Affordable Housing Requirement Financial Analysis

Final Report

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prepared for:

City and County of Honolulu

STRATEGIC ECONOMICS

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I. INTRODUCTION

In December of 2015, the City and County of Honolulu (referred to hereafter as the City) retained Strategic Economics to test the impact of the proposed Affordable Housing Requirement (AHR) on development feasibility. This policy, part of a broader, island-wide affordable housing strategy,[1] would require all new residential projects with more than 10 units to dedicate a percentage of units as affordable to designated income levels (or otherwise assist in providing affordable housing via off-site development or payment of a fee).

In addition to the AHR, the analysis may also inform two other proposed policies:

- Affordable housing requirements for Interim Planned Development-Transit (IPD-T) projects; and
- The community benefits program included in the draft TOD Special District Ordinance and zoning ordinance. This program will allow developers to build additional building height and density in exchange for providing affordable housing and/or other community benefits.

The analysis tests the feasibility of a range of building "prototypes" in a variety of locations across the island, and evaluates the potential impact of affordable housing requirements on real estate development activity. The analysis also considers the potential value that developers can achieve through increased allowed density, as well as a series of financial incentives currently under consideration to accompany the AHR. These include reductions to and waivers of city fees associated with new development, as well as a property tax exemption.

As part of this analysis, Strategic Economics conducted several rounds of interviews with members of the local real estate development community, including developers who specialize in both market rate and affordable housing. The cost and revenue assumptions used in the pro forma model rely heavily on these interviews, as well as an independent review of market data. These interviews also provided context and background on the Honolulu real estate market.

Contents of the Report
After this introduction, Section II contains an overview of the study methodology, including the proposed AHR, the building prototypes tested, and the pro forma method. Next, Section III provides a summary of quantitative results from the pro forma analysis, as well as key findings intended to translate the results of the analysis for a wider audience. Section IV contains a series of policy implications, which are intended to assist city staff as they work to refine the proposed AHR. Appendix A provides details regarding the assumptions used in the analysis, and the pro forma analyses are included in Appendix B.

Limiting Conditions
The following limiting conditions apply to this report:

The analysis contained in this report evaluates the ability of residential real estate development to support the proposed AHR. It is intended to assist city staff as they refine and revise the AHR and other policies, but is not the only factor that informs affordable housing policy. Other important considerations include the severe ongoing need for affordable housing in Honolulu, and the City's overall goals for housing supply and affordability.

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[1] *Housing Oahu: Affordable Housing Strategy, 9/8/2015, Draft for Review and Discussion*

The analysis and assumptions in this report are based on a detailed review of market data and a series of interviews with members of the local development community. While every effort has been made to ensure the veracity of the pro forma assumptions, a professional cost estimator was not a part of the consultant team.

The analysis is based on market research undertaken in the current regulatory environment and, therefore, does not consider the impact of any proposed affordable housing or other community benefits requirement on the market value of land. Typically, imposing a regulatory burden on development is at least partially absorbed in the form of reduced land values over time. A sustained affordable housing policy could improve the prospect for development feasibility beyond what is indicated in this report.

This analysis tests the feasibility of development “prototypes,” which are intended to be generally representative of development opportunities on different parts of the island. In reality, each development project is unique, and many benefit from special circumstances, such as reduced land costs (from long-term holdings), reduced construction costs (from large-scale production or creative design), or government subsidy, which are not represented in this analysis.

II. METHODOLOGY OVERVIEW

This section provides a brief overview of the study methodology, including the proposed AHR and accompanying financial incentives. It also describes the building types and locations used in the analysis, the pro forma method, and the metrics used to measure developer return. See Appendix A for a full summary of pro forma cost and revenue assumptions.

AFFORDABLE HOUSING REQUIREMENT (AHR)

The analysis presented in this report tests a draft version of the AHR, which is subject to change based on the results of this analysis, ongoing discussion with the affordable housing and market-rate development community, and decisions by policymakers. This version of the AHR applies only to residential development, and can be fulfilled in one of three ways: with on-site construction of affordable units, with off-site construction of affordable units, or with an in-lieu contribution in the form of cash or dedicated land. These policies, each tested separately in the pro forma model, are outlined in Figure 1.

Figure 1. Proposed Affordable Housing Requirement

	For Sale	Rental
On-Site Construction	20% of units affordable up to 120% of AMI* (one-half of these at up to 100% of AMI)	15% of units priced at up to 80% of AMI
Off-Site Construction	25% of units affordable up to 120% of AMI (one-half of these at up to 100% of AMI)	15% of units priced at up to 80% of AMI
In-lieu Fee or Land Dedication	$45 per square foot or an equivalent value in improved land	

*Area Median Income (AMI)
Source: Housing Oahu: Affordable Housing Strategy, City and County of Honolulu, 2015; Residential Nexus Analysis, Keyser Marston Associates, 2015

All affordable units produced under the proposed AHR policy would be income-restricted for a period of thirty years. (In other words, they would be required to remain affordable at their designated AMI level in the event of a resale or change of tenant during this time.) The in-lieu fee of $45 is based on the Residential Nexus Study performed for the City in 2015.

FINANCIAL INCENTIVES

The City has proposed several financial incentives to offset the cost of meeting the AHR. This analysis tests the impact of the AHR both with and without the proposed financial incentives. These incentives, which would apply only to the affordable units built under the AHR, are outlined below. Note that the study does not incorporate assumptions about any other affordable housing subsidies, programs, or partnerships that may be available to developers currently working in the City and County of Honolulu.

- **Wastewater Facilities Charge.** The City currently requires newly built residential units receiving wastewater facility service to pay a one-time, per-unit charge. This charge is used to fund the capital costs associated with Honolulu's municipal wastewater system. Currently, developers of "low-income housing projects," as recognized by the City in Section 14-10.6 of the Revised Ordinances of Honolulu (ROH), are charged a reduced fee. In FY 2015/16, for example, this charge was $6,424 per “equivalent single family dwelling unit” for market rate units and $1,329 for low-income units. Under the proposed incentive, this discount would be extended to affordable units produced to meet the AHR.

- **Park Dedication Fee Waiver.** The City currently requires developers of most new residential projects to dedicate a portion of land for use as a park or playground, or to pay a fee equivalent to the fair market value of the land that would be dedicated. For the multi-family prototypes analyzed in this study, the park dedication requirement is 110 square feet per dwelling unit. Under the proposed incentive, this requirement would be waived for the affordable portion of the project.

- **Building Permit Fee Reduction.** The City currently charges a building permit fee to all new development based on a project’s construction cost. For developments with construction costs greater than $2 million (all the building prototypes in this study fall into this category) the fee is calculated as $3,915 plus $4.00 per $1,000 in construction costs. Under the proposed incentive, this fee would be reduced for projects containing affordable units. This analysis assumes the fee is reduced proportionally to the percentage of units that are affordable.

- **Real Property Tax Exemption.** The City currently levies real property tax at a rate of $3.50 per $1,000 of assessed value on most residential property. This tax is currently exempted for qualifying low-income rental units. Under the proposed incentive, this exemption would be extended to all affordable units produced under the AHR. This analysis assumes the exemption is provided for both rental and condominium units, although one option under consideration would offer the exemption only for rental units.[2]

BUILDING PROTOTYPES

Strategic Economics worked with city staff, the development community, and Architects Hawaii to develop a set of building prototypes. The prototypes are intended to represent both the types of buildings that are currently under construction in the City and County of Honolulu, as well as less common building types that may be feasible to build in the future. The prototypes were developed for typical parcel sizes, and assigned to market locations within the city, including locations both inside and outside of TOD station areas (Figure 2).

Once initial building types were established and vetted through developer interviews, Architects Hawaii developed detailed designs and building programs for each, in accordance with applicable zoning restrictions for each location. This process ultimately resulted in six prototypes representing four basic building types (two of the building types each have two versions with different levels of height and density).

[2] The present value of the real property tax exemption, a multi-year benefit, was calculated in order to represent this benefit in the financial analysis. For apartments, the present value was calculated using the income capitalization approach, as described on page 27, and reflected in project net operating income. For condominiums, the present value of the property tax exemption was calculated assuming an ownership period of 15 years and a discount rate of 3 percent, and reflected in a higher achievable sales price.

Figure 2. Building Prototype Locations

The four main building types evaluated are: a low-rise prototype located outside of the TOD corridor, and low-rise, mid-rise and high-rise prototypes located within the TOD corridor (see Figure 3). Additional versions of the mid-rise and high-rise prototypes were created that reflect the additional height and density that might be achieved under the interim or final TOD zoning (Figure 4), based on the relevant neighborhood Transit Oriented Development plans commissioned by DPP for the rail corridor.[3] It should be noted that several projects in the Ala Moana area have recently requested bonus density in excess of the maximum density (floor area ratio, or FAR) tested.

Certain prototype variations were eliminated early on in order to simplify the analysis and presentation of results. For example, the low-rise and mid-rise prototypes were tested as both condominiums and apartments, while – due to the expected lack of feasibility of a high-rise rental project – the high-rise prototype was tested only as a condominium project. Similarly, the mid-rise and high-rise prototypes were tested on a one-acre parcel, while the low-rise prototypes were tested on a larger, 15-acre parcel. The low-rise prototype was originally also tested on a one-acre parcel; however, initial results indicated that this type of low-rise, infill development was less feasible than larger-scale low-rise development in every instance. The low-rise, one-acre prototype was therefore excluded from the analysis. Similarly, a low-rise prototype with additional density was not tested, as surface parking was found to be the limiting factor in determining project density, rather than height or FAR limits.[4]

PRO FORMA METHOD

Strategic Economics developed a static pro forma model to test the impact of the proposed AHR and financial incentives on the feasibility of the building prototypes described above. A detailed description of the cost, revenue and other assumptions used in the model is provided in Appendix B.

The pro forma model first tallies all the development costs, including direct construction costs, indirect costs (including construction financing), land, and developer overhead. Revenues from unit sales or rental leases are then summed. Finally, total development costs are subtracted from total revenues, with the balance representing developer return. The revenue, cost and return assumptions are based on a combination of market research, developer interviews, and input from city staff (e.g., building fees).

To achieve feasibility, projects must exceed a threshold level of developer return, as described below.

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[3] Kalihi Neighborhood Transit-Oriented Development Plan, 2014 and Ala Moana Transit-Oriented Development Plan, 2014.

