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# A POLICY ANALYSIS ON RELIEVING THE HOUSING COST BURDEN OF LOW INCOME RESIDENTS IN HONOLULU

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## Executive Summary


This paper evaluates three policy options to address the high housing cost burden endured by working households/families and individuals in the city and county of Honolulu. It identifies the housing crisis as both a demand and supply-side dilemma. On the demand-side, while there is high need for housing, incomes of residents have been relatively low to afford housing at current prices and rents. On the supply-side, supply of housing stock has been low. Previous demand and supply-side interventions especially the Low Income Housing Tax Credits (LIHTC) and Section 8 Housing Vouchers in the state have not accomplished significant results to date. In the long run, while there is need to address the crisis from both sides of the housing market, this paper strongly recommends that a short-run strategy is necessary to relieve the current housing cost burdens that resident's are enduring.

This paper evaluates two demand-side policy options to boost incomes of residents namely state Earned Income Tax Credits (EITC), Increase Minimum Wages Indexed to Inflation and a supply-side option, namely Increasing Residential Property Tax Credits. It projects the potential policy outcomes of different scenarios for each of the policy options and assesses their outcomes using four evaluative criteria namely **costliness** of the option, **fairness** in terms of its' impact on the target population of those who earn less than 80 percent of the AMI, **effectiveness** in terms of reducing the housing cost burdens and whether it can be **administratively implemented** easily. In doing so, a state EITC is the most favorable option in the short run which is **less costly**, **fair, effective** and can be **implemented and administered** easily. The minimum cost the state government will incur when implementing it is $38 million at a 10 percent minimum EITC rate. In the long-run, increasing supply of affordable housing stock is necessary.

The analysis in this paper is based on income and resident statistics of the city and county of Honolulu but has relevance statewide because more than 75 percent of the working residents live and work in Honolulu.

## The problem: High Costs Low Wages

There are too many working families and households who are burdened by housing costs[1]. In Honolulu, the number of families earning less than 80 percent of the Area Median Income (AMI)[2] and housing cost burdened from 2005 to 2009 was 92,983[3] of which 56,392 of them earned less than $35,000 per annum. At the individual household level, there were more than 166,150 households who earned less than 80 percent of the AMI of which 111,063 of them earn less than $35,000. The share of working household's expenditures on housing alone is more than the 30 percent affordable rate meaning that households spend more than 30 percent of their income on housing.

The median home price for a single family home increased from $295,000 in the year 2000 to $575,000 in 2011 and likewise, the median prices for condos increased from $125,000 to $300,000 according to the data kept by the Honolulu Board of Realtors. This means that in order for a first-time homebuyer to own a single-family home given a 30-year fixed interest at 3.25 percent, he/she would have to pay around $19,000[4] annually as mortgage payments. This means that households' spend 43 percent[5] of their income on housing and at the 30 percent affordability rate, such a mortgage payment is not affordable for single family working

> ❖ *Key points*
>
> - *There are too many working families and households who are burdened by housing costs in Honolulu. They spend more than 30 percent of their income on housing costs.*
> - *Given the current median single-family home price of $575,000 a first time home-owner owing a single family home is housing cost burdened at a 30-year fixed interest rate of 3.25 percent. He/she will have to pay an annual mortgage payment of $19,000 which is more than the 30 percent affordability rate for households earning less than 80 percent of the AMI. Likewise, condos are not still affordable for households earning less than $35,000 per annum*
> - *More than 90,000 working families or 110,000 individuals aged less than 65 living in their own homes are likely to be housing cost burdened.*

[1] The definition of housing cost burden is when an individual spends more than 30% of his/her income on housing
[2] AMI is $55,650 and therefore 80% of it is $44,520. AMI figure is taken from Honolulu General Plan Update for May 2010, page 11.
[3] See table 13.20 of Hawaii Data Book. Figures on number of families & households plus their income ranges referenced throughout this paper are taken from the Hawaii State Data Book.
[4] 3.25% of $575,000
[5] ($19,000/$44520)*100

households earning less than the 80 percent of the AMI of $55,650. While condos are more affordable given that households will have to pay $10,000 annually as mortgage payments, they are not affordable for single family households or spouses[6] earning less than $35,000 per annum. According to the State of Hawaii Data Book, section 21, table 21.18 shows that there are roughly 160,000 households less than 65 years of age living in their own homes that are most likely cost-burdened. There were 1,670 homes foreclosed in 2010 which increased by 11.3 percent from 2009[7].

Likewise from a rental perspective, there are 163,684 renters in the state below the age of 65 of which 73,658 live in Honolulu who are likely to be rental cost-burdened[8]. The current median rent for a single-family house or condo is $1,695/month[9] which means that a household will have to earn $11/hour to afford only the rent and more for other living expenses. This amounts to an annual rental cost of $20,340 which means that the households/families spend 46 percent[10] of their incomes on rentals relative to the 80 percent AMI. Working households spend an additional 16 percent (46 percent less 30 percent affordable rate) of their income on rentals above what is affordable at the current market rental rate.

❖ *Key point*

- *There are roughly 160,000 households earning less than 65 years of age living in their own homes who are most likely housing cost burdened.*
- *More than 163,000 renters in the state of Hawaii below the age of 65 of which more than 70,000 live in Honolulu and are housing cost burdened at a current median rental rate of $1695/month for both single family homes and condos. This is an annual rental cost burden of $20,340 which means that households spend 46 percent of their income on housing. Renters are housing cost burdened by an additional 16 percent.*
- *At least 6000 people are homeless at any given time of the day in the state and 17-42 percent are employed full time*

Additionally, there are too many working people who are homeless living in Honolulu and the island of Oahu. The Hawaii Home Outreach & Medical Education Project indicated that at least 6000 people are homeless at any given time of the

[6] Single family households/spouses means spouse or singles or even with children(s) living in a single family home
[7] See Hawaii Data Book, section 21, table 21.37.
[8] ( 100% - 55%)/100 * 163,684 renters in the state
[9] Taken from Hotpads.com website: http://hotpads.com/search/city/HI/Honolulu#lat=21.3278863636364&lon=-157.799854545455&zoom=20&previewId=1631724365&previewType=area&detailsOpen=true&listingTypes=rental,sub
[10] $20,340/$44,520 * 100

day of which 17-42 percent of them are employed full time. This translates to 1,020 to 2,520 working homeless population at any given time of the day.

