ALOHA Homes Implementation Study

PREPARED FOR

HAWAI'I HOUSING FINANCE AND DEVELOPMENT CORPORATION
(HHFDC)

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Executive Summary

One of the defining public policy issues of our day is the inadequacy of housing for Hawai‘i's families. The cost of housing is most often cited as the motivation for out-migration of families seeking better economic opportunities in other states and as a primary cause for our high rate of homelessness.

The ALOHA Homes Implementation Study aims to ascertain the feasibility of implementing the proposed ALOHA Homes program and, if feasible, formulate an implementation plan. As part of our research we evaluated key components of the Singapore leasehold housing model to see which could be applied in Hawai'i. Singapore was chosen as an inspiration for the ALOHA Homes bill because it has successfully provided high quality and affordable housing for its more than 5 million citizens, and virtually eliminated homelessness.

In our approach, we did not simply comment on the viability of the Singapore model but sought to provide solutions that could work in Hawai‘i. Our research team met with housing experts from developers, to manufacturers, to administrators, to policy problem-solvers in order to assemble best-practices and lessons learned applicable to Hawai‘i's unique circumstances. And we asked local consumers, who represent the target group for ALOHA Homes purchases, to weigh in on a proposed affordable leasehold model.

We found that many of the provisions proposed in the ALOHA Homes model would have the potential to address housing needs of middle-income earners that are currently priced out of the housing market and have very limited opportunities for homeownership.

In our analysis we found several key components of the Singapore model that would not be currently feasible in Hawai‘i. Notable among these are:

- **Government structure:** Singapore has a highly centralized government with extensive land use authority and limited opportunities for citizen input in development decisions.
- **Cost of Construction:** Singapore is able to build housing and infrastructure at costs that are less than half the costs in Hawai'i, in large part because the construction workforce is dominated by nonunionized immigrant laborers.
- **Significant mortgage subsidies for lower-income residents:** Singapore ensures widespread affordability by reducing the home price for residents with lower incomes. These subsidies aim to keep monthly housing costs at approximately 22% of a resident's income.

The above elements of the Singapore model make some aspects of the current ALOHA Homes bill infeasible or not recommended for Hawai‘i. Our findings indicate that other aspects proposed for the ALOHA Homes model which would not be recommended for other reasons.

Key components of the ALOHA Homes bill which are **infeasible** include:

1) **Constructing a 2 bedroom/2 bathroom home for $300,000.**
   Analysis: Our research indicates a feasible price to be approximately $400,000.

2) **Minimum Density of 250 homes per acre.**
Analysis: Due to our government, social, and political structure, imposing a requirement that does not account for local needs or geographic variation would likely be an empty mandate.

3) **Delivering housing to low- and middle-income earners without State Subsidy.**
Analysis: Even at a low price of $400,000, assuming a subsidy of State lands and district-wide infrastructure, house payments would be affordable to households earning approximately $80,000 a year, or 80% of area median income for Honolulu.[1] Households with lower incomes would need further mortgage subsidies to make home purchases affordable.

Key components of the ALOHA Homes bill which are feasible, but **not a best practice** for maximizing long-term affordability include:

1) **Five-year affordability period.** Owner can sell at market price after five years, and will share 75 percent of the equity with the housing agency. The home is no longer affordable to future buyers.

   Analysis: Singapore allows a sale at maximum price to qualified buyers after five years, without losing affordability because the government structure enables constant replacement of affordable homes and public land acquisition. This does not apply to Hawaiʻi or other places we researched with high citizen engagement in land use decisions.

2) **No income restriction.** A person at any income level can purchase an ALOHA home, even though in Singapore there are income restrictions for purchasing new and subsidized homes.

   Analysis: Every jurisdiction in the U.S. with below-market housing has an income limit. European cities also generally have income limits, with Helsinki having a low-income preference instead of limit.

Other main program areas which need further consideration before implementation include:

1) **Stewardship**: Successful below-market housing programs require management, generally from a non-profit or other third-party organization. The State would need to find a partner.
2) **Infrastructure Funding:** Significant public investment in infrastructure is needed to enable housing construction in TOD areas at the prices proposed in this study. The public sector must take a much larger role in this area.
3) **State land contribution/Lease end game issues:** The ALOHA Homes Implementation Study proposes a 99-year lease but does not address what happens at the end of the lease term. In Singapore, the government does not extend the lease period but instead re-houses people as the property generally declines in value when the remaining lease period is shorter than 40 years. It is not clear if this would also be the plan for ALOHA Homes.

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[1] Assumptions: 3% down payment, 30-year mortgage loan at 3% interest, HOA $350/month, no PMI, homeowner's insurance $500. HUD Honolulu Household 100% AMI 2020 is $101,600

> We continue to gather important stakeholder feedback on this issue, but it is clear the use of public lands for residential leasehold ownership is controversial with important legal, political, and financial considerations.

Although some parts of the ALOHA Homes proposal are currently infeasible, the lack of affordable housing is also unsustainable for too many Hawaiʻi residents. The scarcity of affordable homeownership opportunities for local residents who are earning average or even above-average wages is a frustrating and demoralizing experience, as voiced by one focus group participant- “I’ve been saving up for years, but it’s just not enough.” Some people when faced with this reality decide to limit their aspirations and give up on homeownership, while some others move to other states. During our focus group interviews it was striking how many people when presented with the prices and requirements of the leasehold program described in this study responded by saying they felt hopeful. They wanted to be kept informed of program progress and wanted to know where and when the housing would be built.

A state-supported affordable leasehold housing program, that addresses the above obstacles, could fulfill an important housing need for Hawai'i.

Methodology of Study

Project Team

The ALOHA Homes Implementation Study was commissioned by the Hawaiʻi Housing Finance and Development Corporation (HHFDC), the primary agency responsible for overseeing affordable housing finance and development in Hawaiʻi. The study was conducted by the Hawaiʻi Appleseed Center for Law & Economic Justice. The study team included:

- Kenna Stormogipson (Policy and Data Analyst, Hawaiʻi Budget and Policy Center)
- Williamson Chang, JD (Legal Analyst, UHM William S. Richardson School of Law)
- Dave Freudenberger (Public Finance Consultant, Goodwin Consulting Group)
- Charles Long (Developer and author of "Finance for Real Estate Development")
- Dennis Silva (Planner, Hawaiʻi Planning LLC)
- Jessica Sato (Freelance Designer)
- Abbey Seitz (Community Planner)
- Steven Miao, (Research Assistant, Hawaiʻi Budget and Policy Center)
- Jacob Heberle (Summer Intern, Hawaiʻi Appleseed)
- Arjuna Heim (Fall Intern, Hawaiʻi Appleseed)

The team members listed above represent a project team with local and regional expertise in housing policy, real estate finances, legal analysis, state housing policy and urban development.

Review of Relevant Housing Studies and Programs

The project team reviewed relevant housing studies and programs to document best practices in the design, distribution and management of affordable housing, both locally and abroad. The team's greatest focus was on public housing and "social housing" programs in Singapore, Vienna and Helsinki. These programs were given most attention because they are state-supported, effective housing delivery systems that provide affordable home-ownership and rental opportunities to low- and middle-income residents. Lessons learned from these publicly supported programs are included throughout the study. In addition to reviewing existing literature and publications about various public housing programs, the project team interviewed government officials from the model jurisdictions when possible.

Local Stakeholder Interviews and Focus Groups

To ensure that this study was centered on local knowledge, the project team conducted more than 30 local stakeholder interviews. Stakeholders represented government agencies, academic institutions, nonprofit organizations, community groups, and private developers that are involved in affordable housing in Hawaiʻi. Collectively, they provided details about the challenges of and opportunities for different affordable housing delivery systems, addressing costs, community engagement, government accountability and equity concerns. The full list of stakeholders who were interviewed is included in Appendix A.

The project team also gathered input from local residents about a potential ALOHA Homes Program through four one-on-one interviews and four focus groups. Each focus group was held via video conference, lasted approximately 1.5 hours, and included an average of four participants. In total, there were 18 participants. The names of focus group participants engaged in this study are not provided to protect their privacy. Key input from stakeholder interviews and focus groups is referenced throughout the study.

Description of ALOHA Homes Concept

Program History

The proposed ALOHA Homes Program was first championed by State Senator Stanley Chang (District 9), who represents the area stretching from Diamond Head to Hawaiʻi Kai. As chairman of the Senate Committee on Housing since 2019, Senator Chang has focused much of his attention on ending Hawaiʻi's housing shortage. He is particularly inspired by the affordable housing model of Singapore, a city-state at the southern tip of Malaysia where it is estimated that over 90 percent of the city's 5.5 million people are homeowners.[2]

[2] Phang, S. and Helble, M., (2016). Housing Policies In Singapore. ADBI Working Paper 559. Tokyo: Asian Development Bank Institute. Available: http://www.adb.org/publications/housing-policies-singapore/

In early 2019, Senator Chang introduced [Senate Bill 1] ("ALOHA Homes Bill").[3] While the ALOHA Homes Bill did not ultimately pass, the state approved legislation to study provisions in the bill in [Act 167] (Session Laws of Hawai'i 2019). As part of Act 167, HHFDC is required to "to study and formulate a plan to implement an ALOHA Homes program to provide low-cost, high-density leasehold homes for sale to Hawai'i residents on state-owned lands within a one-half mile radius of a public transit station."[4] This study is a result of this Act 167 requirement, and our goal is to provide data and analysis to help the State of Hawai'i implement an affordable leasehold ownership program.

The Original Vision for the ALOHA Homes Program

State Senator Stanley Chang envisioned the ALOHA Homes Program to be based on the following principles, as outlined in the [ALOHA Homes Bill]:

- **Housing should be affordable for Hawai'i residents** with incomes at or below 80 percent of the area median income (AMI).[5] This means a two-bedroom unit could cost no more than approximately $300,000.
- **Down payments should be nonrestrictive for potential homeowners at 3 percent or less** so that the down payment for a two-bedroom unit would be approximately $9,000 or less.
- **99-year leasehold tenure** for sales of residential condominiums on state land.
- **Housing should be revenue-neutral for the state** and all expenses should be recouped through the sale of the leasehold interest on ALOHA Homes and other revenue sources.
- **Housing should be high-density residential** to support future transit-oriented development (TOD) on O'ahu. The ALOHA Homes Bill defined "high-density" as an area that has at least 250 dwelling units per acre. This density is the same as "801 South Street," two mid-priced condominium towers built in downtown Honolulu between 2015 and 2017. These two towers have a density of roughly 250 homes per acre, with 46 stories reaching 400 feet high. The relatively affordable price of these two towers was due in part to their density, which allowed more apartments to fit on a parcel of land.
- **Housing should be part of mixed land-use communities**, accommodating both residential and commercial uses to promote walkable and livable neighborhoods.
- **Housing should be sited near community amenities** such as parks, community meeting places, childcare centers, schools, educational facilities and libraries.
- **Housing should be owner-occupied** to ensure local residents have the opportunity to build equity and have more control over their housing than they would as renters.
- **Housing should be sited in urban development areas,** to promote smart and sustainable growth in Hawai'i. The ALOHA Homes Bill defined "urban development sites" as state and county land within county-designated TOD areas or within a half-mile radius of a public transit station in a county that has a population greater than 500,000.
- **There should be no first-time homebuyer or income limits on potential homeowners**, to promote neighborhoods that integrate residents with a variety of incomes and ages.

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[3] Senate Bill 1, S.D. 2. (2019). Related to Housing. Available here: https://www.capitol.hawaii.gov/session2019/bills/SB1_SD2_.pdf

[4] Act 167 (H.B. No. 820, H.D. 1, S.D. 1, C.D. 1). (Session Laws of Hawai'i 2019). Related to Housing. Available here: https://www.capitol.hawaii.gov/session2019/bills/GM1269_.PDF

[5] Eighty percent of Hawai'i's area median income for a family of four in 2020 was $96,400, according to DBEDT. Available: https://dbedt.hawaii.gov/hcda/annual-ami-stats/

- **Homeowners would not own any other real property** to prevent people from using the program primarily as a form of real estate investment. Anyone who currently owns property would be required to sell that property within six months of purchasing a below-market home. This clause emphasizes that the primary purpose of the program is to provide affordable housing and that wealth or equity building is secondary.
- **There would be waitlist preferences** to prioritize people who are affected by the new development, such as local area residents. The program would also prioritize residents affiliated with a school or university if housing is built on land owned by the school or university.
- **Restricted resale to eligible buyers** would ensure that the units are affordable long-term. Home sales would be restricted to buyers who meet the eligibility requirements as outlined above, including to local residents who own no other property.
- **Equity sharing** would provide a fair profit, but not a windfall to the owner who resells a unit. The owner has two options:
    1. The owner can sell the home back to the public agency for the original purchase price plus inflation for Honolulu as determined by the Consumer Price Index.
    2. If the agency does not exercise the right to purchase the home, the owner may sell the property to another qualified buyer at market price and keep 25 percent of the profit, while the public agency would retain 75 percent of the gain.

  This equity share provision emphasizes that the purpose of the program is to provide and maintain a supply of affordable housing for local residents. While some profit for the owner is acceptable, it is not the main goal of the program.

Differences Between the ALOHA Homes Program and the Singapore Model

Although similar, there are key differences between Singapore's Housing and Development Board (HDB) approach to affordable housing and the original vision for the ALOHA Homes Program:

- **Singapore allows less citizen oversight and community involvement**. Generally speaking, the Singaporean government designed HDB with minimal citizen oversight or community involvement. Although the ALOHA Homes Bill does not currently outline any community involvement process, HHFDC must comply with numerous state rules and regulations designed to promote transparency and protect the public interest. Some examples of this include HRS §91 rulemaking procedures, which require agencies to provide the public access to information on and opportunities to inspect and provide input on agency laws and procedures.[6]

  Hawai'i's Sunshine Laws also require meetings of the HHFDC board to be conducted as "openly as possible." In contrast, Singapore is one of a minority of countries that does not have "Freedom of Information" laws, for citizens to request government data,[7] and in general

[6] Hawaiʻi Revised Statutes (HRS) §91-2, Title 8, Public Proceedings and Records, Chapter 91 Administrative Procedure. Available at: https://files.hawaii.gov/dcca/oah/hrs/hrs_oah_91.pdf
[7] Freedominfo.org A total 119 countries have Freedom of Information laws, but not Singapore.

the level of transparency and public involvement in land use planning in Singapore is much lower than in Hawai‘i.

- **Singapore provides income-based subsidies for first-time buyers.** HDB provides income-based subsidies amounting to 20-25 percent of a person's income in order to ensure that mortgages are affordable. For example, a person earning $2,000 per month would receive a subsidy to reduce their mortgage payment to $450 a month, but a person earning $4,000 a month would pay a $900 monthly mortgage for the same home. Homeownership is made affordable for everyone because initial home prices are based partly on income, not just on the cost of building the home. The ALOHA Homes Bill does not include mortgage subsidies based on income. Instead, it emphasizes that the program is revenue-neutral for the state and the price of the homes is based on the cost of building the units.

- **Singapore has strict eligibility requirements for purchasers of new homes.** Purchasing new affordable housing with 99-year leases in Singapore is heavily regulated by residency, ethnicity, age and income requirements. Singapore eligibility restrictions include:

    - **Minimum age:** A married couple must be at least 21-years-old while the minimum age for a single person is 35-years-old.

    - **Income Restrictions:** Income limits apply to people purchasing a new HDB home. Although top income earners are excluded from the new construction program, there are no income restrictions on the secondary resale market.

    - **Strict Ethnic Quotas:** Singapore supports racial integration through its "Ethnic Integration Policy," which sets quotas for HDB blocks and neighborhoods for the city's major ethnic groups: Malay, Chinese and Indian/Others. The racial quotas are updated periodically to ensure they continue to reflect Singapore's demographics. For example, in 1989 the permissible proportion of HDB apartments for Malays was up to 22 percent in any given neighborhood and 25 percent within an HDB block.[8] These ethnic quotas also apply to the secondary resale market.

  None of the above restrictions apply to ALOHA Homes.