[4] Based on developer input, the building prototypes in this analysis include at least one parking space for each unit. For low-rise buildings with surface parking lots, the number of parking spaces included was determined to be the limiting factor in determining project density, rather than height or FAR. Although strategies such as shared parking, changes in market dynamics that allow for structured parking, or the opening of the rail line might reduce the number of surface spaces required for this building type, this analysis focused on the number of spaces required in today's market without the benefit of a parking management program.

Figure 3. Baseline Development Prototypes

Outside the TOD Corridor	Inside the TOD Corridor		

Low-rise	Low-rise	Mid-rise	High-rise
Condo/Apartment	Condo/Apartment	Condo/Apartment	Condo (Local Buyer Market)
15 acres	15 acres	1 acre	1 acre
3 stories	6 stories	13 stories	22 stories
462 units	858 units	143 units	167 units
2 parking spaces per unit	1.1 parking spaces/ per unit	1.3 parking spaces/ per unit	1.2 parking spaces/ per unit
Surface parking	Surface parking	Podium parking	Podium parking

Figure 4. Variations of Mid-rise and High-rise Prototypes

Mid-rise A	Mid-rise B	High-rise A	High-rise B
1 acre	1 acre	1 acre	1 acre
13 stories	25 stories	22 stories	40 stories
143 units	286 units	167 units	343 units
1.3 parking spaces/ per unit	1.1 parking spaces/ per unit	1.2 parking spaces/ per unit	1.1 parking spaces/ per unit

Measures of Return

Financial performance was measured using return on cost for condominiums and yield on cost for apartments. The thresholds used for development return are based on input from local developers and a review of the required returns for other major metropolitan areas in the United States. These metrics are described in more detail below.

- **Yield on Cost**. Yield on cost is a measure of project profitability commonly used in static pro forma analysis of income-generating projects, such as multifamily rental development. Because it does not account for different financing structures, yield on cost allows for the direct comparison of financial performance among different types of projects with different sources of financing. Yield on cost is equal to the annual net operating income (NOI) divided by total development cost. The net annual operating income is the stabilized income from the property minus operating expenses and an allowance for vacancy. **For apartments, the feasibility threshold was set at 7.5 percent yield on cost.** It should be noted that threshold is high compared to typical thresholds in other US markets; this reflects the fact that market rate apartment projects do not have a proven track record in Honolulu, and thus are more difficult to finance. Over time, it is possible that the threshold may be reduced.

- **Return on cost.** Return on cost is a more commonly used measure of project profitability for condominium developments. Like yield on cost, this measure of return does not account for financing costs beyond the term of construction. Return on cost is equal to net revenue (or "return") divided by total development cost. **For condominiums, the feasibility threshold was set at 18 percent return on cost.** While an 18 percent return on cost may seem high compared to the 7.5 percent yield on cost required for apartments, it is important to note that return on cost represents a one-time return on a project that might have a construction term of 2 to 4 years, while yield on cost is an annual measure of return received each year over the life of a project.

III. ANALYSIS RESULTS AND KEY FINDINGS

This section provides a summary of results from the pro forma analysis, followed by a discussion of key findings, incorporating information from interviews with the development community. The detailed pro forma analyses are included in Appendix B.

FEASIBILITY ANALYSIS RESULTS

The results of the pro forma analysis are provided in Figures 5 and 6 on the following page. The tables show the calculated return for each building prototype under a range of policy scenarios. In addition to a baseline scenario with no AHR, each table shows the results assuming the requirement is met by providing affordable units on site within the project, by providing affordable units off-site, or by paying an in-lieu fee. The table also demonstrates the impact of the financial incentives (note: financial incentives are assumed to not be provided in the event that the requirement is met through an in-lieu fee). The basic results are summarized below, followed by a more detailed discussion of the findings.

As mentioned previously, the feasibility results are meant to be generally representative of multifamily development on Oahu, but they do not represent financial feasibility in all circumstances. A range of factors influence the feasibility of individual development projects, including market conditions that change over time and in certain geographic areas. Over time, at least a portion of the cost of an affordable housing requirement is likely to be reflected in lower land values. This land cost reduction, paired with enhanced sales prices and rents in TOD areas once the rail project nears completion, could improve the financial prospects of many development projects.

- **Of the condominium prototypes tested, only the higher density high-rise prototype (High-rise B) in Ala Moana is currently feasible, with a baseline return on cost of 25 percent.** This high-rise project – which is assumed to target local buyers rather than the luxury market – can meet the AHR with either on-site or off-site affordable housing, as long as the financial incentives are offered. The analysis suggests that a developer would choose to build the units on- or off-site rather than pay an in-lieu fee.

- **After High-rise B, the low-rise prototype in Pearlridge is closest to feasibility, with a baseline return of 10 percent, followed by the higher density mid-rise prototype (Mid-rise B) in Kapalama with a baseline return of 5 percent.**

- **Although none of the apartment prototypes achieves the threshold yield of 7.5 percent, the low-rise prototype in Pearlridge is closest to feasibility with a baseline yield of 6.1 percent.** The low-rise prototype in Kapolei is next, with a baseline yield of 5.7 percent, followed by Mid-rise B in Kapalama, which has a baseline yield of 5.3 percent. The Mid-rise A prototype in Kapalama is the least feasible, with a baseline yield of 4.6 percent.

Figure 5: Return on Cost for Condominium Prototypes, assuming an 18 Percent Threshold for Financial Feasibility

		Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
Baseline (No AHR)		-13%	10%	-7%	5%	1%	25%
On-Site Affordable Housing Requirement	Before Incentives	-16%	5%	-12%	0%	-5%	16%
	With all Incentives	-15%	7%	-10%	2%	-2%	19%
Off-Site Affordable Housing Requirement	Before Incentives	-16%	5%	-12%	0%	-5%	16%
	With all Incentives	-15%	7%	-10%	2%	-2%	19%
In-lieu Fee	Before Incentives	-20%	0%	-13%	-2%	-4%	17%
	With all Incentives	n/a	n/a	n/a	n/a	n/a	n/a

Figure 6: Return on Yield for Apartment Prototypes, assuming a 7.5 Percent Threshold for Financial Feasibility

		Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
Baseline (No AHR)		5.7%	6.1%	4.6%	5.3%	not analyzed	
On-Site Affordable Housing Requirement	Before Incentives	5.4%	5.7%	4.3%	4.9%	not analyzed	
	With all Incentives	5.5%	5.8%	4.4%	5.0%		
Off-Site Affordable Housing Requirement	Before Incentives	5.4%	5.8%	4.4%	5.0%	not analyzed	
	With all Incentives	5.5%	5.8%	4.4%	5.1%		
In-lieu Fee	Before Incentives	5.2%	5.6%	4.3%	4.9%	not analyzed	
	With all Incentives	n/a	n/a	n/a	n/a		

Source: Strategic Economics, 2016

KEY FINDINGS

Key findings from the analysis, incorporating qualitative input provided by local real estate developers in one-on-one interviews and stakeholder meetings, are discussed below. A separate discussion of policy implications is provided in the following section.

Affordable Housing Requirement

High-rise condominium projects in Ala Moana can currently support the AHR as proposed. The higher density condominium prototype (High-rise B) is the only prototype tested that was found to be feasible under current market conditions (Figure 5). In addition to exceeding the 18 percent threshold for developer returns, this 40-story building remains feasible when meeting the proposed AHR with the on-site or off-site option. These findings are consistent with recent agreements with developers in the Ala Moana area that include 20 percent on-site affordable units. Although prototypes in Downtown or in Kakaako (under HCDA jurisdiction) were not tested, it is likely that similar requirements would be feasible there, given similar market conditions.

Outside of high-rise projects in Ala Moana, for-sale residential projects – with or without the AHR – are challenging to build given current high construction and land costs. Even without the AHR, all the condominium prototypes tested in Kapalama, Pearlridge and Kapolei were found to be infeasible with standard land and construction costs, and in the absence of subsidy. This is consistent with the information provided by the developers interviewed for this study, who reported a variety of factors that contribute to the challenge of building new development in Honolulu, including high land costs due to limited supply, high construction costs due to shipping prices and labor shortages, a lack of infrastructure capacity in key locations, and a long entitlement process. Developers noted that there are no "typical" projects in Honolulu, and that many projects require special circumstances, such as reduced land or construction costs, or economies of scale from development of large, master-planned communities, in order to achieve feasibility. As noted in the introduction to this report, the AHR itself should reduce land costs over time, as land markets adjust the new policy.

None of the apartment prototypes tested are feasible under current market conditions, due to the unique challenges associated with building apartments in Honolulu. Unlike condominiums, none of the apartment prototypes tested were found to be feasible under current market conditions, and all would require significant revenue increases or a subsidy to achieve feasibility. This reflects the unique challenges of Honolulu's rental market, which has produced very little new, market-rate apartment development over the last 30 years (except for condominium units purchased by local investors and managed as individual rental units). As a result, there are few comparable projects for use in underwriting new apartments, many local developers are unfamiliar with rental projects, and investors consider Honolulu to be a higher-risk market for new apartment development.

The AHR as proposed represents a modest cost burden on development compared to total development costs. Figures 7 and 8 show the net cost to the developer to provide affordable units on-site (average cost per unit minus average affordable sales price or capitalized value) assuming the proposed on-site AHR and incorporating property tax exemptions and other incentives. For condos, the net cost ranged from $23,000 to $110,000 per affordable unit (equaling one to five percent of total development costs). For apartments, the net costs ranged from $91,000 to $216,000 (or three to six percent of total development costs). Rental apartments tend to experience a slightly higher cost burden because of their deeper level of subsidy under the AHR.

Based on the experience of other cities with new rail lines, it is reasonable to expect that development near the new stations will command price and rent premiums over other locations, improving feasibility over the mid-term. Most studies find that properties near transit can achieve price and rent premiums ranging from 5 to 20 percent.[5] Although the analysis found that many building types are not currently feasible to develop, the low-rise prototype in Pearlridge would require relatively modest price increases to meet the feasibility threshold and support the proposed AHR (11 percent). Development in other locations along the rail line may therefore be possible in the relatively near future, particularly if sales prices increase to reflect the value of the enhanced access provided by the Honolulu Rail Transit project. Reductions in construction or land costs can also improve development feasibility.

Despite these challenges, the successful construction and lease-up of a recent apartment project in Kapolei has begun to re-establish the market in Honolulu, and developers are seeking new opportunities. As more projects come on-line, underwriters will have access to more comparable projects, investors will become more confident (and require lower returns), and local developers will have more experience with rental construction. As the Honolulu rental market continues to evolve, more rental projects will become feasible. In the short-to-mid-term, these are more likely to be unconventional projects, such as those featuring micro-units or unbundled parking, or projects near the rail stations, which will likely have a positive impact on rental rates upon opening.

