	S3: Mid-Rise TOD Medium Mixed Use, Sub. Parking (68-87 DU/AC to 2.25 FAR)	S4: Mid-Rise High Mixed Use TOD, Sub Parking, Density Bonus (88-117 DU/AC to 3.0 FAR)
Planning								
Subtotal	$ 41,759	$ 45,638	$ 45,638	$ 41,759	$ 60,355	$ 61,242	$ 64,095	$ 67,787
Design Review								
Subtotal	$ 6,955	$ 14,496	$ 14,496	$ 14,496	$ 14,496	$ 10,332	$ 10,332	$ 10,332
Building								
Subtotal	$ 553,761	$ 2,021,161	$ 1,582,171	$ 1,544,939	$ 1,343,637	$ 705,460	$ 1,070,030	$ 1,037,449
Transportation								
Subtotal	$ 125,053	$ 686,003	$ 602,765	$ 660,770	$ 228,668	$ 255,884	$ 358,968	$ 355,395
Pasadena Unified School District								
Subtotal	$ 98,000	$ 403,131	$ 294,303	$ 284,940	$ 256,539	$ 107,741	$ 200,020	$ 176,720
Public Works								
Subtotal	$ 52,080	$ 223,200	$ 169,632	$ 146,196	$ 119,040	$ 55,056	$ 122,016	$ 99,324
Public Art								
Subtotal	$ 105,217	$ 398,220	$ 310,295	$ 303,422	$ 264,579	$ 135,231	$ 208,511	$ 201,499
Residential Impact Fee								
Subtotal	$ 549,675	$ 2,757,494	$ 2,093,556	$ 2,108,449	$ 1,155,844	$ 688,303	$ 1,316,193	$ 1,201,835
Records Management Maintenance Cost								
Subtotal	$ 45,975	$ 196,480	$ 153,386	$ 153,149	$ 103,295	$ 60,577	$ 100,505	$ 94,510
TOTAL	**$ 1,578,474**	**$ 6,745,823**	**$ 5,266,242**	**$ 5,258,120**	**$ 3,546,452**	**$ 2,079,826**	**$ 3,450,671**	**$ 3,244,852**
Hypothetical Fee Reductions								
5%	$ 79,000	$ 337,000	$ 263,000	$ 263,000	$ 177,000	$ 104,000	$ 173,000	$ 162,000
10%	$ 158,000	$ 675,000	$ 527,000	$ 526,000	$ 355,000	$ 208,000	$ 345,000	$ 324,000
25%	$ 395,000	$ 1,686,000	$ 1,317,000	$ 1,315,000	$ 887,000	$ 520,000	$ 863,000	$ 811,000
50%	$ 789,000	$ 3,373,000	$ 2,633,000	$ 2,629,000	$ 1,773,000	$ 1,040,000	$ 1,725,000	$ 1,622,000

APPENDIX 6: For-Rent Pro Formas

R1: Low-Rise High Density Residential, Sub. Parking (33-48 DU/AC)

For Rent
47 DU/AC
1.35 FAR
35
0
All Residential Use
Mid (e.g. non-Central TOD)
Parking: Non-Central Non-TOD
Land: Low Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
0.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	0.75	acres				
Height	3	Stories				
Density	47	DU/AC	1.35	FAR		
Built Area	43,984	GBA sq.ft.	95%	efficiency	42,000	NLA sq.ft.
Residential	43,984	GBA sq.ft.	95%	efficiency	42,000	NLA sq.ft.
Non-Residential	0	GBA sq.ft.	90%	efficiency	0	NLA sq.ft.
Room Mix (Base Units)						
Studio	0	units	0	NLA sq.ft./unit		
One-Bedroom	0	units	0	NLA sq.ft./unit		
Two-Bedroom	35	units	1,200	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Base Units	35		1,200			
Room Mix (Density Bonus Units)						
Studio	0	units	0	NLA sq.ft./unit		
One-Bedroom	0	units	0	NLA sq.ft./unit		
Two-Bedroom	0	units	1,200	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Density Bonus Units	0	units	0	NLA sq.ft./unit		
Total All Units	35		1,200	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		2	units		
Low (80% AMI sale and rent)	10%		4	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		

R1: Low-Rise High Density Residential, Sub. Parking (33-48 DU/AC)

Parking [2]						
Units <=650 Sq.Ft.	0	1.0 stall/unit	0	stalls		
Units >650 Sq.Ft.	35	2.0 stall/unit	70	stalls		
Guest Parking	35	0.1 stall/unit	4	stalls		
Residential	2.11	/unit	74	stalls		
Retail	3.0	/1,000 NLAsq.ft.	0	stalls		
Total	100%	of required	74	stalls		
Type						
Surface			9	stalls		
First floor structured			0	stalls		
Subterranean 1			65	stalls		
Subterranean 2			0	stalls		
Subterranean 3			0	stalls		

REVENUE						
Residential						
Market						
Studio	$4.00	NLA/sq.ft.	$0	/unit/month	0 units	$0
One-Bedroom	$3.40	NLA/sq.ft.	$0	/unit/month	0 units	$0
Two-Bedroom	$3.20	NLA/sq.ft.	$3,840	/unit/month	29 units	$1,336,320
Three-Bedroom	$2.90	NLA/sq.ft.	$0	/unit/month	0 units	$0
Total Market	$3.20	NLA/sq.ft.			29 units	$1,336,320
Affordable						
Workforce						
Studio	$20,906	/unit/year	$1,742	/unit/month	0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month	0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month	0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month	0 units	$0
Moderate						
Studio	$16,536	/unit/year	$1,378	/unit/month	0 units	$0
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month	0 units	$0
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month	2 units	$41,808
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month	0 units	$0
Low Income						
Studio	$10,716	/unit/year	$893	/unit/month	0 units	$0
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month	0 units	$0
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month	4 units	$53,712
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month	0 units	$0
Very Low Income						
Studio	$6,348	/unit/year	$529	/unit/month	0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month	0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month	0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month	0 units	$0
Extremely Low Income						
Studio	$3,442	/unit/year	$287	/unit/month	0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month	0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month	0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month	0 units	$0
Total Affordable					6 units	$95,520

R1: Low-Rise High Density Residential, Sub. Parking (33-48 DU/AC)						
Total Gross Revenue			$2.84	NLA/sq.ft.		$1,431,840
(less) Vacancy	5.00%					($71,592)
(less) Operating Expenses	30%					($429,552)
(less) Capital Reserves	2.00%					($28,637)
Residential NOI						**$902,059**
Capitalized Value of NOI	4.00%	cap rate				$22,551,480
(less) Cost of Sale	3.00%					($676,544)
Net Residential Revenue						**$21,874,936**
Retail						
NNN Rental Revenue	$2.35	NLA/sq.ft.				$0
(less) leasing fee	4.0%	NNN Rent				$0
(less) Vacancy	5.00%					$0
(less) Non-reimb. Exp.	5.00%					$0
Retail NOI						**$0**
Capitalized Value of NOI	6.50%	cap rate				$0
(less) Cost of Sale	3.00%					$0
Net Revenue			NA			**$0**
TOTAL VALUE	4.1%	implied cap rate				**$21,874,936**

DEVELOPMENT COSTS						
Direct Costs						
Site						
Land Acquisition	$86	/sq.ft.			$2,809,620	
Land Carry Cost [3]	1.50	yrs. entitle.	2.0	yrs. blg/absrp.	$737,525	
Site Work	$10	/sq.ft.			$326,700	
Subtotal					$3,873,845	
Parking						
Surface	$5,000	/stall			$45,000	
First floor structured	$20,000	/stall			$0	
Subterranean 1	$35,000	/stall			$2,275,000	
Subterranean 2	$40,000	/stall			$0	
Subterranean 3	$50,000	/stall			$0	
Subtotal					$2,320,000	
Residential						
Site	100%	pro rata based on GBA			$3,873,845	
Parking	100%	pro rata based on stalls			$2,320,000	
Construction [4]	$180	/GBA sq.ft.			$7,917,059	
Subtotal			$88,193/unit			$14,110,905
Retail						
Site	0%	pro rata based on GBA			$0	
Parking	0%	pro rata based on stalls			$0	
Construction	$115	/GBA sq.ft.			$0	
TI/TA	$35	/NLA sq.ft.			$0	
Subtotal			NA			$0
Total Direct Costs						**$14,110,905**

R1: Low-Rise High Density Residential, Sub. Parking (33-48 DU/AC)

Indirect Costs				
LEED Certification	3.0% of Direct Costs		$423,327	
Permits and Fees	$36 /GBA sq.ft.		$1,581,579	
Legal	1.0% of Direct Costs		$141,109	
Insurance and Warranty	2.0% of Direct Costs		$282,218	
Architecture and Engineering	7.0% of Direct Costs		$987,763	
Developer Fee	4.5% of Direct Costs		$634,991	
G&A	2.5% of Direct Costs		$352,773	
Subtotal Indirect Costs			$4,403,760	
Residential	100% pro rata based on DC	$27,524/unit		$4,403,760
Retail	0% pro rata based on DC	NA		$0
Financing [5]	1.0 year(s) construction period		$400,479	
Residential	100% pro rata based on DC	$2,503/unit		$400,479
Retail	0% pro rata based on DC	NA		$0
Contingency	5.0%		$945,757	
Residential	100% pro rata based on DC	$5,911/unit		$945,757
Retail	0% pro rata based on DC	NA		$0
In-Lieu Fee: *Residential* [6]	$0.00 /NLA sq.ft.	$0,000/unit		$0
Total Indirect Costs		40.7% of Direct Costs		**$5,749,996**
TOTAL COSTS (Direct + Indirect)				
Residential		$96,607/unit		$19,860,901
Retail		NA		$0
				$19,860,901
RETURN				
Residential				$2,014,035
Retail				$0
Net Value				**$2,014,035**
Residential				10.1%
Retail				NA
Return on Cost (Net Value/Total Cost)				**10.1%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

R2: Mid-Rise High-Density Residential, Sub. Parking (48 - 67 DU/AC)

