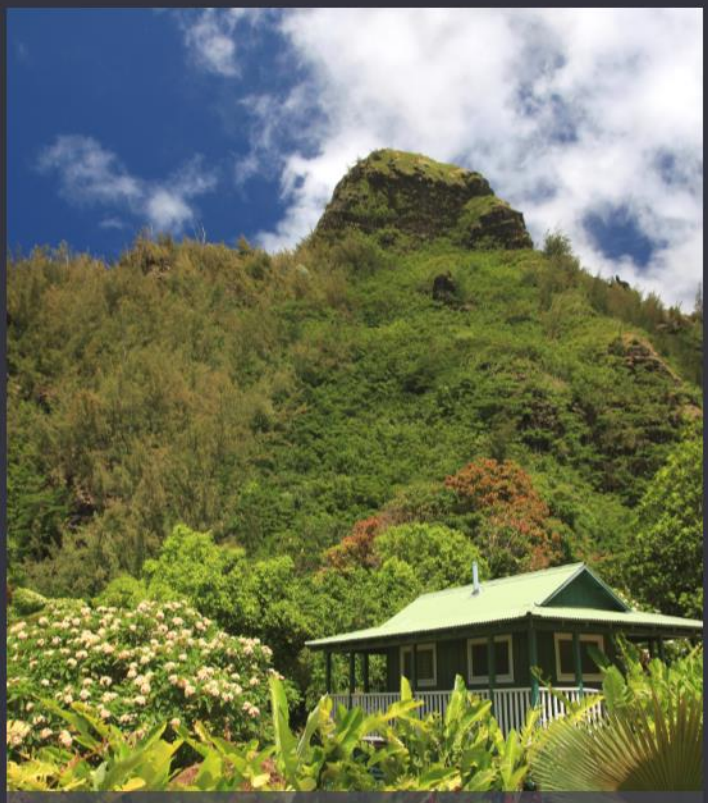
Hawai‘i Vacation Rentals:

Impact on Housing & Hawai‘i’s Economy

March 2018



HAWAII APPLESEED
CENTER FOR LAW & ECONOMIC JUSTICE

Hawai‘i Appleseed
Center for Law and
Economic Justice

119 Merchant Street
Suite 605A
Honolulu, Hawai‘i 96813
(808) 587-7605
www.hiappleseed.org

Authored by:
Victor Geminiani
Madison DeLuca

Contents

Executive Summary 1
The State of Housing in Hawai‘i 3
Severe Impact of Housing Shortage on Those Most in Need 4
Economic Challenges Facing Hawai‘i Residents 5
Hawai‘i’s Vacation Rental Industry 6
Case Study: Maui 9
Vacation Rental Regulation in Other Major Cities 10
Current State of VRU Enforcement 10
Recommendations 11
Conclusion 12
Endnotes 13

Executive Summary

Finding affordable housing has long been a significant challenge for Hawai'i's residents. Over the past decade, it has risen to crisis proportions. Economic barriers to achieving economic stability are daunting for most Hawai'i residents, and are nearly insurmountable for low-income households. The growth of the vacation rental industry in recent years is exacerbating these problems. While vacation rentals offer the possibility of extra income for some residents and additional tax revenue for the state, many of the benefits go to nonresident investors. The adverse consequences of housing stock lost to vacation rentals far outweighs the benefits they might provide to local families and our community.

Hawai'i's housing costs are among the highest in the nation. Hawai'i workers earn the lowest wages in the nation after accounting for cost of living. These financial pressures are compounded by Hawai'i's regressive tax system, which places the second highest tax rate in the nation on people in poverty. Given these factors, an unusually high percentage of our residents are renters—43 percent, the fourth highest percentage in the nation. Rent is more expensive in Hawai'i than any other state. In recent years, rents have been increasing at more than twice the rate of wages. It's no surprise that Hawai'i has the highest rate of homelessness in the nation, and families who have called Hawai'i home for generations are being priced off the islands.

At a time when Hawai'i is only building half of the units necessary to keep up with demand, housing stock available to Hawai'i residents is being eaten up by nonresident purchasers. Twenty-seven percent of Hawai'i home sales are made to nonresidents. On Maui, 60 percent of condominium sales are made to nonresident buyers. The proliferation of short term vacation rental units (VRUs)—the majority of which are operated by nonresidents—has added another pressure point by further limiting the availability of housing for local families.

Over just the last two years, the number of VRUs has increased by 35 percent. There are currently 23,000 VRUs being advertised around the state. Up to 93 percent of them are for entire homes, rather than the rent-out-a-room image purveyed by the VRU industry. One out of every 24 housing units in the state is a VRU, with some communities being completely overwhelmed by the industry's growth. On Kauai one in eight homes is used as a VRU. In Lahaina, the ratio drops to one in three. The reason why investors are choosing VRUs over long-term rentals is obvious: the average VRU brings in about 3.5 times more revenue than a long-term rental unit.

The loss of long-term rentals to VRUs means higher housing costs for Hawai'i residents. Although Hawai'i derives some benefits from VRUs through increased tourism spending and tax collection, the benefits are far outweighed by the costs. San Francisco, which like Honolulu has struggled with high housing costs and a proliferation of VRUs, found that every housing unit withdrawn from the market to be used as a VRU produces a net negative economic impact, even if the unit generates host income, visitor spending, and hotel taxes. San Francisco estimates that their local economy loses up to $300,000 per VRU per year. The impact of VRUs in Hawai'i is likely to be similar.

Hawai‘i should consider adopting measures that will help reverse the damage caused by the proliferation of illegal VRUs in the state, including:

- Making it illegal to advertise a VRU that is not permitted and requiring all VRU advertisements to include a permit number (currently, enforcement agencies report that a VRU advertisement is not sufficient to prove that the unit is actually being used as a VRU);
- Requiring that internet hosting platforms identify and remove noncompliant hosts;
- Empowering local neighbors to enforce the laws against VRUs by granting them standing to file a complaint with the courts;
- Increasing the staff of the county enforcement office;
- Requiring owners or hosts to be present whenever they are hosting; and
- If, after cracking down on illegal VRUs, communities decide to modestly increase the number of VRU permits, dispersing permitted rentals unit in communities throughout the island to avoid oversaturation.

Unless Hawai‘i takes action against illegal VRUs, their numbers will continue to rise as investors convert more homes built for residents into vacation rentals for visitors. Home prices and rents will rise, and Hawai‘i’s families, communities, and economy will suffer.

The State of Housing in Hawai‘i

The housing crisis is one of Hawai‘i’s most critical problems today. Our housing costs are among the highest in the nation.[1] We have the lowest wages when adjusted for cost of living,[2] the highest rate of chronic homelessness,[3] and the highest rate of overcrowding in housing.[4] These problems continue to worsen with housing costs increasing at more than twice the rate of increases in wages.[5] Housing has always been expensive in Hawai‘i, but housing costs have rocketed further out of reach for Hawai‘i residents over the last decade.