The proposed in-lieu fee is set at a level that will encourage condominium developers to provide units directly, with the likely exception of luxury projects. For condominiums, paying the in-lieu fee is generally more expensive than building affordable housing on- or off-site, assuming the full set of financial incentives are offered to partially offset the development costs of these affordable units. While a luxury high rise condominium prototype was not tested as part of the analysis, developers of luxury projects will be more likely to choose to pay the in-lieu fee, due to the high opportunity cost of providing affordable units on site (with higher market prices, the revenue forgone by selling some units at below market prices also increases). In addition, it may not be reasonable to burden lower-income residents with the HOA fees required to support the high-end amenities typical of luxury projects.

Apartment developers are more likely to meet the requirement by paying the in-lieu fee. In contrast to condominiums, the in-lieu fee for apartments is on par with the cost to build affordable rental units. This result is due to the deeper level of affordability required of rental units (80 percent of area median income for rental units, compared to a blend of 100 to 120 percent for condominiums). Consequently, rental apartment developers who do not have the capacity, interest or experience to manage income-restricted apartments in the long-term may choose to pay the in-lieu fee.

Additional community benefits may be achieved for high-rise projects that are allowed additional density beyond the prototypes tested in this study. The High-rise B prototype is 40 stories in height and has a FAR of 7.0 and a density of 343 dwelling units per acre; several projects have recently been proposed with greater densities. The analysis confirms that allowing more height and density creates added value for mid- and high-rise building types, as illustrated with the signficant increase in developer returns for the higher density Kapalama and Ala Moana prototypes.

[5] See, for example, Center for Neighborhood Technology, *The New Real Estate Mantra: Location Near Public Transportation*, March 2013. http://www.apta.com/resources/statistics/Documents/NewRealEstateMantra.pdf

Financial Incentives

The proposed financial incentives have a modest impact on development feasibility. While the financial incentives would benefit the bottom line of all the prototypes tested, their impact is not enough to make the difference for most of the prototypes tested.

The proposed financial incentives are higher for condominium projects. The proposed financial incentives offer a 1.1 to 2.8 percent discount on total development cost for condominiums, and a 1.1 to 1.3 percent discount for apartment projects (Figures 9 and 10). The incentives are generally higher for condominium projects because they are applied only to the affordable units produced under the AHR. Because the condominium projects are required to produce a higher share of affordable units, the financial incentives they receive are also proportionally higher.

The proposed financial incentives have the greatest impact in places with high land costs, such as Ala Moana. The financial incentives offer the greatest discount to higher value locations (Figure 9 and 10). This is the result of the park dedication fee, which, as noted, is based on the cost of the land being developed. In places with high land costs, the fee is generally higher, and therefore the discount associated with the fee waiver is higher.

The real property tax exemption and park dedication fee represent the greatest financial incentives to developers. Depending on the prototype, the real property tax exemption accounts for between 33 and 69 percent of the total financial incentives for condominium developers, and between 44 and 67 percent of the incentives for apartment developers (Figures 9 and 10). The park dedication fee, which is calculated based on the cost of the land being developed, varies more widely, accounting for 14 to 58 percent of the incentives for condominium developers, and 15 to 41 percent of the incentives for apartment developers. One option under consideration by the City is to exempt real property tax only for affordable rental units, while continuing to require it for condominiums. This would make the average total incentive level more comparable for either project type, but would also negatively impact the financial feasibility of the Ala Moana High-rise B.

Other Findings

Although not yet financially feasible, market-rate condominium construction in some locations outside of Ala Moana could be "naturally affordable" and contribute to the inventory of workforce housing on the island. For one of the condominium prototypes and locations tested (the low-rise in Kapolei), current market-rate sales prices are affordable to households earning 100 to 120 percent of AMI. Unfortunately, the analysis found that the revenues from these projects are not high enough to offset high construction and land costs. However, under special conditions such as reduced land and site costs associated with master developments, lowered construction costs, or other assistance, they might be possible to build. If built, these projects would automatically meet the AHR, and help to meet the need for workforce housing on the island. Like Kapolei, however, they likely would be located outside of the TOD areas. Moreover, without the long-term affordability requirements included in the AHR, these units might grow to be unaffordable to workforce buyers over the long-term.

In addition to the cost of building affordable units, developers are also concerned about the "soft" costs of meeting the AHR. Although the most obvious "cost" of the AHR to developers is the loss of revenues associated with affordable units, developers also noted concerns about other costs associated with the requirement. These include the marketing costs to recruit viable buyers or tenants, and the administrative cost of reviewing applications to ensure they meet affordability requirements. Over the long term, there are also costs associated with monitoring compliance over the 30-year affordability period. It is also important to note that the 30-year affordability requirement itself represents a cost to developers, because any income-restricted units required by the AHR in these locations would need to be priced somewhat below market-rate, in order to account for the 30-year affordability period.[6] Finally, there are costs associated with the time and effort to incorporate the new requirement into development plans. The city's draft affordable housing strategy includes several tactics to address these issues, such as the use of web-based technology and industry partnerships to simplify, accelerate, and track the qualification and monitoring process.

[6] See Appendix A for more information on how this discount was applied in the analysis.

Figure 7: On-site Affordable Housing Cost as a Percentage of Total Development Costs, For-Sale Condominiums

	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
Total Development Cost	$218,569,846	$400,691,813	$80,072,892	$148,179,275	$95,567,487	$174,943,036
Total Units	462	858	143	286	167	343
Development Cost per Unit	$473,095	$467,007	$559,950	$518,109	$572,260	$510,038
Revenue per Unit (Affordable, On-site)	$327,163	$404,482	$396,396	$395,188	$393,571	$390,872
Value of Incentives per Unit	$36,104	$39,374	$48,445	$48,383	$71,339	$71,296
Net Cost per AHR Unit	$109,828	$23,151	$115,110	$74,539	$107,351	$47,869
Total Net AHR Cost for Project	$10,148,067	$3,972,643	$3,292,140	$4,263,630	$3,585,519	$3,283,846
Net AHR Cost as % of Total Dev. Cost	5%	1%	4%	3%	4%	2%

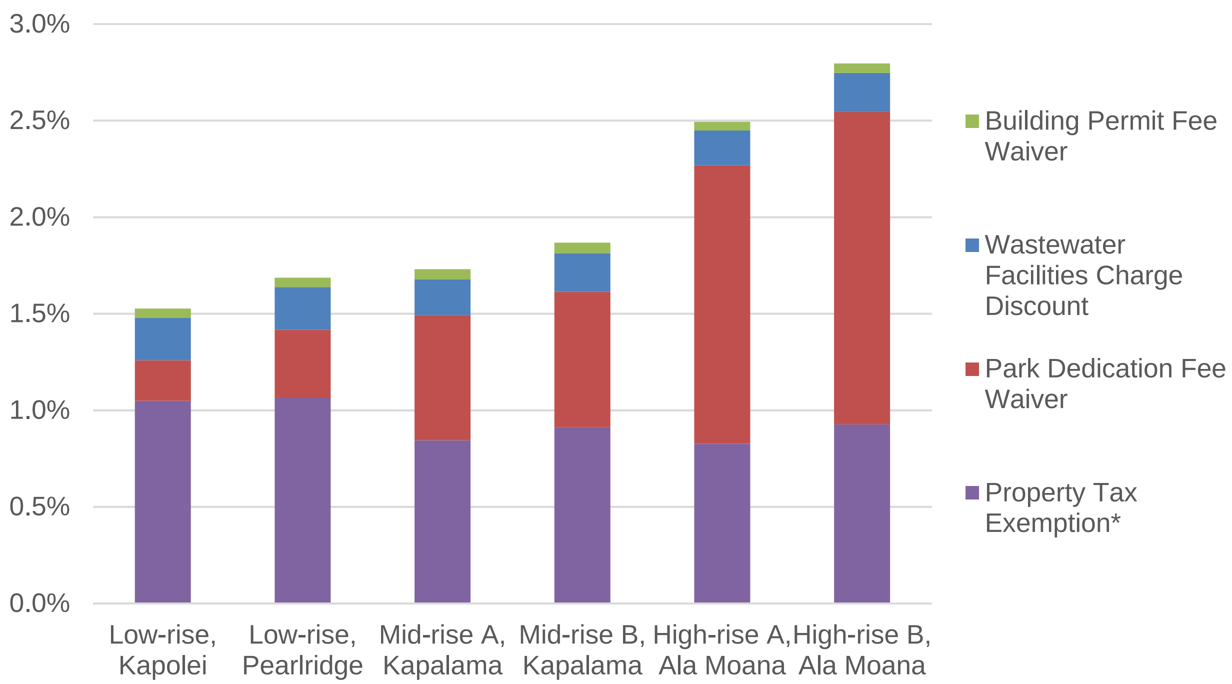
Source: Strategic Economics, 2016.

Figure 8: On-site Affordable Housing Costs as a Percentage of Total Development Costs, Rental Apartments

	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama
Total Development Cost	$210,884,969	$385,542,095	$77,179,732	$142,419,738
Total Units	462	858	143	286
Development Cost per Unit	$456,461	$449,350	$539,718	$497,971
Revenue per Unit (Affordable, On-site)	$321,201	$321,201	$279,695	$279,695
Value of Incentives per Unit	$33,762	$37,033	$44,381	$44,319
Net Cost per AHR Unit	$101,497	$91,116	$215,642	$173,957
Total Net AHR Cost for Project	$7,033,763	$11,726,618	$4,625,525	$7,462,752
Net AHR Cost as % of Total Dev. Cost	3%	3%	6%	5%