- **The Singapore model is entirely state financed:** The Singapore housing model is entirely financed by the state. No outside funders or investors are involved in building housing. The ALOHA Homes model does not explicitly identify its financing strategy, but says the program must be "revenue-neutral." In Singapore, the housing program is not revenue-neutral, but instead receives considerable subsidies from the government to ensure that almost every working Singapore resident can afford their first home purchase. A 2019 presentation by HDB for the World Bank highlights that affordability is made possible through "generous subsidies

[8] Koo, A. (2020, August 12). "HDBGuide To Understanding HDB Ethnic Integration Policy (EIP) And Singapore Permanent Resident (SPR) Quota." Dollars and Sense. Available at: https://dollarsandsense.sg/guide-understanding-hdb-ethnic-integration-policy-eip-singapore-permanent-resident-spr-quota/

and concessionary loans."[9] These subsidies include not only a reduction in the price of the home, but also government issued mortgages with 2.6 percent interest, and down payment support through a government savings account.

In Singapore, subsidies are provided because housing is considered a right of citizenship, much like education and healthcare. As a fundamental right, the government develops tens of thousands of homes a year (15,800 homes in 2018) so that the affordable housing supply meets residents' needs and no citizen is left homeless.

- **Singapore's 37 percent payroll tax helps with down payment:** The Singapore government has a mandatory savings plan similar to social security in the United States, in which every employee and employer contributes a portion of a worker's wages towards a government-managed savings account. The employee contributes 20 percent from each paycheck and the employer puts in 17 percent. The total 37 percent goes to the Central Provident Fund. This wage-based (i.e. payroll) tax is three times the U.S. Social Security tax of 12.4 percent (with 6.2 percent from employees and 6.2 percent from employers).

  In Singapore, approximately 62 percent of a person's Central Provident Fund savings is set aside to be used for a down payment, educational or other personal investments. According to HDB program documents,[10] it takes the average worker three years to accumulate mandatory savings sufficient for a down payment.

  The ALOHA Homes proposal does not create a mandatory payroll tax or propose a specific mechanism for helping residents acquire a down payment.

As is evident from the above description, the ALOHA Homes proposal was inspired by the Singapore model but differs significantly in key areas of program design, including owner qualifications, project financing and approval, and mandates and subsidies for leasehold buyers.

Intended Goals of the ALOHA Homes Program

As outlined in the 2019 ALOHA Homes Bill, the intended goals of the ALOHA Homes Program envisioned by Senator Chang are to:

1) End the housing shortage in Hawai'i;
2) Facilitate development of affordable leasehold homes on state land near future transit stations;
3) Authorize HHFDC to sell residential units as 99-year leasehold properties; and
4) Develop an ALOHA Homes demonstration project by July 1, 2025.

[9] April 2019 presentation to the World Bank, "Affordable Housing Financing and Delivery in Singapore" by Ms. Sia Tze Ming, Deputy Director Housing & Development Board, Singapore.
[10]IBID

Feasibility of Key ALOHA Homes Components

Why the Singapore Housing Model Cannot Be Replicated in Hawaiʻi

Styles of Governance

Singapore: One source[11] notes that Singapore enjoys political stability, honest and effective government, and successful economic policies but "is also known for its limited tolerance for opposition or criticism." Though Singapore does have elections, the People's Action Party has been in power since independence in 1965 and, by most accounts, is in little danger of being unseated in the near future. With no dissenting opinions from rival political parties or the public, Singapore's top-down, unified style of government has allowed its Housing & Development Board to construct public housing at a scale uncommon in most democratic nations.

Hawaiʻi: Though Hawaiʻi's voters and elected officials are heavily Democratic-leaning, there is much disagreement about public spending and state-run programs. Community sentiment, especially about housing policy, can be sharply divided and strongly expressed. Because developing an adequate supply of affordable housing requires a significant and sustained public infrastructure investment, access to developable land, and community approval, it is difficult to imagine Hawaiʻi replicating Singapore's speed and scale of development.

Labor Unions and Wages

Singapore: Singapore's access to abundant, cheap, migrant labor has allowed it to build housing at a low cost. Singapore is one of the world's biggest net importers of migrant labor,[12] with workers coming primarily from Malaysia, Bangladesh, Nepal, India, China and other Asian nations. Legal constraints keep migrant workers from organizing for better wages and conditions. As a result, Singapore's migrant construction workers earn notoriously low wages—approximately $5–20 per hour.[13]

Hawaiʻi: Hawaiʻi leads the nation in union membership, with 23.1 percent of the state's workers in labor unions. Political support for unions is strong.[14] These unions allow workers to negotiate for higher compensation and better working conditions through the power of collective bargaining.[15] In contrast to Singapore's poorly-paid migrant laborers, Hawaiʻi's construction workers earn an average of $33 per hour.[16]

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[11] http://factsanddetails.com/southeast-asia/Singapore

[12] Sacco, M. (2016, February 16)."What Does Singapore Owe Its Migrant Workers?" Carnegie Council for Ethics in International Affairs. Available at: https://www.carnegiecouncil.org/publications/ethics_online/0114

[13] Kirk, M. (2015, June 9)."The Peculiar Inequality of Singapore's Famed Public Housing." Bloomberg CityLab. Available at: https://www.bloomberg.com/news/articles/2015-06-09/for-migrant-workers-in-singapore-it-s-build-high-live

[14] Sauter, M. (2019, April 10). "Hawaii, New York are strongest states for unions, S. Carolina and N. Carolina are weakest." USA Today. Available at: https://www.usatoday.com/story/money/2019/04/10/hawaii-new-york-strongest-states-trade-unions-north-carolina-south-carolina-weakest/39305975/

[15] Sauter (2019)

[16] Bureau of Labor Statistics (2019), https://www.bls.gov/oes/

Construction Costs

Singapore: The average cost for constructing a standard mid-rise or high-rise condominium in Singapore is $125–150 per square foot.[17]

Hawaiʻi: The average cost to construct the same kind of multifamily dwelling in Hawaiʻi is approximately $275–400 per square foot, more than double Singapore's cost of construction.[18] Duplicating Singapore's cost of construction would require construction wages that are not possible or desirable for Hawaiʻi workers.

Models That Can Work in Hawaiʻi

After determining that several aspects of the Singapore model cannot be replicated in Hawaiʻi, our project team looked at examples of affordable housing programs in Helsinki and Vienna to explore other options that Hawaiʻi might draw from. These two places are known for their exceptional affordable housing policies and, similar to Hawaiʻi, they have very strong unions, a high cost of construction, and a robust process to engage citizens in planning decisions. Their projects also deal with a high degree of NIMBYism (Not In My Back Yard), which is prominent in Hawaiʻi's development processes.

Vienna, Austria

Cost of construction: $250–300 per gross square foot[19]

Union labor representation: Trade unions are politically influential in Austria, particularly in Vienna.[20] Across Austria, there are an estimated 1.4 million employees who are trade union members, the majority of whom reside in Vienna.[21] The Austrian Trade Union Federation provides various benefits to its members, such as negotiation of collective agreements, safeguarding of social standards and fair wages, and legal services.[22]

Citizen engagement in land use decisions: Vienna has a long history of civic engagement in community planning, and it continues to guide urban development today. For example, to overcome recent opposition to city transit service initiatives and other car-free amenities, officials brought residents into the decision-making process by providing community groups and neighborhood associations with small grants ($5,000) to plan and finance public-space improvement projects.[23]

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[17] 2019, "Singapore: Quarterly Construction Cost Review" Arcadis SIngapore Pte Ltd.
[18] Based on pro-forma analysis of local projects and interviews with Hawai'i builders and developers
[19] Interview with Kurt Pachinger, Vienna City Administrator, Office of the Executive City Councillor for Housing, Housing Construction, Urban Renewal and Women's Issues
[20] Federal Ministry, Republic of Austria Website. (2020). "Representation of employees". Available at: https://www.migration.gv.at/en/living-and-working-in-austria/working/representation-of-employees/
[21] Federal Ministry, Republic of Austria Website (2020)
[22] Federal Ministry, Republic of Austria Website (2020)
[23] Federal Ministry, Republic of Austria Website (2020)

Public housing rent as a percentage of income: 18–22 percent[24]

City liveability, housing access: In both 2018 and 2019, Vienna was named the world's most "liveable city" on the Global Liveability Index.[25] This prestigious ranking is due in part to residents' bountiful access to affordable housing and transportation. According to Bloomberg CityLab, Vienna—a city with approximately 2 million residents—experiences an annual increase of about 25,000 residents and adds approximately 13,000 new units of housing each year to accommodate them.[26] Strict land-use regulations have focused growth in existing urban neighborhoods, as opposed to suburban sprawl. Population growth is further supplemented by parks and public spaces and, today, more than half of the city is dedicated to green space.[27]

Helsinki, Finland

Cost of construction: $325–400 per gross square foot[28]

Union labor representation: Trade unions are exceptionally strong in Finland, where 59 percent of the working population are members.[29] The average salary for a construction worker in Finland is $54,500 a year or $31 per hour, very similar to Hawai'i's $33 per hour.[30]

Citizen engagement in land use decisions: Finland has high citizen engagement in land-use decisions and consequently, it is very difficult to add affordable housing to older neighborhoods. Instead the government housing development agency focuses on incorporating affordable housing into new neighborhoods.[31]

Public housing rent as a percentage of income: 18–28 percent[32]

City liveability, housing access: In 2017, Helsinki was ranked as the second most liveable city in Europe, following Vienna.[33] One of the main reasons for this high ranking is a successful housing policy which has ensured affordable housing for almost all residents and virtually eliminated homelessness.[34]

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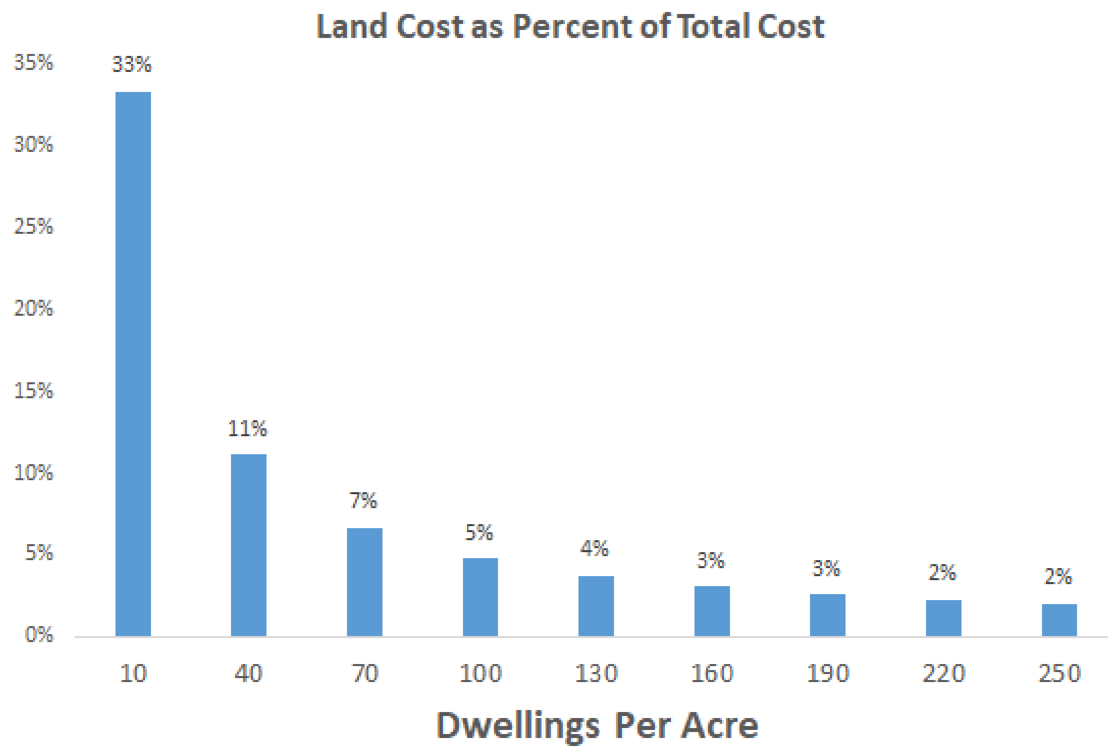
[24] 2019 Presentation for "Boston Initiative on Cities: Global Innovations in Urban Housing Conference April 2019," by Eva Bauer of Austrian Federation of Limited Profit Housing Associations
[25] https://www.eiu.com/topic/liveability
[26] Dudley, D. (2019, October 29). Secrets of the World's Most Livable City. Bloomberg CityLab. Available at: https://www.bloomberg.com/news/articles/2019-10-29/here-s-why-vienna-tops-most-livable-cities-lists.
[27] Dudley (2019)
[28] Interview with Housing Finance and Development Centre of Finland, pro-forma of recent project
[29] Construction & Labor Workers, Finland | 2020/21 (averagesalarysurvey.com)
[30] https://julkaisut.valtioneuvosto.fi
[31] 2020 Interview with Jarmo Linden, Director, Housing Finance and Development Centre of Finland
[32] Jan 2020, Presentation of Housing Finance and Development Centre of Finland "Role of ARA in Social Housing and in Actions to Reduce Homelessness in Finland." Average Finish income from www.statista.com
[33] https://www.eiu.com/n/campaigns/the-global-liveability-report-2017
[34] 2020, "The Role of Social Housing and Actions to Reduce Homelessness in Finland." presentation by The Housing Finance and Development Centre of Finland.

Summary: Although Vienna and Helsinki are farther away from Hawaiʻi than Singapore by location, these cities face many of the social, political, and cost constraints to building new housing that are common in Hawaiʻi. In many ways, compared to the Singapore model, housing policies in Vienna and Helsinki are more relevant to Hawaiʻi.

Case studies of Vienna and Helsinki further demonstrate that building new housing is expensive and requires significant community buy-in and participation. For these reasons, best practices from these two municipalities are included when evaluating various components of the ALOHA Homes proposal.

Feasibility of ALOHA Homes Components

High-Density: At Least 250 Units Per Acre



The more dwelling units built per acre, the less impact additional density has on overall costs. Assumptions: $2 million per acre land cost and construction costs constant $400,000 per unit.

One approach to cost savings is density, although savings diminish as density increases. The more homes that can be built on a specific parcel, the greater the savings in land costs. For example, if a 1-acre parcel is worth $2 million and five homes are built, the land cost for each home is $400,000. However, if 10 homes are built on that same parcel, the land cost per home drops to $200,000, which could translate into significantly lower prices per home.

If the average cost to build a 1,000 square foot home is about $400,000, there are significant savings when the density is increased from 10 homes to 40 homes, or even to 70 homes, but the savings greatly diminish after 130 homes per acre.

Density should fit local community needs. In most of the TOD areas on Oʻahu, mid-rise developments would blend in with the surrounding community. The ʻIwilei, Chinatown and Downtown station areas may have higher density since this is the most urbanized area in the state and is the Central Business District (CBD). The Downtown TOD Neighborhood Plan states: "Develop new housing of varied types, including affordable, family-friendly and mixed-income, to allow a range of household types." Higher density in the Downtown Honolulu CBD fits with the character of the surrounding district, while a mid-rise of between 100 to 200 homes per acre would be appropriate in areas further from the CBD.

Sense of community: We learned from discussions with developers that projects with high density can lack a sense of community and be less attractive to long-term residents. One developer recounted how a project of 120 homes per acre leased up much more quickly than another project of almost 200 homes per acre in the same neighborhood.

Conclusion: At least 250 homes per acre is only appropriate for some areas. For many TOD areas, a lower density would achieve cost savings, retain a sense of community, and fit the surrounding community.