For Rent
64 DU/AC
1.38 FAR
192
0
All Residential Use
Mid (e.g. non-Central TOD)
Parking: TOD
Land: Mid Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
20.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	3.0	acres				
Height	4					
Density	64	DU/AC	1.38	FAR		
Built Area	179,969	GBA sq.ft.	90%	efficiency	161,972	NLA sq.ft.
Residential	179,969	GBA sq.ft.	90%	efficiency	161,972	NLA sq.ft.
Non-Residential	0	GBA sq.ft.	90%	efficiency	0	NLA sq.ft.
Room Mix (Base Units)						
Studio	5	units	700	NLA sq.ft./unit		
One-Bedroom	130	units	785	NLA sq.ft./unit		
Two-Bedroom	25	units	1,175	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Base Units	160		844			
Room Mix (Density Bonus Units)						
Studio	1	units	700	NLA sq.ft./unit		
One-Bedroom	26	units	785	NLA sq.ft./unit		
Two-Bedroom	5	units	1,175	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Density Bonus Units	32	units	844	NLA sq.ft./unit		
Total All Units	192		844	NLA sq.ft./unit		
Affordability[1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		8	units		
Low (80% AMI sale and rent)	10%		16	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		

R2: Mid-Rise High-Density Residential, Sub. Parking (48 - 67 DU/AC)

2

Parking							
Units <=650 Sq.Ft.	0	1.0 stall/unit	0	stalls			
Units >650 Sq.Ft.	192	1.5 stall/unit	288	stalls			
Guest Parking	192	0.0 stall/unit	0	stalls			
Residential	1.50	/unit	288	stalls			
Retail	2.7	/1,000 NLAsq.ft.	0	stalls			
Total	100%	of required	288	stalls			
Type							
Surface			0	stalls			
First floor structured			0	stalls			
Subterranean 1			288	stalls			
Subterranean 2			0	stalls			
Subterranean 3			0	stalls			

REVENUE

Residential

Market						
Studio	$4.00	NLA/sq.ft.	$2,800	/unit/month	5 units	$168,000
One-Bedroom	$3.40	NLA/sq.ft.	$2,670	/unit/month	136 units	$4,358,028
Two-Bedroom	$3.20	NLA/sq.ft.	$3,760	/unit/month	26 units	$1,173,120
Three-Bedroom	$2.90	NLA/sq.ft.	$0	/unit/month	0 units	$0
Total Market	$3.37				167 units	$5,699,148
Affordable						
Workforce						
Studio	$20,906	/unit/year	$1,742	/unit/month	0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month	0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month	0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month	0 units	$0
Moderate						
Studio	$16,536	/unit/year	$1,378	/unit/month	0 units	$0
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month	7 units	$131,208
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month	1 units	$20,904
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month	0 units	$0
Low Income						
Studio	$10,716	/unit/year	$893	/unit/month	1 units	$10,716
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month	13 units	$157,248
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month	3 units	$40,284
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month	0 units	$0
Very Low Income						
Studio	$6,348	/unit/year	$529	/unit/month	0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month	0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month	0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month	0 units	$0
Extremely Low Income						
Studio	$3,442	/unit/year	$287	/unit/month	0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month	0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month	0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month	0 units	$0
Total Affordable					25 units	$360,360

R2: Mid-Rise High-Density Residential, Sub. Parking (48 - 67 DU/AC)						
Total Gross Revenue			$3.12	NLA/sq.ft.		$6,059,508
(less) Vacancy	5.00%					($302,975)
(less) Operating Expenses	30.00%					($1,817,852)
(less) Capital Reserves	2.00%					($121,190)
Residential NOI						**$3,817,490**
Capitalized Value of NOI	4.00%	cap rate				$95,437,243
(less) Cost of Sale	3.00%					($2,863,117)
Net Residential Revenue						**$92,574,126**
Retail						
NNN Rental Revenue	$2.35	NLA/sq.ft.				$0
(less) leasing fee	4.0%	NNN Rent				$0
(less) Vacancy	5.00%					$0
(less) Non-reimb. Exp.	5.00%					$0
Retail NOI						**$0**
Capitalized Value of NOI	6.50%	cap rate				$0
(less) Cost of Sale	3.00%					$0
Net Revenue			NA			**$0**
TOTAL VALUE	4.1%	implied cap rate				**$92,574,126**
DEVELOPMENT COSTS						
Direct Costs						
Site						
Land Acquisition	$121	/sq.ft.			$15,812,280	
Land Carry Cost [3]	1.50	yrs. entitle.	2.0	yrs. blg/absrp.	$4,150,724	
Site Work	$10	/sq.ft.			$1,306,800	
Subtotal					$21,269,804	
Parking						
Surface	$5,000	/stall			$0	
First floor structured	$20,000	/stall			$0	
Subterranean 1	$35,000	/stall			$10,080,000	
Subterranean 2	$40,000	/stall			$0	
Subterranean 3	$50,000	/stall			$0	
Subtotal					$10,080,000	
Residential						
Site	100%	pro rata based on GBA			$21,269,804	
Parking	100%	pro rata based on stalls			$10,080,000	
Construction [4]	$158	/GBA sq.ft.			$28,435,155	
Subtotal			$373,656/unit			$59,784,958
Retail						
Site	0%	pro rata based on GBA			$0	
Parking	0%	pro rata based on stalls			$0	
Construction	$115	/GBA sq.ft.			$0	
TI/TA	$35	/NLA sq.ft.			$0	
Subtotal			NA			$0
Total Direct Costs						**$59,784,958**

R2: Mid-Rise High-Density Residential, Sub. Parking (48 - 67 DU/AC)					
Indirect Costs					
LEED Certification		3.0%		$1,793,549	
Permits and Fees		$37 /GBA sq.ft.		$6,745,823	
Legal		1.0% of Direct Costs		$597,850	
Insurance and Warranty		2.0% of Direct Costs		$1,195,699	
Architecture and Engineering		7.0% of Direct Costs		$4,184,947	
Developer Fee		4.5% of Direct Costs		$2,690,323	
G&A		2.5% of Direct Costs		$1,494,624	
Subtotal Indirect Costs				$18,702,815	
Residential		100% pro rata based on DC	$116,893/unit		$18,702,815
Retail		0% pro rata based on DC	NA		$0
Financing	5	1.0 year(s) construction period		$1,598,225	
Residential		100% pro rata based on DC	$9,989/unit		$1,598,225
Retail		0% pro rata based on DC	NA		$0
Contingency		5.0%		$4,004,300	
Residential		100% pro rata based on DC	$25,027/unit		$4,004,300
Retail		0% pro rata based on DC	NA		$0
In-Lieu Fee: *Residential*	6	$0.00 /NLA sq.ft.	$0,000/unit		$0
Total Indirect Costs			40.7% of Direct Costs		**$24,305,340**
TOTAL COSTS (Direct + Indirect)					
Residential			$408,672/unit		$84,090,298
Retail			NA		$0
					$84,090,298
RETURN					
Residential					$8,483,828
Retail					$0
Net Value					**$8,483,828**
Residential					10.1%
Retail					NA
Return on Cost (Net Value/Total Cost)					**10.1%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

R3: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (68 to 87 DU/AC)

For Rent
72 DU/AC
1.6 FAR
144
7,500
Res Over Retail Uses
Mid (e.g. non-Central TOD)
Parking: TOD
Land: Mid Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
20.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	2.0	acres				
Height	4	stories				
Density	72	DU/AC	1.60	FAR		
Built Area	139,146	GBA sq.ft.	87%	efficiency	120,640	NLA sq.ft.
Residential	130,813	GBA sq.ft.	86%	efficiency	113,140	NLA sq.ft.
Non-Residential	8,333	GBA sq.ft.	90%	efficiency	7,500	NLA sq.ft.
Room Mix (Base Units)						
Studio	20	units	625	NLA sq.ft./unit		
One-Bedroom	60	units	750	NLA sq.ft./unit		
Two-Bedroom	40	units	950	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Base Units	120		796			
Room Mix (Density Bonus Units)						
Studio	4	units	515	NLA sq.ft./unit		
One-Bedroom	12	units	675	NLA sq.ft./unit		
Two-Bedroom	8	units	935	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Density Bonus Units	24	units	735	NLA sq.ft./unit		
Total All Units	144		786	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		6	units		
Low (80% AMI sale and rent)	10%		12	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		

R3: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (68 to 87 DU/AC)						
Parking	2					
Units <=650 Sq.Ft.	24	1.0 stall/unit	24	stalls		
Units >650 Sq.Ft.	120	1.5 stall/unit	180	stalls		
Guest Parking	144	0.0 stall/unit	0	stalls		
Residential	1.42	/unit	204	stalls		
Retail	2.7	/1,000 NLAsq.ft.	20	stalls		
Total	100%	of required	224	stalls		
Type						
Surface			0	stalls		
First floor structured			0	stalls		
Subterranean 1			218	stalls		
Subterranean 2			6	stalls		
Subterranean 3			0	stalls		

REVENUE						
Residential						
Market						
Studio	$4.00	NLA/sq.ft.	$2,500	/unit/month	21 units	$630,000
One-Bedroom	$3.40	NLA/sq.ft.	$2,550	/unit/month	63 units	$1,927,800
Two-Bedroom	$3.20	NLA/sq.ft.	$3,040	/unit/month	42 units	$1,532,160
Three-Bedroom	$2.90	NLA/sq.ft.	$0	/unit/month	0 units	$0
Total Market	$3.40				126 units	$4,089,960
Affordable						
Workforce						
Studio	$20,906	/unit/year	$1,742	/unit/month	0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month	0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month	0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month	0 units	$0
Moderate						
Studio	$16,536	/unit/year	$1,378	/unit/month	1 units	$16,536
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month	3 units	$56,232
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month	2 units	$41,808
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month	0 units	$0
Low Income						
Studio	$10,716	/unit/year	$893	/unit/month	2 units	$21,432
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month	6 units	$72,576
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month	4 units	$53,712
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month	0 units	$0
Very Low Income						
Studio	$6,348	/unit/year	$529	/unit/month	0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month	0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month	0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month	0 units	$0
Extremely Low Income						
Studio	$3,442	/unit/year	$287	/unit/month	0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month	0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month	0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month	0 units	$0
Total Affordable					18 units	$262,296