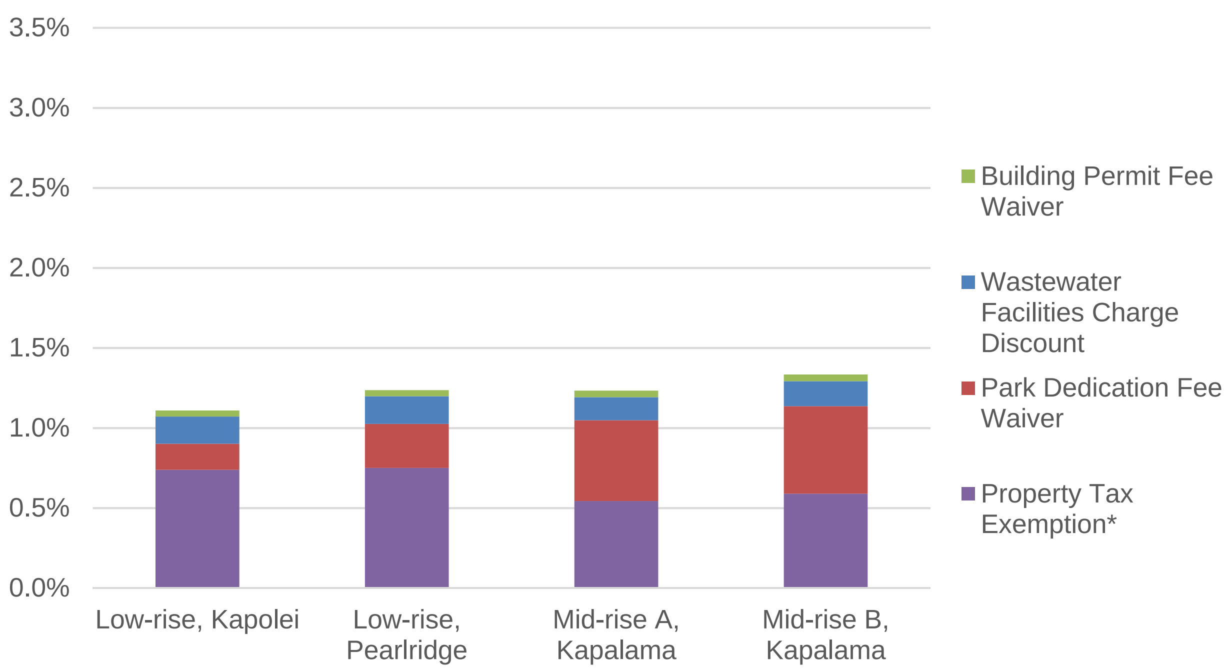
Source: Strategic Economics, 2016.

Figure 9: Financial Incentives as a Percent of Total Development Costs, Condominiums



Source: Strategic Economics, 2016
*present value

Figure 10: Financial Incentives as a Percent of Total Development Costs, Apartments



Source: Strategic Economics, 2016
*present value

IV. IMPLICATIONS FOR POLICY

This section provides a series of policy implications drawn from the analysis and key findings contained in this report. These policy implications are intended to assist City staff as they work with local affordable and market-rate developers to refine the proposed AHR and related policies.

An island-wide Affordable Housing Requirement should not be "one size fits all." The feasibility of residential development in the City and County of Honolulu varies widely by location and project type. While high-rise condominiums are currently feasible in stronger market locations (with or without the AHR), financial feasibility is more challenging for other building types and locations tested. Rental apartment projects face even steeper challenges: although Kapolei Lofts has recently begun to "prove the market" for apartments in Honolulu, the apartment prototypes tested in our analysis are unlikely to be feasible in the short-to-mid-term. In order to meet the goal of providing new workforce housing without stalling new development, implementation of the AHR and other affordable housing policies should acknowledge the range of development contexts and market conditions on the island.

Consider phasing or waiving the AHR in locations where development is not yet feasible. In order to reflect the challenges associated with developing in markets where development is not yet feasible, consider strategies to reduce the impact of the AHR in these locations. These strategies may include:

- *Phasing the requirement:* In market locations where development is not yet feasible, phasing the requirement in over several years will allow time for market conditions to improve, land prices to adjust, and other strategies to encourage development to be implemented. A phased approach to implementation will also allow City staff time to set up partnerships and protocol for long-term monitoring and stewardship of affordable units.
- *Waiving the requirement:* If the City wishes to encourage development of rental units, they might consider waiving the AHR for all rental projects. The city's current proposed AHR would exempt any affordable rental projects from also having to meet the AHR; this exemption could also be applied to market-rate rental projects. In this approach, market-rate condominium developers could still satisfy the AHR through the production of affordable rental units (but at a lower percentage share, as proposed in the affordable housing strategy to help incentivize rental unit production).

Leverage the potential to deliver affordable units sooner in stronger market locations. Stronger market locations, such as Ala Moana, have the potential to deliver workforce housing in the short-term. In order to leverage this market strength, consider setting a higher requirement for affordable housing as the "price" of additional density for high-rise condominiums with a floor-area-ratio of approximately 7.0 and above.

Adjust requirements for future zoning through Unilateral Agreements (UAs) and the Interim Planned Development – Transit (IPD-T) permits to align with the AHR. As proposed, projects under existing UAs would be exempted from the AHR. For future UAs, rules for rezoning could be aligned with the proposed AHR AMI percentages and longer period of affordability. Under IPD-T permits, projects should be required to meet the AHR in order to receive the additional density and height envisioned in the TOD plans.

Minimize the "soft costs" associated with implementation of the AHR to help improve feasibility. In addition to the cost of building new affordable units, developers report a number of "soft costs" associated with the AHR. Strategies to reduce these costs would contribute to project feasibility, and therefore the delivery of new affordable housing units. These strategies might include:

- Partner with a local non-profit to screen the rental and for-sale applicant pool and connect pre-certified tenants with housing options.
- Employ dedicated staff or partner with a local non-profit to monitor and steward rental and home-ownership units over the affordability period.
- Maximize the use of technology and real estate and transaction industry partnerships to qualify buyers and monitor compliance over time.
- Provide developers with clarity around the process of complying with the AHR, and the role of the developer, property manager and homeowner in long-term monitoring and stewardship.
- Allow any units meeting the proposed AMI and affordability term requirements to fulfill the AHR requirement, even if they are already fulfilling a state or federal affordable housing requirement, as long as significant capital is contributed by the developer to meet the AHR.

Strategies beyond the AHR are needed to enhance the ability of the market to deliver workforce housing and transit-oriented development. Given the challenges to the feasibility of market-rate development in many locations, as well as the limited funding sources available to affordable housing development, a wide range of strategies will be required to increase the supply of affordable housing in Honolulu. As described in more detail in the 2015 draft of the City and County's affordable housing strategy (*Housing Oahu: Affordable Housing Strategy),* these might include the use of project-level financial incentives such as the fee reductions and waivers described in this report, the use of private activity bonds coupled with 4% tax credits to fund affordable rental units or infrastructure improvements, the creation of a Community Land Trust or Land Acquisition fund, and an expedited permitting process for affordable units, among other strategies.

APPENDIX A: DETAILED DEVELOPMENT ASSUMPTIONS

This section provides a summary of the development assumptions used in the pro forma analysis, including building prototypes, land costs, construction costs, and sales prices and rental rates for residential units.

Development Costs

Strategic Economics developed a series of revenue and cost assumptions for use in the pro forma model, based on a combination of market research and developer interviews. Initial assumptions were made based on a review of local data sources, including Zillow, RedFin, Rent Jungle / Rainmaker Insights, and Costar, as well as recent market studies, and industry sources. Strategic Economics then vetted and refined these assumptions through interviews with eight local developers. The cost and revenue assumptions listed below are based on their ongoing feedback, as well as additional market research.

Land Costs

Land costs for the hypothetical development sites in Kapolei, Pearlridge, Kapalama, and Ala Moana are listed in Figure 11. As mentioned previously, the analysis did not include land cost adjustments to reflect the impact of the affordable housing requirement.

Figure 11. Land Cost Assumptions, per Square Foot

Location	Kapolei	Pearlridge	Kapalama	Ala Moana
Land Cost	$45	$75	$165	$375

Source: CoStar 2013-2015; Strategic Economics, 2016.

Direct Costs

Direct costs (Figure 12) for each of the building prototypes were estimated by type of cost, including site preparation and demolition, residential construction, and parking. These costs vary based on location, construction type, and tenure, as described below.

- **Site preparation and demolition.** Site preparation and demolition includes any costs associated with demolishing existing improvements, site remediation, and any other onsite work required prior to starting new construction. The cost per square foot of site preparation was assumed to be higher in the more highly urbanized area of Ala Moana, where additional work might be required to prepare a site for new development.

- **Residential construction costs.** Residential construction costs include all direct construction costs for the residential portion of the development. Cost assumptions are lower for the low-rise prototype, which uses steel frame construction, compared to the taller buildings that use cast-in-place concrete construction. Construction costs for rental apartment scenarios were set at 95 percent of their corresponding for-sale costs, assuming apartments would be delivered with certain lower grade finishes. Finally, construction costs were set slightly higher in the Pearlridge low-rise prototype, relative to the low-rise Kapolei prototype, in order to reflect the additional cost of elevators needed to service its six-story buildings.

- **Parking costs.** These costs include the provision of on-site parking in surface parking lots for the low-rise prototypes, and a concrete, multi-level podium parking for mid- and high-rise prototypes.

Figure 12. Direct Cost Assumptions

Cost Category	Unit of Measurement	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
Site Prep/Demo	Per s.f. of site area	$15	$15	$15	$15	$25	$25
Gross Residential Area (For-Sale)	Per s.f. of gross residential	$218	$224	$300	$300	$300	$300
Gross Residential Area (Apartment)	Per s.f. of gross residential	$207	$213	$219	$285	$285	$285
Parking	Per space	$8,000 for surface parking		$38,000 for podium parking			

Source: Strategic Economics, 2016.

Indirect Costs

The pro forma analysis accounted for the following indirect costs: city permits and fees; architecture, engineering, and other types of consulting services; taxes, insurance, legal, and accounting services; miscellaneous/other services; and sales and marketing of for-sale units. A customary contingency (as a percentage of direct costs) and an allowance for developer overhead were also included.

Estimates for city permits and fees (Figure 13) represent all significant development fees currently in effect for the City and County of Honolulu. Note that any waivers, discounts, and exemptions to these fees offered as affordable housing financial incentives are reflected in a different section of the pro forma.

Although not an official fee, the pro forma also includes a contribution to a "streetscape improvement fund" of 1 percent of direct construction costs. This is intended to represent the cost of streetscape improvements required by the City, or other needed infrastructure improvements.

Other indirect costs and fees are given in Figure 14, and are based on input from local developers.