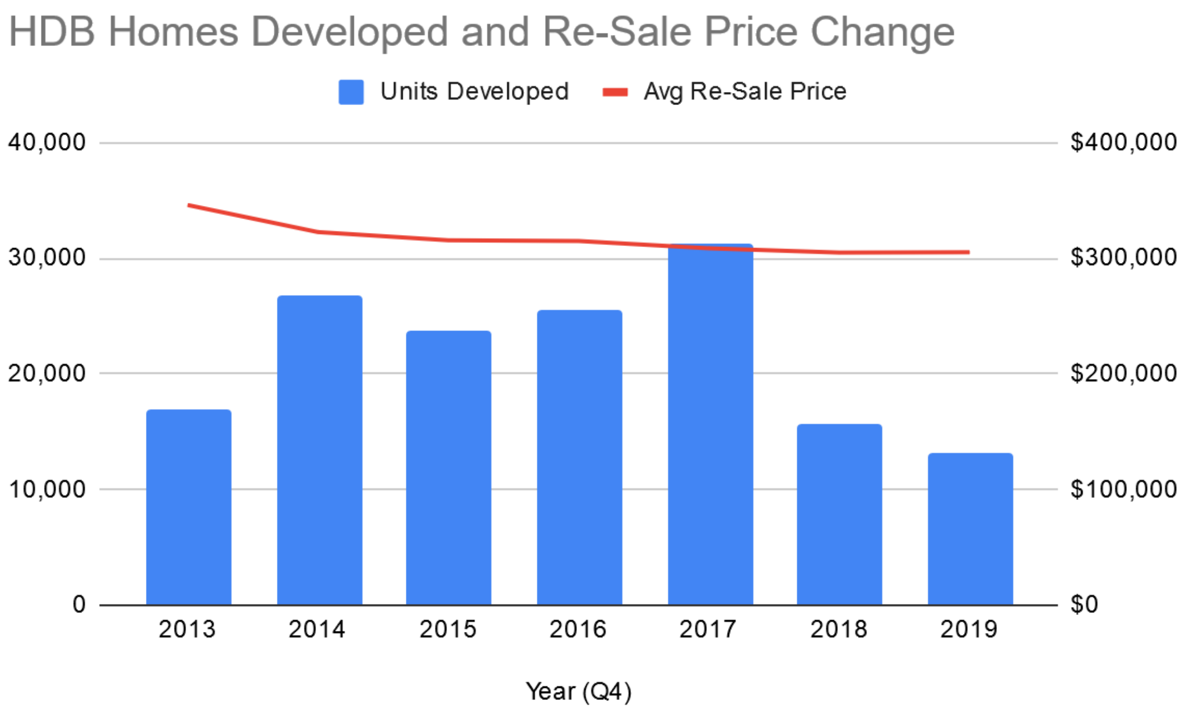
Public Land Contribution in Transit Oriented Areas

Public land contribution is key: One important practice in all three jurisdictions studied—Helsinki, Vienna and Singapore—is that public land is used for affordable housing. As a result of their investments and long-term vision, each city builds enough quality housing to reasonably match demands. Rents meet affordability standards of no more than 18–26 percent of residents' incomes. In addition, each jurisdiction has virtually eliminated homelessness.

Use of public lands for long-term affordability: All three jurisdictions use public lands as a way to maintain affordability.

Singapore creates a constant supply of HDB flats to keep prices stable: In Singapore, the government is able to consistently build enough new homes to meet demand. They acquire land and develop train stations, public infrastructure, and other amenities as needed for the new developments. Due to the continual supply of new HDB flats, these public sector homes—which make up about 80 percent of the housing market—have maintained relatively stable prices. Resale prices for HDB flats ended 2020 slightly lower than at the beginning of 2013.[35] Of course, this ability to add public infrastructure and housing as needed is very difficult in places with less central government control and a high degree of citizen involvement in land-use decisions.

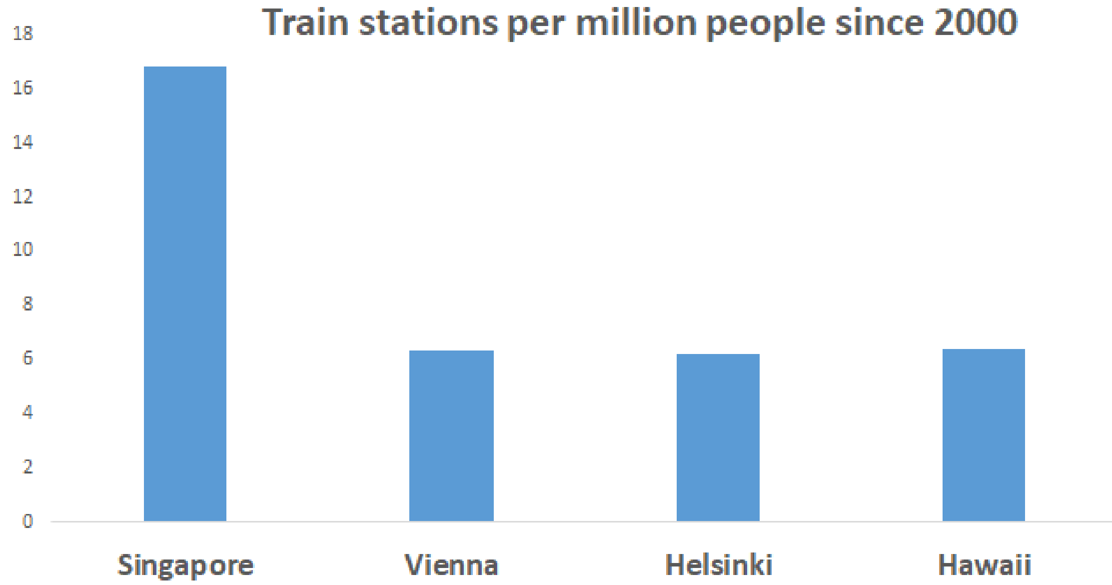
[35] Housing Development Board Data https://www.hdb.gov.sg/residential/buying-a-flat/resale/getting-started/resale-statistics



Helsinki and Vienna use price controls to maintain long-term affordability. The government and political structure of Vienna and Helsinki make the process of acquiring new developable land with public infrastructure and transportation more difficult and time intensive. For example, Singapore has added 122 stations to its public transit system since 2000,[36] whereas Helsinki has only added 8 and Vienna has added 12. [37]

As a comparison, Hawai'i is about to complete nine stations of a rail system that has been discussed and planned for over 50 years. The amount of time, resources, and citizen consensus required in Hawai'i for major construction projects is more similar to Vienna and Helsinki than to Singapore.

[36]https://landtransportguru.net/singapore-rail-timeline/
[37] https://en.wikipedia.org/wiki/Helsinki_Metro#1982_onwards:_In_service, https://en.wikipedia.org/wiki/Wien_Hauptbahnhof



Vienna and Helsinki both preserve the affordability of state supported housing by setting price limits. Price increases in rental and for-sale homes that receive government subsidies are generally limited to inflation plus the cost of improvements. The use of public land, financing, and long-term price controls ensures that every new development maintains a significant supply of affordable housing.

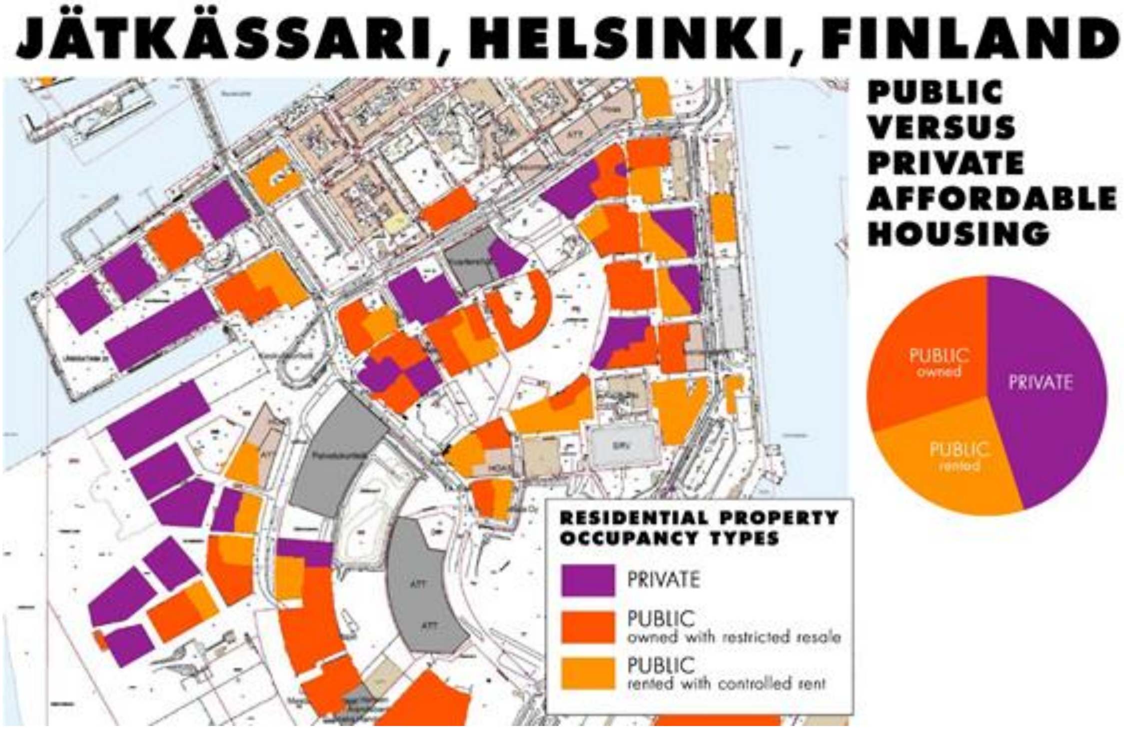
Case Study: Planning for affordability: Jätkäsaari in Helsinki, Finland

A newly developed waterfront neighborhood in Helsinki provides an excellent example of planning for affordability. Jätkäsaari was an old industrial waterfront neighborhood similar to Honolulu's Kaka'ako neighborhood. In 2010, Helsinki began efforts to transform the area into residential and commercial uses. As part of the development process, the Helsinki planning department purchased most of the land area, and between 2008 and 2019 the city invested more than $275 million in Jätkäsaari, with another $240 million budgeted for future development. The planning department sold about 45 percent of the land to the private market, and reserved the remaining land area for publicly-funded housing and other public purposes.

After the land-use decisions had been made, the municipality financed the construction of 60 new apartment buildings that were a mix of rental housing and shared equity ownership with restricted resale prices. Once construction is completed, it is estimated that Jätkäsaari will be home to 21,000 residents and offer jobs to 6,000 people.[38]

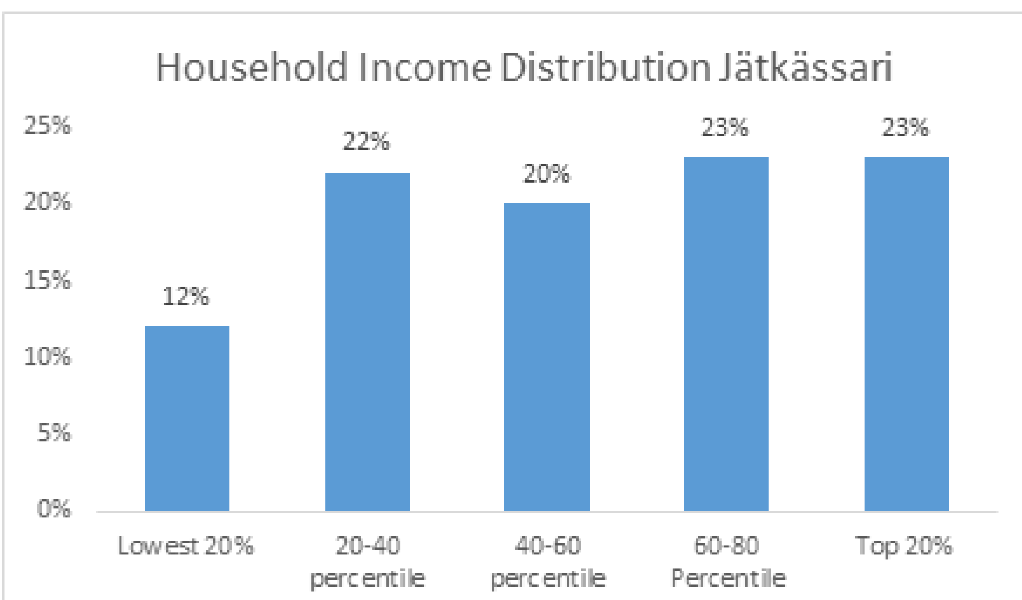
To create a more equitable neighborhood, the public and private housing developments were integrated throughout the area.

[38] Helsinki Municipal Website. (2020). Jätkäsaari. Available at: https://www.uuttahelsinkia.fi/fi/jatkasaari



This map by housing type clearly shows how Helsinki has planned for long-term affordability: more than half of the land and residential homes are publicly supported and will remain affordable for the life of the building.

Not only will this neighborhood maintain affordable housing, but it also ensures income diversity of residents by developing a mix of private housing and state subsidized rental and for-sale properties. Jätkäsaari is not a poor neighborhood or a wealthy neighborhood: it is a mixed neighborhood where the percentage of households in the various income quartiles is remarkably evenly distributed.



Vienna uses similar land-use and pricing strategies to maintain housing affordability.

"What makes Vienna unique is that you cannot tell how much someone earns simply by looking at their home address." −Kathrin Gaál, Vienna's Councilor of Housing [39]

Although Singapore, Vienna and Helsinki employ different strategies to maintain affordable pricing, all three use a combination of public land and publicly-funded infrastructure as the starting point.

Public Lands in Transit-Oriented Development Areas: A Tremendous Opportunity
The State of Hawaiʻi is the largest landowner along the new 21-station rail system being built on Oʻahu. Between various state agencies, there are approximately 2,000 acres of land within a half a mile of the rail line.[40] Additionally, state and county land near bus transit corridors on neighbor islands offer opportunities for transit-oriented development and affordable housing.[41] For example, Maui is developing a new bus transit hub on state lands, with the opportunity to build affordable housing on more than 5 acres of adjacent state lands. University of Hilo in Hawaiʻi County, has land which could be used for student housing, and Kauaʻi is developing affordable housing on county lands at Lima Ola in ʻEleʻele.

Buyer Restrictions

The ALOHA Homes Bill proposes several restrictions related to the home purchaser. The following is the analysis of each restriction based on best practices from other jurisdictions.

Buyer owns no other real property. Home is primarily a place to live.

Purpose: When it takes considerable public resources to develop affordable housing, it is important that housing be **primarily** developed as a place for residents to live, not a wealth building vehicle. Restricting ownership to buyers with no other property supports the concept that housing is an essential human need and an important public purpose. Permitting the purchase of these units as second homes rather than as a primary residence, would subvert the purpose of public investment in housing as well as allowing a buyer to use them as investment vehicles.

Analysis: Provision is recommended. Limiting the amount of wealth generation from publicly subsidized housing is important for the long-term viability of a housing program. Restricting ownership as proposed is a standard requirement for most publicly-supported for-sale housing. Most jurisdictions in the United States include such a requirement for below-market for-sale housing offered under inclusionary zoning policies (See Appendix B for examples from other U.S. jurisdictions). Singapore, which has the largest owner-occupied public housing system in the world,

[39] 02/15/2019 "Vienna's Affordable Housing Paradise," by Adam Forrest, Huffington Post www.huffpost.com
[40] http://planning.hawaii.gov/lud/state-tod/
[41] State Office of Planning and Hawaii Housing Finance and Development Corporation. (2018). State Strategic Plan for Transit-Oriented Development. Available at: https://planning.hawaii.gov/wp-content/uploads/State-TOD-Strategic-Plan_Dec-2017-Rev-Aug-2018.pdf

also has strict prohibitions about owning other property. Notably, Helsinki had a below-market homeownership program called HITAS, which allowed people to own other property. As purchasers increasingly used the program to build wealth by owning multiple homes, HITAS became unpopular and was considered a waste of public resources. It was discontinued in 2020.[42]

Hawai'i considerations for fractional ownership of homestead and other properties: In Hawaiʻi, many residents have fractional ownership as a partial interest in a family owned property. These properties have significant cultural and family value but partial owners typically cannot use them as homes for themselves. Moreover, it can be difficult to divest from some partial ownership structures. It is, therefore, important to recognize and accommodate partial ownership of less than 50 percent when establishing restrictions to purchase state-sponsored housing.

Hawai'i Resident Requirement

Purpose: It is appropriate that the benefits of programs supported by state and local tax dollars are restricted to local residents. A failure to include such constraints could incentivize out-of-town residents to move Hawaiʻi for the benefit of affordable housing in such a desirable location.

Case Study: San Diego, CA

As part of their inclusionary zoning program, San Diego offers below-market for-sale homes to people up to 120 percent of area median income. Initially their program did not have a residency requirement, which prompted a significant number of applications from out-of-state residents. Since this was not the intended purpose of the program, the San Diego Housing Commission updated the rules in 2017 to **require two years of residency** in San Diego County, verified by three years of tax returns.[43] The policy has remained in place since then.