**What are the causes of high housing costs?**

There are both domestic and external causes of the high housing costs. Domestically, the Honolulu General Plan Update 2010 when dissecting housing affordability noted that "what is considered affordable is still not affordable" (page 12). From the demand-side, this is because of the low minimum wage rate which is currently at $7.25/hour in Hawaii, equivalent to the federal level not indexed to inflation (Blair, 2010). Furthermore, tourism and agriculture are the two major industries in the state of which the jobs created by these two and their complementary industries like retail trade and transportation services do not create high paying jobs. On the flipside of low incomes of residents, the salary level for workers in the construction industry is relatively high. The 2010 annual average wage[11] by industry indicates that workers in the construction industry receive $62,556 whereas those in agriculture receive $31,044 and tourism related industries like accommodation and food services receive $26,208, transportation services receive $41,238, retail trade receive $28,132 and real estate and renting receive $41,184. While workers in the services/tourism and agriculture industries earn less below the affordable rate of the AMI, construction workers earn twice more of which these high costs are passed on to the general workforce in the form of high housing costs.

❖ *Key points*

- *In Honolulu, housing considered affordable is still not affordable for working families because of the low incomes of residents attributed to low minimum wage rate and the proliferation of low paying jobs.*
- *External demand from investors and second home owners drive up housing prices especially condos and high value residential areas as opposed to affordable homes. However, it has the indirect effect of driving up values of private land which directly affects the cost of building affordable homes on private lands.*
- *From the supply-side, the high construction costs increases the housing costs.*

From the domestic supply-side perspective, the other fundamental cause of the high housing costs besides the chronic low housing stock is the high costs of construction. The costs

[11] See Hawaii Workforce Infonet Website, Employment and Pay by Industry

of building new homes have increased from135.2 percent in 2000 to 221.6 percent in 2010 and 126.6 percent to 202.4 percent for single family homes and condos respectively (Hawaii Data Book, table 21.09). This means that over the 10 year period, the construction cost increased by 86.4 percent for single family homes and 76.4 percent for condos. The Construction Cost Index (CCI) for Oahu estimates the current costs of materials used in the building of single family homes and condominiums and the costs of labor excluding land. For single family homes, materials include lumber, roofing shingles, cement, copper pipe, electrical wire, drywall, glass and paint. Labor types included are carpenters, electricians, masons, painters, plasterers, plumbers, roofers and lathers. For condos, it includes five other additional labor groups namely boilermakers, tilesetters, structural and reinforcing iron workers and heavy equipment operators. They do not include the costs of contract overhead and profit, site preparation, utilities-installation and overtime labor (DBEDT, 2000:12). This percentage increase of material input costs is dictated by the overall national and state inflation as well as the increased transportation costs incurred in shipping the material inputs from the mainland[12].

From an external perspective, a recent study done by Krainer and Wilcox (2011) using an econometric model pointed out that the real estate prices in the state are driven by income changes on the US mainland and Japan. Their data covered the years from 1975 to 2008 and their results show that the external demands from both countries have statistically significant effects on home prices. They concluded that real estate prices in the state are significantly driven by external demand[13].

External demand can be categorized into two types. Firstly, as Croix (2010) pointed out, demand from Japan and US mainland is primarily for investment and profit purposes provided that Hawaii is a tourism destination that makes investment in real estate lucrative. Secondly, demand from second home-owners for vacation purposes increases the total demand for housing because of the welcoming environmental amenities of the island and state. A proxy variable to measure this demand would be the number of vacant owned homes of which the rate increased from 0.7 percent in 2000 to 1 percent in 2010 which effectively translates to 3223 homes in 2000 and 5195 in 2011[14]. These vacant homes can be kept as second/vacation homes or either rented

[12] Labor cost is categorized as domestic costs.

[13] Note also that external demand has indirect effects on land markets and therefore has pervasive impact on the whole housing market.

[14] See Hawaii Data Book, Section 21: Construction and Housing, table 21.23.

out in the future. It is important to note that residents of Honolulu who desperately need homes are priced out of the housing market of which such ownership can be seen as a luxury.

**What is wrong with current policy interventions-LIHTC & Section 8?**

The Low Income Housing Tax Credits (LIHTC) is a federal housing policy created by the Tax Reform Act of 1986 to provide affordable housing to low income workers earning less than 30 percent of the AMI. In Hawaii, this program is administered by the Hawaii Housing Finance and Development Corporation (HHFDC) and the main goal is to incentivize housing developers (individuals, corporations and employers), investors and Non-Government Organizations (NGO's) to increase affordable housing supply by either constructing new affordable homes or rehabilitating existing ones (gentrification). In 2001, the federal and state tax credits awarded to developers were $2,301,567 and $690,470 respectively whereas in 2009, the figures increased to $6,203,380 for federal and $3,101,669 for state. The number of successful housing units built under the auspices of the LIHTC program decreased from 446 in 2001 to 443 in 2009 of which only 28 units were made available for those earning less than 30 percent of the AMI in 2001 and 54 units in 2009. The rest were made available for those earning higher than the 30% AMI[15]. Again the LIHTC program is deemed unsuccessful not only in terms of the insignificant number of housing units built relative to the demand in the market (SMS, 2005:2) but it failed to provide more than 50% of the units to those earning less than 30% of the AMI who are the target population.