Figure 13. City Permits and Fees per Unit

Cost Category	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
Wastewater Facilities Charge[a]	$6,520	$6,520	$6,520	$6,520	$6,520	$6,520
Park Dedication Fee[b]	$4,950	$8,250	$18,150	$18,150	$41,250	$41,250
Water System Facilities Charge[c]	$2,022	$1,522	$1,424	$1,424	$1,424	$1,424
Leeward Oahu School Impact Fee[d]	$4,334	$4,334	$0	$0	$0	$0
Ewa Impact Fee[e]	$1,245	$0	$0	$0	$0	$0
Building Permits and Fees[g]	$1,157	$1,102	$1,481	$1,419	$1,275	$1,232
Plan Review[h]	$231	$220	$296	$284	$255	$246
Streetscape Improvement Charge (Estimated)[i]	$2,871	$2,744	$3,633	$5,268	$3,128	$4,579
Total Fees	**$23,099**	**$24,472**	**$31,208**	**$32,781**	**$53,597**	**$55,005**

All amounts given are before financial incentives.
[a] Source: Revised Ordinances of Honolulu, Chapter 14 Appendix D. The per unit Wastewater Facility Charge is the average of the charges for FY 2015/2016 and FY 2016/2017.
[b] Source: Revised Ordinances of Honolulu, Chapter 22, Section 7.5. The park dedication rate for multi-family condominium and apartment developments is 110 square feet per unit.
[c] Source: Board of Water Supply. Assumes an average of 6 fixtures for one-bedroom units, 7.5 fixtures for two-bedroom units, and 9 fixtures for three-bedroom units.
[d] Source: Hawaii State Department of Education. Fee applies only to developments within the impact fee district.
[e] Source: Revised Ordinances of Honolulu, Chapter 33A. Fee applies only to developments within the impact fee district.
[f] Source: Department of Planning and Permitting. Set at 1.0% of direct costs.
[g] Source: Revised Ordinances of Honolulu, Table 18-A. Building Permit is $3,915 + $4.00 for every $1000 in construction costs.
[h] Source: Department of Planning and Permitting. Plan Review Fee is 20% of the building permit fee.
[i] Charges for streetscape improvements are not an official City fee. Values shown are an estimate of what would be paid for a typical project.

Figure 14. Indirect Cost Assumptions (other than City Fees)

Cost Category	Unit of Measurement	Cost Assumptions
Architecture, Engineering & Consulting	% of Direct Costs	6.0%
Taxes, Insurance, Legal & Accounting	% of Direct Costs	3.0%
Other	% of Direct Costs	3.0%
Sales and Marketing *(For-Sale units only)*	% of Sales Revenues	5.5%
Contingency	% of Direct Costs	5.0%
Developer Overheard	% of Total Development Cost	4.0%

Source: Strategic Economics, 2016.

Financing Costs

Financing cost assumptions are given in Figure 15. The term of the construction loan varies by the scale of the prototype to reflect the longer construction times for larger projects.

Figure 15. Financing Cost Assumptions

Cost Category	Unit of Measurement	Value
Amount Financed	% of Direct + Indirect Costs	60%
Average Outstanding Balance	% of Amount Financed	55%
Construction Loan Fee	% of Amount Financed	1.5%
Construction Interest (annual)	% of Avg Outstanding Balance	6.0%

Prototype	Term in Months
Low-rise, Kapolei	36
Low-rise, Pearlridge	48
Mid-rise, Kapalama	24
Mid-rise + CB bonus, Kapalama	24
High-rise, Ala Moana	30
High-rise + CB bonus, Ala Moana	30

Source: Strategic Economics, 2016.

Sales Prices and Rental Rates

This section describes the revenue assumptions for both market rate and affordable units.

Market Rate Units

Sales price assumptions for market rate condominiums are given in Figure 17, and apartment rents are given in Figure 18. The unit mix used to calculate the weighted average sales price and rents is shown in Figure 16. Strategic Economics estimated per square foot sales prices and rental rates based on a wide range of sources, including:

- **Recently-Built Comparables**. Strategic Economics assembled data for recently-built (since 2010) multi-family residential developments in submarkets that approximate the designated market locations of Kapolei, Pearlridge, Kapalama, and Ala Moana. Condominium sales data were drawn from Redfin, while comparable rental rates were drawn largely from Apartments.com and, in some cases, by contacting rental properties directly. Developments meeting these criteria, however, were relatively sparse and mainly concentrated around the Kapolei and Ala Moana submarkets.

- **Older Comparables.** Because some parts of Oahu have seen relatively little market-rate multi-family development in recent years, Strategic Economics leveraged data on older properties to the greatest extent possible. Based on sales and rental data from Redfin, Apartments.com, and Zillow for all multi-family properties in the submarkets of interest, SE conducted a regression analysis based on year built to estimate the market value of hypothetical units built in 2016 for each submarket. This data was used as a point of comparison for recently built comparables, as well as to model the price relationships between the unit types and geographic locations.

- **The "Shadow Market".** As rental apartment properties are less common in Oahu than in many metropolitan areas, Strategic Economics used data from condominiums listed as rentals in apartments.com and Zillow to supplement the data available from rental apartment developments.

- **Third-Party Market Research.** Strategic Economics validated its estimates of rental values, particularly the relationships between rents in the various locations studied, against average rents collected and published by Rainmaker Insights.

- **Developer Input.** Several developers provided feedback on a preliminary draft of sales prices and rental rales, and in some cases estimates were adjusted accordingly.

The assumptions for vacancy rates, capitalization rates, and operating expenses are based on past experience with similar pro forma analyses and consultation with developers familiar with local markets and business practices.

Estimating the Capitalized Value of Apartments

For rental projects, the estimated average rents were converted to one-time revenues using an income capitalization approach. This valuation approach first estimates the annual net operating income (NOI) of the apartment prototype, which is the difference between total project income (annual rents) and project expenses, including operating costs and vacancies. The NOI is then divided by the capitalization rate ("cap rate") to derive total project value.

Figure 16: Unit Mix Assumption, For-sale Condominiums and Rental Apartments

	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
One Bedroom	21%	21%	35%	35%	35%	35%
Two Bedroom	61%	61%	65%	65%	65%	65%
Three Bedroom	18%	18%	0%	0%	0%	0%

Source: Architects Hawaii, 2016; Strategic Economics, 2016.

Figure 17. Sales Price Assumptions for Market Rate For-Sale Condominium Units.

	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
Per s.f.						
One Bedroom	$494	$611	$691	$725	$912	$1,003
Two Bedroom	$430	$532	$601	$631	$793	$872
Three Bedroom	$414	$512	n/a	n/a	n/a	n/a
Weighted Avg	**$436**	**$539**	**$625**	**$656**	**$825**	**$907**
Per Unit						
One Bedroom	$346,873	$428,850	$466,921	$490,267	$521,515	$573,666
Two Bedroom	$436,215	$539,306	$593,411	$623,082	$662,794	$729,074
Three Bedroom	$549,542	$679,415	n/a	n/a	n/a	n/a
Weighted Avg	**$437,852**	**$541,330**	**$549,139**	**$576,596**	**$613,347**	**$674,681**

Source: Strategic Economics, 2016.

Figure 18. Rent and Valuation Assumptions for Market Rate Rental Apartment Units

	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama
Monthly Rent per s.f.				
One Bedroom	$3.12	$3.24	$3.41	$3.58
Two Bedroom	$2.71	$2.82	$2.97	$3.12
Three Bedroom	$2.61	$2.72	$2.86	$3.00
Weighted Average	**$2.75**	**$2.86**	**$3.09**	**$3.24**
Monthly Rent Per Unit				
One Bedroom	$2,187	$2,277	$2,306	$2,421
Two Bedroom	$2,751	$2,863	$2,934	$3,081
Three Bedroom	$3,465	$3,607	n/a	n/a
Weighted Average	**$2,761**	**$2,874**	**$2,714**	**$2,850**
Gross Annual Income	$33,133	$34,487	$32,570	$34,198
Less Vacancy (5% Vacancy Rate)	-$1,657	-$1,724	-$1,628	-$1,710
Less Expenses	-$5,300	-$5,300	-$6,000	-$6,000
Net Operating Income	$26,176	$27,462	$24,941	$26,488
Capitalized Value (5% Cap Rate)	**$523,518**	**$549,245**	**$498,825**	**$529,767**

Source: Strategic Economics, 2016.

Affordable Units

Strategic Economics based its revenue assumptions for affordable units (Figures 19 and 20) on the area median income (AMI) guidelines and mortgage financing assumptions determined in consultation with local developers and home finance professional experienced with affordable housing.

<u>For-sale Condominiums</u>

For-sale units were assumed to be purchased with a 30-year fixed rate mortgage with a five percent down payment and an interest rate of 5.25 percent.[7] In order to estimate the sales price for the affordable condominium units, Strategic Economics first estimated the sales price set by the DPP, based on the number of bedrooms in each unit. The one-bedroom sales price was calculated as the average affordability level for families of one to three persons; the two-bedroom price is the average of the levels for two to five persons, and the three-bedroom price is the average of the levels for three to seven persons.

Strategic Economics made two adjustments to the maximum sales prices described above:

1) Prices were adjusted to reflect the fact that not all units will be sold to buyers with the maximum allowable household incomes. Because a buyer at the maximum allowable income level cannot always be found, affordable units are sometimes sold to households with incomes somewhat lower than the maximum. To account for this, Strategic Economics reduced the assumed AMI level of the buyer by five percentage points. (E.g., condominiums allowed to be sold to a household up to 120 percent of AMI are assumed to have sold on average at a price affordable to a buyer at 115 percent of AMI; condos at 100 percent of AMI are sold at 95 percent of AMI.)

2) In locations where the affordable prices are close to the current market prices, the affordable prices were further adjusted downward to ensure that the affordable units are sold at a discount compared to units with no income restrictions (referred to as "attainable prices"). In Kapolei and Pearlridge, the calculated affordable price and the estimated market price are within 20 percent of each other. In these locations, the attainable prices were capped at 80 percent of market rate prices. This 20 percent discount from the market reflects the need to compete with local market-rate units, both on price and on the potential for future appreciation. This calculation is based on a review of the price gap between affordable and market-rate units in mixed-income developments in "naturally affordable areas," such as the Olina at Mehana, in Kapolei. Figure 28 summarizes both the "affordable" prices based on AMI guidelines, and the "attainable" prices used in the analysis.

Figure 19. Weighted Average Affordable and Attainable Sales Prices by Prototype

	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama	High-rise A, Ala Moana	High-rise B, Ala Moana
Affordable Sales Price (Wtd Avg)*	$446,519	$446,519	$425,236	$425,236	$425,236	$425,236
Attainable Sales Price (Wtd Avg)*	$350,282	$433,064	$425,236	$425,236	$425,236	$425,236

* Represents the weighted average of prototype unit mix and sales at 95 percent of AMI and 105 percent of AMI.
Source: Department of Planning and Permitting, 2015; Strategic Economics, 2016.