Legal Considerations: Durational-Residency Requirements Could Be Challenged

A durational-residency requirement for a public benefit which requires that a person live in a place for a certain length of time has generally been found by the courts to limit the "constitutional right to travel from one State another." The right to travel has been interpreted to refer to not just entering and exiting another State but to the right to be treated like other citizens of that State.

For example, a California law attempted to limit welfare benefits for newly-arrived residents to the amount paid by their previous state of residence for their first twelve months in California, at which point they were entitled to benefits at the California rate. In Saenz v. Roe (526 U.S. 489, 119 S.Ct. 1518, 143 L.Ed.2d 689 (1999)), the U.S. Supreme Court invalidated California's restriction.

However, courts have made an exception to the general rule of disallowing durational-residency requirements for "portable" benefits that a nonresident could obtain and take out of the state. (See, for example, Martinez v. Bynum, 461 U.S. 321, 332–33, 103 S.Ct. 1838, 75 L.Ed.2d 879 (1983)). In-state tuition requirements are an important example of a "portable" benefit.

[42] https://finrepo.fi/en/news-helsinki-is-going-to-close-hitas-system

[43] https://www.sdhc.org/housing-opportunities/affordable-for-sale-housing/

> “The state can establish such reasonable criteria for in-state [college tuition] status as to make virtually certain that students who are not, in fact, bona fide residents of the State, but who have come there solely for educational purposes, cannot take advantage of the in-state rates.” Vlandis v. Kline, 412 U.S. 441, 453–54, 93 S.Ct. 2230, 37 L.Ed.2d 63 (1973)

Applicability to ALOHA Homes: One could argue that homeownership is a portable benefit as compared to renting. An owner builds equity in their home, which translates into a profit that can be taken out of state when the owner sells. However, before the sale of the home the benefit is not portable since it requires the owner to live in the home. Whether ownership is considered a portable benefit similar to college tuition or a non-portable benefit more similar to welfare has not yet been decided by the courts.

Analysis: The most conservative legal approach would be to require no specific length of time for residency but simply that a person be a current Hawaiʻi resident. Moreover, applicants to the ALOHA homes program would need to be on a pre-approved buyer list before construction begins. They would likely be waiting at least two years before construction is completed and they own a home. This reduces the likelihood that a person would establish residency in Hawaiʻi just for this program.

Recommendation: A current resident provision is likely to be sufficient to dissuade out-of-state residents from moving to Hawaiʻi just for this program. However, the requirement could be amended as a durational-residency requirement later if warranted.

<u>Defining “Resident” by Voting Record</u>

Description: The ALOHA homes bill states that a person “voting in the most recent primary or general election shall be an indication of residency in the State; provided further that not voting in any primary or general election creates a rebuttable presumption of non-residency.”

Purpose: This measure would disqualify non-voters from participating in the program and would presumably reward residents who do vote.

Legal Concerns: Voting is not a standard definition of residency and could be considered discriminatory. At the very least, it would discriminate against legal residents who are noncitizens and citizens who choose not to vote for personal or religious reasons.

The Hawai'i Supreme Court has adopted a common definition: ‘[a]ny person who occupies a dwelling within the State, has a present intent to remain within the State for a period of time, and manifests the genuineness of that intent by establishing an ongoing physical presence within the State together with indicia that his presence within the State is something other than merely transitory in nature.’” (Citizens for Equitable & Responsible Gov't v. Cty. of Hawaii, 108 Haw. 318, 323, 120 P.3d 217, 222 (2005).

Analysis: A standard definition of "resident" is someone who can demonstrate an intention to stay in Hawai'i, which can be shown with a driver's license, completed voter registration, or rental agreements with a Hawai'i address etc.

Recommendation: Using a standard definition of "resident" will prevent legal challenges and still achieve goals of the program.

Income restrictions

Purpose: Having no income restrictions for buyers could make the program more popular among people who would not otherwise qualify. It would also support the idea that housing is a right which everyone is allowed to access.

Analysis: Not a best practice. A constrained housing supply requires prioritizing access, and higher income earners have options in the private market.

Our survey of affordable housing policies for for-sale homes shows that, to the extent the public is subsidizing the home, income limits and preferences are typically imposed. Even Singapore has income restrictions for who can qualify for their "new flat" program. As of 2019 the income limit was $9,000 per month for a couple and $4,500 for a single person in Singapore. An exception is Finland, where lower-income applicants have preferences but there is no set income limit.

Generally, the lesser the amount of affordable housing available, the stricter the income requirements. Places with large proportions of State-supported public housing, such as Singapore, Vienna and Finland, have relatively high income thresholds because there is enough housing to accommodate need. For example, Vienna's income limits allow 80 percent of the population to buy state-supported homes. At the same time, they ensure that about 79 percent of the housing stock is affordable, with 50 percent owned directly by the City and 29 percent subject to rent control. However, in places without enough affordable housing to meet the demand, income requirements are stricter to ensure that housing is going to people with the greatest needs.

Factors to Consider when determining income limits:

1. **Benefits of mixed income neighborhoods**
   Good policy encourages mixed-income neighborhoods and discourages income segregation, which has forged many divisions and unequal access to opportunity.
2. **Income limits high enough to qualify for a mortgage**
   Where a publicly-supported project is designed to recoup the cost of units built, income limits for buyers must be high enough so that they can qualify for mortgages. For example, a one-bedroom affordable home at $290,000 would still cost approximately $1,800 a month in

housing costs, which would require a yearly salary of about $65,000 or about 80 percent AMI for Honolulu[44].

3. **Income limits high enough that public workers can qualify: 140% AMI**
   A state supported housing program should be available to teachers, police, firefighters and other public workers. An income limit of 120 percent AMI would disqualify many households with public sector workers. For example, the average teacher salary in Hawai'i for 2019 was $65,800 [45], so a household with two teachers would earn $131,600 which is approximately 130 percent of the area median income for Honolulu. A limit of 140 percent AMI would include most public sector households.

4. **Offering opportunity to those with greatest need.**
   Honolulu has a scarcity of affordable housing so publicly-supported housing should be allocated at least partly on the basis of need. This could be achieved by having preferences for qualified buyers who are lower-income for a portion of the homes.

Recommendation: Income limit of 140% AMI with some preferences for lower-income residents. Set an upper income limit of 140 percent AMI, with a goal of having some percentage of homes occupied by people earning 100 percent AMI and below. Lower-income residents could be provided a preference in a lottery system.

First-time Homebuyer

Purpose: The purpose of this provision is to allow more residents to access the program, including residents who have previously owned property or currently own property but would consider selling to purchase an affordable home.

Analysis: Many affordable for-sale programs do not require that a person be a first-time homebuyer, but do require that the person not own another home at the time of purchase.

Recommendation: First-time home buyer provision is not necessary. A first-time homebuyer provision could exclude people who previously owned property and are now priced out of private market ownership. The more important provision is that a person not own another home.

Owner Occupancy Enforcement

Owner-occupancy compliance has been a major concern with affordable housing units.

To address the potential of creating a "black market" of illegal rental units, we have examined two options for enforcing owner-compliance:

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[44] https://www.huduser.gov
[45] January 2020, "Hawai'i Teachers Compensation Study and Recommendations" prepared for Hawaii Department of Education, pg. 42

1. **Biometric security systems**
   Using iris, facial, or fingerprint scans to verify identities
2. **Stewardship specialist(s)**
   Employing full- and part- time staff to monitor compliance

Biometric System

Benefits: Secure and Modern.
By requiring a retinal, facial, or fingerprint scan upon entry, a biometric system provides a highly secure form of owner occupancy enforcement. An automatic record is maintained of all entries to a home, which could have security benefits as well.

Focus Group Concerns: Privacy, Flexibility for Guests, and System Maintenance.
Though biometric systems are reliable, both providers and focus group participants raised concerns about privacy. While receiving quotes for biometric systems, the concern of whether biometrics have received the “sign off” was raised. Providers noted that tenant pushback is common with biometric systems and wondered if there are precedents for using them in owner-occupied housing. This apprehension was echoed by participants in our focus groups. While acknowledging that biometrics would ensure owner-occupancy, some participants expressed discomfort about having their data saved. Focus group participants also raised concerns about the effects of biometric systems on visiting friends or family members and about the overall flexibility of the system. Lastly, informants raised questions about the system’s performance during power outage or internet disruption, and what type of maintenance it would require.

Costs: $1,500–$2,800 for installation, on-going supervision and maintenance.
Quotes for biometric systems range between $400 to $600 per housing unit,exclusive of the cost to have a contractor install wiring or an internet connection and integrate it into a system.. Installation raises the price to $1,500 to $2,800 per unit[46]. The system would also require staff to provide on-going oversight, manage connectivity problems, and enter system updates for guests and new residents.

Stewardship Specialist: Most common enforcement method
Affordable housing departments across the United States most commonly employ staff to manage enforcement. The Champlain Housing Trust in Vermont serves as one of the largest and most successful land trusts in the country. The Trust employs a staff of five to manage their inventory of more than 630 homes and enforce occupancy rules. The service is financed by monthly charges to each home, similar to an HOA fee. The Champlain Trust team handles not just owner-occupancy requirements but also compliance with re-sale restrictions, re-financing requests and disputes that may arise between owners. Enforcement is based on random checks and annual audits. The success of the Champlain Land Trust and many others is due to the stewardship specialist role and to adjusting the size of the team as the housing inventory grows.

Benefits: Flexible, Human Enforcement, Includes other services.
A stewardship approach would more easily accommodate guests or other changes in unit occupancy. It also makes enforcement feel less invasive than a high-tech approach. Lastly, a steward specialist helps with all aspects of the leasehold agreement including resales and conflicts between occupants.

[46] Based on quote from Fulcrum Biometrics, Iris Id 2020

Concerns: Human error, less predictable: Unlike biometric systems, the stewardship specialist system is human-operated and managed. This can lead to a higher margin for error and a greater variability in the quality of services, depending on the skill and training of the staff.

Costs: **$50–$75 monthly fee per home.** A stewardship specialist program is supported by monthly homeowner fees also referred to as "ground lease fees," since they are used to ensure compliance with lease terms such as owner-occupancy. Many stewardship programs also use a software program called "HomeKeeper," which has a one-time set-up fee of $3,500 and an annual cost of approximately $3,000.

Recommendation: We recommend a Stewardship approach.
While both owner occupancy enforcement methods have their benefits, a stewardship specialist would provide more services, including managing the resale process and dealing with lease disputes. This allows the position to be much more involved in the overall program and invested in its long-term success. When paired with substantial fines for breaking owner-occupancy rules, the stewardship model has proven to be effective for many below-market for-sale programs.

99-Year Leases and Use of State Lands

Affordable Housing on State Lands and Length of Lease Terms

The issues of affordable housing development and length of lease terms on State lands—crown and government lands of the Hawaiian Kingdom which had been designated as "ceded" to the Republic of Hawaiʻi and then the United States before being conveyed to the State of Hawaiʻi—are complex on many grounds: legal, financial, and moral. Additional engagement with key stakeholders is necessary to accurately convey the key perspectives on these issues. The study will be supplemented in a few weeks once the authors have gathered the necessary input.

Five Year Affordability Period

Purpose: The intent of this provision is to give the buyer an incentive to maximize the resale price by maintaining the home, and it prevents any incentive for a "black market" because the new buyer will be purchasing the unit at market price instead of a discounted price.

Example: The current ALOHA Homes bill states:

> *"If the corporation does not exercise its right to purchase the ALOHA home, the ALOHA home may be sold by the owner to an eligible buyer; provided that the corporation shall retain seventy-five per cent of all profits from the sale net of closing and financing costs, using the price at which the owner purchased the ALOHA home, plus documented capital improvements, as the cost basis."*

2010: Discount Purchase Price: **$300,000** by qualified buyer. Market Price = **$400,000**

2020: Market Selling Price: **$590,000 (**4% yr increase) Total Equity Gains: **$290,000**
Buyer Equity: **$72,500** (25%) Agency Equity**: $217,500**

2020: Selling Price for next buyer: **$590,000**

Several Concerns:

Home no longer affordable after first buyer.
In the above illustration, the affordable home is only affordable to the first buyer and any future buyers will be paying market price for the home. In this case, the affordability is lost to all subsequent buyers and the benefits of the public program accrue only to the first buyer.

Equity gained by the agency is not sufficient to replace the home.
In this example, the agency has gained $217,500 from the sale, far less than the cost to replace the home that was lost. Not only will the agency need to pay for new construction, but it will need to undertake a new planning and permitting process and invest in the development of a new site.

Replacing the lost home is lengthy and costly, and unlikely to be in the same location.
The main downside of this model is that the affordable homes lost are **usually not replaced** in a meaningful timeframe. Providing affordable housing in desirable locations requires significant resources and often takes years -even decades - of planning, so it is both costly and difficult to replace units once lost. In addition, the State would have to continually provide new funding, which is not always feasible. Even if the agency gets funds to replace the homes at some point, completion is likely to be years or even decades later… if ever.

Case Study: Kaka‘ako. Affordable homes lost have yet to be replaced.
From 2008–2019 Kaka'ako developed to 7,300 for-sale condominiums, of which 1,872 (26 percent) were priced below market rates. Most of those homes were required to remain affordable for only two to five years. As a result, today only 637 homes (9 percent) are still under an affordable price requirement. **By 2025 only 3 percent of for-sale homes will be under an affordability restriction,** and, without any new additions, by 2035 there will be no homes available at below-market prices.

Best Practices: Long term affordability periods.
Over the past few years, the trend in high-cost cities and counties across the U.S. is to extend the affordability period, with many requiring that the home stay affordable for the duration of the lease period. In San Diego, a below market home must stay affordable for 55 years, while in San Francisco, Washington D.C., and New York City, the affordability period is the life of the building.

Recommendation:
Maintain affordability for all subsequent buyers by restricting the resale price.
If the state invests funds to accomplish the public purpose of giving less-affluent people the opportunity to own their own homes, state policy should safeguard the supply of these homes so they'll be available to working families for years to come. We recommend that the sales price of affordable units be restricted so that subsequent buyers can purchase a home at the same area median income level as their predecessors. This way the home stays in the affordable pool, and the neighborhood maintains its affordability.

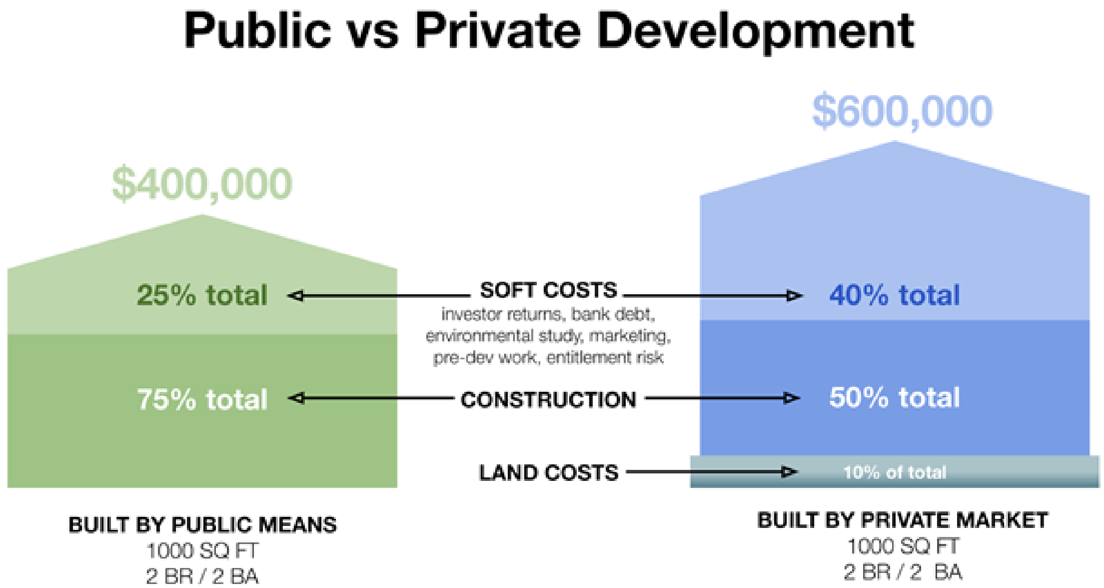
With this recommendation, the price appreciation is limited and will likely be lower than market price appreciation (unless the market price drops). However, the owners still enjoy significant equity gains that accrue as the owner pays down the mortgage—not to mention the security of owning one's home. See Appendix C for models of gains made with equity sharing based on CPI. This model does not provide funds back to the agency, but it also does not require the agency to replace the home and it maintains affordable housing in that same neighborhood.