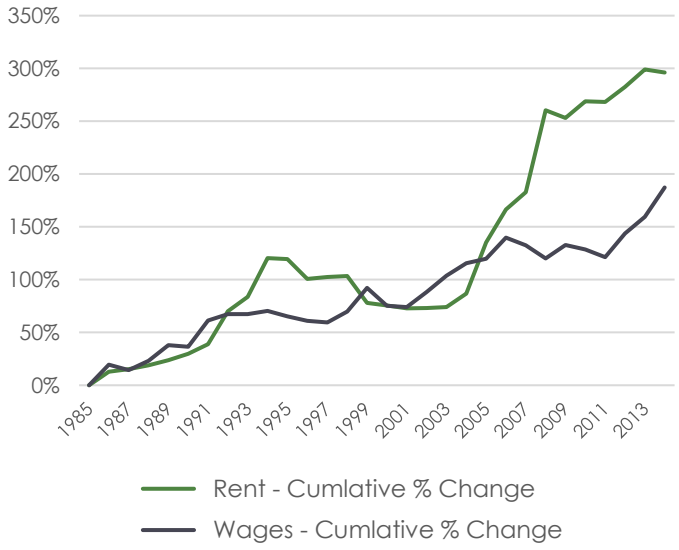
A primary contributor to Hawai‘i’s housing problem is that our supply of affordable housing fails to keep up with demand. Although Hawai‘i gained 8,458 housing from 2011 to 2014, this pace is insufficient to create the 24,551 units Hawai‘i needs between 2016 and 2020 to keep up with new demand.[6] For every two units needed, only one is being built.

As demand continues to outpace supply, housing prices and rents for families who live and work in Hawai‘i will continue to rise. This problem is exacerbated by nonresident home purchasers. Statewide, 27 percent of Hawai‘i’s homes sold between 2008 and 2015 went to nonresidents.[7] On Maui, investors and second-home owners hold over 60 percent of condominiums and apartments[8] and 52 percent of homes are sold to nonresidents.[9] This dramatically shrinks the pool of available housing for our families.

Vacation rental units (VRUs) provide another significant pressure, leading to the reduction of available housing for Hawai‘i residents and driving up rents. VRUs are rental properties being used as rentals for less than 30 days to transient parties, and many are illegal.[10] In Hawai‘i, where 43 percent of households rent—the fourth highest percentage out of all the states—this issue is particularly problematic.[11] A sharp increase in VRU inventory, driven by the strong economic returns VRUs generate, undoubtedly affects our local housing market. Maui, the island with the largest number of VRUs in the state, is particularly impacted.

Rent vs. Wage Increases

Increases in rent prices have dramatically outpaced increases in wages since 2000



52% Percent of Maui homes sold to nonresident buyers

60% Percent of Maui condos and apartments sold to investors and second homeowners

Severe Impact of Housing Shortage on Those Most in Need

Hawai'i's housing shortage most acutely affects residents and families who are the least economically secure. Housing demand is typically measured relative to "Area Median Income" (AMI)—the income level at which half of Hawai'i's residents make more and half make less. In 2016, the median household income for Hawai'i was $74,511.[12] Approximately 74 percent of the total housing units required by 2025 are needed for households making less than $75,000.[13] In other words, roughly three-quarters of the total amount of new housing required in coming years needs to be affordable to the lowest-income half of the population. The greatest housing needs are at the lowest levels of the income scale.

Hawai'i Housing Demand by Income Level (2015-2025)

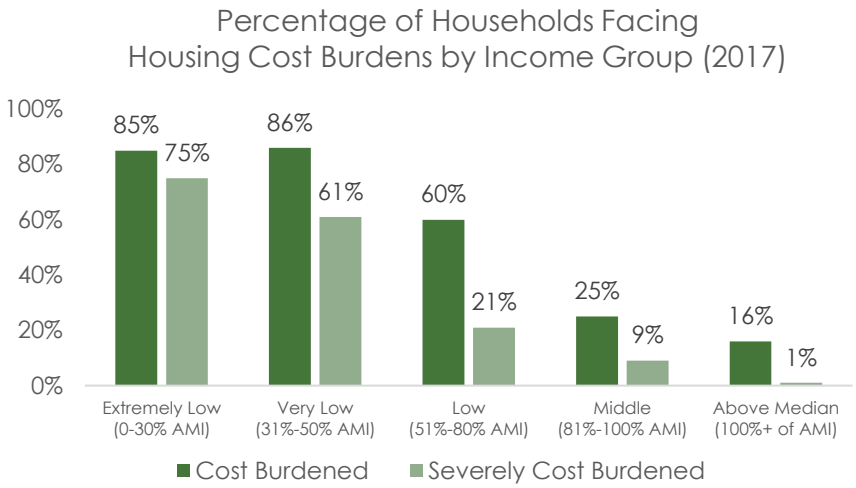
Not only is there a need for new, affordable homes in the future, the unfortunate reality is that the amount of planned affordable housing is far below the amount needed to close the availability gap. Units built by the private market, without the use of government subsidies, are typically priced at levels affordable only to households at 140 percent of AMI and above—prices well out of reach for the vast majority of Hawai'i residents. The Hawai'i Housing Finance and Development Corporation (HHFDC)—the main state agency charged with developing and financing housing affordable below 140 percent of AMI —planned to develop only 5,801 units of housing between 2016 and 2020.[14] This is **less than a third of the 19,908 units needed at or below the 140 percent of AMI income level in this time period.**[15]

The lack of sufficient housing stock and increased housing costs relative to wages has resulted in high rates of crowding (where a household has more than two people per bedroom) and doubling up (where multiple households live in a single home). In recent years, Hawai'i has been ranked first in crowding for owner-occupied units and second for renter-occupied units. **In 2016, 20 percent of Hawai'i's households were crowded or doubled up.**[16]

Native Hawaiians are particularly disadvantaged by the explosion of VRUs. Their homes are more likely to be overcrowded and doubled up, leaving no space to rent out.[17] They are also more economically insecure; while Native Hawaiians participate in the labor force at higher rates than the state average, they earn significantly less per capita.[18]

Economic Challenges Facing Hawai‘i Residents

Living in Hawai‘i comes with serious economic challenges that compound the struggle to find affordable housing. Hawai‘i is the second worst state for taxing people in poverty,[19] and Hawai‘i residents earn the lowest wages in the country when adjusted for cost of living.[20] **Forty-eight percent of households in Hawai‘i struggle to afford basic household necessities.**[21]



Housing is considered affordable when a household spends no more than 30 percent of its income on shelter. Families with expenses exceeding this amount are considered cost-burdened, while those spending more than 50 percent are severely cost-burdened.[22] **Seventy-five percent of extremely low-income households in Hawai‘i spend more than half of their income on housing.** [23] This leaves little money to cover other expenses such as clothing, food, and medicine.