[7] The mortgage loan assumes a 5.25% interest rate, based on interviews with developers and home-financing professionals. This rate is somewhat higher than a typical buyer would ordinarily qualify for, because generally buyers of income-restricted units need to be pre-approved for a mortgage at a higher rate than what they eventually receive.

Rental Apartments

The affordable rents for each unit type are given in Figure 29, and are based solely on DPP guidelines. They represent the affordable rents at 80 percent of AMI, weighted by the unit mix in each prototype.

Figure 20. Weighted Average Affordable Rents by Prototype at 80 Percent of Area Median Income

	Low-rise, Kapolei	Low-rise, Pearlridge	Mid-rise A, Kapalama	Mid-rise B, Kapalama
Affordable Monthly Rent	$1,874	$1,874	$1,753	$1,753

Source: Department of Planning and Permitting, 2015; Strategic Economic, 2016.

APPENDIX B: PRO FORMA ANALYSES

Prototype				
Location	Kapolei			
Format	Low-rise, Large Site			
Tenure	For-Sale Condo			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$202,287,764	$161,830,211	$202,287,764	$202,287,764
Affordable Units		$32,366,042	$40,457,553	
Less Sales and Marketing	-$11,125,827	-$10,680,794	-$13,350,992	-$11,125,827
Total Sales Value or Capitalized Value	**$191,161,937**	**$183,515,459**	**$229,394,324**	**$191,161,937**
Net Operating Income				
Project Costs				
Direct Costs				
Site Prep/Demo	$9,801,000	$9,801,000	$9,801,000	$9,801,000
Gross Residential Area	$118,360,904	$118,360,904	$118,360,904	$118,360,904
Parking	$7,424,000	$7,424,000	$7,424,000	$7,424,000
Subtotal Direct Costs	**$135,585,904**	**$135,585,904**	**$135,585,904**	**$135,585,904**
Indirect Costs				
City Building and Impact Fees	$10,671,640	$10,671,640	$10,671,640	$10,671,640
Arch, Engineering & Consulting	$8,135,154	$8,135,154	$8,135,154	$8,135,154
Taxes, Insurance, Legal & Accounting	$4,067,577	$4,067,577	$4,067,577	$4,067,577
Other	$4,067,577	$4,067,577	$4,067,577	$4,067,577
Subtotal Indirect Costs	**$26,941,949**	**$26,941,949**	**$26,941,949**	**$26,941,949**
Contingency	**$6,779,295**	**$6,779,295**	**$6,779,295**	**$6,779,295**
Financing Costs				
Construction Loan Fee	$1,462,751	$1,462,751	$1,462,751	$1,462,751
Construction Interest	$9,654,154	$9,654,154	$9,654,154	$9,654,154
Subtotal Financing Costs	**$11,116,905**	**$11,116,905**	**$11,116,905**	**$11,116,905**
Developer Overhead	$8,742,794	$8,742,794	$8,742,794	$8,742,794
Land Costs	$29,403,000	$29,403,000	$29,403,000	$29,403,000
Total On-site Development Cost	**$218,569,846**	**$218,569,846**	**$218,569,846**	**$218,569,846**
Off-site housing cost or in-lieu fee			$54,642,462	$20,886,466
Total Development Cost	**$218,569,846**	**$218,569,846**	**$273,212,308**	**$239,456,312**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$477,847	$597,308	$0
Park Dedication Fee Waiver	$0	$457,380	$571,725	$0
Building Permit Fee Waiver	$0	$106,885	$133,606	$0
Property Tax Exemption (Capitalized Value)	$0	$2,293,908	$2,867,385	$0
Total AHR Incentives	$0	$3,336,019	$4,170,024	$0
Feasibility				
Net Revenue				
Before Incentives	-$27,407,909	-$35,054,387	-$43,817,984	-$48,294,375
With all Incentives	-$27,407,909	-$31,718,368	-$39,647,960	-$48,294,375
Performance Metrics	**Return on Cost**			
Before Incentives	-13%	-16%	-16%	-20%
With all Incentives	-13%	-15%	-15%	-20%

Prototype				
Location	Pearlridge			
Format	Low-rise, Large Site			
Tenure	For-Sale Condo			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$464,461,286	$371,569,029	$464,461,286	$464,461,286
Affordable Units		$74,313,806	$92,892,257	
Less Sales and Marketing	-$25,545,371	-$24,523,556	-$30,654,445	-$25,545,371
Total Sales Value or Capitalized Value	**$438,915,915**	**$421,359,279**	**$526,699,099**	**$438,915,915**
Net Operating Income				
Project Costs				
Direct Costs				
Site Prep/Demo	$9,801,000	$9,801,000	$9,801,000	$9,801,000
Gross Residential Area	$229,254,623	$229,254,623	$229,254,623	$229,254,623
Parking	$7,424,000	$7,424,000	$7,424,000	$7,424,000
Subtotal Direct Costs	**$246,479,623**	**$246,479,623**	**$246,479,623**	**$246,479,623**
Indirect Costs				
City Building and Impact Fees	$21,071,254	$21,071,254	$21,071,254	$21,071,254
Arch, Engineering & Consulting	$14,788,777	$14,788,777	$14,788,777	$14,788,777
Taxes, Insurance, Legal & Accounting	$7,394,389	$7,394,389	$7,394,389	$7,394,389
Other	$7,394,389	$7,394,389	$7,394,389	$7,394,389
Subtotal Indirect Costs	**$50,648,809**	**$50,648,809**	**$50,648,809**	**$50,648,809**
Contingency	**$12,323,981**	**$12,323,981**	**$12,323,981**	**$12,323,981**
Financing Costs				
Construction Loan Fee	$2,674,156	$2,674,156	$2,674,156	$2,674,156
Construction Interest	$23,532,572	$23,532,572	$23,532,572	$23,532,572
Subtotal Financing Costs	**$26,206,728**	**$26,206,728**	**$26,206,728**	**$26,206,728**
Developer Overhead	$16,027,673	$16,027,673	$16,027,673	$16,027,673
Land Costs	$49,005,000	$49,005,000	$49,005,000	$49,005,000
Total On-site Development Cost	**$400,691,813**	**$400,691,813**	**$400,691,813**	**$400,691,813**
Off-site housing cost or in-lieu fee			$100,172,953	$38,789,150
Total Development Cost	**$400,691,813**	**$400,691,813**	**$500,864,767**	**$439,480,964**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$887,429	$1,109,287	$0
Park Dedication Fee Waiver	$0	$1,415,700	$1,769,625	$0
Building Permit Fee Waiver	$0	$193,382	$241,727	$0
Property Tax Exemption (Capitalized Value)	$0	$4,260,114	$5,325,143	$0
Total AHR Incentives	$0	$6,756,625	$8,445,782	$0
Feasibility				
Net Revenue				
Before Incentives	$38,224,102	$20,667,466	$25,834,332	-$565,048
With all Incentives	$38,224,102	$27,424,091	$34,280,114	-$565,048
Performance Metrics	**Return on Cost**			
Before Incentives	10%	5%	5%	0%
With all Incentives	10%	7%	7%	0%

Prototype				
Location	Kapalama			
Format	Mid-rise A			
Tenure	For-Sale Condo			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$78,526,941	$62,821,553	$78,526,941	$78,526,941
Affordable Units		$12,161,738	$15,202,173	
Less Sales and Marketing	-$4,318,982	-$4,124,081	-$5,155,101	-$4,318,982
Total Sales Value or Capitalized Value	**$74,207,960**	**$70,859,211**	**$88,574,013**	**$74,207,960**
Net Operating Income				
Project Costs				
Direct Costs				
Site Prep/Demo	$653,400	$653,400	$653,400	$653,400
Gross Residential Area	$45,366,900	$45,366,900	$45,366,900	$45,366,900
Parking	$7,068,000	$7,068,000	$7,068,000	$7,068,000
Subtotal Direct Costs	**$53,088,300**	**$53,088,300**	**$53,088,300**	**$53,088,300**
Indirect Costs				
City Building and Impact Fees	$4,462,677	$4,462,677	$4,462,677	$4,462,677
Arch, Engineering & Consulting	$3,185,298	$3,185,298	$3,185,298	$3,185,298
Taxes, Insurance, Legal & Accounting	$1,592,649	$1,592,649	$1,592,649	$1,592,649
Other	$1,592,649	$1,592,649	$1,592,649	$1,592,649
Subtotal Indirect Costs	**$10,833,273**	**$10,833,273**	**$10,833,273**	**$10,833,273**
Contingency	**$2,654,415**	**$2,654,415**	**$2,654,415**	**$2,654,415**
Financing Costs				
Construction Loan Fee	$575,294	$575,294	$575,294	$575,294
Construction Interest	$2,531,294	$2,531,294	$2,531,294	$2,531,294
Subtotal Financing Costs	**$3,106,588**	**$3,106,588**	**$3,106,588**	**$3,106,588**
Developer Overhead	$3,202,916	$3,202,916	$3,202,916	$3,202,916
Land Costs	$7,187,400	$7,187,400	$7,187,400	$7,187,400
Total On-site Development Cost	**$80,072,892**	**$80,072,892**	**$80,072,892**	**$80,072,892**
Off-site housing cost or in-lieu fee			$20,018,223	$5,655,078
Total Development Cost	**$80,072,892**	**$80,072,892**	**$100,091,115**	**$85,727,970**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$147,905	$184,881	$0
Park Dedication Fee Waiver	$0	$519,090	$648,863	$0
Building Permit Fee Waiver	$0	$42,346	$52,933	$0
Property Tax Exemption (Capitalized Value)	$0	$676,175	$845,219	$0
Total AHR Incentives	$0	$1,385,516	$1,731,896	$0
Feasibility				
Net Revenue				
Before Incentives	-$5,864,933	-$9,213,682	-$11,517,102	-$11,520,011
With all Incentives	-$5,864,933	-$7,828,165	-$9,785,207	-$11,520,011
Performance Metrics	**Return on Cost**			
Before Incentives	-7%	-12%	-12%	-13%
With all Incentives	-7%	-10%	-10%	-13%