R3: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (68 to 87 DU/AC)					
Total Gross Revenue			$3.21 NLA/sq.ft.		$4,352,256
(less) Vacancy	5.00%				($217,613)
(less) Operating Expenses	30.00%				($1,305,677)
(less) Capital Reserves	2.00%				($87,045)
Residential NOI					**$2,741,921**
Capitalized Value of NOI	4.00%	cap rate			$68,548,032
(less) Cost of Sale	3.00%				($2,056,441)
Net Residential Revenue					**$66,491,591**
Retail					
NNN Rental Revenue	$2.35	NLA/sq.ft.			$211,500
(less) leasing fee	4.0%	NNN Rent			($8,460)
(less) Vacancy	5.00%				($10,152)
(less) Non-reimb. Exp.	5.00%				($10,152)
Retail NOI					**$182,736**
Capitalized Value of NOI	6.50%	cap rate			$2,811,323
(less) Cost of Sale	3.00%				($84,340)
Net Revenue			NA		**$2,726,983**
TOTAL VALUE	4.2%	implied cap rate			**$69,218,574**

DEVELOPMENT COSTS					
Direct Costs					
Site					
Land Acquisition	$121	/sq.ft.		$10,541,520	
Land Carry Cost [3]	1.50	yrs. entitle.	2.0 yrs. blg/absrp.	$2,767,149	
Site Work	$10	/sq.ft.		$871,200	
Subtotal				$14,179,869	
Parking					
Surface	$5,000	/stall		$0	
First floor structured	$20,000	/stall		$0	
Subterranean 1	$35,000	/stall		$7,630,000	
Subterranean 2	$40,000	/stall		$240,000	
Subterranean 3	$50,000	/stall		$0	
Subtotal				$7,870,000	
Residential					
Site	94%	pro rata based on GBA		$13,330,650	
Parking	91%	pro rata based on stalls		$7,167,321	
Construction [4]	$162	/GBA sq.ft.		$21,191,675	
Subtotal			$260,560/unit		$41,689,647
Retail					
Site	6%	pro rata based on GBA		$849,219	
Parking	9%	pro rata based on stalls		$702,679	
Construction	$115	/GBA sq.ft.		$958,333	
TI/TA	$35	/NLA sq.ft.		$262,500	
Subtotal			NA		$2,772,731
Total Direct Costs					**$44,462,378**

R3: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (68 to 87 DU/AC)				
Indirect Costs				
LEED Certification	3.0%		$1,333,871	
Permits and Fees	$38 /GBA sq.ft.		$5,275,591	
Legal	1.0% of Direct Costs		$444,624	
Insurance and Warranty	2.0% of Direct Costs		$889,248	
Architecture and Engineering	7.0% of Direct Costs		$3,112,366	
Developer Fee	4.5% of Direct Costs		$2,000,807	
G&A	2.5% of Direct Costs		$1,111,559	
Subtotal Indirect Costs			$14,168,066	
Residential	94% pro rata based on DC	$83,028/unit		$13,284,528
Retail	6% pro rata based on DC	NA		$883,539
Financing (5)	1.0 year(s) construction period		$1,226,268	
Residential	94% pro rata based on DC	$7,186/unit		$1,149,796
Retail	6% pro rata based on DC	NA		$76,472
Contingency	5.0%		$2,992,836	
Residential	94% pro rata based on DC	$17,539/unit		$2,806,199
Retail	6% pro rata based on DC	NA		$186,637
In-Lieu Fee: *Residential* (6)	$0.00 /NLA sq.ft.	$0,000/unit		$0
Total Indirect Costs		41.4% of Direct Costs		**$18,387,169**
TOTAL COSTS (Direct + Indirect)				
Residential		$285,285/unit		$58,930,169
Retail		NA		$3,919,379
				$62,849,547

RETURN	
Residential	$7,561,423
Retail	($1,192,395)
Net Value	**$6,369,027**
Residential	12.8%
Retail	-30.4%
Return on Cost (Net Value/Total Cost)	**10.1%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

R4: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 2.25 FAR)

For Rent
87 DU/AC
1.8 FAR
152
10,000
Res Over Retail Uses
High (Central)
Parking: TOD
Land: High Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
0.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM						
Site Area	1.75	acres				
Height	5	stories				
Density	87	DU/AC	1.80	FAR		
Built Area	137,500	GBA sq.ft.	85%	efficiency	116,799	NLA sq.ft.
Residential	126,389	GBA sq.ft.	85%	efficiency	106,799	NLA sq.ft.
Non-Residential	11,111	GBA sq.ft.	90%	efficiency	10,000	NLA sq.ft.
Room Mix (Base Units)						
Studio	70	units	645	NLA sq.ft./unit		
One-Bedroom	75	units	725	NLA sq.ft./unit		
Two-Bedroom	7	units	1,050	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Base Units	152		703			
Room Mix (Density Bonus Units)						
Studio	0	units	645	NLA sq.ft./unit		
One-Bedroom	0	units	725	NLA sq.ft./unit		
Two-Bedroom	0	units	1,050	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Density Bonus Units	0	units	0	NLA sq.ft./unit		
Total All Units	152		703	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		8	units		
Low (80% AMI sale and rent)	10%		15	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		

R4: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 2.25 FAR)

Parking	2			
Units <=650 Sq.Ft.	70	1.0 stall/unit	70	stalls
Units >650 Sq.Ft.	82	1.5 stall/unit	123	stalls
Guest Parking	152	0.0 stall/unit	0	stalls
Residential	1.27	/unit	193	stalls
Retail	2.7	/1,000 NLAsq.ft.	27	stalls
Total	100%	of required	220	stalls
Type				
Surface			0	stalls
First floor structured			0	stalls
Subterranean 1			183	stalls
Subterranean 2			37	stalls
Subterranean 3			0	stalls

REVENUE

Residential

Market						
Studio	$4.50	NLA/sq.ft.	$2,900	/unit/month	59 units	$2,053,377
One-Bedroom	$4.00	NLA/sq.ft.	$2,898	/unit/month	64 units	$2,225,664
Two-Bedroom	$3.40	NLA/sq.ft.	$3,568	/unit/month	6 units	$256,918
Three-Bedroom	$3.00	NLA/sq.ft.	$0	/unit/month	0 units	$0
Total Market	$4.17				129 units	$4,535,959
Affordable						
Workforce						
Studio	$20,906	/unit/year	$1,742	/unit/month	0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month	0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month	0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month	0 units	$0
Moderate						
Studio	$16,536	/unit/year	$1,378	/unit/month	4 units	$66,144
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month	4 units	$74,976
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month	0 units	$0
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month	0 units	$0
Low Income						
Studio	$10,716	/unit/year	$893	/unit/month	7 units	$75,012
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month	7 units	$84,672
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month	1 units	$13,428
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month	0 units	$0
Very Low Income						
Studio	$6,348	/unit/year	$529	/unit/month	0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month	0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month	0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month	0 units	$0
Extremely Low Income						
Studio	$3,442	/unit/year	$287	/unit/month	0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month	0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month	0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month	0 units	$0
Total Affordable					23 units	$314,232

R4: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 2.25 FAR)					
Total Gross Revenue			$3.78 NLA/sq.ft.		$4,850,191
(less) Vacancy	5.00%				($242,510)
(less) Operating Expenses	30.00%				($1,455,057)
(less) Capital Reserves	2.00%				($97,004)
Residential NOI					**$3,055,620**
Capitalized Value of NOI	4.00%	cap rate			$76,390,502
(less) Cost of Sale	3.00%				($2,291,715)
Net Residential Revenue					**$74,098,787**
Retail					
NNN Rental Revenue	$2.50	NLA/sq.ft.			$300,000
(less) leasing fee	4.0%	NNN Rent			($12,000)
(less) Vacancy	5.00%				($14,400)
(less) Non-reimb. Exp.	5.00%				($14,400)
Retail NOI					**$259,200**
Capitalized Value of NOI	6.50%	cap rate			$3,987,692
(less) Cost of Sale	3.00%				($119,631)
Net Revenue			NA		**$3,868,062**
TOTAL VALUE	4.3%	implied cap rate			**$77,966,848**
DEVELOPMENT COSTS					
Direct Costs					
Site					
Land Acquisition	$202	/sq.ft.		$15,398,460	
Land Carry Cost [3]	1.50	yrs. entitle.	2.0 yrs. blg/absrp.	$4,042,096	
Site Work	$10	/sq.ft.		$762,300	
Subtotal				$20,202,856	
Parking					
Surface	$5,000	/stall		$0	
First floor structured	$20,000	/stall		$0	
Subterranean 1	$35,000	/stall		$6,405,000	
Subterranean 2	$40,000	/stall		$1,480,000	
Subterranean 3	$50,000	/stall		$0	
Subtotal				$7,885,000	
Residential					
Site	92%	pro rata based on GBA		$18,570,307	
Parking	88%	pro rata based on stalls		$6,917,295	
Construction [4]	$160	/GBA sq.ft.		$20,222,293	
Subtotal			$285,687/unit		$45,709,896
Retail					
Site	8%	pro rata based on GBA		$1,632,549	
Parking	12%	pro rata based on stalls		$967,705	
Construction	$115	/GBA sq.ft.		$1,277,778	
TI/TA	$35	/NLA sq.ft.		$350,000	
Subtotal			NA		$4,228,031
Total Direct Costs					**$49,937,927**

R4: Mid-Rise Medium Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 2.25 FAR)

Indirect Costs				
LEED Certification	3.0%		$1,498,138	
Permits and Fees	$38 /GBA sq.ft.		$5,269,824	
Legal	1.0% of Direct Costs		$499,379	
Insurance and Warranty	2.0% of Direct Costs		$998,759	
Architecture and Engineering	7.0% of Direct Costs		$3,495,655	
Developer Fee	4.5% of Direct Costs		$2,247,207	
G&A	2.5% of Direct Costs		$1,248,448	
Subtotal Indirect Costs			$15,257,410	
Residential	92% pro rata based on DC	$87,285/unit		$13,965,630
Retail	8% pro rata based on DC	NA		$1,291,780
Financing 5	1.0 year(s) construction period		$1,269,820	
Residential	92% pro rata based on DC	$7,264/unit		$1,162,310
Retail	8% pro rata based on DC	NA		$107,510
Contingency	5.0%		$3,323,258	
Residential	92% pro rata based on DC	$19,012/unit		$3,041,892
Retail	8% pro rata based on DC	NA		$281,366
In-Lieu Fee: *Residential* 6	$0.00 /NLA sq.ft.	$0,000/unit		$0
Total Indirect Costs		39.8% of Direct Costs		**$19,850,488**
TOTAL COSTS (Direct + Indirect)				
Residential		$399,248/unit		$63,879,728
Retail		NA		$5,908,687
				$69,788,415
RETURN				
Residential				$10,219,059
Retail				($2,040,626)
Net Value				**$8,178,433**
Residential				16.0%
Retail				-34.5%
Return on Cost (Net Value/Total Cost)				**11.7%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