Analysis of Key Cost Savings Approaches

Estimated Cost is Significantly Below Market Prices

HOME TYPE	**AVERAGE MARKET PRICE** for all condos, Honolulu metro area only, 2019	**STATE-SUPPORTED HOUSING COST RANGE** for mid- to high-rise buildings	**SQUARE FOOTAGE**	**STATE-SUPPORTED APPROXIMATE COST**	**SAVINGS**
1bd / 1ba	$395,000	$280,000–$325,000	600	$300,000	**24%**
2bd / 2ba	$569,000	$385,000–$425,000	830	$405,000	**30%**
3bd / 2ba	$744,000	$460,000–$530,000	1,000	$500,000	**33%**

These savings arise from two main sources: State land contributions and reductions in all expenses that are not direct costs for vertical construction.



Reducing all soft costs besides vertical construction is a best practice.

State-Supported Financing

The complexity and difficulty in securing financing contributes significantly to project delays and the overall cost of affordable housing.. Providing low-cost financing in a timely and straightforward manner would increase competition for projects and reduce development costs.

All three jurisdictions we researched provide access to low-cost funding to reduce the costs of affordable housing, as noted below:

Helsinki, Finland: Government-backed construction loans at 1 percent interest for 40 years
Vienna, Austria: Construction loans at 1 percent interest for 35 years.
Singapore: The Housing Development Board pays construction companies directly to build housing so no loans are needed.

After researching several financial tools, we recommend the following approach to minimize project financing costs and reduce risk for developers and the State.

1. **DURF for pre-development costs. The Dwelling Unit Revolving Fund (DURF) is** extremely flexible and could be used to cover pre-development costs such as due diligence, master planning, and a programmatic EIS.
2. **Streamline Entitlement: Environmental Impact Statements/Environmental Assessments.** Completing an EIS or an EA can add one to two years to a project timeline. In fact, this work can be done most efficiently if carried out directly by the State.
3. **Buyer Pipeline & Pre-Sales of Homes:** Ensuring a pipeline of qualified buyers and pre-sales is key to minimizing financial risk to the State and to developers. Every developer of lower-income for-sale housing emphasized the importance of programs that ready prospective buyers to take on a mortgage, for which an average of two years is needed. In addition to

buyers needing preparation, there is also likely a pool of *middle-income* buyers already mortgage qualified should a pilot project be developed.

4. **Issue taxable mortgage revenue bonds for construction.** These bonds affect the state budget less than general obligation (GO) bonds. The interest rate is currently 3–4%.

   Fewer competing interests: Unlike GO bonds, taxable mortgage revenue bonds are not backed by the full faith and credit of the State of Hawai'i. They are, instead, secured by a pledge of mortgage payments and a deed of trust in the building. In this way, financing with mortgage revenue bonds does not compete with all the other State interests that are paid for with GO bonds, such as roads and schools, and are not a private activity bond.

   Easy to sell bonds for affordable housing: Bonds backed by affordable housing projects in high cost areas such as Hawaiʻi are relatively easy to sell because investors know there is significant demand for below-market housing, and there is little risk that homes will go unsold. Catalyst Housing Group in California has partnered with local jurisdictions and the California Community Housing Authority to sell over $550 million of limited obligation mortgage revenue bonds since 2017.[47] Currently, there are many times more buyers than available bonds and as a result the interest rate on these bonds is expected to continue to drop as this becomes a more common way to finance affordable housing for middle-income earners.

   Efficient and straightforward: HHFDC could serve as the issuing authority for these bonds, which could be issued on a project-by-project basis. Since these bonds would not likely have to go through a complex budgetary or allocation process, they could be issued quickly, and that agility would reduce the time to secure project financing. The marginally higher interest rate cost compared to tax-exempt bonds is trivial.

   Stand-alone financing or combined with other tools in the toolbox: A taxable mortgage revenue bond structured with a 3-year, interest-only, bullet maturity would act like a construction loan. It could fund all of the project costs or be combined with other sources of public or private financing, such as funding from nonprofit lenders or commercial banks offering community-based financing programs.

   Bond issue example: Appendix D presents a high-level sample analysis of a 3-year taxable mortgage revenue bond. It would include two years of capitalized interest, which would allow debt service on the bonds to be fully covered for 2-½ of the three years, creating a real cash-flow advantage not available with many other sources of financing. At the end of the 3-year term only a small amount of debt service would remain, and it could be funded by the developer and rolled into the permanent financing, or, more likely, added to each homeowner's individual mortgage. With an average coupon of 3.5 percent, and an underwriter's discount and total issuance costs amounting to 2 percent of the bond issue, this form of financing would appear superior to many forms of private construction loans with higher rates and similar fees.

[47] Dec. 2020 Interview with Jordan Moss, founder of Catalyst Housing Group

Community Lending Options: Taxable municipal bonds could also be used in combination with commercial construction loans. Many banks have programs that are designed for community investment and would fund affordable housing construction. We spoke with several local banks that would be interested in partnering on this type of project.

Non-Profit Options: Many nonprofit lenders also have products designed to support affordable housing. Hawaiian Community Assets, among others, has funded affordable housing construction loans.

Off-Site Infrastructure part of District Plan

Off-Site Infrastructure Costs:

Individual Projects Paying for Off-Site Infrastructure is Inefficient and Drives Up Costs:

“Off-site” infrastructure costs are those not directly situated on the project site. It is more cost efficient and effective to have these costs paid for not by each project but as a publicly-supported district-wide infrastructure investment. Relieving developers of these requirements would allow them to be selected for what they do best: delivering housing. In fact, this is what all three jurisdictions—Vienna, Helsinki, and Singapore—do. There, the government has created the plan and put in the necessary backbone—roads, sewers, water and electrical services—before developers start building houses. These elements of the planned neighborhood are fairly standard and do not require much creative design. This model allows housing developers to compete on cost and design for the parts that customers will actually experience, such as the layout of the apartments and common area amenities. Also, when the public sector assumes the costs of basic infrastructure, the overall cost of building affordable housing is lower and homes can be sold at a lower price.

Public Infrastructure Investment best supports affordable housing in areas with public land

Market rate housing is affected less by savings in off-site infrastructure cost because its price is largely determined by the market, not by the cost to build. However, there are many places where even market rate housing cannot be built due to lack of infrastructure, and if the public sector provided the infrastructure, more houses would be built. This could lead to a reduction in price, although market rate housing would still not likely be as affordable as a publicly-supported housing project where the price is determined by the cost of building.

Two main ways for the public to pay for district infrastructure: GET or Property Assessment (Community Facilities District)

A July 2020 planning and implementation study prepared for the TOD Council[48] assessed various options to pay for infrastructure needed in TOD areas, and concluded that using General Excise Tax (GET) funding was preferable to other proposals. The study recommended that the State increase the GET rate by .01 percent on economic activity in the newly-developed area. It would dedicate the

[48] July 2020, “State Transit-Oriented Development Planning and Implementation Project for the Island of O ‘ahu” Prepared for Office of Planning and Prepared by PBR Hawaii.

resulting revenue collected over 10 years to pay for state-supported infrastructure costs. In addition to GET, 30 percent of future property tax revenue from developed areas would be used to cover the costs.

We recommend considering a CFD model: More Equitable and can provide enough revenue

Although we appreciate that the authors of this study felt it was more politically feasible to use an increase in GET to pay for infrastructure, we believe that a Community Facilities District (CFD) model is more appropriate. In fact, such an approach might be more feasible since the COVID-19 pandemic recession has imposed new constraints on the State budget. The 2020 study *assumed a pre-COVID economy* when the State budget was not facing a $2 billion budget shortfall, tourism was strong, and unemployment low. Additionally, the impacts of COVID have revealed a deeply inequitable economy: single family home prices keep increasing, while low- and middle-income workers are struggling with lost jobs and earnings.

Property assessments are a better tax: Can be adjusted to be progressive.

Property tax assessments tend to be progressive in nature (that is, wealthy households pay the most and low-income households pay the least) because the higher the value of the home, the larger the tax amount. The homeowner's exemption of $100,000 (or more) makes these taxes more progressive because it disproportionately benefits households in lower priced homes. In many Hawaiʻi counties, property taxes are becoming more progressive with increased rates for **non-owner occupants** and marginally higher rates for more expensive homes. [49]

Community Facilities District Approach is a Targeted Tax: Only properties in improvement areas are impacted, not the entire island. Also, permanently affordable homes can be exempted.

Another advantage of a CFD approach for infrastructure is that the added tax can be targeted to new developments that benefit from the public improvements. The tax can also be crafted to largely exempt affordable homes, while remaining in place for *market priced homes*.

Based on data from the July 2020 study for the TOD council here is an example of how a CFD can pay for district-wide infrastructure:

Iwilei-Kapalama TOD Plan Projections for Phase I and II:[50]

Number of Homes to be Constructed between 2020- 2039: **16,661**
Public Housing (HPHA projects): 3,800
DHHL: 500
HHFDC (Liliha Civic Center): 200
Market Priced Homes: **12,161**

[49] See Maui County Property Tax Rates: https://www.mauicounty.gov/DocumentCenter/View/122028/2020-Tax-Rate

[50] "State Transit Oriented Development Planning and Implementation Project for the Island of Oahu" July 2020

Number of affordable homes, according to Honolulu County guidelines (15%) – 1,824
Number of private homes sold at market prices: **10,337**

Using the above housing projections, an assessment could be implemented on the market rate property which would generate enough revenue to pay for both market rate and affordable housing.

Infrastructure Investment Needed for IK:[51]
Phase I: $235 million Phase II: $227 million **Total: $512 million**

Based on some general assumptions, the following CFD assessments on *market rate homes* would produce funding adequate to support infrastructure investment needs.[52]

Assessed Value	Current RPT Rate	Honolulu Infrastructure Tax	Total RPT Rate + CFD
0-500k	0.35%	0.5%	0.85%
500k- $1M	0.35	1%	1.35%

Assumptions:
Annual CFD special tax revenues, in current dollars, would amount to $33 million, assuming an average private market home value of $569,000. Depending on future property value increases (we assumed 1–2 percent per year), the number of people claiming a homeowner's exemption, and the timing of infrastructure requirements, ***this additional CFD revenue could generate approximately $500M in net bond proceeds available to fund infrastructure***. These CFD tax rate assumptions may be considered high, and lower CFD special tax rates would produce less funds, but that may be compensated for if private market home prices are higher than assumed in this simple example.

In this way, a Community Facilities District assessment on private market properties could subsidize the infrastructure costs needed for all homes, including the long-term affordable rental and for-sale.

Construction Methods

Our analysis determined that hard cost management for a state-supported affordable housing program should be ***the same*** as for market rate housing. We looked at three hard cost approaches and present our findings below:

- **Factory-built / Modular**: Savings begin only at an initial order of 4,000–5,000 homes

  Our interview with Factory OS indicated that, at this time, the only way modular construction of multi-story homes could save costs in Hawai'i would be if shipping costs were eliminated by having a factory built on O'ahu. In order for Factory OS to recover the costs of building a factory in Hawai'i, the state would need to approve and fund orders for 1,000–1,500 homes per year for four to five years.

[51] Pg. 87-88 of "State Transit Oriented Development Planning and Implementation Project for the Island of Oahu" July 2020
[52] Assumptions: Average price for 2bd condo in Honolulu Metro area in 2019: $569,000, property value increase of 1.5% per year, no home-owners exemption.

At this time, with the concept of state-supported for-sale homes being a new approach to delivering affordable housing, it would be unwise to “guarantee” such a large order of homes. Funding a pilot project and testing the viability of the model should be the first priority. At a later time, if the price of a modular unit comes down, and the state-supported ownership housing model has proven effective, it could make sense to follow this route.

- **Artificial Intelligence (AI) Design**: Savings of 1–3%

  According to two contractors who use Artificial Intelligence and Design, savings related to AI use are about 3–5 percent of hard construction costs or 1.5–2.5% of total project costs. Although it is not a significant amount of the final cost, it is one advancement that the state can take advantage of by providing financing for larger projects. While construction companies use this technology to gain a competitive edge over other companies, the State can directly pass these savings onto the buyer.

- **Limited Do-It-Yourself (DIY) Construction or “Shell Housing”** 5–10% savings

  We interviewed several developers that have used sweat equity models in mid-rise dwellings, who report what future residents could have some significant savings by doing some of the finishing work themselves. Work that could be completed in a mid-rise includes installing floors, painting walls, hanging kitchen cabinets, and installing light and plumbing fixtures. Cost savings of even *just 5–10% would be significant* and especially if could be applied towards a down payment, as has sometimes been the case with Self-Help housing.

Streamlined Entitlement: Environmental Assessment

In TOD areas, the development of affordable housing and mixed-use developments could be expedited by the implementation of Programmatic Environmental Impact Statements (EIS) for regional areas. Further, there was a 2019 amendment to the Hawai'i Administrative Rules (HAR) regarding the waiver of an Environmental Assessment (EA) when developing affordable housing. An EA for each parcel adds significant time and costs to any development project. One way to save costs is for the state to complete a Programmatic EIS in TOD areas.

The utilization of the following HAR sections could expedite the development of affordable housing in TOD areas.

EA Waiver for affordable housing.

As stated in Hawai'i Administrative Rules:

“§11-200.1-15 General types of actions eligible for exemption:
(c) The following general types of actions are eligible for exemption:

(10) New construction of affordable housing, where affordable housing is defined by the controlling law applicable for the state or county proposing agency or approving agency, that meets the following:

(A) Has the use of state or county lands or funds or is within Waikiki as the sole triggers for compliance with chapter 343, HRS;
(B) As proposed conforms with the existing state urban land use classification;

(C) As proposed is consistent with the existing county zoning classification that allows housing; and
(D) As proposed does not require variances for shoreline setbacks or siting in an environmentally sensitive area, as stated in section 11-200 .1-13 (b) (11)."

The above HAR can be used to expedite the development of affordable housing. The EA completion and process ranges from 8-12 months; hence, the waiver of an EA expedites the development process by approximately one year.

Programmatic EIS can be used in instances requiring a "larger total undertaking." If the project or a series of projects within an area sited for future development is proposed and the approving agency determines that the "larger total undertaking" requires an Environmental Impact Statement (EIS), the following HAR section can be implemented: Section 11-200.1-10.

> **Example: Aloha Stadium.** A recent mixed-use development in a TOD area implementing the HAR section stated above is the New Aloha Stadium Entertainment District (NASED) EIS. This multi-phased project is utilizing this HAR provision to complete their EIS requirement and process. The NASED project is essentially a Programmatic EIS as it's a large-scale development to be completed in phases.

Recommendation: To achieve cost savings, an ALOHA Homes project should qualify for an EA waiver or be included as part of a larger programmatic EIS.

Developer Fees

Developer Fees and Overhead at 4–6% of Project Costs.
This housing delivery model significantly reduces risks and costs for the developer, which can translate into a lower development fee still being an attractive level of compensation. In a model where the State is providing construction loan financing, in the form of taxable mortgage revenue bonds supported by a mortgage interest in the property (not a private activity bond), and where entitlements and permits have been streamlined, the developer assumes less risk. For the purposes of our sample pro-forma, we have used a middle number of a 5% developer fee. A few relevant comparisons include:

1. In places with a similar housing delivery model, such as Finland, the developer fees are 4 percent.
2. Some non-profit developers in Hawaiʻi complete projects with a 3–5 percent developer fee.
3. Lastly, average LIHTC projects have developer fees and overhead largely in the 6–8 percent range, so 4–6 percent seems reasonable for a project with less risk and lower upfront costs.

Hard Construction Costs

For affordable housing, costs of $325–375 per sq ft of leasable area is achievable.