Forty-three percent of Hawai‘i households rent rather than own—the fourth highest percentage in the nation. Hawai‘i’s “housing wage” (defined as the wage needed to afford a two-bedroom unit at fair market rents) is $35.20—the highest of all the states. In comparison, the average renter’s real wage is $15.64. A minimum wage worker would need to work 152 hours a week—3.8 full-time jobs—to afford a two-bedroom unit, and 116 hours a week—2.9 full time jobs—to afford a one-bedroom unit.[24]

As the housing market becomes increasingly hostile, eviction and displacement become more likely. Eviction can lead to lower credit scores and increased difficulty finding replacement housing, loss of security deposits and personal belongings, and additional moving expenses that already cash-strapped families can ill afford.

Even if a displaced family can find new housing, it may be in a different area. This breaks up communities, severs ties with family and friends, and disrupts children’s schooling. Classroom turnover hurts our keiki; it leads to lower achievement, academic progress, and high school graduation rates. Additionally, unstable housing situations can increase substance abuse and incidences of psychiatric disorders.[25]

13% of homeless shelter clients came from homes they were unable to retain

The most severe consequence of displacement is homelessness. In 2016, almost thirteen percent of homeless services clients came from homes they were unable to retain.[26] As Hawai‘i has the nation’s highest chronic homelessness rate, keeping people housed should be a high priority.[27]

Housing costs even drive some residents out of our state. In 2016, approximately 22 percent of survey respondents said they would move out of Hawai‘i on their next move. **Thirty-one percent of those who wanted to leave reported that housing was one of the problems causing them to move.**[28]

Hawai‘i’s Vacation Rental Industry

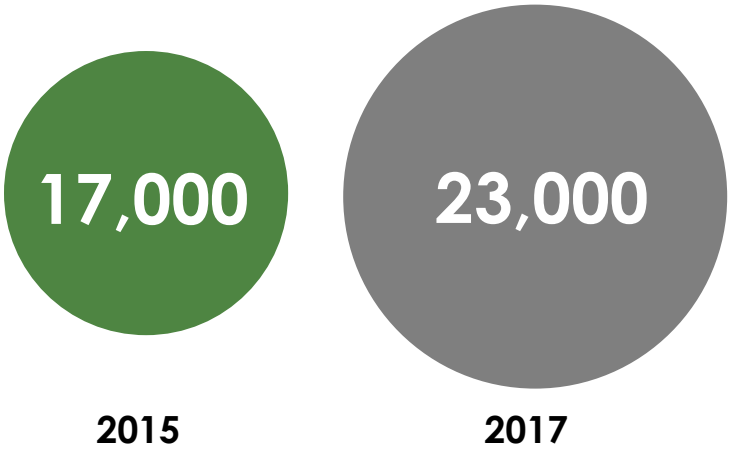
The Internet has provided opportunities for anyone to advertise units for short-term rental, regardless of county or state laws. A sizable percentage of VRU operators (also known as “owners” or “hosts”) are willing to operate in violation the law because the economic returns for a VRU are significantly higher than that of a long-term rental.

Compounding matters is the recent rise of internet hosting platforms like HomeAway and Airbnb. These platforms have substantial marketing budgets, near-universal brand awareness among travelers, and e-commerce infrastructure that makes it easier for people to operate a VRU today than ever before.

Internet hosting platforms also provide significant anonymity. They shield host information from regulators and permit illegal operations to list on their sites. This makes enforcement nearly impossible and reduces illegal hosts’ fear of getting caught.

Sharp Rise in Hawai‘i Vacation Rentals

VRUs in Hawai‘i are pervasive and their numbers are growing. In 2017, the Hawai‘i Tourism Authority (HTA) estimated that 23,000 VRUs existed in Hawai‘i,[29] a **35 percent increase in only the last two years.**[30]



Since Hawai‘i has roughly 540,000 total housing units, these estimates mean that approximately 1 out of every 24 units is a VRU.[31] The share of VRUs is even higher in towns frequented by tourists. In Koloa on Kauai, 1 out of every 2.5 housing units is a VRU.[32]

1 in 24
Hawai‘i Homes is a Vacation Rental

1 in 10
Kauai Homes is a Vacation Rental

1 in 3
Lahaina Homes is a Vacation Rental

Vacation Rental Ownership

Some platforms perpetuate the myth that VRU hosts are residents renting out extra rooms to make ends meet.[33]

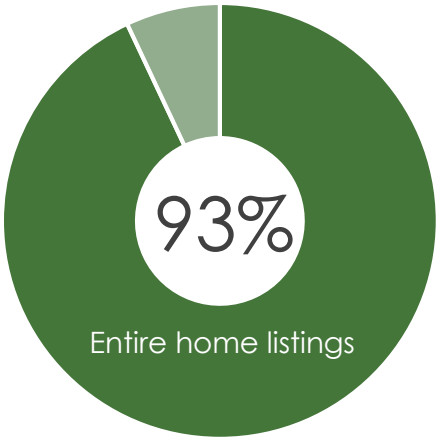
However, the majority of hosts are nonresidents. The available data is not sufficiently detailed to determine the full extent of nonresident ownership, but it does reveal that at least 52 percent of VRUs are owned by nonresidents. The true figure is likely much higher.[34]

52%

At minimum, 52% of VRUs are owned by nonresidents

Entire Home vs. Shared Home

Additionally, the majority of VRUs are entire-home rentals. Various sources estimate that between 74 percent and 93 percent of VRUs are for entire-home rentals. A report commissioned by Airbnb derived the low-end estimate of 74 percent,[35] while the high-end estimates were derived from visitor surveys and data extracted from VRU booking sites. Ninety-two percent of visitors surveyed self-reported that they had the entire unit to themselves,[36] while data extracted from three separate VRU booking sites indicated that 93 percent of VRUs were for an entire home or entire condo.[37]



Up to 93 percent of VRU listings are for entire homes

These entire-home rental hosts are likely not renting their primary residence, as the hosts would need to vacate the premises for the duration of their guests' visits. Rather, entire-home listings are likely posted by multi-unit hosts who use VRU platforms to facilitate commercial-style rental operations. **From 2009 to 2014, the number of Airbnb booked entire-home listings increased by an annual average of over 100 percent**.[38] A recent study suggested that **hosts with 20 or more units earned more than 27 percent of the total revenue generated by multi-unit hosts.**[39] It should be noted that the study was conducted by a group with ties to the hotel industry, but if even close to accurate, it paints a compelling picture of who is benefiting from VRUs.