R5: Mid-Rise High Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 3.0 FAR)

For Rent
87 DU/AC
2.41 FAR
153
10,000
Res Over Retail Uses
High (Central)
Parking: TOD
Land: High Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
0.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	1.75	acres				
Height	5	stories				
Density	87	DU/AC	2.41	FAR		
Built Area	183,774	GBA sq.ft.	85%	efficiency	155,900	NLA sq.ft.
Residential	172,663	GBA sq.ft.	85%	efficiency	145,900	NLA sq.ft.
Non-Residential	11,111	GBA sq.ft.	90%	efficiency	10,000	NLA sq.ft.
Room Mix (Base Units)						
Studio	30	units	725	NLA sq.ft./unit		
One-Bedroom	50	units	850	NLA sq.ft./unit		
Two-Bedroom	53	units	1,050	NLA sq.ft./unit		
Three-Bedroom	20	units	1,300	NLA sq.ft./unit		
Total Base Units	153		954			
Room Mix (Density Bonus Units)						
Studio	0	units	725	NLA sq.ft./unit		
One-Bedroom	0	units	850	NLA sq.ft./unit		
Two-Bedroom	0	units	1,050	NLA sq.ft./unit		
Three-Bedroom	0	units	1,300	NLA sq.ft./unit		
Total Density Bonus Units	0	units	0	NLA sq.ft./unit		
Total All Units	153		954	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		8	units		
Low (80% AMI sale and rent)	10%		15	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		

R5: Mid-Rise High Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 3.0 FAR)

Parking [2]							
Units <=650 Sq.Ft.	0	1.0 stall/unit	0	stalls			
Units >650 Sq.Ft.	153	1.5 stall/unit	230	stalls			
Guest Parking	153	0.0 stall/unit	0	stalls			
Residential	1.50	/unit	230	stalls			
Retail	2.7	/1,000 NLAsq.ft.	27	stalls			
Total	100%	of required	257	stalls			
Type							
Surface			0	stalls			
First floor structured			0	stalls			
Subterranean 1			183	stalls			
Subterranean 2			74	stalls			
Subterranean 3			0	stalls			

REVENUE						
Residential						
Market						
Studio	$4.50	NLA/sq.ft.	$3,263	/unit/month	25 units	$978,750
One-Bedroom	$4.00	NLA/sq.ft.	$3,400	/unit/month	42 units	$1,713,600
Two-Bedroom	$3.40	NLA/sq.ft.	$3,570	/unit/month	45 units	$1,927,800
Three-Bedroom	$3.00	NLA/sq.ft.	$3,900	/unit/month	18 units	$842,400
Total Market	$3.67				130 units	$5,462,550
Affordable						
Workforce						
Studio	$20,906	/unit/year	$1,742	/unit/month	0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month	0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month	0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month	0 units	$0
Moderate						
Studio	$16,536	/unit/year	$1,378	/unit/month	2 units	$33,072
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month	3 units	$56,232
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month	3 units	$62,712
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month	0 units	$0
Low Income						
Studio	$10,716	/unit/year	$893	/unit/month	3 units	$32,148
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month	5 units	$60,480
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month	5 units	$67,140
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month	2 units	$29,496
Very Low Income						
Studio	$6,348	/unit/year	$529	/unit/month	0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month	0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month	0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month	0 units	$0
Extremely Low Income						
Studio	$3,442	/unit/year	$287	/unit/month	0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month	0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month	0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month	0 units	$0
Total Affordable					23 units	$341,280

R5: Mid-Rise High Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 3.0 FAR)					
Total Gross Revenue			$3.31 NLA/sq.ft.		$5,803,830
(less) Vacancy	5.00%				($290,192)
(less) Operating Expenses	30.00%				($1,741,149)
(less) Capital Reserves	2.00%				($116,077)
Residential NOI					**$3,656,413**
Capitalized Value of NOI	4.00%	cap rate			$91,410,323
(less) Cost of Sale	3.00%				($2,742,310)
Net Residential Revenue					**$88,668,013**
Retail					
NNN Rental Revenue	$2.50	NLA/sq.ft.			$300,000
(less) leasing fee	4.0%	NNN Rent			($12,000)
(less) Vacancy	5.00%				($14,400)
(less) Non-reimb. Exp.	5.00%				($14,400)
Retail NOI					**$259,200**
Capitalized Value of NOI	6.50%	cap rate			$3,987,692
(less) Cost of Sale	3.00%				($119,631)
Net Revenue			NA		**$3,868,062**
TOTAL VALUE	4.2%	implied cap rate			**$92,536,074**
DEVELOPMENT COSTS					
Direct Costs					
Site					
Land Acquisition	$202	/sq.ft.		$15,436,575	
Land Carry Cost [3]	1.50	yrs. entitle.	2.0 yrs. blg/absrp.	$4,052,101	
Site Work	$10	/sq.ft.		$762,300	
Subtotal				$20,250,976	
Parking					
Surface	$5,000	/stall		$0	
First floor structured	$20,000	/stall		$0	
Subterranean 1	$35,000	/stall		$6,405,000	
Subterranean 2	$40,000	/stall		$2,960,000	
Subterranean 3	$50,000	/stall		$0	
Subtotal				$9,365,000	
Residential					
Site	94%	pro rata based on GBA		$19,026,586	
Parking	89%	pro rata based on stalls		$8,381,128	
Construction [4]	$160	/GBA sq.ft.		$27,712,364	
Subtotal			$344,500/unit		$55,120,078
Retail					
Site	6%	pro rata based on GBA		$1,224,390	
Parking	11%	pro rata based on stalls		$983,872	
Construction	$115	/GBA sq.ft.		$1,277,778	
TI/TA	$35	/NLA sq.ft.		$350,000	
Subtotal			NA		$3,836,040
Total Direct Costs					**$58,956,117**

R5: Mid-Rise High Mixed-Use TOD, Sub. Parking (87 to 117 DU/AC, up to 3.0 FAR)					
Indirect Costs					
LEED Certification		3.0%		$1,768,684	
Permits and Fees		$34 /GBA sq.ft.		$6,177,290	
Legal		1.0% of Direct Costs		$589,561	
Insurance and Warranty		2.0% of Direct Costs		$1,179,122	
Architecture and Engineering		7.0% of Direct Costs		$4,126,928	
Developer Fee		4.5% of Direct Costs		$2,653,025	
G&A		2.5% of Direct Costs		$1,473,903	
Subtotal Indirect Costs				$17,968,514	
Residential		93% pro rata based on DC	$104,996/unit		$16,799,374
Retail		7% pro rata based on DC	NA		$1,169,140
Financing	5	1.0 year(s) construction period		$1,567,945	
Residential		93% pro rata based on DC	$9,162/unit		$1,465,925
Retail		7% pro rata based on DC	NA		$102,020
Contingency		5.0%		$3,924,629	
Residential		93% pro rata based on DC	$22,933/unit		$3,669,269
Retail		7% pro rata based on DC	NA		$255,360
In-Lieu Fee: *Residential*	6	$0.00 /NLA sq.ft.	$0,000/unit		$0
Total Indirect Costs			39.8% of Direct Costs		**$23,461,088**
TOTAL COSTS (Direct + Indirect)					
Residential			$481,592/unit		$77,054,647
Retail			NA		$5,362,559
					$82,417,206
RETURN					
Residential					$11,613,366
Retail					($1,494,497)
Net Value					**$10,118,869**
Residential					15.1%
Retail					-27.9%
Return on Cost (Net Value/Total Cost)					12.3%

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

APPENDIX 7: For-Sale ProFormas

S1: Med-High Density Residential Townhomes, Tuck Parking (To 32 DU/AC)

For-Sale Market/For-Rent Affordable
26 DU/AC
1.05 FAR
64
0
All Residential Use
Prices: low (e.g. Non-Central Non-TOD)
Parking: Non-Central Non-TOD
Land: Low Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
0.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	2.5	acres				
Height	3	Stories				
Density	26	DU/AC	1.05	FAR		
Built Area	114,526	GBA sq.ft.	95%	efficiency	108,800	NLA sq.ft.
Residential	114,526	GBA sq.ft.	95%	efficiency	108,800	NLA sq.ft.
Non-Residential	0	GBA sq.ft.	90%	efficiency	0	NLA sq.ft.
Room Mix (Base Units)						
Studio	0	units	0	NLA sq.ft./unit		
One-Bedroom	0	units	0	NLA sq.ft./unit		
Two-Bedroom	0	units	0	NLA sq.ft./unit		
Three-Bedroom	64	units	1,700	NLA sq.ft./unit		
Total Base Units	64		1,700			
Room Mix (Density Bonus Units)						
Studio	0	units	0	NLA sq.ft./unit		
One-Bedroom	0	units	0	NLA sq.ft./unit		
Two-Bedroom	0	units	0	NLA sq.ft./unit		
Three-Bedroom	0	units	1,700	NLA sq.ft./unit		
Total Density Bonus Units	0		0	NLA sq.ft./unit		
Total All Units	64		1,700	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		3	units		
Low (80% AMI sale and rent)	10%		6	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		
Parking [2]						
Units <=650 Sq.Ft.	0	1.0 stall/unit	0	stalls		
Units >650 Sq.Ft.	64	2.0 stall/unit	128	stalls		
Guest Parking	64	0.1 stall/unit	7	stalls		
Residential	2.11	/unit	135	stalls		
Retail	3.0	/1,000 NLAsq.ft.	0	stalls		

S1: Med-High Density Residential Townhomes, Tuck Parking (To 32 DU/AC)							
Total	100%	of required	135	stalls			
Type							
Surface			0	stalls			
First floor structured			135	stalls			
Subterranean 1			0	stalls			
Subterranean 2			0	stalls			
Subterranean 3			0	stalls			