Prototype				
Location	Kapalama			
Format	Mid-rise B			
Tenure	For-Sale Condo			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$164,906,577	$131,925,262	$164,906,577	$164,906,577
Affordable Units		$24,323,477	$30,404,346	
Less Sales and Marketing	-$9,069,862	-$8,593,681	-$10,742,101	-$9,069,862
Total Sales Value or Capitalized Value	**$155,836,715**	**$147,655,058**	**$184,568,822**	**$155,836,715**
Net Operating Income				
Project Costs				
Direct Costs				
Site Prep/Demo	$653,400	$653,400	$653,400	$653,400
Gross Residential Area	$90,313,800	$90,313,800	$90,313,800	$90,313,800
Parking	$11,742,000	$11,742,000	$11,742,000	$11,742,000
Subtotal Direct Costs	**$102,709,200**	**$102,709,200**	**$102,709,200**	**$102,709,200**
Indirect Costs				
City Building and Impact Fees	$8,873,043	$8,873,043	$8,873,043	$8,873,043
Arch, Engineering & Consulting	$6,162,552	$6,162,552	$6,162,552	$6,162,552
Taxes, Insurance, Legal & Accounting	$3,081,276	$3,081,276	$3,081,276	$3,081,276
Other	$3,081,276	$3,081,276	$3,081,276	$3,081,276
Subtotal Indirect Costs	**$21,198,147**	**$21,198,147**	**$21,198,147**	**$21,198,147**
Contingency	**$5,135,460**	**$5,135,460**	**$5,135,460**	**$5,135,460**
Financing Costs				
Construction Loan Fee	$1,115,166	$1,115,166	$1,115,166	$1,115,166
Construction Interest	$4,906,731	$4,906,731	$4,906,731	$4,906,731
Subtotal Financing Costs	**$6,021,897**	**$6,021,897**	**$6,021,897**	**$6,021,897**
Developer Overhead	$5,927,171	$5,927,171	$5,927,171	$5,927,171
Land Costs	$7,187,400	$7,187,400	$7,187,400	$7,187,400
Total On-site Development Cost	**$148,179,275**	**$148,179,275**	**$148,179,275**	**$148,179,275**
Off-site housing cost or in-lieu fee			$37,044,819	$11,310,156
Total Development Cost	**$148,179,275**	**$148,179,275**	**$185,224,093**	**$159,489,431**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$295,810	$369,762	$0
Park Dedication Fee Waiver	$0	$1,038,180	$1,297,725	$0
Building Permit Fee Waiver	$0	$81,144	$101,430	$0
Property Tax Exemption (Capitalized Value)	$0	$1,352,350	$1,690,438	$0
Total AHR Incentives	$0	$2,767,484	$3,459,355	$0
Feasibility				
Net Revenue				
Before Incentives	$7,657,440	-$524,217	-$655,271	-$3,652,716
With all Incentives	$7,657,440	$2,243,267	$2,804,084	-$3,652,716
Performance Metrics	**Return on Cost**			
Before Incentives	5%	0%	0%	-2%
With all Incentives	5%	2%	2%	-2%

Prototype				
Location	Ala Moana			
Format	High-rise A			
Tenure	For-Sale Condo			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$102,428,870	$81,943,096	$102,428,870	$102,428,870
Affordable Units		$14,202,869	$17,753,587	
Less Sales and Marketing	-$5,633,588	-$5,288,028	-$6,610,035	-$5,633,588
Total Sales Value or Capitalized Value	**$96,795,282**	**$90,857,937**	**$113,572,421**	**$96,795,282**
Net Operating Income				
Project Costs				
Direct Costs				
Site Prep/Demo	$1,089,000	$1,089,000	$1,089,000	$1,089,000
Gross Residential Area	$44,943,600	$44,943,600	$44,943,600	$44,943,600
Parking	$7,334,000	$7,334,000	$7,334,000	$7,334,000
Subtotal Direct Costs	**$53,366,600**	**$53,366,600**	**$53,366,600**	**$53,366,600**
Indirect Costs				
City Building and Impact Fees	$8,950,671	$8,950,671	$8,950,671	$8,950,671
Arch, Engineering & Consulting	$3,201,996	$3,201,996	$3,201,996	$3,201,996
Taxes, Insurance, Legal & Accounting	$1,600,998	$1,600,998	$1,600,998	$1,600,998
Other	$1,600,998	$1,600,998	$1,600,998	$1,600,998
Subtotal Indirect Costs	**$15,354,663**	**$15,354,663**	**$15,354,663**	**$15,354,663**
Contingency	**$2,668,330**	**$2,668,330**	**$2,668,330**	**$2,668,330**
Financing Costs				
Construction Loan Fee	$618,491	$618,491	$618,491	$618,491
Construction Interest	$3,401,703	$3,401,703	$3,401,703	$3,401,703
Subtotal Financing Costs	**$4,020,194**	**$4,020,194**	**$4,020,194**	**$4,020,194**
Developer Overhead	$3,822,699	$3,822,699	$3,822,699	$3,822,699
Land Costs	$16,335,000	$16,335,000	$16,335,000	$16,335,000
Total On-site Development Cost	**$95,567,487**	**$95,567,487**	**$95,567,487**	**$95,567,487**
Off-site housing cost or in-lieu fee			$23,891,872	$5,588,154
Total Development Cost	**$95,567,487**	**$95,567,487**	**$119,459,358**	**$101,155,641**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$172,728	$215,910	$0
Park Dedication Fee Waiver	$0	$1,377,750	$1,722,188	$0
Building Permit Fee Waiver	$0	$42,577	$53,222	$0
Property Tax Exemption (Capitalized Value)	$0	$789,659	$987,074	$0
Total AHR Incentives	$0	$2,382,715	$2,978,393	$0
Feasibility				
Net Revenue				
Before Incentives	$1,227,795	-$4,709,550	-$5,886,937	-$4,360,359
With all Incentives	$1,227,795	-$2,326,835	-$2,908,544	-$4,360,359
Performance Metrics	**Return on Cost**			
Before Incentives	1%	-5%	-5%	-4%
With all Incentives	1%	-2%	-2%	-4%

Prototype				
Location	Ala Moana			
Format	High-rise B			
Tenure	For-Sale Condo			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$231,415,644	$185,132,515	$231,415,644	$231,415,644
Affordable Units		$29,171,163	$36,463,954	
Less Sales and Marketing	-$12,727,860	-$11,786,702	-$14,733,378	-$12,727,860
Total Sales Value or Capitalized Value	**$218,687,783**	**$202,516,976**	**$253,146,220**	**$218,687,783**
Net Operating Income				
Project Costs				
Direct Costs				
Site Prep/Demo	$1,089,000	$1,089,000	$1,089,000	$1,089,000
Gross Residential Area	$91,503,600	$91,503,600	$91,503,600	$91,503,600
Parking	$14,402,000	$14,402,000	$14,402,000	$14,402,000
Subtotal Direct Costs	**$106,994,600**	**$106,994,600**	**$106,994,600**	**$106,994,600**
Indirect Costs				
City Building and Impact Fees	$18,343,265	$18,343,265	$18,343,265	$18,343,265
Arch, Engineering & Consulting	$6,419,676	$6,419,676	$6,419,676	$6,419,676
Taxes, Insurance, Legal & Accounting	$3,209,838	$3,209,838	$3,209,838	$3,209,838
Other	$3,209,838	$3,209,838	$3,209,838	$3,209,838
Subtotal Indirect Costs	**$31,182,617**	**$31,182,617**	**$31,182,617**	**$31,182,617**
Contingency	**$5,349,730**	**$5,349,730**	**$5,349,730**	**$5,349,730**
Financing Costs				
Construction Loan Fee	$1,243,595	$1,243,595	$1,243,595	$1,243,595
Construction Interest	$6,839,772	$6,839,772	$6,839,772	$6,839,772
Subtotal Financing Costs	**$8,083,367**	**$8,083,367**	**$8,083,367**	**$8,083,367**
Developer Overhead	$6,997,721	$6,997,721	$6,997,721	$6,997,721
Land Costs	$16,335,000	$16,335,000	$16,335,000	$16,335,000
Total On-site Development Cost	**$174,943,036**	**$174,943,036**	**$174,943,036**	**$174,943,036**
Off-site housing cost or in-lieu fee			$43,735,759	$11,477,466
Total Development Cost	**$174,943,036**	**$174,943,036**	**$218,678,794**	**$186,420,502**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$354,765	$443,456	$0
Park Dedication Fee Waiver	$0	$2,829,750	$3,537,188	$0
Building Permit Fee Waiver	$0	$84,549	$105,686	$0
Property Tax Exemption (Capitalized Value)	$0	$1,621,875	$2,027,343	$0
Total AHR Incentives	$0	$4,890,938	$6,113,673	$0
Feasibility				
Net Revenue				
Before Incentives	$43,744,748	$27,573,940	$34,467,425	$32,267,282
With all Incentives	$43,744,748	$32,464,878	$40,581,098	$32,267,282
Performance Metrics	**Return on Cost**			
Before Incentives	25%	16%	16%	17%
With all Incentives	25%	19%	19%	17%

Prototype				
Location	Kapolei			
Format	Low-rise, Large Site			
Tenure	Rental Apartment			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$241,865,448	$205,585,630	$241,865,448	$241,865,448
Affordable Units		$22,259,251	$22,259,251	
Less Sales and Marketing				
Total Sales Value or Capitalized Value	**$241,865,448**	**$227,844,882**	**$264,124,699**	**$241,865,448**
Net Operating Income	$12,093,272	$11,392,244	$13,206,235	$12,093,272
Project Costs				
Direct Costs				
Site Prep/Demo	$9,801,000	$9,801,000	$9,801,000	$9,801,000
Gross Residential Area	$112,442,858	$112,442,858	$112,442,858	$112,442,858
Parking	$7,424,000	$7,424,000	$7,424,000	$7,424,000
Subtotal Direct Costs	**$129,667,858**	**$129,667,858**	**$129,667,858**	**$129,667,858**
Indirect Costs				
City Building and Impact Fees	$10,671,640	$10,671,640	$10,671,640	$10,671,640
Arch, Engineering & Consulting	$7,780,071	$7,780,071	$7,780,071	$7,780,071
Taxes, Insurance, Legal & Accounting	$3,890,036	$3,890,036	$3,890,036	$3,890,036
Other	$3,890,036	$3,890,036	$3,890,036	$3,890,036
Subtotal Indirect Costs	**$26,231,783**	**$26,231,783**	**$26,231,783**	**$26,231,783**
Contingency	**$6,483,393**	**$6,483,393**	**$6,483,393**	**$6,483,393**
Financing Costs				
Construction Loan Fee	$1,403,097	$1,403,097	$1,403,097	$1,403,097
Construction Interest	$9,260,439	$9,260,439	$9,260,439	$9,260,439
Subtotal Financing Costs	**$10,663,535**	**$10,663,535**	**$10,663,535**	**$10,663,535**
Developer Overhead	$8,435,399	$8,435,399	$8,435,399	$8,435,399
Land Costs	$29,403,000	$29,403,000	$29,403,000	$29,403,000
Total On-site Development Cost	**$210,884,969**	**$210,884,969**	**$210,884,969**	**$210,884,969**
Off-site housing cost or in-lieu fee			$31,632,745	$20,886,466
Total Development Cost	**$210,884,969**	**$210,884,969**	**$242,517,714**	**$231,771,434**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$358,385	$358,385	$0
Park Dedication Fee Waiver	$0	$343,035	$343,035	$0
Building Permit Fee Waiver	$0	$80,163	$80,163	$0
Property Tax Exemption (Capitalized Value)	$0	$1,558,148	$1,558,148	$0
Total AHR Incentives	$0	$2,339,731	$2,339,731	$0
Feasibility				
Net Revenue				
Before Incentives	$30,980,479	$16,959,913	$21,606,985	$10,094,013
With all Incentives	$30,980,479	$19,299,644	$23,946,716	$10,094,013
Performance Metrics	**Yield on Cost**			
Before Incentives	5.73%	5.40%	5.45%	5.22%
With all Incentives	5.73%	5.46%	5.50%	5.22%