❖ *Key points*

- *The number of successful housing units built under the auspices of the LIHTC program decreased from 446 in 2001 to 443 in 2009 of which only 28 units were made available for those earning less than 30 percent of the AMI in 2001 and 54 in 2009. It failed to provide more than 50 percent of the units to the target population- those who earn less than 30 percent of the AMI*
- *There are many reasons for the trivial success of the LIHTC program. Low quality of homes, restrictive zoning laws, varying preferences of employees about where they want to live and participants taking advantage of the program are the notable reasons.*

[15] HHFDC: "Other Information; Recent LIHTC awards" http://hawaii.gov/dbedt/hhfdc/developers/LIHTC_html

There are many reasons for this trivial success of the program. Firstly, the low quality of homes discourages low income earners to participate in the program as the Urban Land Institute of Hawaii pointed out. Also, restrictive zoning laws prevent interested employers to find project sites close to work places to build affordable housing units for the interested employees. (Wathen, 2008). Thirdly, as Haughey R. (2001) noted, the difference in preferences of the employees about where they want to live and the kind of neighborhoods they want matters to them more than the high costs of housing such that they are willing to pay for any price of housing that meets their location and neighborhood preferences. For instance, most employees prefer to live near school districts that have good schools so that they do not have to commute long distances to take their kids to school. In other words, employees do not like being forced to live in places where they dislike. Finally, another irony that SMS (2005) pointed out was that participants take advantage of the subsidies and re-sell the affordable units at higher affordable rates or sometimes they do that after making additional improvements to these houses.

The Housing Vouchers Program/Section 8 of the Housing Act of 1937 is also a federal policy administered by the Hawaii Public Housing Authority (HPHA) that provides cash vouchers to low income families, the elderly, and the disabled to afford decent, safe and sanitary housing in the private market. The federal government subsidizes 60 to 70 percent of the rental fees paid directly to landlords at a fair market rent which means that any amount above the fair market rent will have to be met by the tenant in addition to his/her 30 to 40 percent rental contribution of which may be increased after the first year of lease (US HUD Programs, 2006). For Honolulu, the standard rental rate set by the HPHA effective as of 10/01/2007 is $1,214 which means that the tenants' share of the rent is somewhere around $360 to $485. In 2010, the federal government spent more than $1.7 million federal dollars for tenants living in a single bedroom home/condo under this program.

While the voucher program addresses the issues raised with the LIHTC program, the 2011 housing voucher data for Hawaii prepared by the Center on Budget and Policy Priorities shows that only 9,161 families which is just 10 percent of the total number of families who earn less than 80 percent of the AMI used the vouchers from the 12,214 authorized and 3,623 vouchers were used for Honolulu. About 3,053 authorized vouchers were still left unused by the low-income families in 2010. Also, the participation rate has declined where only 75 percent of Hawaii's authorized vouchers were used in 2010, a lower percentage than in 2004 which was 87 percent. "This decline represents the loss of assistance for 1,501 low-income families at a time when 47,788 low-income renter households in Hawaii had severe housing cost burdens" as noted by the Center on Budget and Policy Priorities.

There are many reasons that studies have pointed out. Firstly, tenants drop out of the program or are not willing to participate primarily because they can't afford the minimum rental (Center on Budget and Policy Priorities, 2011). Secondly, other issues like discrimination by landlords on the basis of family size, disability, ancestry and race were the four major court cases registered in the Hawaii Civil Rights Commission cases (HCRC) according to a 2003 study done by SMS (see pages 11-12). From 1995-1998 there were 2,058 cases filed against landlords and from 1999-2002, the number of cases increased to 2,578 cases (SMS 2003). As more and more residents became aware of the fair housing laws, they pursued legal suits against landlords which more likely prevents more landlords from registering and participating in the program. This culminated to long waiting lists of tenants for section 8 housing in Honolulu and the state. The other major likely reason for the lack of participation of landlords given the kind of institutional arrangement is attributed to the fixed rental rates set by the HPHA which is relatively low and unattractive compared to the private housing market.

*Key point*

- *Section 8 housing vouchers also recorded dismal success and participation rate has also declined. Only 9161 families used the vouchers from the 12,214 authorized in 2010 of which 3053 authorized vouchers were left unused. Participation rate declined from 87 percent in 2004 to 75 percent in 2010.*
- *There are many reasons. Firstly, tenants drop out of the program because they can't afford their share of the minimum rent, secondly discriminatory practices by landlords and finally the low unattractive rental rates set by HPHA. All of these discourage landlords to participate.*
- *Section 8 homeownership program also recorded dismal success. Only 20 families received services from this program and 3 achieved homeownership in 2011. Again the reasons are most likely to be the lack of capital for low income households and the too many bureaucratic requirements and expectations of*

Furthermore, the section 8 homeownership option program is intended to provide 60 to 70 percent assistance in terms of mortgage payments and other home ownership expenses for qualified Hawaii Community Development Corporation of Hawaii (HCDCH) section 8, housing choice voucher program participants. The success of this program has also been trivial. Only 20 families received services from this program of which only three families achieved homeownership in 2011 according to the Department of Community Services report on housing programs. Again, a major possible reason is in sync with what the Center on Budget and Policy Priorities pointed out where low income tenants still can't afford the minimum capital to enable them to participate in the program. Also, part of the reason may be due to too many bureaucratic requirements and expectations which include education awareness[16] but unfortunately discourages tenants from effectively participating.

**What if we do not address the affordable housing crisis?**

The future of Oahu and the state in the next five to ten years and beyond is potentially bleak with the additional issues of expected large numbers of retiring baby boomers. The Hawaii Executive Office of Aging 2007-2011 report (page 14-15) noted that there are about 249,755 older adults (age 65 or more) in the state and with the aging baby-boomers and decreasing mortality, their projections indicate that by 2030, one in four individuals will be an older adult. While more than 70% of the baby boomers own homes, new workers to replace the baby boomers cannot afford to rent or own homes and therefore is possible that Oahu and the state risks the danger of loosing it's younger generation of workers to other states on the mainland that have comparatively low rents and home prices (Wathen, 2008).