Detriments of Vacation Rentals Outweigh Benefits

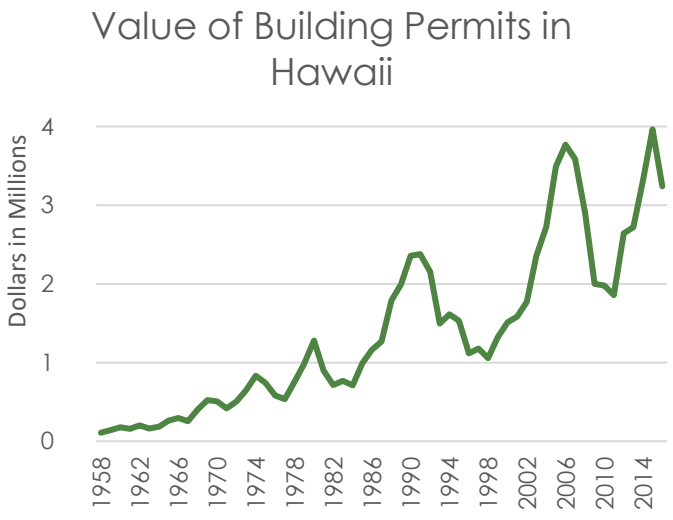
While VRUs bring additional tourism, spending, and the potential for taxation, studies have shown that the negative impacts on cities' economies and housing costs far outweigh the benefits. San Francisco found that VRUs result in the withdrawal of housing units from the residential market, which leads to higher housing costs. Every housing unit withdrawn from the market to be used as a VRU produces a net negative economic impact on the city, even if the unit generates host income, visitor spending, and hotel taxes every day of the year. The city estimates that **the local economy loses up to $300,000 per VRU per year.**[40]

Other cities have also tracked the outsized and negative effects of VRUs. In 2014, Airbnb absorbed one percent of Los Angeles' rental housing market, and rents rose 7.3 percent.[41] Furthermore, if 8,000 illegal Airbnb listings were removed in New York City, the number of available rental units would rise 10 percent.[42]

Why Long-Term Rentals Are Being Lost to Vacation Rentals

3.5x

Amount of revenue an average Airbnb unit can generate compared to a long-term rental



Renting out a unit as a VRU is more profitable than renting it long-term, making VRUs particularly appealing for nonresident investors. A 2015 study by Honolulu's Office of Community Services indicated that at 80 percent occupancy, the average Airbnb unit would bring in about 3.5 times more revenue than a long-term rental.[43] Approximately seventy-eight percent of rental units on Oahu earn less money than the average Oahu entire-home Airbnb.

Thus, on average in Honolulu, a potential host would only have to rent on Airbnb 73 days out of the year to earn more on Airbnb than renting long term. In some areas the threshold is lower; a Waimanalo host would only have to rent on Airbnb 26 days to make more than they would renting long term.[44] A report prepared for the Hawai'i Tourism Authority estimates that revenue from VRUs will reach $1.9 billion by 2021, an increase of 58 percent from 2016 revenue.[45]

Given the enormous economic incentives, it is inevitable that opportunists will use VRUs to commercialize Hawai'i's neighborhoods. Hosts are overwhelmingly speculators and investors who benefit from the escalating price of housing in Hawai'i,[46] and our property tax rate, which is the lowest in the nation.[47] Hawai'i is a safe place to invest money for long-term security and a high return on investments, at the expense of our residents.

Case Study: Maui

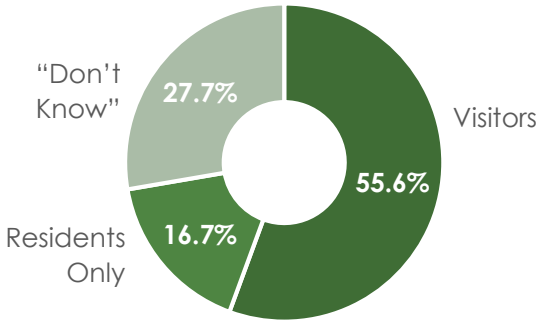
With almost 9,000 estimated VRUs[48] taking up 13.6 percent of its housing stock,[49] Maui is an example of unfettered VRU proliferation. One in seven housing units on Maui is a VRU. In Lahaina, it is one in three.[50] Maui is an example of what the state of Hawai'i could become if we do not enact stricter regulations.

*Approximately **9,000** VRUs are active on Maui. Only **223** are legal.*

Nonresidents dominate Maui's housing market. Sixty percent of condos[51] and 52 percent of homes on Maui are sold to nonresident buyers.[52]

Sixty-six percent of nonresidents who own Maui property report renting out their units. Only 16.7 percent of these owners choose to rent to residents only.[53] Thus, it is no surprise that Maui has the highest percentage of residential units being used as VRUs in the state.[54]

Who Nonresident Maui Property Owners Say They Rent To



Since 2006, the number of housing units produced each year on Maui has lagged behind the number of new households. A 2014 report commissioned by the County of Maui shows that by 2020, Maui's unmet housing need will reach nearly 4,000 units. Seventy percent of these units will be needed for households at or below 80 percent of AMI.[55] Almost a quarter of Maui residents are severely cost-burdened; this is **the highest proportion of severely cost-burdened residents in the state.**[56]

Even when new units are constructed they are often not affordable; Maui has the lowest share of affordable housing in the state. Median sales prices for homes on Maui saw the largest increase (24 percent) in the state from 2010 to 2014. Furthermore, less than a quarter of prospective Maui home buyers are able to make an adequate down payment.[57]

Maui has taken concrete steps to address the problems posed by VRUs:

- Potential hosts must obtain a permit, arrange a safety inspection and provide public signage with their contact information.
- Opposition from neighbors can trigger a Maui Planning Commission review of the VRU and neighborhoods have caps on the number of short term rentals that can operate.
- Any dwelling approved for short-term use must have been constructed more than five years before a permit application is submitted.[58]

However, lack of enforcement power has limited the efficacy of these regulations. Although the number of active VRUs is estimated at 9,000, Maui has only issued 223 permits.[59]

Vacation Rental Regulation in Other Major Cities

Cities across the globe are searching for solutions to reduce the proliferation of illegal VRUs and increase the supply of critical housing for residents. Three examples of such locations are:

San Francisco

- In 2014, San Francisco limited homesharing to 90 days per year during which hosts are not present for their guest's stay, mandated that hosts register their properties, required hosts or platforms to collect taxes,[71] and only allowed each host to rent out one unit.[72]
- In 2016, the city required VRU platforms to verify that listings are registered before posting them online. Non-compliant platforms could face fines of up to $1,000 per day.[73]
- The system was implemented in January of 2018, resulting in Airbnb listings decreasing by almost 50 percent.[74]

New York City

- New York State law was amended in 2010 to prohibit rentals of fewer than 30 days during which the owner is not present.[75]
- In examining Airbnb data from 2014, the New York Attorney General's Office found that nearly 72 percent of New York City listings are illegal. Additionally, while only 6 percent of hosts ran commercial-scale operations, these hosts collected 37 percent of the city's Airbnb revenue.[76]
- Subsequently, in 2016 Governor Cuomo made it illegal to advertise an apartment for rent for less than 30 days on a VRU platform.[77] Offenders could be fined up to $7,500.[78]