Prototype				
Location	Pearlridge			
Format	Low-rise, Large Site			
Tenure	Rental Apartment			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$471,252,096	$400,564,282	$471,252,096	$471,252,096
Affordable Units		$41,338,610	$41,338,610	
Less Sales and Marketing				
Total Sales Value or Capitalized Value	**$471,252,096**	**$441,902,891**	**$512,590,706**	**$471,252,096**
Net Operating Income	$23,562,605	$22,095,145	$25,629,535	$23,562,605
Project Costs				
Direct Costs				
Site Prep/Demo	$9,801,000	$9,801,000	$9,801,000	$9,801,000
Gross Residential Area	$217,791,892	$217,791,892	$217,791,892	$217,791,892
Parking	$7,424,000	$7,424,000	$7,424,000	$7,424,000
Subtotal Direct Costs	**$235,016,892**	**$235,016,892**	**$235,016,892**	**$235,016,892**
Indirect Costs				
City Building and Impact Fees	$21,071,254	$21,071,254	$21,071,254	$21,071,254
Arch, Engineering & Consulting	$14,101,014	$14,101,014	$14,101,014	$14,101,014
Taxes, Insurance, Legal & Accounting	$7,050,507	$7,050,507	$7,050,507	$7,050,507
Other	$7,050,507	$7,050,507	$7,050,507	$7,050,507
Subtotal Indirect Costs	**$49,273,281**	**$49,273,281**	**$49,273,281**	**$49,273,281**
Contingency	**$11,750,845**	**$11,750,845**	**$11,750,845**	**$11,750,845**
Financing Costs				
Construction Loan Fee	$2,558,612	$2,558,612	$2,558,612	$2,558,612
Construction Interest	$22,515,782	$22,515,782	$22,515,782	$22,515,782
Subtotal Financing Costs	**$25,074,393**	**$25,074,393**	**$25,074,393**	**$25,074,393**
Developer Overhead	$15,421,684	$15,421,684	$15,421,684	$15,421,684
Land Costs	$49,005,000	$49,005,000	$49,005,000	$49,005,000
Total On-site Development Cost	**$385,542,095**	**$385,542,095**	**$385,542,095**	**$385,542,095**
Off-site housing cost or in-lieu fee			$57,831,314	$38,789,150
Total Development Cost	**$385,542,095**	**$385,542,095**	**$443,373,409**	**$424,331,245**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$665,572	$665,572	$0
Park Dedication Fee Waiver	$0	$1,061,775	$1,061,775	$0
Building Permit Fee Waiver	$0	$145,036	$145,036	$0
Property Tax Exemption (Capitalized Value)	$0	$2,893,703	$2,893,703	$0
Total AHR Incentives	$0	$4,766,086	$4,766,086	$0
Feasibility				
Net Revenue				
Before Incentives	$85,710,001	$56,360,797	$69,217,297	$46,920,851
With all Incentives	$85,710,001	$61,126,883	$73,983,383	$46,920,851
Performance Metrics	**Yield on Cost**			
Before Incentives	6.11%	5.73%	5.78%	5.55%
With all Incentives	6.11%	5.80%	5.84%	5.55%

Prototype				
Location	Kapalama			
Format	Mid-rise A			
Tenure	Rental Apartment			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$71,332,021	$60,632,218	$71,332,021	$71,332,021
Affordable Units		$5,999,466	$5,999,466	
Less Sales and Marketing				
Total Sales Value or Capitalized Value	**$71,332,021**	**$66,631,684**	**$77,331,487**	**$71,332,021**
Net Operating Income	$3,566,601	$3,331,584	$3,866,574	$3,566,601
Project Costs				
Direct Costs				
Site Prep/Demo	$653,400	$653,400	$653,400	$653,400
Gross Residential Area	$43,098,555	$43,098,555	$43,098,555	$43,098,555
Parking	$7,068,000	$7,068,000	$7,068,000	$7,068,000
Subtotal Direct Costs	**$50,819,955**	**$50,819,955**	**$50,819,955**	**$50,819,955**
Indirect Costs				
City Building and Impact Fees	$4,462,677	$4,462,677	$4,462,677	$4,462,677
Arch, Engineering & Consulting	$3,049,197	$3,049,197	$3,049,197	$3,049,197
Taxes, Insurance, Legal & Accounting	$1,524,599	$1,524,599	$1,524,599	$1,524,599
Other	$1,524,599	$1,524,599	$1,524,599	$1,524,599
Subtotal Indirect Costs	**$10,561,072**	**$10,561,072**	**$10,561,072**	**$10,561,072**
Contingency	**$2,540,998**	**$2,540,998**	**$2,540,998**	**$2,540,998**
Financing Costs				
Construction Loan Fee	$552,429	$552,429	$552,429	$552,429
Construction Interest	$2,430,689	$2,430,689	$2,430,689	$2,430,689
Subtotal Financing Costs	**$2,983,118**	**$2,983,118**	**$2,983,118**	**$2,983,118**
Developer Overhead	$3,087,189	$3,087,189	$3,087,189	$3,087,189
Land Costs	$7,187,400	$7,187,400	$7,187,400	$7,187,400
Total On-site Development Cost	**$77,179,732**	**$77,179,732**	**$77,179,732**	**$77,179,732**
Off-site housing cost or in-lieu fee			$11,576,960	$5,655,078
Total Development Cost	**$77,179,732**	**$77,179,732**	**$88,756,691**	**$82,834,810**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$110,929	$110,929	$0
Park Dedication Fee Waiver	$0	$389,318	$389,318	$0
Building Permit Fee Waiver	$0	$31,760	$31,760	$0
Property Tax Exemption (Capitalized Value)	$0	$419,963	$419,963	$0
Total AHR Incentives	$0	$951,969	$951,969	$0
Feasibility				
Net Revenue				
Before Incentives	-$5,847,711	-$10,548,048	-$11,425,204	-$11,502,789
With all Incentives	-$5,847,711	-$9,596,079	-$10,473,236	-$11,502,789
Performance Metrics	**Yield on Cost**			
Before Incentives	4.62%	4.32%	4.36%	4.31%
With all Incentives	4.62%	4.37%	4.40%	4.31%

Prototype				
Location	Kapalama			
Format	Mid-rise B			
Tenure	Rental Apartment			
	Affordable Housing Requirement Option			
	No AHR	**On-site**	**Off-site**	**In-lieu fee**
Revenues				
Sales Value or Capitalized Value				
Market Rate Units	$151,513,244	$128,786,257	$151,513,244	$151,513,244
Affordable Units		$11,998,933	$11,998,933	
Less Sales and Marketing				
Total Sales Value or Capitalized Value	**$151,513,244**	**$140,785,190**	**$163,512,176**	**$151,513,244**
Net Operating Income	$7,575,662	$7,039,259	$8,175,609	$7,575,662
Project Costs				
Direct Costs				
Site Prep/Demo	$653,400	$653,400	$653,400	$653,400
Gross Residential Area	$85,798,110	$85,798,110	$85,798,110	$85,798,110
Parking	$11,742,000	$11,742,000	$11,742,000	$11,742,000
Subtotal Direct Costs	**$98,193,510**	**$98,193,510**	**$98,193,510**	**$98,193,510**
Indirect Costs				
City Building and Impact Fees	$8,873,043	$8,873,043	$8,873,043	$8,873,043
Arch, Engineering & Consulting	$5,891,611	$5,891,611	$5,891,611	$5,891,611
Taxes, Insurance, Legal & Accounting	$2,945,805	$2,945,805	$2,945,805	$2,945,805
Other	$2,945,805	$2,945,805	$2,945,805	$2,945,805
Subtotal Indirect Costs	**$20,656,264**	**$20,656,264**	**$20,656,264**	**$20,656,264**
Contingency	**$4,909,676**	**$4,909,676**	**$4,909,676**	**$4,909,676**
Financing Costs				
Construction Loan Fee	$1,069,648	$1,069,648	$1,069,648	$1,069,648
Construction Interest	$4,706,451	$4,706,451	$4,706,451	$4,706,451
Subtotal Financing Costs	**$5,776,099**	**$5,776,099**	**$5,776,099**	**$5,776,099**
Developer Overhead	$5,696,790	$5,696,790	$5,696,790	$5,696,790
Land Costs	$7,187,400	$7,187,400	$7,187,400	$7,187,400
Total On-site Development Cost	**$142,419,738**	**$142,419,738**	**$142,419,738**	**$142,419,738**
Off-site housing cost or in-lieu fee			$21,362,961	$11,310,156
Total Development Cost	**$142,419,738**	**$142,419,738**	**$163,782,699**	**$153,729,894**
Affordable Housing Requirement Incentives				
Wastewater Facilities Charge Discount	$0	$221,857	$221,857	$0
Park Dedication Fee Waiver	$0	$778,635	$778,635	$0
Building Permit Fee Waiver	$0	$60,858	$60,858	$0
Property Tax Exemption (Capitalized Value)	$0	$839,925	$839,925	$0
Total AHR Incentives	$0	$1,901,276	$1,901,276	$0
Feasibility				
Net Revenue				
Before Incentives	$9,093,506	-$1,634,548	-$270,522	-$2,216,650
With all Incentives	$9,093,506	$266,727	$1,630,753	-$2,216,650
Performance Metrics	**Yield on Cost**			
Before Incentives	5.32%	4.94%	4.99%	4.93%
With all Incentives	5.32%	5.01%	5.05%	4.93%