The housing crisis endangers the quality of life for working residents of Oahu. The Hawaii Business 2011 special report identified six areas as most important determinants of the quality of life in the state namely the economy, education, environment, health, housing/transport and crime/communities of which the adverse effects, both current and potential associated with the housing crisis in many ways are threatening. This point was reiterated by Harvard housing scholar Nicolas Retsinas at

❖ *Key points*

- *By 2030, one in four individuals will be an older adult.*
- *The retirement of the baby boomers poses a potential problem to most likely exacerbate the current housing crisis.*
- *The low housing stock available at unaffordable rates endangers the quality of life of both the current and future generation.*

[16] Education awareness is where eligible families receive a variety of case management services, credit repair counseling, money management education, and referral to homebuyer education classes, to become mortgage-ready.

the Housing Forum in 2009 at the Urban Land Institute Hawaii (ULIH). He noted that the affordable housing crisis in Hawaii conjures two basic questions; firstly, "What kind of community do we want in Hawaii?" and "How do we want our children to live?" The rationale is that efforts to address the affordable housing crisis in Oahu and the state are fundamental to enhancing the quality of life and creating a better future for the children.

While there is no silver bullet to the long persistent affordable housing crisis for the working population in Oahu, it is necessary and feasible to perpetuate improvements at the margin meaning that any interventions that prevent additional working people from becoming homeless or otherwise helping them to afford a home is helpful. In addition, the same applies if additional households currently facing rental and ownership burdens can be able to save additional money to spend on other household goods and services which will increase their lifetime consumption and wealth. This will ultimately enhance the quality of life of workers and consequently the overall productivity of working residents in Oahu and the state.

## Policy options & outcomes

The affordable housing crisis in Honolulu is systemic such that it needs policy intervention in all land, labor and capital markets from both their demand and supply sides respectively to comprehensively address the crisis. The long run strategy for the state and county of Honolulu in the quest to improve the quality of life of its' residents would be to diversify its' economic base which means to have industrial economic policies to facilitate the development of other industries as well as generating complementary industries that are capable of creating high paying jobs[17]. However, in the immediate short term, feasible options within the existing tax and minimum wage regimes can be explored to reduce housing cost burdens endured by the low income earners and at least put marginal incomes back into their pockets. This paper proposes and evaluates three different options in order to perpetuate this goal.

❖ *Key points*

- *In the immediate short term, feasible existing tax and minimum wage regimes can be explored to reduce housing cost burdens endured by low income earners*
- *EITC, Increasing state Minimum Wages and indexing it to inflation as well as residential property tax credits are three feasible short term options to boost incomes and relieve residents from being housing cost burdened.*

### ❖ Option1: State Earned Income Tax Credits

The state Earned Income Tax Credit (EITC) program is an effective tool that can be used to support incomes of working households and families who are housing cost burdened. Zahradnik (2004) in his policy analysis on "Reducing income tax on Hawaii's poor families" dissected three policy options; increasing the standard deduction; expanding refundable tax credits and implementing the EITC for the state of Hawaii. He pointed out that the latter provides "greater benefits" to the low-income working families in the state. Although, the EITC is a nationally revered poverty alleviation program, it has been widely recommended and discussed for it to be implemented also at the state level which has yet to materialize.

[17] Hawaii Technology Tax Incentive, Act 221 is an example of diversifying economic base but success has yet to be achieved.

There are more than 120,000 individuals or 76,000 families who earn above the poverty line ($15,000) and below $50,000 in the state who would be eligible to file both federal and state EITC claims according to the income data kept by the Department of Business, Economic Development and Tourism (DBEDT).

> ❖ *Key Point*
> - *There are more than 120,000 individuals or 76,000 families who earn above poverty line ($15,000) and below $50,000 living in the state who would be eligible to file both federal and state tax*

The main sources of income identified by the Internal Revenue Service (IRS)[18] are;

- Wages, salaries, tips, commissions, and other taxable employee pay.
- Net earnings from self-employment.
- Gross income received as a statutory employee.
- Disability pay is considered earned income if received before minimum retirement age (62 in 2011).
- Nontaxable combat pay that a member of the U.S. armed services elects to include solely for purposes of EITC calculation—the service member must include all or none of the combat pay in this calculation.

Table 1 below shows a simulation of the state EITC for households based on the maximum[19] federal EITC rate for qualifying households using the IRS preview of 2012 tax year. The rationale is that those who qualify for the federal EITC would also qualify for the state EITC. Based on the federal credits, a 10%, 15% and 20% simulation of state EITC is calculated.

[18] Link: http://www.irs.gov/pub/irs-pdf/p596.pdf

[19] Note that the maximum is the peak of the phasing in of incomes. It phases out after the maximum and eventually to zero as income goes up.

| Table 1: Family Type | Max Income to be Eligible | Max Federal Credit | Max State Credit if 10% | Max State Credit if 15% | Max State Credit if 20% |
|---|---|---|---|---|---|
| Single w/ 1 child | $36,920 | $3169 | $316.9 | $475.3 | $633.8 |
| Married w/ 1 child | $42,130 | $3169 | $316.9 | $475.3 | $633.8 |
| Single w/ 2 children | $41,952 | $5236 | $523.6 | $785.4 | $1047.2 |
| Married w/ 2 children | $47,162 | $5236 | $523.6 | $785.4 | $1047.2 |
| Single w/ 3 or more children | $45,060 | $5891 | $589.1 | $883.6 | $1178.2 |
| Married w/3 or more children | $50,270 | $5891 | $589.1 | $883.6 | $1178.2 |
| Single w/ no children | $13,980 | $475 | $47.5 | $71.3 | $95 |
| Married w/ no children | $19,190 | $475 | $47.5 | $71.3 | $95 |

- **Housing cost burden relief for single-family homeowners**

Previously, we noted that a family/household who wants to purchase a single family home at the current annual interest rate of 3.25 percent will have to pay mortgage payments of $19,000 annually which is 43 percent of the 80 percent AMI ($44,520). At an affordable rate of 30 percent, this is an additional 13 percent ($5,787) of housing cost burden. Below, this paper simulates three different scenarios of the impact of both federal and state EITC on the housing cost burdens endured by working families owning single-family homes. This simulation also depicts the different scenarios for condos as well[20].