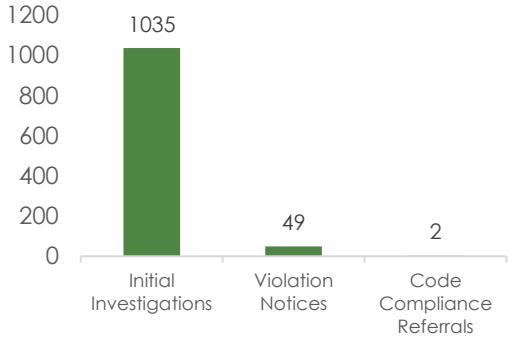
Barcelona, Spain

- A 2016 study revealed that 40 percent of Barcelona VRUs are illegal. The report also blamed Barcelona's 33 percent rise in rent since 2013 on the increase in tourist accommodations.[79]
- Professionally-owned tourist apartments must be licensed, and owners of illegally advertised properties face fines of up to €60,000.[80]
- Barcelona doubled its VRU enforcement team from 20 to 40 inspectors. By 2018 the city will have over 100 inspectors.[81]

Current State of VRU Enforcement

Increased enforcement is essential to ensuring that the VRU industry in Hawai'i remains in check. Additionally, the burden for proving a violation should be reduced—enforcement agencies claim that advertising the unit as a VRU is not, on its own, sufficient proof it is being used as a VRU. On Oahu for example, from January through August of 2017, Honolulu's Department of Planning and Permitting (DPP) conducted 1,035 VRU investigations. They issued 49 notices of violation, only two of which were referred to the Code Compliance Branch for civil fines.[71]

Oahu VRU Enforcement Actions



Recommendations

Reduce the Burden of Proof

As mentioned in the preceding section, enforcement agencies claim that an internet ad is purportedly not enough evidence to issue a violation, and it is difficult to gather evidence to prove that someone is renting a unit for less than 30 days.[72] Allowing investigators to use online advertisements as evidence will shift the burden of proof to the host. There are several options available:

- Implement fines. Other locations, including Austin, Texas,[73] and New York State,[74] have banned the hosts of unlicensed or noncompliant short-term rentals from advertising, imposing fines on those that do. San Francisco has taken the practice of fining even further, placing the burden of enforcement on rental platforms. Platforms are fined $1,000 per day per unregistered host.[75]
- Demand data transparency from internet platforms to identify illegal operators and impose requirements that remove noncompliant listings from platforms. In San Francisco, homesharing platforms must remove unregistered listings or face a fine. They also must collect data from their hosts and pass it on the city.[76]
- Model Honolulu's Bill 20 regarding Accessory Dwelling Units (ADUs). Honolulu has included strong enforcement provisions in its regulations on ADUs. In 2015, Bill 20 allowed homeowners to build ADUs on their property to create more affordable rental units. The bill stipulated that rentals cannot be for less than six months and the property owner or property owner's relative must occupy the primary dwelling unit on the property.

  In addition, Bill 20 strengthened DPP's enforcement powers by placing the burden of proof on the homeowner. Inspectors can use advertisements on the internet as proof that an accessory dwelling unit is being used as a VRU. Advertising without a permit creates a presumption that the unit is being illegally rented and requires the owner to prove that it is not.[77] Advertising the ADU as a VRU can result in revocation of the ADU permit and fines of $1,000 per day.[78] Regulations on VRUs themselves must have equally strong enforcement tools.

Plan Carefully for Expansion of Permitting

Hawai'i cannot bear the heavy load of VRUs that has been building over recent years. However, if enforcement efforts successfully reduce the number of illegal VRUs, it may be appropriate to consider a modest, controlled expansion of permits, in which case, the following factors should be considered:

- Neighbors should be informed of any permit applications submitted in their neighborhoods and be given an opportunity to contest the applications.
- Permits should be dispersed fairly around the island, not concentrated in one particular community that will be overburdened.
- All advertising material, including websites, should include the property owner's permit number, address, and resort zoning classification.
- Each unit's property owner or resident should be required to be present during guests' stays.
- Fines for unpermitted units should commence at the issuance of the first notice of violation. Fines should start low but increase substantially with subsequent violations to the level where they eliminate the possibility of still making a profit after paying the daily fines. Correcting a violation should not dismiss the assessed fines.

Broaden the Authority of Enforcement Agencies

Enforcement agencies like the DPP would benefit from more staff and a greater focus on deterrence, not just compliance. Fines from noncompliant VRUs should be used to fund DPP enforcement expansion.

Support Increased Community Involvement

Community members can work in partnership with enforcement agencies to protect their neighborhoods. Counties should establish a hotline or reporting app to monitor VRUs and require hosts to notify their neighbors that they have applied for a VRU permit. Furthermore, neighbors should be explicitly allowed to use state courts to appeal for enforcement against specific units in their neighborhoods, or to bring claims against neighborhood hosts directly.

Conclusion

While the VRU industry is arguing that vacation rentals are boosting Hawai‘i’s economy and residents’ incomes, in reality, VRU are doing more harm than good. The proliferation of VRUs—the majority of which are owned by nonresidents—is reducing the housing stock available to families who live and work in Hawai‘i and increasing our already high housing costs. Residents who have been struggling for years under the pressures of expensive housing and relatively low wages are reaching their breaking point. Families who have lived in Hawai‘i for generations are being displaced from their homes and their islands by a steady flow of short-term visitors. While Hawai‘i welcomes its visitors and recognizes their importance to our economy, tourism needs to be carried out in a way that is balanced and sustainable over the long-term. The current state of VRUs in Hawai‘i is not. Hawai‘i needs to take action before further damage is done.

Endnotes

[1] 2016 American Community Survey 1-Year Estimates Ranking Tables, R2511 and R2514, 2016. Available at http://files.hawaii.gov/dbedt/census/acs/ACS2016/ACS2016_1_Year/state_rank/16_state_ranking_file.pdf

[2] Kolko, Jed. *Cities Where Salaries Go Furthest in the U.S.,* Indeed Hiring Lab (Aug. 24, 2017). Available at http://www.hiringlab.org/2017/08/24/salaries-go-furthest-in-us-cities/?utm_source=Grassroot+Institute+Newsletter&utm_campaign=d062b83822-Prez_Column_10_6_17&utm_medium=email&utm_term=0_9da0f1c1e4-d062b83822-164734697&ct=t(Prez_Column_10_6_17)&mc_cid=d062b83822&mc_eid=43e403dd28

[3] *The 2017 Annual Homeless Assessment Report (AHAR) to Congress,* The U.S. Department of Housing and Urban Development, Dec. 2017 (p. 65). Available at https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf

[4] *Selected Housing Characteristics, 2016 American Community Survey 1-Year Estimates,* U.S. Census Bureau. Available at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_DP04&prodType=table

[5] *FMR History for Honolulu County, HI,* HUD User. Available at: https://www.huduser.gov/portal/datasets/fmr/fmr_il_history/history_fmr.odn?inputname=METRO46520M46520*Honolulu%20County%2B1500399999&county_select=yes&statename=Hawaii&statefp=15&stusab=HI&fmr_year=2016&il_year=2016&area_choice=county; *Median Household Income by State.* Historical Income Tables: Households, U.S. Census Bureau. Available at https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-households.html

[6] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 5, 34). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[7] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 16). Available at https://dbedt.hawaii.gov/hhfdc/files/2017/03/State_HHPS2016_Report_031317_final.pdf

[8] Cassiday, Rick. *Oahu Rental Housing Study*, Department of Community Services City & County of Honolulu, 2014 (p. 55). Available at https://dbedt.hawaii.gov/hhfdc/files/2015/02/RENTAL-HOUSING-STUDY-2014-UPDATE-CITY-COUNTY-OF-HONOLULU.pdf

[9] *Residential Homes Sales in Hawaii*, Department of Business, Economic Development and Tourism Research and Economic Analysis Division, May 2016 (p. 18). Available at http://files.hawaii.gov/dbedt/economic/data_reports/homesale/Residential_Home_Sales_in_Hawaii_May2016.pdf

[10] *The Impact of Vacation Rental Units in Hawai'i, 2016*, SMS Research & Marketing Services for Hawai'i Tourism Authority Research Division, Nov. 2016 (p. 2-3). Available at http://www.hawaiitourismauthority.org/default/assets/File/Housing%20and%20Tourism%20113016.pdf

[11] *Out of Reach 2017: The High Cost of Housing*, National Low Income Housing Coalition, 2017 (pp. 16, 66). Available at: http://nlihc.org/sites/*default*/files/oor/OOR_2017.pdf

[12] *Census Data Highlights,* Hawai'i State Data Center, Sept. 2017. Available at http://files.hawaii.gov/dbedt/census/acs/ACS2016/ACS2016_1_Year/Other_Files/ACS_2016_Analysis_DBEDT_final.pdf

[13] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 35). Available at https://dbedt.hawaii.gov/hhfdc/files/2017/03/State_HHPS2016_Report_031317_final.pdf

[14] *Annual Report,* Hawaii Housing Finance and Development Corporation, 2015 (p. 3). Available at http://files.hawaii.gov/dbedt/annuals/2015/2015-hhfdc.pdf

[15] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 5, 34). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[16] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 8). Available at https://dbedt.hawaii.gov/hhfdc/files/2017/03/State_HHPS2016_Report_031317_final.pdf

[17] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 73). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[18] *Testimony of Kamana'opono Crabbe Relating to Land Use Ordinance,* Office of Hawaiian Affairs, Dec. 9, 2015 (p.2).

[19] *Who Pays? 5th Edition*, Institute on Taxation and Economic Policy, Jan. 2015 (p. 15). Available at https://itep.org/wp-content/uploads/whopaysreport.pdf

[20] Kolko, Jed. *Cities Where Salaries Go Furthest in the U.S.,* Indeed Hiring Lab (Aug. 24, 2017). Available at http://www.hiringlab.org/2017/08/24/salaries-go-furthest-in-us-cities/?utm_source=Grassroot+Institute+Newsletter&utm_campaign=d062b83822-Prez_Column_10_6_17&utm_medium=email&utm_term=0_9da0f1c1e4-d062b83822-164734697&ct=t(Prez_Column_10_6_17)&mc_cid=d062b83822&mc_eid=43e403dd28

[21] *Alice: A Study of Financial Hardship in Hawai'i,* Aloha United Way, 2017 (p. 1). Available at https://www.auw.org/sites/default/files/United%20Way%20ALICE%20Report%20-%20Hawaii%2C%202017.pdf

[22] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 7). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[23] *2017 State Housing Profile*, National Low Income Housing Coalition, June 14, 2017. Available at http://nlihc.org/sites/default/files/SHP_HI.pdf

[24] *Out of Reach 2017: The High Cost of Housing*, National Low Income Housing Coalition, 2017 (pp. 16, 66). Available at: http://nlihc.org/sites/*default*/files/oor/OOR_2017.pdf

[25] Geminiani, Victor & Chin, Jennifer. *Evicted in Hawaii – Lives Hanging in the Balance,* Hawaii Bar Journal, 2016 (p. 30-32).

[26] Yuan, S., & Gauci, K. T. *Homeless Service Utilization Report: Hawai'i 2016*, University of Hawai'i Center on the Family, 2017 (p. 7). Available at: http://uhfamily.hawaii.edu/publications/brochures/b761f_HomelessServiceUtilization2016.pdf

[27] *The 2017 Annual Homeless Assessment Report (AHAR) to Congress,* The U.S. Department of Housing and Urban Development, Dec. 2017 (p. 65). Available at https://www.hudexchange.info/resources/documents/2017-AHAR-Part-1.pdf

[28] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 18-19). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[29] *2017 Visitor Plant Inventory*, Hawaii Tourism Authority, 2017 (p. 70). Available at http://www.hawaiitourismauthority.org/default/assets/File/reports/accommodations/2017%20VISITOR%20PLANT%20INVENTORY%20REPORT%20-%2001-17-2018.pdf

[30] *2015 Visitor Plant Inventory*, Hawaii Tourism Authority, 2015 (p. 72). Available at .http://www.hawaiitourismauthority.org/default/assets/File/reports/accommodations/2015%20VISITOR%20PLANT%20INVENTORY%20REPORT.pdf

[31] *QuickFacts Hawaii, Housing,* U.S. Census Bureau. Available at: https://www.census.gov/quickfacts/HI

[32] *Individually Advertised Units in Hawai'i,* SMS Research & Marketing Services for Hawai'i Tourism Authority, Dec 2014 (p. 3, 7, 8). Available at http://www.hawaiitourismauthority.org/default/assets/File/research/accommodations%20studies/Individually%20Advertised%20Units%20in%20Hawaii%20(Vacation%20Rentals).pdf

[33] Geron, Tomio. *Airbnb Had $56 Million Impact On San Francisco: Study,* Nov. 9, 2012. Available at https://www.forbes.com/sites/tomiogeron/2012/11/09/study-airbnb-had-56-million-impact-on-san-francisco/#352e35413962