Based on our interviews with local industry experts including both construction companies and developers, the actual costs of vertical concrete construction in TOD areas with land well-suited for housing is $260–$300 per gross square foot. For an affordable housing project with limited amenities, the common areas, not including parking, are about 20 percent of the total constructed space. This translates into a cost of roughly $325–$375 per square foot of leasable space for the project. In addition to having fewer amenities, affordable housing can use less expensive construction methods such as tunnel form construction employed by Hawaii Dredging. For affordable housing construction of sound quality but not luxury, we estimate that a hard cost of $350 per square foot of leasable space is reasonable and accurate.[53] These hard costs are lower than what is found in typical LIHTC projects for two reasons:

1. The conditions on construction and compliance with LIHTC requirements adds to the cost.
2. An extended pre-development process often results from complicated financing structures and circumstances.

Parking Separated from Housing Cost

Best Practice: Unbundling parking from the cost of housing. The cost for a parking stall can range from $25,000 to $40,000. In Vienna and Helsinki parking is always unbundled and one parking structure is often shared by multiple buildings. High cost jurisdictions such as San Francisco, New York and Seattle are increasingly separating the cost of parking from the cost of housing. Especially in areas near transit this is becoming standard practice.Parking becomes an option that homeowners can pay for with a monthly fee instead of automatically being incorporated into the purchase. To finance parking sometimes a developer will partner with a private parking operator that owns, operates and maintains the structure. In TOD areas where there are other transit options some people would choose to own fewer cars or choose a car sharing option, such as the Hawaii Hui Car Share program where you can reserve cars for personal use. [54]

Focus Group Results: Residents are receptive as long as parking is available. When presented with the option to separate the cost of parking in order to lower the purchase price of a home, our focus group participants agreed it would be good to have a choice. The main concern was ensuring enough parking for those who wanted to pay for it.

Development Model to Increase Competition

We recommend the following for a development model: **Two-step RFQ/RFP process with third-party verification of financial documents**

To encourage competition among developers and to reduce costs for the state, it is recommended that proposals undergo a two-step vetting process and that in the final proposal developers be required to submit their pro-forma for third-party verification.

1. **Create a two-step process in which developers** first submit qualifications. Invite no more than three developers to submit a more detailed RFP. This is the process in use by the New Aloha Stadium Redevelopment Authority to maximize competition and initial interest in a project. However, expect detailed plans from only the top contenders.

[53] Based on interviews with several local developers and construction contractors.
[54] www.drivehui.com

2. **Engage private consultants to provide third-party analysis** of private development pro-formas as a prerequisite for the contribution of publicly-owned land. This helps to build trust in the process through accountability and transparency. This is a common practice in many jurisdictions and the cost—about $20,000—is minimal compared to the cost of the overall project. Additionally, the developer can wrap the cost into the overall project budget if a development agreement is executed.

Benefits of Implementation: Ownership Opportunities for 80%–140% AMI

This model provides a pathway to ownership for people earning average and above-average wages, but who can still not afford to purchase in the private market. Based on the recent Hawai‘i Housing Planning Study, there are approximately 5,000 households in the 80%-140% who would like to purchase a home.[55]

Leasehold ownership, even with shared-equity, offers significant benefits over rental housing.

There are long-lasting benefits of a leasehold ownership model when compared to rental housing. Some of these include:

1) **Greater stability and control over lease terms:** Leasehold owners, as members of the housing association, can set rules for the building, priorities for common area spaces and determine the schedule for maintenance of the building.
2) **Sense of Ownership, Improved well-being:** In the words of one focus group participant, “Owning a home would make me feel like more of a community member, more of a citizen.” Numerous studies have shown that homeowners are more likely to be invested in their local community and that there are significant health and educational improvements for homeowners. [56],[57]
3) **Inheritance: Transfer property to children.** Under a long-term leasehold model, a property can be passed down from parents to their children in the same way as fee simple. The ability to transfer property and equity to future generations is a significant benefit over renting.
4) **Financial Gains: Price stability, wealth generation, and tax benefits.** With a fixed 30-year mortgage, a person’s monthly housing costs are more stable over time, and not subject to annual increases that are allowable for most rental agreements. Also, even in a shared-equity model where the resale price is restricted, an owner can build up significant gains just by paying down their mortgage and benefiting from inflationary increases in home value. Lastly, tax benefits through the mortgage-interest deduction program amount to thousands of dollars in savings every year for homeowners. For residents with an income range of

[55] 2019, “Hawai‘i Housing Planning Study”
[56] 2016, “Beneficial impacts of homeownership: A research summary”, Habitat for Humanity
[57] May 2012, “Homeownership and Civic Engagement in Low-Income Urban Neighborhoods: A longitudinal analysis.” Maturuk, Lindblad, Quercia Volume: 48 Issue 5

$60,000 to $90,000, who would most likely take advantage of this program, the savings would be approximately $2,500-$3,000 a year for the first five years of a mortgage.[58]

None of the above advantages are available to renters.

Demand for State Supported Leasehold Housing: Focus Group Insights

After determining what a feasible price would be for this type of housing, we conducted focus groups to see if there would be interest in this housing model and what the concerns would be.

Methodology: To conduct the focus groups, we sent out messages via text and social media to the general public through our website and partner organizations including local unions. Over a period of four weeks over 160 people completed our survey. Ultimately,18 people participated in either a one-on-one session or a group conversation.

We initially screened for people who had enough household or individual income to potentially qualify for a mortgage with our price assumptions. However, because approximately 66% percent of respondents would not be able to income qualify, we held one focus group with low-income participants to gauge interest in a rent-to-own model supported by low-income tax credits (LIHTC). This rent-to-own model is one of the few pathways to ownership for those below 80 percent of the area median income, and is something the state can facilitate through the existing LIHTC program. Because the ALOHA Homes model does not expressly contemplate a rent-to-own option, we conducted only one focus group with lower-income participants. Fourteen of our 18 focus group participants were income qualified.

Focus Groups' Key Input

- **Leaseholds: hesitation at first, receptive after learning details.**
  Generally speaking, participants did not fully understand the limits and benefits of leasehold properties prior to participating in the focus groups. The focus group facilitator explained that leasing was a way to cut down costs, because "you don't pay for the land, you only pay for the building." While many participants were initially apprehensive about the idea of engaging in a leasehold agreement, most were open to it after better understanding the financial benefits of leaseholds.

  Given the stigma of leasehold properties for many focus group participants, it was important to make a clear distinction between private-market leaseholds, and state-provided leaseholds, which offer a public benefit, and in some cases, operate similar to a public land trust.

- **Importance of pricing: low-monthly costs key to program interest.**

[58] Assumptions: 30 yr mortgage with 3% interest rate. Federal effective tax rate of 12%, Hawai'i rate of 7%.

Program participants who were initially very skeptical of a leasehold program became interested after being presented with monthly costs, including homeowners association (HOA) fees that are similar to market-rate rental prices. Even participants who strongly preferred fee simple ownership were interested in this option as an intermediate ownership strategy or a stepping stone. “I would do this for the next five years or so,” said one participant who was initially very skeptical. Three participants expressed concern that HOA fees would increase over time and wanted assurance that there were sufficient funds for maintenance.

- **Down payment assistance and mortgage readiness: critical for access.**
  For most focus group participants, down payments were the greatest barrier to owning a property. Access to a lower down payment (3 percent or less) and potential down payment assistance was an important benefit to almost everyone. For some, it was the most attractive aspect of the entire program. Moreover, some participants indicated that financial literacy and mortgage readiness programs would be of great benefit to them, as they face credit score and debt barriers to receiving bank loans.

- **Shared equity: initial confusion, strong support after explanation.**
  Similar to leaseholds, most participants did not fully understand the concept of shared equity prior to participating in the focus groups. The focus group facilitator used graphics to explain the concept, and the financial trade-offs of keeping housing affordable over the long-term. Once explained, participants almost unanimously supported the concept of shared equity. As one participant stated, “If I receive help buying a place, it only makes sense that I don’t make a lot of money if I sell the place.” Moreover, most participants felt it would be unfair for people to sell affordable units at market-rate value, at any time after the initial purchase.

- **99 yr lease vs 65 yr lease lengths.**
  The main benefit people cited for longer leases was being able to pass the home onto their children.

- **Preferences and set-asides: Set asides perceived to be more fair.**
  Focus group participants generally supported both preferences and set-asides for special groups in need of housing. However, some participants were hesitant about the idea of preferences because they thought “everyone should be equal.”

  Notably, even the participants who were against preferences were in support of housing set-asides. A set-aside felt more fair to participants who were opposed to some applications receiving preference over others.

- **Sweat equity: highly popular option, 94% support.**
  Nearly all focus group participants were in support of the sweat equity model and expressed interest in engaging in such a program if it could help reduce the cost of the home and the down payment. They also expressed interest in the fact that sweat equity would help create community among residents and provide homeowners with useful home maintenance skills. As one participant noted, “This [sweat equity] is a great way to solidify tenants’ commitment.”

- **Future resident involvement in planning: strong interest, once a month is feasible.** Focus group participants believed future residents should be involved in the planning of the ALOHA Homes Program and the eventual design of affordable housing units. Many participants also expressed interest in participating themselves. However, there was some disagreement over the preferred frequency of involvement. Some participants indicated they would be interested in meeting on a monthly basis for about a year, while others said they would only participate a few times a year.

- **Housing amenities: gathering space desired, low HOA fees is priority.** While focus group participants expressed a desire for amenities, such as recreation rooms and communal spaces with grills, there were few amenities which participants indicated would "make-or-break" their involvement in the ALOHA Homes Program. Instead, participants preferred lower HOA fees and fewer amenities. However, many participants indicated that having laundry machines within their own unit was critical; they would not live in a housing complex with shared laundry machines. Moreover, there was a general interest in having access to gardens or open green spaces.

- **Parking: support separating from cost of housing, concern there will be enough.** The focus group facilitator began the discussion about parking by sharing information about how parking increases tenants' mortgages. Many participants were surprised to learn the high costs associated with parking. Although participants generally desired the availability of parking, some participants were open to the idea of having a "one-car-family." Others were open to not having parking, pending the availability of other transit options. Participants were particularly interested in the option of separating parking from the cost of housing by paying a separate monthly fee of approximately $160 per stall in exchange for a lower mortgage. Participants appreciated the option to not have parking included in the cost of the mortgage.

- **Owner-occupancy enforcement: concerns with high-tech, management preferred.** Focus group participants universally agreed that owner-occupancy must be a requirement of the ALOHA Homes Program and that it should be strictly enforced, including with high fines for residents who break the rules. Some participants, particularly single-women, felt this was important for ensuring safety.

  Generally, participants were not in favor of technological solutions such as face-scanning and fingerprinting, as they felt it was an invasion of privacy, could be difficult to accommodate guests and was susceptible to technological error. As one participant put it, "I can't even get my fob to work sometimes." Participants were more in favor of solutions that involved a property manager enforcing the rules. They felt that the residents themselves should have an active role in monitoring and identifying tenants who are illegally renting their units. Lastly, participants expressed a need for flexibility in some cases where family and friends are visiting for extended periods.

- **Potential Pilot Project: Liliha Civic Center** In order to make the program more tangible and relatable we suggested the Liliha Civic Center as a potential pilot project site. This site was selected because it is close to downtown

Honolulu, is nearby a future rail station and already has plans for affordable housing. Most participants were very interested in this location, with several commenting that it would save them significant time spent in their cars commuting to work. Some people were so enthusiastic that they asked when the project would start and to be kept informed of any progress.

- **Strong support for state-operated affordable leasehold housing.**
  While there was disagreement over some of the potential elements of the ALOHA Homes program, focus group participants were generally supportive of the State pursuing this effort and felt that it was the responsibility of the State to provide affordable housing opportunities to its residents. Several participants expressed frustration that current properties being built were not affordable to local residents and one noted that "even the supposedly 'affordable' homes are not really affordable."

  Given the lack of affordable homeownership programs in Hawaiʻi, focus group participants felt that many of their family members, friends and colleagues would be interested in this new and innovative opportunity. As one participant from Kauaʻi said, "I would actually move to Honolulu for this program."

Conclusion:
There is likely high demand among local residents for leasehold affordable housing at the prices that are currently feasible with this model, especially if it is coupled with down payment assistance programs. Concerns that emerged about the model were the potential for HOA prices to increase, possible limits in being able to pass the property onto one's children, and ensuring that the property be well-maintained and managed in the future.

The interest in affordable homeownership opportunities, even with shared equity and a restricted-resale price, mirrors the experiences in other high cost places shared with our research team. In San Francisco, there are 20 approved applications for every available below-market home, even with a permanent resale price restriction.[59] Other interviews with land trusts and local governments affirmed that ownership opportunities priced at least 25 percent below market have strong demand even with resale price and buyer restrictions.[60]

Other Affordable Leasehold Program Considerations

State Land Contributions are Key: Mission Alignment of State Agencies

For this housing delivery model to be successful, it is critical that land is contributed at a minimal cost. Otherwise, the housing will require further subsidies in order to be affordable at 80–140 percent of area median income. It is also crucial that the housing projects are part of a larger mixed-use area plan where market rate housing and commercial properties can help subsidize the affordable homes.

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[59] Interview with San Francisco Mayor's Office of Housing and Community Development
[60] Interviews with Grounded Solutions Network and several Community Land Trusts

Although the state has significant land holdings in TOD areas, the land is often owned by different state agencies whose missions do not include affordable housing. For example, the Department of Education must prioritize education goals and the Department of Accounting and General Services must provide office space for state agencies. However, for affordable housing to be built near rail or other transportation hubs, some of the lands controlled by these departments should be repurposed for housing.

The difficulty is determining which lands should be used for affordable housing, and then facilitating the transfer of development rights to an agency such as HHFDC or HCDA which can deliver the affordable housing. Also, landowning agencies which do not have housing missions, such as the Department of Education, should be compensated for their contribution of land towards affordable housing. Otherwise the goal of affordable housing will always be competing with the primary mission of other agencies. A land contribution can and should be a win-win.

Fortunately, the process of bringing agencies together to create a plan for affordable housing in TOD areas has already been started by the Hawaii Interagency Council for Transit Oriented Development. Created in 2016, the council has encouraged agency collaboration and has initiated important planning efforts for TOD areas. However, it does not have the authority to implement an affordable housing plan or the structure necessary to hold agencies accountable for moving a plan forward. To assist the TOD council and the state in reaching the goals of affordable housing, the following actions are recommended:

1. **Establish a TOD subcabinet under the governor's executive office.** The subcabinet would be responsible for advising the governor and guiding the planning and coordination of state agency TOD implementation. The governor should regularly attend TOD subcabinet meetings to assess progress towards housing goals and offer assistance with obstacles that emerge. To demonstrate that affordable housing is a top priority for the state, the governor must be visibly involved in ensuring that benchmarks are reached.
2. **Create the position of Director of Affordable Housing, who would report directly to the governor and ensure that progress is being made across departments and agencies.** The director would create a set of housing goals and report on progress towards them regularly to the governor. This position would emphasize the importance of affordable housing and require greater accountability from the state in progressing toward its goals.
3. **Support funding for the TOD council and the Director of Affordable Housing to provide seed money for planning efforts and hiring consultants as needed.** Even an annual budget of $1–2 million for affordable housing planning and implementation efforts would create efficiencies in how hundreds of millions of state and county dollars are spent, and ensure that affordability is prioritized in future development plans.

Expanding the availability of affordable housing will depend on many agencies collaborating and working together towards this common purpose. Unfortunately, collaboration cannot be mandated or simply passed into law. Instead, it needs to be incentivized by providing resources and plans that advance affordable housing goals, compensating non-housing agencies that contribute land, and by continuous assessment of progress. There are no short-cuts to effective collaboration, or to achieving long-range, ambitious goals such as providing quality affordable housing to Hawai‘i residents.

Mortgage Assistance: Down Payment Support and Mortgage Readiness

Down payment support is one of the most referenced hurdles for people trying to purchase a home. According to the Hawai'i Housing Planning Study of 2019, when researchers asked people for their top reasons for not buying a home, the overall price of the house was the response for 56 percent of respondents, followed by the down payment for 31 percent.[61]

This data aligns with our focus group research, which indicated that **the ability to obtain a 3 percent down payment** and other forms assistance such as grant or matched savings programs, was a significant benefit to interested residents. All of our focus group participants could afford the monthly house payments at our projected sales prices; it was simply the down payment and loan qualification requirements that would prevent homeownership.