[20] Note that the different scenarios for condos are not projected because the scenarios for single-family home-owners projected also depicts the impact of state EITC on the cost burden endured by condo-owners since condos cost less than single-family homes.

**a) Scenario 1: Single/Married with 1 child**

According to table 1, a state EITC of 10 percent will offset 1.1[21] percent of the 13 percent mortgage cost burden for those single/married households with 1 child, 1.4 percent at 15 percent and 1.7 percent at 20 percent state EITC rate. Combined with the federal EITC, the 13 percent cost burden for Honolulu households will be reduced by 8.5 percent to 4.5 percent[22] on average. Without the state EITC, the mortgage cost burden will only be reduced by 7.5 percent which means any state EITC between 10 to 20 percent will account for 1 percent (8.5 less 7.5 percent) of the total housing cost burden. The 1 percent implies any amount between the continuums of $300 to $700 of state EITC which is the actual state credit awarded.

**b) Scenario 2: Single/Married with 2 child**

Using the same method in scenario 1, a state EITC of 10 percent for households/families who fall into this category will offset 1.5 percent of the 13 percent mortgage cost burden, 2.1 percent at 15 percent state EITC and 2.7 percent at 20 percent state EITC rate. Combined with the federal EITC, the total mortgage cost burden will be reduced by 14 percent on average which means that households in this category will gain additional 1 percent (14-13 percent) surplus dollars. Without the state EITC, households lose their 1 percent gain and are further cost burdened by 1 percent which means that the state EITC effectively accounts for 2 percent of the cumulative effect whereby it offsets the cost burden by 1 percent but concurrently generates additional 1 percent surplus dollars for households. In other words, the state EITC accounts for 1 percent of the mortgage cost burden reduction.

**c) Scenario 3: Single/Married with 3 child**

A state EITC of 10 percent for households/families who fall into this category will offset 1.7 percent of the 13 percent mortgage cost burden, 2.3 percent at 15 percent and 3 percent at 20 percent rate. Combined with the federal EITC, the total burden will be reduced by 15.5 percent

[21] (10% state EITC-$19,000/$44,520) * 100 and the rest in scenario 1 for the different state EITC rates (15% & 20%) as well as scenarios 2 & 3 are done the same way

[22] (((Sum average of all three state EITC with Federal EITC less $19000) /$44,520)*100) less 30 percent affordability rate.

which means that households in this category will gain an additional 2.5 percent (15.5-13 percent) after their 13 percent mortgage cost burden is offset. Without the state EITC, households will lose 2 percent of the 2.5 percent gain which means that households will gain an additional 0.5 percent from the federal EITC alone as surplus dollars after offsetting the burden. In other words, the state EITC of 10 to 20 percent will not have any impact on reducing the mortgage cost burden endured by households in this category but instead culminate to surplus dollars for them.

- **EITC relief for renters of single family homes**

From a rental perspective, we noted previously that the current median rent for a single-family house or condo is $1,695/month which amounts to $20,340 annually which means that households/families spend 46 percent of their incomes on rentals relative to the 80 percent AMI. Working households spend an additional 16 percent ($7123) of their income on rentals above what is affordable at the current market rental rate. Below are also three different scenarios of the impact of both the federal and state EITC on the rental cost burden endured by households/families renting single family homes/condos but however, again much attention is given to the impact of state EITC.

**a) Scenario 1: Single/Married with 1 child**

Using the same technique to calculate the impact of state EITC on mortgage cost burdens of homeowners, a state EITC at 10 percent will offset 1.1 percent[23] of the 16 percent rental cost burden that single/married families with 1 child endure, 1.4 percent at 15 percent and 1.7 percent at 20 percent state EITC rate. Combined with the federal EITC, the 16 percent rental cost burden will be reduced by 8.5 percent on average which means renters will now bear a rental cost burden of 7.5 percent. Without the state EITC, the rental burden cost will be 8.5 percent which means that the state EITC effectively accounts for 1 percent (8.5-7.5 percent) of the rental cost burden. This indicates an amount of $300 to $600 which is the amount of state EITC.

[23] (10% state EITC-$20340/$44,520)*100 and the rest in scenario 1 for the different state EITC rates (15% & 20%) as well as scenarios 2 & 3 are done the same way

b) **Scenario 2: Single/Married with 2 child**

Similarly, for households in the second category, a 10 percent state EITC will offset roughly 1.5 percent of the 16 percent rental cost burden, 2.1 percent at 15 percent and 2.7 percent at 20 percent rate. Combined with federal EITC, the total rental cost burden of 16 percent will be reduced by 14 percent on average which means renters will now be burdened by only 2 percent. Without the state EITC, the rental cost burden will be roughly 12 percent which means that any state EITC between 10 to 20 percent accounts for 2 percent (14-12 percent) of the rental cost burden. This indicates any amount between $500 to $1000 which is the amount of state EITC.

c) **Scenario 3: Single/Married with 3 child**

Finally, for renters in the third category, a 10 percent state EITC will offset roughly 1.7 percent of 16 percent rental cost burden, 2.3 percent at 15 percent and 3 percent at 20 percent. Combined with federal EITC, the total rental cost burden of 16 percent will be reduced by 15.5 percent on average which means renters will now bear a rental cost burden of 0.5 percent. Without the state EITC, the rental cost burden will be roughly 13.5 percent which means any state EITC between 10 to 20 percent will account for 2 percent (15.5 -13.5 percent) of the rental cost burden. This indicates any amount between $550 to $1200 which is the amount of state EITC.