[34] Available data show that out of a total of 45,075 short-term rentals, including those characterized as "residential" (VRUs) and those characterized as "commercial," 31,402 (70 percent) were owned by nonresidents and 13,673 (30 percent) were owned by residents. According to the same data set, 28,398 of the 45,075 short-term rentals are "residential" (VRUs). Making the most conservative assumption possible—that residents owned only VRUs and no "commercial" rentals—nonresidents would own 14,725 (52 percent) of the VRUs in Hawai'i. *The Impact of Vacation Rental Units in Hawai'i, 2016*, SMS Research & Marketing Services for Hawai'i Tourism Authority Research Division, Nov. 2016 (p. 6). Available at http://www.hawaiitourismauthority.org/default/assets/File/Housing%20and%20Tourism%20113016.pdf

[35] Cassiday, Rick. *Airbnb & Hawaii Housing*, Jan. 9, 2017 (p.14). Available at https://www.airbnbcitizen.com/wp-content/uploads/sites/27/2017/01/HawaiiAirbnbReportDesigned.pdf

[36] *Hawaii's Home and Vacation Rental Market: Impact and Outlook*, JLL for Hawaii Tourism Authority, Dec 29, 2016 (p. 33). Available at http://www.hawaiitourismauthority.org/default/assets/File/JLL%20Report_Impact%20of%20Home%20Rental%20Market%20on%20Hawaii_12-29-2016.pdf

[37] *2017 Visitor Plant Inventory*, Hawaii Tourism Authority, 2017 (p. 60). Available at http://www.hawaiitourismauthority.org/default/assets/File/reports/accommodations/2017%20VISITOR%20PLANT%20INVENTORY%20REPORT%20-%2001-17-2018.pdf

[38] Cassiday, Rick. *Airbnb & Hawaii Housing*, Jan. 9, 2017 (p. 2). Available at https://www.airbnbcitizen.com/wp-content/uploads/sites/27/2017/01/HawaiiAirbnbReportDesigned.pdf

[39] *Hosts with Multiple Units – A Key Driver of Airbnb Growth*, CBRE Hotels' Americas Research, March 2017 (p. 19). Available at https://www.ahla.com/sites/default/files/CBRE_AirbnbStudy_2017.pdf

[40] *Amending the Regulation of Short-Term Residential Rentals: Economic Impact Report*, City and County of San Francisco, May 18, 2015 (p. 8). Available at http://sfcontroller.org/sites/default/files/FileCenter/Documents/6458-150295_economic_impact_final.pdf?documentid=6457

[41] *How Airbnb Short-Term Rentals Exacerbate Los Angeles's Affordable Housing Crisis: Analysis and Policy Recommendations*, Harvard Law and Policy Review, Feb 2, 2016 (p. 231, 240). Available at: http://blogs.ubc.ca/canadianliteratureparkinson/files/2016/06/How-Airbnb-Short-term-rentals-disrupted.pdf

[42] Woolf, Nicky. *Airbnb and house-sharing firms reduced New York housing stock by 10% - study*, The Guardian, June 27, 2016. Available at https://www.theguardian.com/us-news/2016/jun/27/airbnb-new-york-city-housing-stock-reduction-study

[43] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 58). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[44] *Financial Characteristics 2016 American Community Survey 1-Year Estimates*, U.S. Census Bureau, 2016. Available at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_S2503&prodType=table; *Zip Code Boundaries: US Census Bureau*. Available at https://www2.census.gov/geo/tiger/TIGER2010/ZCTA5/2010; *Median Contract Monthly Rent: 2015 American Community Survey 5-year Estimates Table B25058,* U.S. Census Bureau, 2015. Available at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk; *Zip Codes*, *Honolulu Open Data*, City & County of Honolulu (2017). Available at http://honolulu-cchnl.opendata.arcgis.com/datasets/62431dd72960448087a287fa06b87bf5_7; *Honolulu*, Airdna, Sept. 2017. Available at https://www.airdna.co/market-data/app/us/hawaii/honolulu/overview

[45] *Hawaii's Home and Vacation Rental Market: Impact and Outlook*, JLL for Hawaii Tourism Authority, Dec 29, 2016 (p. 26). Available at http://www.hawaiitourismauthority.org/default/assets/File/JLL%20Report_Impact%20of%20Home%20Rental%20Market%20on%20Hawaii_12-29-2016.pdf

[46] *Table 21.01—Number and Value of Building Permits, by county: 1958 to 2016,* The State of Hawaii Data Book, The Department of Business, Economic Development & Tourism, 2016 (p. 1006). Available at http://files.hawaii.gov/dbedt/economic/databook/db2016/db2016.pdf

[47] Logan, David. *Property Taxes by State – 2016*, National Association of Home Builders, Oct 2, 2017. Available at http://eyeonhousing.org/2017/10/property-taxes-by-state-2016/

[48] *Minutes*, Council of the County of Maui Planning Committee, 6/16/16 (p. 13). Available at https://www.mauicounty.gov/ArchiveCenter/ViewFile/Item/21920

[49] *Individually Advertised Units in Hawai'i,* SMS Research & Marketing Services for Hawai'i Tourism Authority, Dec 2014 (p. 4). Available at http://www.hawaiitourismauthority.org/default/assets/File/research/accommodations%20studies/Individually%20Advertised%20Units%20in%20Hawaii%20(Vacation%20Rentals).pdf

[50] *Individually Advertised Units in Hawai'i,* SMS Research & Marketing Services for Hawai'i Tourism Authority, Dec 2014 (p. 8). Available at http://www.hawaiitourismauthority.org/default/assets/File/research/accommodations%20studies/Individually%20Advertised%20Units%20in%20Hawaii%20(Vacation%20Rentals).pdf

[51] Cassiday, Rick. *Maui Rental Market*, Department of Housing and Human Concerns County of Maui, 2014 (p. 3). Available at https://dbedt.hawaii.gov/hhfdc/files/2015/02/RENTAL-HOUSING-STUDY-2014-UPDATE-COUNTY-OF-MAUI.pdf

[52] *Residential Homes Sales in Hawaii*, Department of Business, Economic Development and Tourism Research and Economic Analysis Division, May 2016 (p. 18). Available at http://files.hawaii.gov/dbedt/economic/data_reports/homesale/Residential_Home_Sales_in_Hawaii_May2016.pdf

[53] *The Impact of Vacation Rental Units in Hawai'i, 2016*, SMS Research & Marketing Services for Hawai'i Tourism Authority Research Division, Nov. 2016 (p. 20). Available at http://www.hawaiitourismauthority.org/default/assets/File/Housing%20and%20Tourism%20113016.pdf

[54] *Individually Advertised Units in Hawai'i,* SMS Research & Marketing Services for Hawai'i Tourism Authority, Dec 2014 (p. 4). Available at http://www.hawaiitourismauthority.org/default/assets/File/research/accommodations%20studies/Individually%20Advertised%20Units%20in%20Hawaii%20(Vacation%20Rentals).pdf

[55] Cassiday, Rick. *Maui Rental Market*, Department of Housing and Human Concerns County of Maui, 2014 (p. 27-28). Available at https://dbedt.hawaii.gov/hhfdc/files/2015/02/RENTAL-HOUSING-STUDY-2014-UPDATE-COUNTY-OF-MAUI.pdf