Savings & Down Payment Programs in Hawaiʻi:

Hawaiian Community Assets (HCA) provides a MATCH Savings Program. HCA matches savings for individuals to put towards an identified savings goal. HCA also provides micro loans of up to $10,000 that a buyer can put toward a down payment.

Local Banks: 3% down payment options. We spoke with three local lenders and all offered mortgage products with a 3% down payment.[62]

Department of Hawaiian Home Lands: Pilot program.
As of December 2020, the Department of Hawaiian Home Lands (DHHL) approved a pilot program for down payment assistance to help those on the housing waitlist to make payments toward fee-simple residences not situated on Hawaiian Home Lands. By accepting this assistance, the applicant is removed from the list. Should the fee-simple property be sold, DHHL has first right of refusal. It is anticipated that applicants would have to pay for some portion of the down payment, but it is not yet clear how much.

PMI is not required for some below-market mortgages.
Private Mortgage Insurance (PMI) is required in most mortgages where the borrower contributes less than 20% for the down payment. Both Freddie Mac and Fannie Mae have adjustable or cancelable PMI based on the loan-to-market value amount achieved by the borrower. Other municipalities that provide below market housing suggested that this provision can be used to waive PMI if a home is sold for more than 20% below market, because the mortgage loan is already 80% loan to value without a down payment.

Future Resident Engagement in Planning and Design

Best Practice: Vienna, Helsinki and other European cities are adopting the practice. Involving future residents in project planning adds value to a project and creates a sense of community.

[61] 2019 "Hawaiʻi Housing Planning Study" prepared for HHFDC
[62] Interviews with Bank of Hawaii, Central Pacific Bank, and American Savings Bank

Over the past few decades, standards have increased for how future residents can be involved in the design and management of affordable housing projects. Below are some case studies:

Local Case Study: Community Involvement in Puʻuhonua O Waiʻanae
With a community of nearly 250 people, Puʻuhonua O Waiʻanae is one of the oldest and most established houseless encampments on Oʻahu.[63] Although the residents are technically houseless, Puʻuhonua O Waiʻanae is an established village on 19.5 acres of land, where residents grow their own food, share resources with one another, engage in community services, and plan community events.[64] Puʻuhonua O Waiʻanae is organized into sections of 20 to 25 people, forming "communities within the community." Each section is appointed a village "captain" to help enforce rules and settle disputes.

In 2020, Puʻuhonua O Waiʻanae succeeded in raising $1.5 million in private donations to purchase a 20-acre parcel of land in Waiʻanae Valley to relocate their village. The initial design concept for the new village included a cluster of tiny homes based on the village sections, and shared spaces at the center of the community, including restrooms, kitchens, cooking areas and gardens.

Village residents were then invited to participate in design charrettes to provide input on the design of proposed community spaces and the homes. Once the relocation site was selected and purchased, organizers and future residents began site visits, clearing rubbish, and building relationships with neighbors of the future village, establishing a sense of responsibility for the land before the building starts. Moreover, the selected design of the homes, A-frame structures, is simple enough to install that residents can actively participate in the process once construction begins. The simple design, communal kitchens and bathrooms, and villagers' demonstrated ability to perform functions like groundskeeping and security, help keep development and operating costs down- savings that will be passed on to residents in the form of rents below $300 per household.

International Case Studies: Co-Determination in Vienna, Participation model in Helsinki
Vienna has a long history of government-sponsored housing. Today, 62 percent of residents in the city live in public housing.[65] The developers of public housing actively engage future tenants through a process of "co-determination." Through this process, residents can provide input on housing design, as well as on the use of and decoration of communal areas. The level of collected input varies by development, with some projects allowing residents to choose a floor plan, while others allow input on only common areas.

Helsinki multi-family housing developers are working with buyers during pre-construction to get design input especially for amenities and community spaces. Meeting with future occupants is seen by some developers as a way to add value to a project and have residents help with resource

[63] Friedheim, N. (2018, September 30). "This Waianae Homeless Camp Is Going Legit". Honolulu Civil Beat. Available at: https://www.civilbeat.org/2018/09/this-waianae-homeless-camp-is-going-legit/
[64] HCA. (2020). "Affordable Housing Development Training" Webinar. Available at: https://www.dropbox.com/s/cs0dk5ofixdyvfd/Affordable%20Housing%20Development%20Training%20-%20Nov%202020.mp4?dl=0
[65] Dudley (2020)

choices: should we have less parking and more car sharing options? How should communal space be used? Involving future occupants in these conversations can create better design and also save on project costs.[66]

International Case Study: Senakw Development in Vancouver

In January, 2020, Squamish Nation members approved the construction of a new district, called Sedakw, in Vancouver that would house 11 towers with 6,000 total dwelling units for more than 10,000 residents.[67] The future development sits on 11.7 acres of former railway lands within one of Canada's smallest First Nations reserves.

Since Sedakw is on federal land and not city land, the planners of the future development have the flexibility to work outside of Vancouver's design standards. While the city typically mandates one parking stall per unit, only 10 percent of Sedakw apartments will include parking. Sedakw buildings will also forgo the podium-and-tower design that has become iconic in Vancouver.[68] Instead, the apartments will be slender high-rises with a density of 500 units per acre, on par with the density in cities such as Hong Kong.

The future Sedakw development challenges the notion that indigenious communities must be low-density, rural, and located on the outskirts of cities. Revery Architecture, the architecture firm responsible for the Sedakw design, worked with members of the Squamish Nation to ensure the design paid tribute to the site's history and relationship to the natural environment. For example, apartments near the Burrard Street Bridge, have been designed to emulate the feeling of entering a forest.[69]

Lessons for the ALOHA Homes Program

- Engage future residents early: Consider ways for future residents to become involved with project design before construction begins. This builds a sense of community and adds value.
- Dense, urban design can still pay tribute to the area's history and natural environment.

Cost Recovery Principle: State Funding is Recycled

One advantage of an ownership model for affordable housing is that state funding for the project can be recovered and recycled for another project when new residents secure mortgages that cover the costs of development. Note that this is for the cost of the building only and not for all the offsite infrastructure, community-wide amenities, and other costs that go into a larger community plan. However, recycling the money for just the vertical construction costs helps create a sustainable path to expanding affordable homeownership in Hawaiʻi.

[66] New York Times (2020, October 14th) "Helsinki makes sustainability a guiding principle for development", by Dorn Townsend Available at: https://www.nytimes.com/2020/10/14/todaysinyt/helsinki-makes-sustainability-a-guiding-principle-for-development.html
[67] Halliday, M. (2020, January 3). "The bold new plan for an Indigenous-led development in Vancouver." The Guardian (Cities). Available at: https://www.theguardian.com/cities/2020/jan/03/the-bold-new-plan-for-an-indigenous-led-development-in-vancouver
[68] Halliday (2020)
[69] Halliday (2020)

Proposed Action Items

Legislative

Most of the tools needed to implement this model for affordable home-ownership already exist within current state laws and administrative rules.

Community Facility Districts for Infrastructure Financing

One area that might require some legislative change is allowing the state to be re-paid for infrastructure investments through Community Facilities Districts implemented by the counties. In this arrangement the state would put in the initial bond funding and the counties would repay the bond financing with increased property assessments in the various improvement districts. Further research is needed to assess whether this arrangement would require any changes in the HRS or if it simply requires a memorandum of understanding between the state and the county.

Affordable Housing Facilitator

Access to affordable housing is such a key issue for Hawai‘i residents that it deserves high level attention and direct communication with the Governor’s Office. This position would coordinate efforts across multiple agencies and work towards a long-term strategic plan.

Taxable Mortgage Revenue Bonds

This financing tool could be used by HHFDC to provide low-cost and efficient construction financing on a project-by-project basis without impacting the state budget or the private activity bond cap. Further legal research is being conducted to determine if the current HRS 201H provisions for Taxable Mortgage Securities Programs are sufficient for the purposes of financing affordable leasehold housing.

Lease end game issues

We are awaiting further input from important stakeholders and will amend this section.

Leadership

A new leasehold housing program would require high-level state leadership to facilitate negotiation and collaboration between multiple state agencies and departments. Although each department has a separate mission, there are ways for all stakeholders to benefit from providing affordable housing to Hawai‘i residents.

Conclusion

In more than 5,000 households in Hawai'i, there are residents earning good wages, who want to purchase a home but find prices to be out of reach. We spoke with some of these residents—teachers, hotel workers, even real estate agents—and they all believe the state should play a role in expanding affordable ownership opportunities.This study provides an initial blueprint for one way to accomplish this without impacting general fund revenue.The model does require a state subsidy in the form of land use and access to expedited entitlements and financing. It also requires negotiation and collaboration across departments.

Adopting a leasehold ownership model faces significant obstacles and will not be easy. If it was, it would have been done already. As a case in point:

In 1970 the Hawaiʻi legislature passed Act 105 for the purpose of enabling the Hawaiʻi Housing Authority to develop affordable ownership opportunities. The act stated:

> “The legislature has also determined that decent shelter and the responsibility of home ownership contributes to the pride and dignity of man and makes him a greater asset to the community and that lack of decent shelter and the *responsibility of home ownership* contributes to harmful frustration in our community. The home is the basic source of shelter and security in society, and the center of our society which provides the basis for the development of our future citizens. **Frustration in the basic necessity of decent shelter, in the satisfaction of the basic drive in man to provide a decent home for his family, provokes an unrest in our community that is harmful to the overall fiber of our society.”**

For more than fifty years the Hawaiʻi legislature has struggled to provide home-ownership opportunities to lower- and middle-income residents. The problem is arguably more pressing now than ever before: Hawaiʻi’s population has declined each of the past four years, and one of the main reasons is the cost of housing. While the ALOHA Homes model needs work, the concept of affordable leasehold housing has great potential to fulfill an important housing need for local residents.

Appendix A: Interviewees

Local Developers and Construction Companies
Hawaiʻi Dredging
Albert C. Kobayashi Inc.
Stanford Carr
Hawaiʻi Island Community Development Corporation
Alaka'i Development
Mark Development Inc.
Self-Help Housing
Artspace
Hunt Co. Hawaiʻi
Ahe Group

Local Government
Office of Planning
OHA
DHHL
City and County of Honolulu, Planning Department
City and County of Hawaiʻi, Planning Department

Local Housing Organization
LURF
BIA

Lenders
Bank of Hawaiʻi
American Savings Bank
Central Pacific Bank
Hawaiʻi Community Assets

Financial Consultants
UH Office of Budget and Finance
280CapMarkets

Other Housing Organizations and Agencies
City of Burlington Department of Planning and Zoning
Portland Housing Bureau
San Diego Housing Commission
City and County of San Francisco
DC Department of Housing and Community Development
Champlain Housing Trust
Na Hale O Maui Land Trust
Grounded Solutions
ARA - Housing Finance and Development Centre of Finland
Habitat for Humanity NYC, Habitat for Humanity Maui
Catalyst Housing Group
Factory OS
Center for Budget and Policy Priorities

Interviewed People

Jonathan Huskey - Deputy Director for State Campaign Communications, Center for Budget and Policy Priorities
Bernie Bergmann - State Data and Campaigns Senior Manager, Center for Budget and Policy Priorities
Claudia Shay - Executive Director, Self-Help Housing
Craig Watase - President, Mark Development Inc.
Jarmo Linden - Director, The Housing Finance and Development Centre of Finland
Jeremy McComber - Development Manager, Hawaii Island Community Development Corporation
Keith Kato - Executive Director, Hawaii Island Community Development Corporation
Jon Wallenstrom - Principal, Alaka'i Development
Greg Handberg - Senior Vice President, Artspace
Naomi Chu - Vice President of Asset Management, Artspace
Juliana Bernal - Project Manager, Habitat for Humanity NYC
Kevin Brown - President, Factory OS
Paul Silen - Vice President - Commercial Division, Hawaiian Dredging
Stanford Carr - President, Stanford Carr Development
Paul Kay - Executive Vice President & COO, Hunt Development Group - Hawaiʻi Division
Thomas Lee - Senior Vice President of Development, Hunt Development Group - Hawaiʻi Division
Sharon Gi - Vice President of Development, Hunt Development Group - Hawaiʻi Division
Steve Colón - President, Hunt Development Group - Hawaiʻi Division
Ruby - Planner, Office of Planning (Honolulu)
Jeff Weiss - Hunt Development Group
Dwight Mitsunaga - President, Building Industry Association
Dean Uchida - President, Building Industry Association
Jessica Leorna - CEO of Building Industry Association
Sherri Dodson - Executive Director, Habitat for Humanity Maui
Jenee Gaynor - Capacity Building Manager, Grounded Solutions
Robert Leuchs - Director of Homeownership Center, Champlain Land Trust
Kalbert Young - Vice President and and Chief Financial Officer, UH Office of Budget and Finance
Jordan Moss - Founder, Catalyst Housing Group
Shelly Tanaka - Vice President, John Child & Company
Roberta Hsu - Project Manager, Albert C. Kobayashi Inc.
Michael Young - Vice President, Albert C. Kobayashi Inc.
Tom Lockard - Managing Director, Head of Investment Banking, 280CapMarkets (Originations Head, Co-Founder)
Catherine Lee - 280securities
Jessica Conner - Senior Policy and Planning Coordinator, Portland Housing Bureau
Dory Van Bockel - Program Manager, Development Incentives Team, Portland Housing Bureau
Gene Bulmash - Inclusionary Zoning Manager, DC's Department of Housing and Community Development
Todd Rawlings - Housing Program Manager, City of Burlington Department of Planning and Zoning
David White - Director of Planning and Zoning, City of Burlington Department of Planning and Zoning
Rusty Rasmussen - SVP, Division Manager, Central Pacific Bank
Sujata Raman - Vice President, Single-Family Housing Finance - San Diego Housing Commission
Maria Benjamin - San Francisco housing department