**Table 2: Summary table showing impact of state EITC on reducing housing & rental cost burdens**

| Burdens → Family size ↓ | Mortgage cost burden reduced @ 10-20% state EITC | Net Mortgage burdens for single family homes | Rental cost burden reduced @10 -20% state EITC | Net rental burdens for single family homes |
|---|---|---|---|---|
| Single w/1 child | 1 % | 13-1=12% | 1% | 16-1=15% |
| Married w/1 child | 1% | 13-1=12% | 1% | 16-1=15% |
| Single w/2 child | 1% | 13-1=12% | 2% | 16-2=14% |
| Married w 2/child | 1% | 13-1=12% | 2% | 16-2=14% |
| Single w/ 3 child | 0% | 0% | 2% | 16-2=14% |
| Married w/3 child | 0% | 0% | 2% | 16-2=14% |

To sum up the calculations thus far, looking from a home ownership perspective, the state EITC will reduce mortgage cost burdens by 1, 2 and 2.5 percent for the different household categories respectively with 1 percent for the single/married with 1 child, 2 percent for households with 2 children but 1 percent amounts to surplus dollars and thus as shown in Table 2 above, the state EITC reduces mortgage cost burdens by only 1 percent. With single/married family households with 3 children, the state EITC reduces the cost burden by 2.5 percent but since the federal EITC completely offsets the cost burden, the state EITC is seen to generate additional surplus dollars, thus 0 percent in terms of reducing mortgage cost burdens. Hence, economically speaking, this effectively means that the state EITC is more valuable to the first two categories of households (single/married with 1 & 2 children) as opposed to the third household category. In other words, single/married households with 3 children do not need the state EITC as much as single/married families with 1 or 2 children do. However, single/married households with 2 children will benefit more from the state EITC because it will offset their mortgage cost burden as well as putting surplus dollars into their purse unlike households with 1 child who still will be cost burdened. For the renters, the state EITC benefits those single/married with 2 or 3 children by 2 percent which is 1 percent more than those single/family with 1 child. Generally, it is obvious that both the federal and state EITC combined significantly offset the housing cost burdens of households in Honolulu but homeowners will benefit more than renters.

❖ *Key points*

- The state EITC will reduce housing cost burden by 1, 2 and 2.5 % for the different household categories at a 10% , 15% and 20% EITC rate respectively.
- *State EITC seems to be more valuable to single/married households with 1 or 2 children. Single/Married families with 3 children do not need state EITC that much since federal EITC will completely offset their housing cost burden as well as put additional dollars into their pockets. Single/married families with 2 children will benefit more from the state EITC because it will completely offset their housing cost burden as well as putting additional dollars into their pockets.*
- *Home owners will gain more than renters.*

- **Cost of state level EITC to the state government**

On average, given that more than 120,000 households live above the federal poverty line but earn below $50,000 per annum, at a 10 percent EITC rate, the program will cost the state government between $38 to $70 million, $57 to $106 million at 15 percent rate and $80 to $142 million at 20 percent rate.

❖ **Option 2: Increase the state minimum wage rate**

Increasing the minimum wage rate and indexing it to inflation are other options to boost incomes of households. Currently, the minimum wage rate for Hawaii is $7.25 per hour which is equivalent to the federal level but is not indexed to local inflation[24]. Eight states namely Arizona, Colorado, Florida, Montana, Ohio, Oregon Vermont and Washington have indexed the federal minimum wage to inflation of which the rates vary within the range of $7.64 in Colorado to $9.04 in Washington. Eighteen other states including Washington D.C. have their rates above the federal level for which 10 of them have it indexed to inflation.

One strong argument against raising minimum wages is that it discourages employers to employ workers and thereby increasing unemployment figures. This argument is based on the standard economic theory of demand and supply whereby as wages goes up, employment declines and unemployment increases. However, arguments based on this theory have failed to explain the evidence at hand. A 2004 comprehensive study conducted by the Fiscal Policy Institute (FPI) found the evidence in the United States to be otherwise where increasing the minimum wage did not consequently lead to an increase in unemployment but instead led to investments in worker quality, higher worker productivity and retention[25].

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[24] According to the Fair Labor Standards Act (FLSA), employers are required to pay the higher level of the two that benefits the employee. However, in states like Arkansas where the state minimum wage is lower than the federal level ($6.25), the federal level only applies to those employees who are non-exempt from the FLSA. By income test, the non-exempt employees are those people who earn less than $23,000 annually ($455 per week) which means the federal rate applies to this category of workers while those who earn more than $100,000 are exempt. The duties test is the second method.

[25] Link: http://www.fiscalpolicy.org/minimumwageandsmallbusiness.pdf

a) **Scenario 1: Index current minimum wage rate to inflation**

If Hawaii indexes the wage rate in the state to inflation by 5 percent (on average) and sets it equal to Colorado ($7.64), more than 16,000 households or 7,000 families will earn incomes above the federal poverty threshold of two which is $14,070 per annum. In this case, we assume an average state inflation rate of 5 percent which is the minimum but the rate can be more which will profoundly have a positive impact on the incomes of those living below and just around the federal poverty level. These low income earners will now earn around $15,500 if they work full time ($7.64*8 hours per day*5 days a week * 52 weeks in a year).

b) **Scenario 2: Increase minimum wage to equal Washington rate and index it to inflation.**

Also, it is possible that the state can increase its' minimum wage rate above the federal level of $7.25 to equal that of Washington ($9.04) which is the highest in the nation and index it to inflation. In this case, the annual earnings for a household who works full time will be more than $19,000 which means that more than 41,000 households or 17,000 families in the state will benefit.