REVENUE						
Residential						
Market						
Studio	$0	NLA/sq.ft.	$0	/unit	0 units	$0
One-Bedroom	$0	NLA/sq.ft.	$0	/unit	0 units	$0
Two-Bedroom	$620	NLA/sq.ft.	$0	/unit	0 units	$0
Three-Bedroom	$620	NLA/sq.ft.	$1,054,000	/unit	55 units	$57,970,000
Total Sale Proceeds	$620	NLA/sq.ft.	1,054,000	/unit	55 units	$57,970,000
Affordable						
Workforce						
Studio	$20,906	/unit/year	$1,742	/unit/month	0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month	0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month	0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month	0 units	$0
Moderate						
Studio	$16,536	/unit/year	$1,378	/unit/month	0 units	$0
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month	0 units	$0
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month	0 units	$0
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month	3 units	$69,192
Low Income						
Studio	$10,716	/unit/year	$893	/unit/month	0 units	$0
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month	0 units	$0
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month	0 units	$0
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month	6 units	$88,488
Very Low Income						
Studio	$6,348	/unit/year	$529	/unit/month	0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month	0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month	0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month	0 units	$0
Extremely Low Income						
Studio	$3,442	/unit/year	$287	/unit/month	0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month	0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month	0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month	0 units	$0
Total Affordable					9 units	$157,680
Total Gross Affordable Revenue						$157,680
(less) Vacancy	5.00%					($7,884)
(less) Operating Expenses	30.00%					($47,304)
(less) Capital Reserves	2.00%					($3,154)
Residential NOI						**$99,338**
Capitalized Value of NOI	4.00%	cap rate				$2,483,460
Sale Proceeds						$57,970,000
(less) Cost of Sale	3.00%					($1,813,604)
Net Residential Revenue						**$58,639,856**
Retail						

S1: Med-High Density Residential Townhomes, Tuck Parking (To 32 DU/AC)

NNN Rental Revenue		$2.25	NLA/sq.ft.			$0
(less) leasing fee		4.0%	NNN Rent			$0
(less) Vacancy		5.00%				$0
(less) Non-reimb. Exp.		5.00%				$0
Retail NOI						**$0**
Capitalized Value of NOI		6.50%	cap rate			$0
(less) Cost of Sale		3.00%				$0
Net Revenue				$0/GBA sq.ft.		**$0**
TOTAL VALUE						**$58,639,856**
DEVELOPMENT COSTS						
Direct Costs						
Site						
Property Acquisition		$86	/sq.ft.		$9,365,400	
Land Carry Cost	3	1.50	yrs. entitle.	2.0 yrs. blg/absrp.	$2,458,418	
Site Work		$10	/sq.ft.		$1,089,000	
Subtotal					$12,912,818	
Parking						
Surface		$5,000	/stall		$0	
First floor structured		$20,000	/stall		$2,700,000	
Subterranean 1		$35,000	/stall		$0	
Subterranean 2		$40,000	/stall		$0	
Subterranean 3		$50,000	/stall		$0	
Subtotal					$2,700,000	
Residential						
Site		100%	pro rata based on GBA		$12,912,818	
Parking		100%	pro rata based on stalls		$2,700,000	
Construction	4	$198	/GBA sq.ft.		$22,668,881	
Subtotal				$957,042/unit		$38,281,698
Retail						
Site		0%	pro rata based on GBA		$0	
Parking		0%	pro rata based on stalls		$0	
Construction		$115	/GBA sq.ft.		$0	
TI/TA		$35	/NLA sq.ft.		$0	
Subtotal				$0/GBA sq.ft.		$0
Total Direct Costs						**$38,281,698**
Indirect Costs						
LEED Certification		3.0%			$1,148,451	
Permits and Fees		$31	/GBA sq.ft.		$3,546,452	
Legal		1.0%	of Direct Costs		$382,817	
Insurance and Warranty		2.0%	of Direct Costs		$765,634	
Architecture and Engineering		7.0%	of Direct Costs		$2,679,719	
Developer Fee		4.5%	of Direct Costs		$1,722,676	
G&A		2.5%	of Direct Costs		$957,042	
Subtotal Indirect Costs					$11,202,792	
Residential		100%	pro rata based on DC	$280,070/unit		$11,202,792
Retail		0%	pro rata based on DC	$0/GBA sq.ft.		$0
Financing	5	1.0	year(s) construction period		$1,023,037	
Residential		100%	pro rata based on DC	$25,576/unit		$1,023,037
Retail		0%	pro rata based on DC	$0/GBA sq.ft.		$0
Contingency		5.0%			$2,525,376	
Residential		100%	pro rata based on DC	$63,134/unit		$2,525,376
Retail		0%	pro rata based on DC	$0/GBA sq.ft.		$0

S1: Med-High Density Residential Townhomes, Tuck Parking (To 32 DU/AC)			
In-Lieu Fee: *Residential* [6]	$0.00 /NLA sq.ft.	$0,000/unit	$0
Total Indirect Costs		38.5% of Direct Costs	**$14,751,205**
TOTAL COSTS (Direct + Indirect)			
Residential		$828,639/unit	$53,032,903
Retail		$0/GBA sq.ft.	$0
			$53,032,903
RETURN			
Residential			$5,606,953
Retail			$0
Net Value			**$5,606,953**
Residential			10.6%
Retail			NA
Return on Cost (Net Value/Total Cost)			**10.6%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu condo fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

S2: Mid-Rise Low-Medium Mixed-Use, Part Sub. Parking, Density Bonus (33-48 DU/AC)

For-Sale Market/For-Rent Affordable
48 DU/AC
1.26 FAR
48
7,170
Res Over Retail Uses
Prices: mid (e.g. non-Central TOD)
Parking: Non-Central Non-TOD
Land: Low Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
20.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	1.00	acres				
Height	4	Stories				
Density	48	DU/AC	1.26	FAR		
Built Area	54,785	GBA sq.ft.	88%	efficiency	48,370	NLA sq.ft.
Residential	46,818	GBA sq.ft.	88%	efficiency	41,200	NLA sq.ft.
Non-Residential	7,967	GBA sq.ft.	90%	efficiency	7,170	NLA sq.ft.
Room Mix (Base Units)						
Studio	3	units	750	NLA sq.ft./unit		
One-Bedroom	30	units	850	NLA sq.ft./unit		
Two-Bedroom	7	units	950	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Base Units	40		860			
Room Mix (Density Bonus Units)						
Studio	1	units	750	NLA sq.ft./unit		
One-Bedroom	6	units	850	NLA sq.ft./unit		
Two-Bedroom	1	units	950	NLA sq.ft./unit		
Three-Bedroom	0	units	0	NLA sq.ft./unit		
Total Density Bonus Units	8		850	NLA sq.ft./unit		
Total All Units	48		858	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		2	units		
Low (80% AMI sale and rent)	10%		4	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		
Parking [2]						
Units <=650 Sq.Ft.	0	1.0 stall/unit	0	stalls		
Units >650 Sq.Ft.	48	2.0 stall/unit	96	stalls		
Guest Parking	48	0.1 stall/unit	5	stalls		
Residential	2.10	/unit	101	stalls		
Retail	3.0	/1,000 NLAsq.ft.	22	stalls		

S2: Mid-Rise Low-Medium Mixed-Use, Part Sub. Parking, Density Bonus (33-48 DU/AC)							
Total	100%	of required	123	stalls			
Type							
Surface			20	stalls			
First floor structured			0	stalls			
Subterranean 1			103	stalls			
Subterranean 2			0	stalls			
Subterranean 3			0	stalls			
REVENUE							
Residential							
Market							
Studio	$700	NLA/sq.ft.	$525,000	/unit		4 units	$2,100,000
One-Bedroom	$700	NLA/sq.ft.	$595,000	/unit		31 units	$18,445,000
Two-Bedroom	$690	NLA/sq.ft.	$655,500	/unit		7 units	$4,588,500
Three-Bedroom	$690	NLA/sq.ft.	$0	/unit		0 units	$0
Total Sale Proceeds	$697	NLA/sq.ft.	598,400	/unit		42 units	$25,133,500
Affordable							
Workforce							
Studio	$20,906	/unit/year	$1,742	/unit/month		0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month		0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month		0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month		0 units	$0
Moderate							
Studio	$16,536	/unit/year	$1,378	/unit/month		0 units	$0
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month		2 units	$37,488
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month		0 units	$0
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month		0 units	$0
Low Income							
Studio	$10,716	/unit/year	$893	/unit/month		0 units	$0
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month		3 units	$36,288
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month		1 units	$13,428
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month		0 units	$0
Very Low Income							
Studio	$6,348	/unit/year	$529	/unit/month		0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month		0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month		0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month		0 units	$0
Extremely Low Income							
Studio	$3,442	/unit/year	$287	/unit/month		0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month		0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month		0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month		0 units	$0
Total Affordable						6 units	$87,204
Total Gross Revenue							$87,204
(less) Vacancy	5.00%						($4,360)
(less) Operating Expenses	30.00%						($26,161)
(less) Capital Reserves	2.00%						($1,744)
Residential NOI							**$54,939**
Capitalized Value of NOI	4.00%	cap rate					$1,373,463
Sale Proceeds							$25,133,500
(less) Cost of Sale	3.00%						($795,209)
Net Residential Revenue							**$25,711,754**
Retail							

S2: Mid-Rise Low-Medium Mixed-Use, Part Sub. Parking, Density Bonus (33-48 DU/AC)