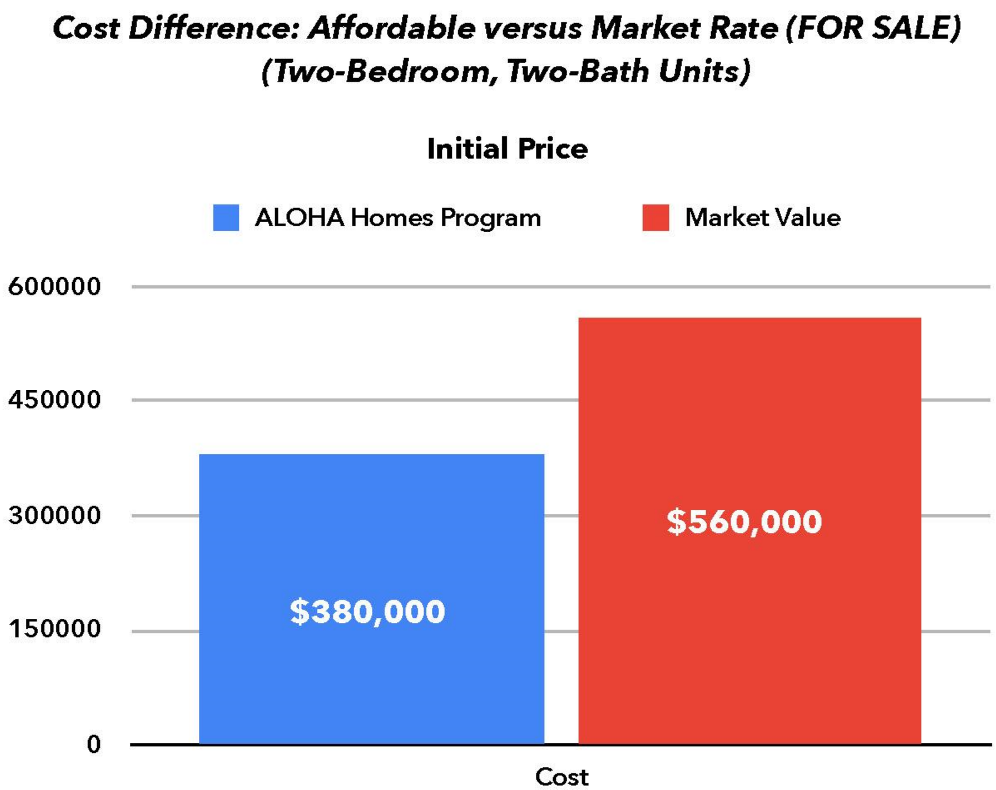
Appendix B: Other Jurisdictions

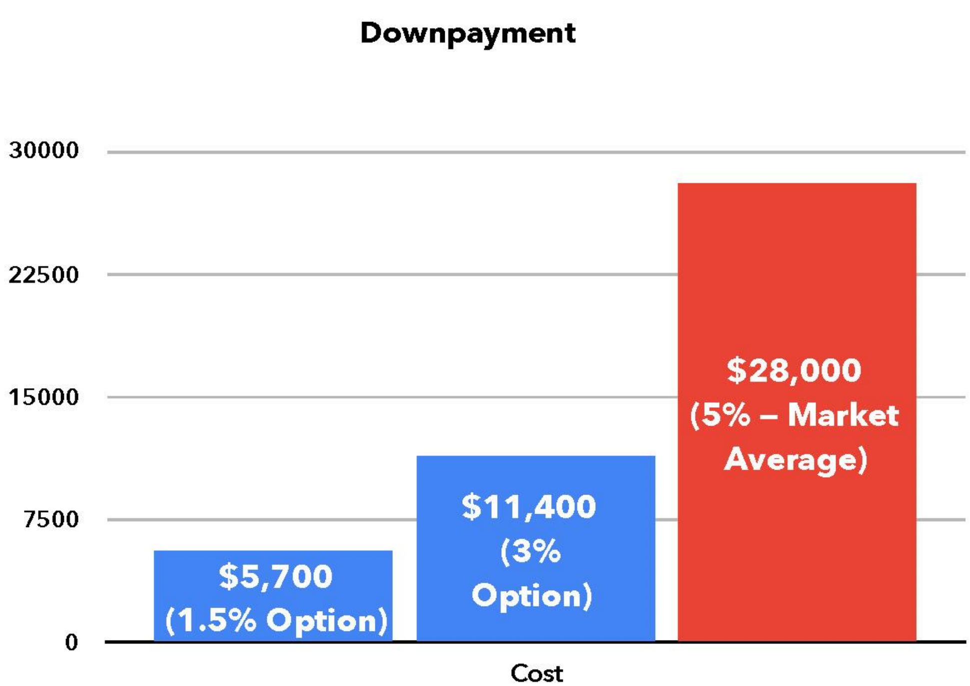
	Washington DC	**Portland, OR**	**San Francisco, CA**	**San Diego, CA**
Managed by	Department of Housing and Community Development	Portland Housing Bureau	Mayor's Office of Housing and Community Development	San Diego Housing Commission
AMI Range	50–80%	60–80%	80–130%	100–120%
% Units Affordable	8–10%	10–20%	12%	20%
Affordability Period	Life of the building	99 years	Life of the building	45–55 years
Owner-occupancy	Yes	Yes		Yes
Residency Requirement	Current Resident	Current resident	Current Resident	Live/work 2 years
Own Other Property	No other residential	No liquid assets > $20,000	No residential	No other property

	Aspens, CO	**Naples, FL (Collier County)**	**Boston, MA**	**New York, NY**
Managed by	Aspen Pitkin County Housing Authority		City of Boston	New York City Department of Housing Preservation and Development
AMI Range	<205%	80–150%	Varies, <100%	80–130%
Affordability Period	Property Unique	15 years	50 years	Max 40 years
Owner-occupancy	Yes		Yes	Yes
Residency Requirement	Work full-time in Pitkin County or 75% of Income	Yes	Preference	Resident, Local area preference
Own Other Property	No residential			

Other Requirements	Occupy unit at least 9 months out of the year		Preferences (depending on unit) for Veterans, senior citizens, first time homebuyers, approved professional artists, Boston residents	Sell to income-qualifying buyers at 2% appreciation

Appendix C: Equity Share Model



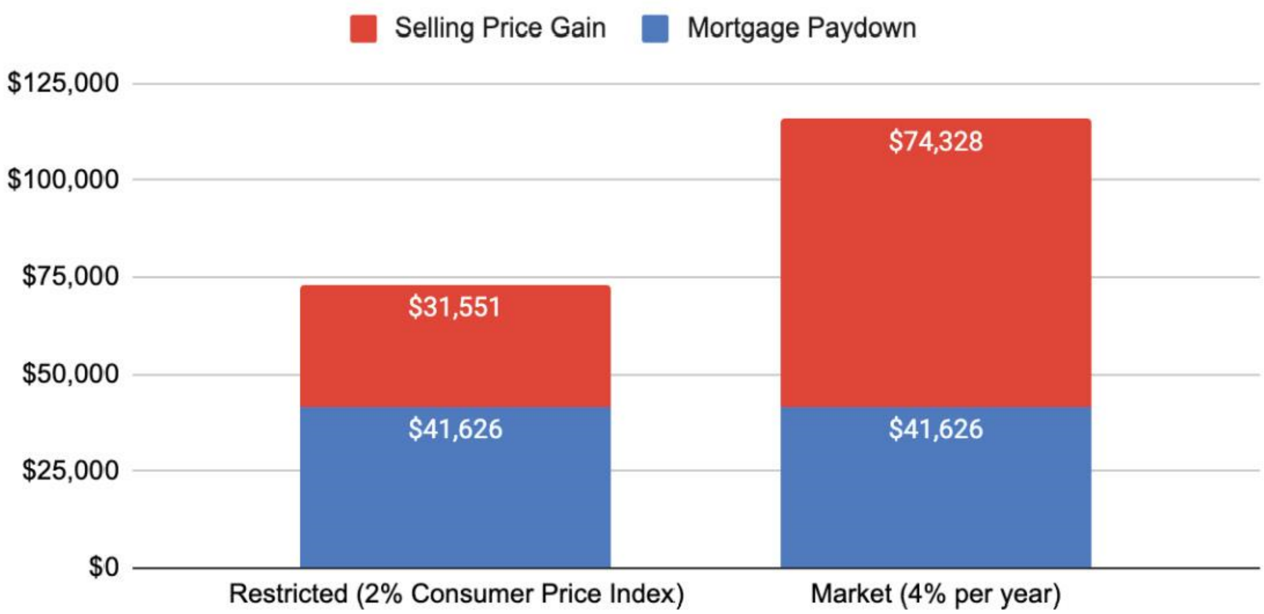


Mortgage Payments: Affordable Leasehold $380,000 vs. Market Rate $570,000

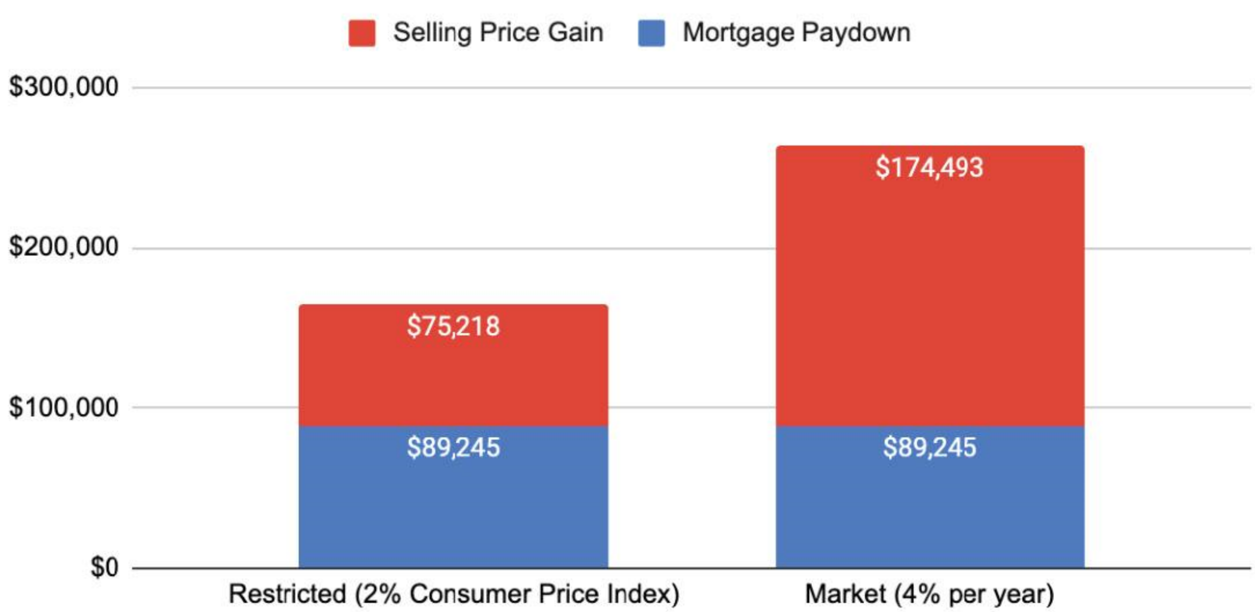
2 Bed/ 2 bath: Affordable Leasehold $380,000 vs. Market Rate Rental

Equity-Share Difference: Affordable versus Market Rate (FOR SALE)
(Two-Bedroom, Two-Bath Units)

After 5-Years



After 10-Years



Appendix D: Hawai‘i Three-Year Taxable Bonds

TABLE OF CONTENTS

Hawaii Housing Authority
Hawaii Housing Finance Authority, Mortgage Revenue Bonds, Series 2021 (3-Year)

SOURCES AND USES OF FUNDS

Hawaii Housing Authority
Hawaii Housing Finance Authority, Mortgage Revenue Bonds, Series 2021 (3-Year)

Sources:		
Bond Proceeds:		
Par Amount		50,000,000.00
		50,000,000.00
Uses:		
Project Fund Deposits:		
Project Fund		44,883,811.81
Other Fund Deposits:		
Capitalized Interest Fund		4,116,188.19
Delivery Date Expenses:		
Cost of Issuance	500,000.00	
Underwriter's Discount	500,000.00	
		1,000,000.00
		50,000,000.00

Notes:
Cost of Issuance includes market study, appraisal, Financial Advisor, Bond Counsel, Disclosure Counsel, Issuer Fees, HOA Counsel, Trustee, Environmental Assessment, Construction Manager Consultant
30 months of capitalized interest
2023 bullet maturity

BOND SUMMARY STATISTICS

Hawaii Housing Authority
Hawaii Housing Finance Authority, Mortgage Revenue Bonds, Series 2021 (3-Year)

Dated Date	12/16/2020
Delivery Date	12/16/2020
Last Maturity	12/01/2023
Arbitrage Yield	3.470403%
True Interest Cost (TIC)	3.831217%
Net Interest Cost (NIC)	3.808028%
All-In TIC	4.196439%
Average Coupon	3.470000%
Average Life (years)	2.958
Duration of Issue (years)	2.836
Par Amount	50,000,000.00
Bond Proceeds	50,000,000.00
Total Interest	5,132,708.33
Net Interest	5,632,708.33
Total Debt Service	55,132,708.33
Maximum Annual Debt Service	51,735,000.00
Average Annual Debt Service	18,636,408.45
Underwriter's Fees (per $1000)	
Average Takedown	
Other Fee	10.000000
Total Underwriter's Discount	10.000000
Bid Price	99.000000

Bond Component	*Par Value*	*Price*	*Average Coupon*	*Average Life*
Bond Component	50,000,000.00	100.000	3.470%	2.958
	50,000,000.00			2.958

	TIC	All-In TIC	Arbitrage Yield
Par Value	50,000,000.00	50,000,000.00	50,000,000.00
+ Accrued Interest			
+ Premium (Discount)			
- Underwriter's Discount	-500,000.00	-500,000.00	
- Cost of Issuance Expense		-500,000.00	
- Other Amounts			
Target Value	49,500,000.00	49,000,000.00	50,000,000.00
Target Date	12/16/2020	12/16/2020	12/16/2020
Yield	3.831217%	4.196439%	3.470403%

BOND PRICING

Hawaii Housing Authority
Hawaii Housing Finance Authority, Mortgage Revenue Bonds, Series 2021 (3-Year)

Bond Component	*Maturity Date*	*Amount*	*Rate*	*Yield*	*Price*
Bond Component:					
	12/01/2023	50,000,000	3.470%	3.470%	100.000
		50,000,000			

Dated Date	12/16/2020	
Delivery Date	12/16/2020	
First Coupon	06/01/2021	
Par Amount	50,000,000.00	
Original Issue Discount		
Production	50,000,000.00	100.000000%
Underwriter's Discount	-500,000.00	-1.000000%
Purchase Price	49,500,000.00	99.000000%
Accrued Interest		
Net Proceeds	49,500,000.00	

BOND DEBT SERVICE

Hawaii Housing Authority
Hawaii Housing Finance Authority, Mortgage Revenue Bonds, Series 2021 (3-Year)

Period Ending	*Principal*	*Coupon*	*Interest*	*Debt Service*
12/01/2021			1,662,708.33	1,662,708.33
12/01/2022			1,735,000.00	1,735,000.00
12/01/2023	50,000,000	3.470%	1,735,000.00	51,735,000.00
	50,000,000		5,132,708.33	55,132,708.33

BOND SOLUTION

Hawaii Housing Authority
Hawaii Housing Finance Authority, Mortgage Revenue Bonds, Series 2021 (3-Year)

Period Ending	*Proposed Principal*	*Proposed Debt Service*	*Total Adj Debt Service*
12/01/2021		1,662,708	1,662,708
12/01/2022		1,735,000	1,735,000
12/01/2023	50,000,000	51,735,000	51,735,000
	50,000,000	55,132,708	55,132,708

NET DEBT SERVICE

Hawaii Housing Authority
Hawaii Housing Finance Authority, Mortgage Revenue Bonds, Series 2021 (3-Year)

Period Ending	*Total Debt Service*	*Capitalized Interest Fund*	*Net Debt Service*
12/01/2021	1,662,708.33	1,662,708.33	
12/01/2022	1,735,000.00	1,735,000.00	
12/01/2023	51,735,000.00	934,972.22	50,800,027.78
	55,132,708.33	4,332,680.55	50,800,027.78

Appendix E:

Mid-Rise / High-Rise Building on 1.5 Acres- With Parking					
Type	**# Homes**	**Area (gross sq sf per home)**	**Total Sq Ft**	**Parking Stalls**	**Site Sq Ft**
2 Bedroom / 2 Bath Unit	150	830	124,500	120	65,340

Project Costs

	Basis	Explanation	Cost	Per Home	Per Sq Ft
Due Diligence, Entitlements, Etc.	Estimate	Reduced since State will complete a portion	$250,000	$1,667	$2
Environmental Assessment	Not Applicable	State conducts analysis			
Off-Site Infrastructure	$3,000	Part of District Wide Plan ($3000 per home estimate)	$450,000	$3,000	
Land and Closing Costs/Commissions	Not Applicable	State/County contributes land			
On-Site Infrastructure, Site Prep, Etc (per site sq	$10	Recent HI pro formas	$653,400	$4,356	$5
Vertical Construction GMP (per bldg sq ft)	$350	Input from HI developer cntractors	$43,575,000	$290,500	$350
Parking Structure (per stall)	$35,000	Traditional Parking Structure	$4,200,000	$28,000	$34
Hard Cost Contingency	5%	Average contigency for LIHTC and other projects	$2,388,750	$15,925	$19
Permits and Fees	Estimate	Reduction or exemption for most fees	$510,000	$3,400	$4
Design and Engineering	4% of hard costs	Work with general/subs from start; standardization	$2,006,550	$13,377	$16
Developer Fee (5%) includes overhead	5% of subtotal	Less than typical due to lower risk and State financing	$2,898,422	$19,323	$23
Construction Management and Inspection	2% of hard costs	Fee seen in other pro-formas	$1,003,275	$6,689	$8
Taxes	Exempt	GET, RPT, and other tax exemptions			
Legal	set fee per project	Using State lawyers/consultants where possible	$200,000	$1,333	$2
Insurance	1% of hard costs	Lower premiums if State supports/guarantees	$501,638	$3,344	$4
Homebuyer Preparation and Pre-Sales	Set Fee per unit	High demand; Developer non-profit for pipeline	$750,000	$5,000	$6
Construction Loan Origination Fee	1.5% of funding	Recent HI pro formas	$677,211	$4,515	$5
Construction Interest- 100%	4% of hard costs	Low-Cost Financing through Revenue Bonds	$802,620	$5,351	$6
Subtotal			$60,866,865	$405,779	$489
Additional Contingency	3% of subtotal		$1,826,006	$12,173	$15
TOTAL COST			**$62,692,871**	**$417,952**	**$504**