- **Cost of increasing minimum wage rates to the employers**

Since increasing the minimum wage rate and indexing it to inflation for Hawaii workers only benefits those earning $7.25 per hour, it will only cover 16,000 individual households or 7000 families. If Hawaii indexes its' minimum wage rate to 5 percent inflation rate, it will cost the employers additional $5,000-$6,000 per month. Annually, this will cost employers $60,000 to $72,000. If it sets it equal to the Washington rate ($9.04) and indexes it to inflation, the additional cost to employers will be between $34,000 to $36,000 per month. Annually it will cost employers $400,000 to $430,000.

### ❖ Option 3: Increase residential property tax credits

Hawaii has the lowest sales and general excise tax (GET) regimes in the nation and they are broad based but however, are regressive meaning that the composition of taxes paid by those living below the poverty line and those earning less than 80 percent of the AMI is higher compared to those in the high income brackets as indicated by the Institute of Taxation and Economic Policy (2009). Those earning below the 80 percent of the AMI and the poverty line pay more than 6 to 10 percent of their income as GET while those in the upper income bracket pay 1 to 3 percent (Davis, Gardner, Mclntyre, McLynch & Alla, 2009:38)

> ❖ *Key Points*
> - *Property tax rates in Honolulu is $3.50 per $1000 assessed value of the property.*
> - *Property Tax Credits goes to property owners granted a property tax exemption where title holders earn less than $50,000*
> - *At the current Property Tax rate, credits accounts for about 1/6 of the total mortgage housing cost burden.*

Property tax is also a regressive tax regime (besides sales and excise tax) which comprises more than 45 percent of the total state revenue (Davis et.al, 2009:38). The higher the value of the property, the higher the owner pays property taxes. It varies in the state by county of which the updated Honolulu's rate is $3.50 per $1000 assessed value of the property from July 1st 2011 to June 30th 2012.

From the many items in the list of what is within the state's fiscal grasp is to provide residential property tax credits to ease the housing/mortgage cost burdens of home-owners. Mayor Mufi Hannemann signed into law Bill 80, Floor Draft 1 (FD1), Committee Draft 1 (CD1) in 2005 which provides tax credits for owners granted a property tax home exemption where titleholders have aggregate income of no more than $50,000. Eligible owners would receive a tax credit for any amount that exceeds 4 percent of their annual income. For example, looking at Table 3 below, if a household/family earns between $30,000-$36,000, at the current property tax rate of $3.50 in Honolulu (see case 2-far left hand column of Table 3), they will receive $812 as property tax credits if their annual income is $30,000 and $612 if their income is $36,000[26].

The amount of residential property tax credits depends on the value of properties, property tax rate and the annual household incomes. Residential property values and tax rates have a positive relationship with the credits whereas a negative relationship is true for annual

[26] ($575,000/$1000 *$3.5) less (0.04*30,000) or ($575,000/$1000 *$3.5) less (0.04*36,000)

incomes. Tax credits owed increases with increases in property values and tax rates but declines with incomes as depicted in Table 3 below. The table summarizes how much first time single family home-owners will receive as property tax credits at the current median price of $575,000 and it's corresponding financial impact on housing cost burden if the city and county of Honolulu varies it's current property tax rates.

At the current residential property tax rate of $3.50, the tax credits offset 2 to 3 percent housing cost burden of those earning between $20,000 to $36,000 of which higher credits- (equivalent to reduce 3 percent of housing cost burden)- is accrued to those earning around $20,000-$24,000 and a lower credits- (equivalent to reduce 2 percent of housing cost burden)- to those earning around $30,000-$36,000. Increasing the property tax rate to $4.00 means that households will pay an additional property tax of $288 but will also receive proportional amounts of tax credits of $288 which means that it nets out and there are no gains. However, it is important to take heed of the fact that residential property tax credits do play a crucial role in easing the mortgage burdens that residential homeowners may have. At the current property tax rate of $3.50, the residential tax credits account for at least about a sixth of the housing/mortgage cost burden.

**Table 3: Summary of mortgage cost burden of single family homeowners reduced from residential property tax credits for Honolulu households earning less than 80 percent of the AMI**

| Scenarios | Household income range | 4% of annual income | Property Tax Credits (PTC) (Property tax less 4% income) | Mortgage cost burden reduced (%)[27] | Net cost burden (%)[28] |
|---|---|---|---|---|---|
| **Case 1: Property tax is $2300 at $4:00 rate** | $30,000-$36,000 | $1200 - $1400 | $1100 to $900 | 3 | 10 |
| | $25,000-$29,000 | $1000 - $1160 | $1300 to $1140 | 4 | 9 |
| | $20,000-$24,000 | $800 - $960 | $1500 to $1340 | 4 | 9 |
| **Case 2. Property tax is $2012 at $3.50 rate** | $30,000-$36,000 | $1200 - $1400 | $812 to $612 | 2 | 11 |
| | $25,000-$29,000 | $1000 - $1160 | $1200 to $852 | 2.4 | 10.6 |
| | $20,000-$24,000 | $800 - $960 | $1212 to $1052 | 3 | 10 |
| **Case 3: Property tax is $1725 at $3.00 rate** | $30,000-$36,000 | $1200 - $1400 | $525 to $325 | 1.3 | 11.7 |
| | $25,000-$29,000 | $1000 - $1160 | $725 to $565 | 1.8 | 11.2 |
| | $20,000-$24,000 | $800 - $960 | $925 to $756 | 2 | 12 |

[27] ((Average of PTC less $19000)/*44520)*100
[28] Remember total mortgage cost burden was 13% ($5785) above affordable rate of 30 percent

- **Cost of residential property tax to the state government**

According to the Housing and Construction data from the Hawaii Data Book kept by DBEDT, section 21; Table 21.15 shows that the number of home exemptions claimed[29] in 2011 was more than 200,000. This implies that at the current property tax rate of $3.50, it will cost the state somewhat more between the ranges of $122 to $242 million[30], $65 to $185 million at $3.00 property tax rate and $180 to $300 million at $4.00 property tax rate.