NNN Rental Revenue		$2.35	NLA/sq.ft.			$202,203
(less) leasing fee		4.0%	NNN Rent			($8,088)
(less) Vacancy		5.00%				($9,706)
(less) Non-reimb. Exp.		5.00%				($9,706)
Retail NOI						**$174,704**
Capitalized Value of NOI		6.50%	cap rate			$2,687,748
(less) Cost of Sale		3.00%				($80,632)
Net Revenue				$327/GBA sq.ft.		**$2,607,116**
TOTAL VALUE						**$28,318,870**
DEVELOPMENT COSTS						
Direct Costs						
Site						
Property Acquisition		$86	/sq.ft.		$3,746,160	
Land Carry Cost	3	1.50	yrs. entitle.	2.0 yrs. blg/absrp.	$983,367	
Site Work		$10	/sq.ft.		$435,600	
Subtotal					$5,165,127	
Parking						
Surface		$5,000	/stall		$100,000	
First floor structured		$20,000	/stall		$0	
Subterranean 1		$35,000	/stall		$3,605,000	
Subterranean 2		$40,000	/stall		$0	
Subterranean 3		$50,000	/stall		$0	
Subtotal					$3,705,000	
Residential						
Site		85%	pro rata based on GBA		$4,413,998	
Parking		82%	pro rata based on stalls		$3,042,317	
Construction	4	$175	/GBA sq.ft.		$8,215,280	
Subtotal				$391,790/unit		$15,671,596
Retail						
Site		15%	pro rata based on GBA		$751,129	
Parking		18%	pro rata based on stalls		$662,683	
Construction		$115	/GBA sq.ft.		$916,209	
TI/TA		$35	/NLA sq.ft.		$250,962	
Subtotal				$324/GBA sq.ft.		$2,580,982
Total Direct Costs						**$18,252,577**
Indirect Costs						
LEED Certification		3.0%			$547,577	
Permits and Fees		$44	/GBA sq.ft.		$2,079,826	
Legal		1.0%	of Direct Costs		$182,526	
Insurance and Warranty		2.0%	of Direct Costs		$365,052	
Architecture and Engineering		7.0%	of Direct Costs		$1,277,680	
Developer Fee		4.5%	of Direct Costs		$821,366	
G&A		2.5%	of Direct Costs		$456,314	
Subtotal Indirect Costs					$5,730,341	
Residential		86%	pro rata based on DC	$123,001/unit		$4,920,050
Retail		14%	pro rata based on DC	$102/GBA sq.ft.		$810,291
Financing	5	1.0	year(s) construction period		$516,037	
Residential		86%	pro rata based on DC	$11,077/unit		$443,068
Retail		14%	pro rata based on DC	$9/GBA sq.ft.		$72,970
Contingency		5.0%			$1,224,948	
Residential		86%	pro rata based on DC	$26,293/unit		$1,051,736
Retail		14%	pro rata based on DC	$22/GBA sq.ft.		$173,212

S2: Mid-Rise Low-Medium Mixed-Use, Part Sub. Parking, Density Bonus (33-48 DU/AC)			
In-Lieu Fee: *Residential* [6]	$0.00 /NLA sq.ft.	$0,000/unit	$0
Total Indirect Costs		40.9% of Direct Costs	**$7,471,326**
TOTAL COSTS (Direct + Indirect)			
Residential		$460,134/unit	$22,086,449
Retail		$457/GBA sq.ft.	$3,637,455
			$25,723,904
RETURN			
Residential			$3,625,305
Retail			($1,030,339)
Net Value			**$2,594,966**
Residential			16.4%
Retail			-28.3%
Return on Cost (Net Value/Total Cost)			**10.1%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu condo fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

S3: Mid-Rise TOD Medium Mixed Use, Sub. Parking (68-87 DU/AC to 2.25 FAR)

For-Sale Market/For-Rent Affordable
84 DU/AC
2.16 FAR
84
5,000
Res Over Retail Uses
Prices: high (Central)
Parking: TOD
Land: High Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
0.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	1.00	acres				
Height	5	stories				
Density	84	DU/AC	2.16	FAR		
Built Area	93,957	GBA sq.ft.	85%	efficiency	80,000	NLA sq.ft.
Residential	88,402	GBA sq.ft.	85%	efficiency	75,000	NLA sq.ft.
Non-Residential	5,556	GBA sq.ft.	90%	efficiency	5,000	NLA sq.ft.
Room Mix (Base Units)						
Studio	0	units	675	NLA sq.ft./unit		
One-Bedroom	20	units	750	NLA sq.ft./unit		
Two-Bedroom	52	units	900	NLA sq.ft./unit		
Three-Bedroom	12	units	1,100	NLA sq.ft./unit		
Total Base Units	84		893			
Room Mix (Density Bonus Units)						
Studio	0	units	675	NLA sq.ft./unit		
One-Bedroom	0	units	750	NLA sq.ft./unit		
Two-Bedroom	0	units	900	NLA sq.ft./unit		
Three-Bedroom	0	units	1,100	NLA sq.ft./unit		
Total Density Bonus Units	0		0	NLA sq.ft./unit		
Total All Units	84		893	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		4	units		
Low (80% AMI sale and rent)	10%		8	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		
Parking [2]						
Units <=650 Sq.Ft.	0	1.0 stall/unit	0	stalls		
Units >650 Sq.Ft.	84	1.5 stall/unit	126	stalls		
Guest Parking	84	0.0 stall/unit	0	stalls		
Residential	1.50	/unit	126	stalls		
Retail	2.7	/1,000 NLAsq.ft.	14	stalls		

S3: Mid-Rise TOD Medium Mixed Use, Sub. Parking (68-87 DU/AC to 2.25 FAR)							
Total	100%	of required	140	stalls			
Type							
Surface			0	stalls			
First floor structured			78	stalls			
Subterranean 1			62	stalls			
Subterranean 2			0	stalls			
Subterranean 3			0	stalls			

REVENUE						
Residential						
Market						
Studio	$740	NLA/sq.ft.	$499,500	/unit	0 units	$0
One-Bedroom	$740	NLA/sq.ft.	$555,000	/unit	17 units	$9,435,000
Two-Bedroom	$720	NLA/sq.ft.	$648,000	/unit	45 units	$29,160,000
Three-Bedroom	$720	NLA/sq.ft.	$792,000	/unit	10 units	$7,920,000
Total Sale Proceeds	$724	NLA/sq.ft.	$646,000	/unit	72 units	$46,515,000
Affordable						
Workforce						
Studio	$20,906	/unit/year	$1,742	/unit/month	0 units	$0
One-Bedroom	$23,736	/unit/year	$1,978	/unit/month	0 units	$0
Two-Bedroom	$26,531	/unit/year	$2,211	/unit/month	0 units	$0
Three-Bedroom	$29,301	/unit/year	$2,442	/unit/month	0 units	$0
Moderate						
Studio	$16,536	/unit/year	$1,378	/unit/month	0 units	$0
One-Bedroom	$18,744	/unit/year	$1,562	/unit/month	1 units	$18,744
Two-Bedroom	$20,904	/unit/year	$1,742	/unit/month	2 units	$41,808
Three-Bedroom	$23,064	/unit/year	$1,922	/unit/month	1 units	$23,064
Low Income						
Studio	$10,716	/unit/year	$893	/unit/month	0 units	$0
One-Bedroom	$12,096	/unit/year	$1,008	/unit/month	2 units	$24,192
Two-Bedroom	$13,428	/unit/year	$1,119	/unit/month	5 units	$67,140
Three-Bedroom	$14,748	/unit/year	$1,229	/unit/month	1 units	$14,748
Very Low Income						
Studio	$6,348	/unit/year	$529	/unit/month	0 units	$0
One-Bedroom	$7,104	/unit/year	$592	/unit/month	0 units	$0
Two-Bedroom	$7,812	/unit/year	$651	/unit/month	0 units	$0
Three-Bedroom	$8,508	/unit/year	$709	/unit/month	0 units	$0
Extremely Low Income						
Studio	$3,442	/unit/year	$287	/unit/month	0 units	$0
One-Bedroom	$3,778	/unit/year	$315	/unit/month	0 units	$0
Two-Bedroom	$4,077	/unit/year	$340	/unit/month	0 units	$0
Three-Bedroom	$4,353	/unit/year	$363	/unit/month	0 units	$0
Total Affordable					12 units	$189,696
Total Gross Affordable Revenue						$189,696
(less) Vacancy	5.00%					($9,485)
(less) Operating Expenses	30.00%					($56,909)
(less) Capital Reserves	2.00%					($3,794)
Residential NOI						**$119,508**
Capitalized Value of NOI	4.00%	cap rate				$2,987,712
Sale Proceeds						$46,515,000
(less) Cost of Sale	3.00%					($1,485,081)
Net Residential Revenue						**$48,017,631**
Retail						

S3: Mid-Rise TOD Medium Mixed Use, Sub. Parking (68-87 DU/AC to 2.25 FAR)						
NNN Rental Revenue		$2.50	NLA/sq.ft.			$150,000
(less) leasing fee		4.0%	NNN Rent			($6,000)
(less) Vacancy		5.00%				($7,200)
(less) Non-reimb. Exp.		5.00%				($7,200)
Retail NOI						**$129,600**
Capitalized Value of NOI		6.50%	cap rate			$1,993,846
(less) Cost of Sale		3.00%				($59,815)
Net Revenue				$243/GBA sq.ft.		**$1,934,031**
TOTAL VALUE						**$49,951,661**
DEVELOPMENT COSTS						
Direct Costs						
Site						
Property Acquisition		$202	/sq.ft.		$8,799,120	
Land Carry Cost	3	1.50	yrs. entitle.	2.0 yrs. blg/absrp.	$2,309,769	
Site Work		$10	/sq.ft.		$435,600	
Subtotal					$11,544,489	
Parking						
First floor structured		$20,000	/stall		$0	
Second floor structured		$20,000	/stall		$1,560,000	
Subterranean 1		$35,000	/stall		$2,170,000	
Subterranean 2		$40,000	/stall		$0	
Subterranean 3		$50,000	/stall		$0	
Subtotal					$3,730,000	
Residential						
Site		94%	pro rata based on GBA		$10,861,880	
Parking		90%	pro rata based on stalls		$3,357,000	
Construction	4	$180	/GBA sq.ft.		$15,871,641	
Subtotal				$752,263/unit		$30,090,521
Retail						
Site		6%	pro rata based on GBA		$682,609	
Parking		10%	pro rata based on stalls		$373,000	
Construction		$115	/GBA sq.ft.		$638,889	
TI/TA		$35	/NLA sq.ft.		$175,000	
Subtotal				$235/GBA sq.ft.		$1,869,498
Total Direct Costs						**$31,960,019**
Indirect Costs						
LEED Certification		3.0%			$958,801	
Permits and Fees		$39	/GBA sq.ft.		$3,450,671	
Legal		1.0%	of Direct Costs		$319,600	
Insurance and Warranty		2.0%	of Direct Costs		$639,200	
Architecture and Engineering		7.0%	of Direct Costs		$2,237,201	
Developer Fee		4.5%	of Direct Costs		$1,438,201	
G&A		2.5%	of Direct Costs		$799,000	
Subtotal Indirect Costs					$9,842,675	
Residential		94%	pro rata based on DC	$231,673/unit		$9,266,929
Retail		6%	pro rata based on DC	$72/GBA sq.ft.		$575,746
Financing	5	1.0	year(s) construction period		$841,591	
Residential		94%	pro rata based on DC	$19,809/unit		$792,362
Retail		6%	pro rata based on DC	$6/GBA sq.ft.		$49,229
Contingency		5.0%			$2,132,214	
Residential		94%	pro rata based on DC	$50,187/unit		$2,007,491
Retail		6%	pro rata based on DC	$16/GBA sq.ft.		$124,724