[56] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 7). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[57] *Hawai'i Housing Planning Study*, SMS Research & Marketing Services for Hawai'i Housing Finance and Development Corporation, Dec. 2016 (p. 22, 26, 29). Available at https://dbedt.hawaii.gov/hhfdc/files/2016/12/State_HHPS2016_Report_111416-FINAL-122216.pdf

[58] Spence, William. *Report to the Planning Commissions and the County Council Pursuant to Ordinance 3941 (2012), Section 16, and a Proposed bill for an Ordinance Amending Title 19, Maui County Code, Relating to Zoning as it Pertains to Short-term Rental Homes,* County of Maui Department of Planning, April 29, 2014 (p. 2, 131-132). Available at https://www.mauicounty.gov/DocumentCenter/View/91217

[59] *Short-Term Rental Homes (STRHs),* County of Maui (p. 7). Available at https://www.mauicounty.gov/DocumentCenter/View/14762

[60] *Barcelona fines Airbnb and HomeAway 60,000 euros each,* Ajuntament de Barcelona. Available at https://ajuntament.barcelona.cat/turisme/en/noticia/barcelona-fines-airbnb-and-homeaway-60000-euros-each

[61] *Ordinance No. 218-14,* Board of Supervisors of the City and County of San Francisco, Oct. 17, 2014 (p. 19). Available at http://www.sfbos.org/ftp/uploadedfiles/bdsupvrs/ordinances14/o0218-14.pdf

[62] *Homesharing in San Francisco: A Review of Policy Changes and Their Impacts*, Bay Area Council Economic Institute, Jan. 2018 (p. 2-3). Available at http://www.bayareaeconomy.org/files/pdf/BACEI_Homesharing_1112018.pdf

[63] Said, Carolyn. *Airbnb listings in San Francisco plunge by half,* San Francisco Chronicle, Jan 16, 2018. Available at https://www.sfchronicle.com/business/article/Airbnb-listings-in-San-Francisco-plunge-by-half-12502075.php

[64] *Chapter 225,* New York City, 2010 (p. 1). Available at https://www1.nyc.gov/assets/buildings/pdf/NYS_chapter_225.pdf

[65] *A.G. Schneidermand Releases Report Documenting Widespread Illegality Across Airbnb's NYC Listings; Site Dominated By Commercial Users*, New York State Office of Attorney General, Oct. 16, 2014. Available at https://ag.ny.gov/press-release/ag-schneiderman-releases-report-documenting-widespread-illegality-across-airbnbs-nyc

[66] Cox, Murray. *NYC: Report on the Anti-Airbnb Advertising Law,* Inside Airbnb, Nov. 16, 2016. Available at http://insideairbnb.com/nyc-report-on-the-anti-airbnb-advertising-law/

[67] Rosenberg, Zoe. *Illegal Airbnb listings in NYC will now incur hefty fines,* Curbed New York, Oct. 21, 2016. Available at https://ny.curbed.com/2016/10/21/13361942/airbnb-illegal-short-term-rentals-fines-nyc

[68] Lomas, Natasha. *Airbnb faces fresh crackdown in Barcelona as city council asks residents to report illegal rentals,* Tech Crunch, Sept. 19, 2016. Available at https://techcrunch.com/2016/09/19/airbnb-faces-fresh-crackdown-in-barcelona-as-city-council-asks-residents-to-report-illegal-rentals/

[69] Shankman, Samantha. *Barcelona Overtourism: Airbnb and Short-Term Rentals,* Skift, Aug. 3, 3017. Available at https://skift.com/2017/08/03/barcelona-overtourism-airbnb-and-short-term-rentals/

[70] Burgen, Stephen. *Barcelona cracks down on Airbnb rentals with illegal apartment squads,* The Guardian, June 2, 2017. Available at https://www.theguardian.com/technology/2017/jun/02/airbnb-faces-crackdown-on-illegal-apartment-rentals-in-barcelona

[71] Donnelly, Christine. *City addresses complaint on vacation rental enforcement,* Honolulu Star-Advertiser, Sept. 13, 2017. Available at http://www.staradvertiser.com/2017/09/13/hawaii-news/kokua-line/city-addresses-complaint-on-vacation-rental-enforcement/

[72] Donnelly, Christine. *City addresses complaint on vacation rental enforcement,* Honolulu Star-Advertiser, Sept. 13, 2017. Available at http://www.staradvertiser.com/2017/09/13/hawaii-news/kokua-line/city-addresses-complaint-on-vacation-rental-enforcement/

[73] *Short Term Rental News Release and FAQ,* Austin Code Department, March 17, 2016. Available at http://austintexas.gov/article/short-term-rental-news-release-and-faq

[74] Rosenberg, Zoe. *Illegal Airbnb listings in NYC will now incur hefty fines,* Curbed New York, Oct 21, 2016. Available at https://ny.curbed.com/2016/10/21/13361942/airbnb-illegal-short-term-rentals-fines-nyc

[75] Weise, Elizabeth. *Airbnb rentals in San Francisco may dive with new host rules,* USA Today, May 1, 2017. Available at https://www.usatoday.com/story/tech/news/2017/05/01/airbnb-san-francisco-settlement-regulations-illegal-homeaway/101168688/

[76] *Homesharing in San Francisco: A Review of Policy Changes and Their Impacts*, Bay Area Council Economic Institute, Jan. 2018 (p. 2-3). Available at http://www.bayareaeconomy.org/files/pdf/BACEI_Homesharing_1112018.pdf

[77] *Ordinance 15-41,* City and County of Honolulu, 2015 (p. 5, 7). Available at: http://www4.honolulu.gov/docushare/dsweb/Get/Document-168733/dspage03688827543855432191.pdf

[78] *Accessory Dwelling Unit Homeowners' Handbook*, Hawaii Appleseed Center for Law & Economic Justice (p. 30). Available at http://hawaiiadu.org/wp-content/uploads/2016/03/HawaiiADU-Handbook.pdf/

119 Merchant Street, Suite 605A
Honolulu, Hawai‘i 96813
(808) 587-7605
www.hiappleseed.org

Board of Directors
David J. Reber, Esq., President
Naomi C. Fujimoto, Esq., Secretary
Patrick Byrne
Michael R. Cruise, Esq.
David Derauf, M.D.
Joyce Lee-Ibarra
Neal Milner
Nathan Nelson, Esq.
Blake Oshiro, Esq.
Garret Sugai

Co-Executive Directors
Victor Geminiani
Gavin Thornton

Hawai‘i Appleseed is working to build a Hawai‘i where everyone has genuine opportunities to achieve economic security and fulfill their potential. We change systems that perpetuate inequality through research, policy development, education, coalition building, and advocacy.

HAWAII APPLESEED
CENTER FOR LAW & ECONOMIC JUSTICE