## Part 3: Policy Options Evaluation

Table 4 below summarizes the likely effects of the three proposed policy options on the state and the residents using four evaluative criteria namely cost, fairness and target, effectiveness and administrative feasibility. Firstly, the **cost** of each policy option varies for each of the different scenarios but the estimated cost below provides a baseline cost estimate associated with each policy option. For instance, it will cost the state at least $38 million or more per annum to implement a state EITC at a minimum baseline scenario of 10 percent. Likewise, at least $60,000 annually or more will be borne by employers if the state indexes it's minimum wage rate to a baseline state inflation rate of 5 percent. If the minimum wage rate is increased to Washington's highest rate in the nation which is $9.04 and indexed to inflation, it will cost the employers at least $400,000 or more per annum. Finally, it will cost the state at least $180 million or more if the current residential property tax credit of $3.50 is increased to $4.00.

*Key points*

- *Cost refers to the minimum cost incurred to implement the policy*
- *Fairness and target refers to the impact of the policy on the target population who are working households earning less than 80 percent of the AMI excluding retirees.*
- *Effectiveness refers to how much the policy will reduce the housing cost burden.*
- *Administrative feasibility refers to whether the policy can be implemented easily given the current administrative regimes.*

Secondly, **fairness and target** of each policy option refers to the distribution of benefits of the policy on the target group who are those households earning between $25,000-$45,000 per

[29] This means the number of residential homeowners with legal titles who have filed for property tax exemptions.
[30] $612 & $1212 * 200,000 respectively. Likewise for the rest of the property tax rate options.

annum and are housing cost burdened. For EITC**,** the impact is fairly distributed amongst all households including those who are not in the housing market/ earning less than $25,000 per annum as well. Those who are eligible to file a federal EITC can also do the same for state EITC. Likewise, for increasing minimum wages and indexing it to inflation, it will have a disproportionate effect on only those who are paid the hourly minimum wage rate of $7.25. This implies that the impact on the target group is not achieved but disproportionately benefits those who earn less than $15,000-$20,000 per annum. Finally, for residential property tax credits, the impact is not targeted and disproportionately benefits only those who own residential properties who most likely retirees are earning less than $50,000 per annum.

Thirdly, **effectiveness** refers to whether the policies actually reduce the housing cost burdens endured by low income households or otherwise not. For state EITC, it does significantly reduce the housing cost burden of the targeted households whereas increasing minimum wages and indexing it to inflation and residential property tax credits do not. Increasing minimum wages does not impact those who are housing cost burdened but instead benefits those who are not in the housing market. Likewise, increasing the residential property tax credit has a zero net gain effect because it depends on how much tax one pays[31]. Property tax is a supply-side intervention aimed at incentivizing landlords/ property owners to build more by offsetting their tax liabilities.

Finally, **administrative feasibility** refers to whether these policies are feasible to be implemented easily given the existing implementation practices and mechanisms. The state EITC is currently absent in the state but it is highly feasible and can be easily implemented without further complicating existing fiscal regimes. Simply, those who qualified for a federal EITC can also file and apply for a state EITC. The other two latter options are currently operational.

[31] In order to get more tax credits, one has to pay more residential property tax and therefore there are no net gains.

| Table 4: Summary table showing the effects of the proposed options on the state government & residents | | | | |
|---|---|---|---|---|
| | **Minimum cost ($)** | **Fairness & Target** | **Effectiveness** | **Feasibility**[32] |
| **Option 1: Implement State EITC** | >$38 million per annum to be borne by the state government | Benefits eligible low-income households regardless of whether they are housing cost burdened or not. | Reduces the housing cost burden of households significantly | Ranked 10. Those households eligible and have filed a federal tax return are also eligible for state EITC |
| **Option 2: Index Minimum Wages to inflation** | >$60,000 per annum to be borne by employers if $7.25 is indexed to 5% state inflation rate<br><br>>$400,000 per annum to be borne by employers if Minimum wage is increased to Washington's rate of $9.04 and indexed to inflation | Benefits only those earning at the minimum wage rate of $7.25 per hour | Zero net Effect. Does not reduce the housing cost burden of the targeted group. | Ranked 10<br>It is currently implemented |
| **Option 3: Increase residential property tax credits** | >$180 million per annum to be borne by state government at $4.00 property tax rate | Benefits those who own residential properties/land lords who are mostly retirees earning less than $50,000 per annum. | Zero net effect. Does not offset housing cost burden | Ranked 10. It is currently implemented |

[32] On a scale of 1 to 10 where 10 being highly feasible and 1 being least feasible, feasibility of implementing each options is a subjective assessment of the author.

## Conclusion

In order to reduce the housing cost burden endured by low-income earners in the state, three policy options to boost incomes of low-income earners have been considered. Of the three, state EITC is the most favorable option which costs lesser than the second preferred option which is to increase the residential property tax credits**,** it fairly impacts the target group, it is effective in terms of reducing the housing cost burden and can be implemented and administered easily.

The potential success of a state EITC needs to be conceptualized within the context of the bigger housing crisis picture. In doing so, it is important to understand that the housing crisis is both a demand and supply-side problem. While there is still greater need to increase the housing stock as well as diversifying the economic base to create high paying jobs in the long run, it is essentially necessary in the short run that a state EITC will profoundly reduce the housing cost burden endured by approximately 160,000 low-income households who are housing cost burdened. As a result, they will consume and save more, accumulate wealth and traverse from other income related problems affecting their quality of life.

On the other hand, increasing the minimum wages and indexing it to inflation is not targeted to those housing cost burdened as well as ineffective in terms of offsetting the cost burden. It increases costs to employers. For the third option to increase residential property tax credits, it will only benefit those that own properties who are most likely retirees. It does not have any effect on reducing the housing cost burden endured by younger working households. Both options to increase minimum wages and indexing it to inflation as well as increasing residential tax credits can be implemented and administered easily.

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