S3: Mid-Rise TOD Medium Mixed Use, Sub. Parking (68-87 DU/AC to 2.25 FAR)			
In-Lieu Fee: *Residential* [6]	$0.00 /NLA sq.ft.	$0,000/unit	$0
Total Indirect Costs		40.1% of Direct Costs	**$12,816,480**
TOTAL COSTS (Direct + Indirect)			
Residential		$501,873/unit	$42,157,302
Retail		$329/GBA sq.ft.	$2,619,196
			$44,776,499
RETURN			
Residential			$5,860,328
Retail			($685,166)
Net Value			**$5,175,163**
Residential			13.9%
Retail			-26.2%
Return on Cost (Net Value/Total Cost)			**11.6%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu condo fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

S4: Mid-Rise High Mixed Use TOD, Sub Parking, Density Bonus (88-117 DU/AC to 3.0 FAR)

For-Sale Market/For-Rent Affordable
104 DU/AC
2.4 FAR
83
5,000
Res Over Retail Uses
Prices: high (Central)
Parking: TOD
Land: High Cost
On-Site Affordable
0.0% Workforce @150% AMI
5.0% Moderate Income
10.0% Low Income
0.0% Very Low Income
0.0% Extremely Low Income
20.0% Density Bonus
100% required parking
0% rent appreciation
0% impact fee reduction
0% processing time reduction

PROGRAM

Site Area	0.80	acres				
Height	5	stories				
Density	104	DU/AC	2.40	FAR		
Built Area	83,556	GBA sq.ft.	85%	efficiency	71,300	NLA sq.ft.
Residential	78,000	GBA sq.ft.	85%	efficiency	66,300	NLA sq.ft.
Non-Residential	5,556	GBA sq.ft.	90%	efficiency	5,000	NLA sq.ft.
Room Mix (Base Units)						
Studio	0	units	675	NLA sq.ft./unit		
One-Bedroom	54	units	750	NLA sq.ft./unit		
Two-Bedroom	15	units	975	NLA sq.ft./unit		
Three-Bedroom	0	units	1,050	NLA sq.ft./unit		
Total Base Units	69		799			
Room Mix (Density Bonus Units)						
Studio	0	units	675	NLA sq.ft./unit		
One-Bedroom	11	units	750	NLA sq.ft./unit		
Two-Bedroom	3	units	975	NLA sq.ft./unit		
Three-Bedroom	0	units	1,050	NLA sq.ft./unit		
Total Density Bonus Units	14		798	NLA sq.ft./unit		
Total All Units	83		799	NLA sq.ft./unit		
Affordability [1]						
Workforce (180% AMI)	0%		0	units		
Moderate (110% AMI sale, 120% rent)	5%		3	units		
Low (80% AMI sale and rent)	10%		7	units		
Very Low (50% AMI sale and rent)	0%		0	units		
Extremely Low (30% AMI)	0%		0	units		
Parking [2]						
Units <=650 Sq.Ft.	0	1.0 stall/unit	0	stalls		
Units >650 Sq.Ft.	83	1.5 stall/unit	125	stalls		
Guest Parking	83	0.0 stall/unit	0	stalls		
Residential	1.51	/unit	125	stalls		
Retail	2.7	/1,000 NLAsq.ft.	14	stalls		

S4: Mid-Rise High Mixed Use TOD, Sub Parking, Density Bonus (88-117 DU/AC to 3.0 FAR)				
Total	100% of required	139 stalls		
Type				
Surface		0 stalls		
First floor structured		0 stalls		
Subterranean 1		84 stalls		
Subterranean 2		55 stalls		
Subterranean 3		0 stalls		

REVENUE				
Residential				
Market				
Studio	$740 NLA/sq.ft.	$499,500 /unit	0 units	$0
One-Bedroom	$740 NLA/sq.ft.	$555,000 /unit	58 units	$32,190,000
Two-Bedroom	$720 NLA/sq.ft.	$702,000 /unit	15 units	$10,530,000
Three-Bedroom	$720 NLA/sq.ft.	$756,000 /unit	0 units	$0
Total Sale Proceeds	$733 NLA/sq.ft.	585,200 /unit	73 units	$42,720,000
Affordable				
Workforce				
Studio		$1,742 /unit/month	0 units	$0
One-Bedroom		$1,978 /unit/month	0 units	$0
Two-Bedroom		$2,211 /unit/month	0 units	$0
Three-Bedroom		$2,442 /unit/month	0 units	$0
Moderate				
Studio		$1,378 /unit/month	0 units	$0
One-Bedroom		$1,562 /unit/month	2 units	$37,488
Two-Bedroom		$1,742 /unit/month	1 units	$20,904
Three-Bedroom		$1,922 /unit/month	0 units	$0
Low Income				
Studio		$893 /unit/month	0 units	$0
One-Bedroom		$1,008 /unit/month	5 units	$60,480
Two-Bedroom		$1,119 /unit/month	2 units	$26,856
Three-Bedroom		$1,229 /unit/month	0 units	$0
Very Low Income				
Studio		$529 /unit/month	0 units	$0
One-Bedroom		$592 /unit/month	0 units	$0
Two-Bedroom		$651 /unit/month	0 units	$0
Three-Bedroom		$709 /unit/month	0 units	$0
Extremely Low Income				
Studio		$287 /unit/month	0 units	$0
One-Bedroom		$315 /unit/month	0 units	$0
Two-Bedroom		$340 /unit/month	0 units	$0
Three-Bedroom		$363 /unit/month	0 units	$0
Total Affordable			10 units	$145,728
Total Gross Affordable Revenue				$145,728
(less) Vacancy	5.00%			($7,286)
(less) Operating Expenses	30.00%			($43,718)
(less) Capital Reserves	2.00%			($2,915)
Residential NOI				**$91,809**
Capitalized Value of NOI	4.00% cap rate			$2,295,216
Sale Proceeds				$42,720,000
(less) Cost of Sale	3.00%			($1,350,456)
Net Residential Revenue				**$43,664,760**
Retail				

S4: Mid-Rise High Mixed Use TOD, Sub Parking, Density Bonus (88-117 DU/AC to 3.0 FAR)

NNN Rental Revenue		$2.50	NLA/sq.ft.			$150,000
(less) leasing fee		4.0%	NNN Rent			($6,000)
(less) Vacancy		5.00%				($7,200)
(less) Non-reimb. Exp.		5.00%				($7,200)
Retail NOI						**$129,600**
Capitalized Value of NOI		6.50%	cap rate			$1,993,846
(less) Cost of Sale		3.00%				($59,815)
Net Revenue				$243/GBA sq.ft.		**$1,934,031**
TOTAL VALUE						**$45,598,790**
DEVELOPMENT COSTS						
Direct Costs						
Site						
Property Acquisition		$202	/sq.ft.		$7,039,296	
Land Carry Cost	3	1.50	yrs. entitle.	2.0 yrs. blg/absrp.	$1,847,815	
Site Work		$10	/sq.ft.		$348,480	
Subtotal					$9,235,591	
Parking						
Surface		$5,000	/stall		$0	
First floor structured		$20,000	/stall		$0	
Subterranean 1		$35,000	/stall		$2,940,000	
Subterranean 2		$40,000	/stall		$2,200,000	
Subterranean 3		$50,000	/stall		$0	
Subtotal					$5,140,000	
Residential						
Site		93%	pro rata based on GBA		$8,621,523	
Parking		90%	pro rata based on stalls		$4,622,302	
Construction	4	$178	/GBA sq.ft.		$13,847,496	
Subtotal				$677,283/unit		$27,091,321
Retail						
Site		7%	pro rata based on GBA		$614,069	
Parking		10%	pro rata based on stalls		$517,698	
Construction		$115	/GBA sq.ft.		$638,889	
TI/TA		$35	/NLA sq.ft.		$175,000	
Subtotal				$244/GBA sq.ft.		$1,945,655
Total Direct Costs						**$29,036,976**
Indirect Costs						
LEED Certification		3.0%			$871,109	
Permits and Fees		$42	/GBA sq.ft.		$3,244,852	
Legal		1.0%	of Direct Costs		$290,370	
Insurance and Warranty		2.0%	of Direct Costs		$580,740	
Architecture and Engineering		7.0%	of Direct Costs		$2,032,588	
Developer Fee		4.5%	of Direct Costs		$1,306,664	
G&A		2.5%	of Direct Costs		$725,924	
Subtotal Indirect Costs					$9,052,247	
Residential		93%	pro rata based on DC	$211,142/unit		$8,445,691
Retail		7%	pro rata based on DC	$76/GBA sq.ft.		$606,556
Financing	5	1.0	year(s) construction period		$791,773	
Residential		93%	pro rata based on DC	$18,468/unit		$738,719
Retail		7%	pro rata based on DC	$7/GBA sq.ft.		$53,054
Contingency		5.0%			$1,944,050	
Residential		93%	pro rata based on DC	$45,345/unit		$1,813,787
Retail		7%	pro rata based on DC	$16/GBA sq.ft.		$130,263

S4: Mid-Rise High Mixed Use TOD, Sub Parking, Density Bonus (88-117 DU/AC to 3.0 FAR)			
In-Lieu Fee: *Residential* [6]	$0.00 /NLA sq.ft.	$0,000/unit	$0
Total Indirect Costs		40.6% of Direct Costs	**$11,788,070**
TOTAL COSTS (Direct + Indirect)			
Residential		$458,910/unit	$38,089,518
Retail		$343/GBA sq.ft.	$2,735,528
			$40,825,046
RETURN			
Residential			$5,575,242
Retail			($801,497)
Net Value			**$4,773,745**
Residential			14.6%
Retail			-29.3%
Return on Cost (Net Value/Total Cost)			**11.7%**

(1) Affordability tiers and threshold income: Workforce (180% AMI), Moderate (110% AMI sale, 120% rent), Low (80% AMI sale and rent), Very Low (50% AMI sale and rent), Extremely Low (30% AMI)

(2) Parking requirements based on City of Pasadena schedule

(3) Land carry cost assumes combined 7.5% cost of debt + equity per year before stabilization and 100% avg. balance

(4) Direct construction costs assume 20% allowance for contractor profit, insurance, and contingency.

(5) Construction financing assumptions: 60% LTC, 4.5% interest, 2.0% fee, 50% avg. balance.

(6) Proposed in-lieu condo fee from David Rosen and Associates (DRA). Assumes location in Sub-Area 'D'

APPENDIX 8: GPAHG Recommendation Memo

IZ Working Group Mission Statement (v. 5.0)

We exist to support Pasadena's mission to increase its sustainable inventory of inclusionary housing, enabling wage earners of all levels to participate in Community and benefit from a Home within the City of Pasadena

Inclusionary helps address the urgent need for affordable housing, at no cost to the city. Pasadena is becoming unaffordable for most teachers and city workers, not to mention those in work in hotels, restaurants, etc. With the median housing cost topping $900,000 and the average rent at $2400 per month for an apartment, working and middle class people are finding it increasingly difficult to live in our city. An increase in commuters is exacerbating our traffic problems. Two thirds of our homeless population are on the streets because of rising housing costs. Public subsidies for affordable housing are hard to come by, so asking the private market to supply a percentage of affordable units or in lieu fees to create affordable units is one of the national best practices today. Pasadena's inclusionary housing policies have been on the forefront, demonstrating courageous leadership by producing units despite the risk of lawsuits. This great policy can be even greater with the continued leadership of the Planning Commission. Inclusionary policies play a fundamental role in limiting traffic and preserving the social and economic diversity within communities and providing sorely needed affordable units.

What is feasible to maximize the effectiveness of this policy? The Inclusionary Zoning Working Group (IZ) of the Greater Pasadena Affordable Housing Group (GPAHG) requests that the Planning Commission to consider the feasibility of the following suggested changes to Pasadena's Inclusionary Housing Policy.

Summary:

1. ***Increase the Inclusionary set aside:***
   a) 25% in all areas of the city except TOD's. as follows:
   EXTREMELY LOW: 5% *VERY LOW:*5% *LOW:* 7% *MODERATE:* 8% *TOTAL* = 25
   We have done a preliminary feasibility analysis of this and the profit margin is still over 13% return, with section 8 subsidy applied to the extremely low option. The Holly Street Apartments are a good example of including some Section 8.

   b) 30% within a quarter mile of TOD's as follows:
   EXTREMELY LOW: 6% *VERY LOW:* 6% *LOW:* 9% *MODERATE:* 9% *TOTAL*= 30%

   Santa Monica and Hawaii both have 30% set aside in their policies. It is the policy of Metro that any of their land have 35% affordability. With the windfall of land cost due to increased densities, plus the significant investment of public transportation, it is only fair that a sizeable percent of TOD sites provide a higher percent of affordable units. The logical place for lower income units is in TOD sites where ridership is among those who are likely not to have or need a car.

   The approved Pasadena Housing Element calls for the city by 2016 to explore two different set aside percentages, for TOD sites and the rest of the city.

   The gentrifying and displacing power of TOD sites has moved Denver and Seattle to create special funds to achieve TOAH—Transit Oriented Affordable Housing.

   c) For both TOD and non-TOD sites, for-sale developments would have: 25% @ moderate-income ownership units or low-income rental units.

2. ***Achieve a higher percent of units and Integrated Housing, across the spectrum of Incomes.***
   Developers must provide a mix of units and the full percentage of set aside units. No credits, (trade downs) or lower percent of units allowed to be set aside in exchange for very-low or low-income units. Even in the case of state density bonus, the full 25% (and 30% in TOD) sites must be achieved. The mix of units must be at the various income bands as listed in Item 1 above.

   There is one exception to this, to allow a calculation based on the number of bedrooms to accommodate more families. This is especially important considering the decrease in PUSD enrollment. A three bedroom unit can be considered as 1.5% of a unit when calculating the overall 25% or 30% set aside.

3. ***Provide a broader menu of incentives.***
   Allow for even less parking requirements than is already permitted in the case very low income, including exemption of any parking for extremely low income. This will also further address traffic concerns. And in the case of mixed-use complexes allow for day/night uses of shared parking spaces, especially in TODs. Provide incentives with a shared electric car and charging stations, where resident and sign-up for its use. One underground parking space is about $30,000, thus minimizing parking save a developer money and incentivizes more affordable units. Section 8 can also off-set the cost of a extremely low income.

4. ***Change the policy to begin at 8 units or more and have developments of 2-7 units either provide a unit or pay a fee.***

5. ***We agree with the results of city's nexus study that the in-lieu fee must be increased. We ask that be adopted on Oct. 15 and done so retroactively to those projects now doing preliminary reviews.*** *We believe that the new fee structure, once passed does not need to be revisited in the feasibility study. We would lose sorely needed inclusionary in lieu fee dollars by delaying this vote.* ***But we have one caveat, <u>that all projects opting to pay the fee, must still include at least one fourth of the full required percent of set aside units.</u>*** *(Chicago's IZ is set up this way)*

   Why the fee is so important With this fee, a total of 691 affordable units (not including the 533 inclusionary units developed) have been assisted consisting of new production projects (176 units) and rehabilitation/affordability preservation projects (515 units). With an increased fee, the city can preserve and produce even more affordable units to help address the severe housing crisis, with 49% of the city spending more than 50% of their income on housing and house the 677 persons experiencing homelessness.

6. ***Offsite units must be built concurrently with the primary market-rate project.*** *This is presently in the ordinance, but we want to reinforce this to allow no exceptions.*

7. ***Offsite Option: require developers to increase affordable units by an additional 25% and place the units into a newly formed Community Land Trust once developed.*** *This will assure long term affordability.*

8. ***Approval process improved to allow more public input, or prevent loss of potential city revenue:***
   a) In lieu fee use for the off-site development must come though Pasadena's Affordable Housing Trust Fund so that it can be leveraged, thus allowing the off-site developer to achieve the goal an additional 25% units required for off-site development.
   b) Off-site responsibility for assuring the completion of the units, including insurance for the off-site units must be retained by primary developer, but they can contract with a different developer to build the off-site units.
   c) IZ Policy exemptions must include provisions for public input with adequate (e.g. 30 day) notice.
   d) IZ Policy exemptions must be approved by both Planning and once approved, a newly formed Affordable Housing Commission which is comprised of citizens, community leaders, and city government representatives.

9. **Monitoring the Units**
   The city is doing a good job of monitoring the units, but it can be burdensome and take time away from efforts to preserve and produce more affordable housing stock. Therefore we recommend that a task force be formed to create a city initiated Community Land Trust (CLT) and later spin it off as was done in the city of Irvine. The benefits of a CLT are as follows:

   a) The CLT will monitor IZ rental units to assure that they remain affordable in perpetuity. Additionally the CLT will assure that ownership units remain owner-occupied, affordable and well maintained to uphold their resale value. The CLT will save the city money by taking on these responsibilities.
   b) A CLT will provide a mechanism for the homeowners and owners of affordable housing developments to place homes into the trust in order to preserve affordability in perpetuity so that when expensive covenants and HUD deals are mature, and they have been placed in the trust, these subsidies are not lost.

10. **Allow units to be built in project area B. The average home price in NW Pasadena is pushing $800,000.** This area no longer has an over-concentration of affordable housing, but the opposite. Due to a lack of affordable housing, long-term residents are being displaced. Right now the densities in project area B are too low to allow inclusionary projects. This area either needs to be up-zoned in transportation corridors so that some inclusionary projects are possible or also given the opportunity to have off site IZ projects (or both)

11. **Include Condo Conversions as part of the inclusionary housing ordinance.** When an apartment owner decides to convert units into for-sale condos, 30% must be affordable with first right of refusal for existing residents, and the levels of affordability determined within the 30% designed to help retain existing residents. Sufficient time to allow for credit repair, obtain down payment assistance, and other tools must be in place to assure a meaningful and genuine opportunity for existing residents to consider purchasing their unit. This helps the city to reach their goal to prevent displacement. In the case of condo conversions, on-site affordable and in lieu fees options are not applicable. Additionally, these units would not necessarily be placed into the CLT, this would be discretionary choice on the part of the apartment owner. (Page E-12 Pasadena Housing Element describes the city's goals to wed condo conversions to the inclusionary policy in order to prevent displacement.)
    Page E-10 of the Pasadena HE states that

"...many older and modestly priced apartments are being converted to condominiums. Approximately 800 units have converted since 2001, with an increase in applications in recent years. While providing more affordable ownership opportunities, residents are still being displaced."

APPENDIX 9: Glossary

Absorption: The change in occupancy over a given time period.

Direct Costs: All costs associated with the physical site and construction of the building. In the pro-forma analysis used in this study, direct costs include land acquisition costs, land carrying costs, site preparation costs, and construction costs (including material, labor, contractor fees, and contingencies).

Dwelling Unit Per Acre (DU/AC): A measure of residential density calculated as the number of dwelling units per acre.

Floor Area Ratio (FAR): A measure of built density calculated as the total amount of permitted usable building floor area divided by the total area of the lot on which the building stands.

Indirect Costs: Any costs associated with the project that are not considered direct costs. In the pro-forma analysis used in this study, indirect costs include City permits and fees, legal fees, insurance and warranty, architecture and engineering, developer fees, general and administrative expenses, and construction financing fees and interest.

Market Capitalization Rates: The rate of return that an investment property will generate based on its current market value, calculated as net operating income divided by total market value. The lower the capitalization rate, the higher the return to the seller.

Stabilization: A stabilized property is one that is fully leased to market occupancy and rents are at market rate levels (not including affordable units).

Total Development Costs: The sum of direct costs and indirect costs.

Transit Oriented Development (TOD): Commercial and residential real estate development centered around transit. In this study, the TOD area is defined as the 0.5-mile radius surrounding the Gold Line Stations within Pasadena city limits.

Return on Costs, Unleveraged: A measure of financial return a developer expects to earn on a project, calculated as total project value at stabilization or full absorption less total development costs. The unleveraged return on costs excludes the effect of debt on return and provides a standard commonly used approach to interpreting a project's underlying economics and to compare it with other projects.

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