Renter Cost Burden in the Commonwealth of Virginia

An Analysis of Current Policy and Possible Solutions for the Joint Legislative Audit and Review Commission

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Disclaimer

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

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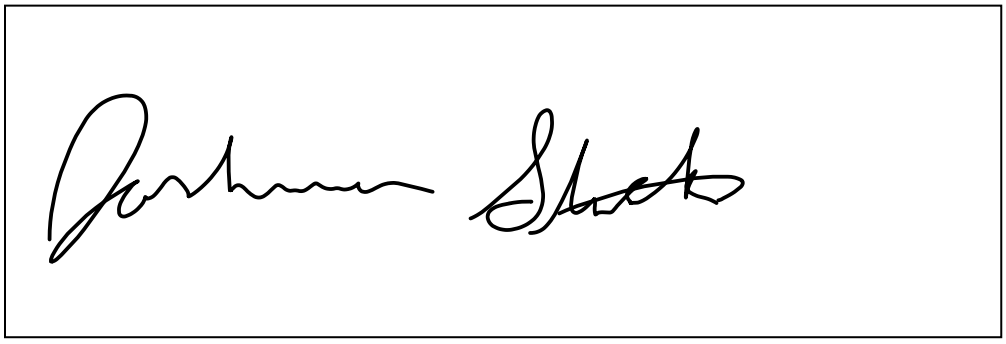
Honor Statement

On my honor as a student, I have neither given nor received unauthorized aid on this assignment.



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Executive Summary

Nearly half of renters in the Commonwealth of Virginia spend more than 30 percent of their incomes on housing costs. Known as being ***cost-burdened***, this impacts over 478,000 households, or 1,190,000 individual Virginian renters (U.S. Census Bureau, 2018). Cost burden reduces household expendable income for other goods, such as childcare, educational pursuits, and nutrition. It also leads to evictions, which destabilizes employment and imposes legal costs. Addressing the prevalence of renter cost-burden is necessary to maintaining productivity and quality of life in the Commonwealth of Virginia.

Policies that successfully reduce cost burden reduce housing costs and/or increase real incomes for renters. This is achieved by a) subsidizing renter income directly, b) subsidizing housing developers' projects contingent on producing affordable units, or c) deregulation in the housing market to lower the cost of housing production.

This report proposes four policy alternatives against five criteria: cost, effectiveness, equity, political feasibility, and administrative feasibility. The alternatives are:

1) Maintain the status quo by enacting no new policy.
2) Implement a housing voucher program that subsidizes renters' housing costs.
3) Implement a Low-Income Housing Tax Credit (LIHTC) matching program to increase existing subsidies to housing developers.
4) Reform Virginia's legal code to enable local governments to establish inclusionary zoning (IZ) programs.

This report recommends **Policy Option 2: Implement a Housing Voucher Program.** The Housing Voucher Program is the most effective alternative for reducing the number of cost-burdened households and achieves the most equitable distribution of benefits. Finally, this report suggests an implementation strategy that utilizes Virginia Housing's experience with the federal Housing Choice Voucher program to initiate the new policy.

This report is prepared for the Joint Legislative Audit and Review Commission (JLARC), a state agency that conducts policy analyses, program evaluations, and agency oversight for the Virginia General Assembly. JLARC will soon begin an evaluation of affordable housing in Virginia and this analysis will serve as a resource for relevant data, research, and best practices related to state housing policy.

Key Acronyms

Area Median Income (AMI)

Communities of Opportunity Tax Credit (COPTC)

Department of Housing and Community Development (DHCD)

Fair Housing Act (FHA)

Fair Market Rent (FMR)

Housing Choice Voucher (HCV)

Housing Finance Agency (HFA)

Inclusionary Zoning (IZ)

Department of Housing and Urban Development (HUD)

Low-Income Housing Tax Credit (LIHTC)

Metro/Micropolitan Statistical Area (MSA)

Office of Policy Development and Research at Housing and Urban Development (PD&R)

Public Housing Agency (PHA)

Virginia Housing Development Authority (VHDA; also known as Virginia Housing)

Virginia Housing Trust Fund (VHTF)

Introduction and Problem Statement

Problem Statement: ***Nearly half of Virginian renters are cost-burdened.***

Virginia's housing affordability crisis was thrust into national prominence when five Virginian cities ranked in the top ten most evicting cities in the nation (Badger and Bui, 2018). Since then, growing acknowledgement and concern over housing affordability issues has led to political leaders seeking new policy solutions (Gordon, 2020). Affordable housing provides stability, comfort, and financial peace of mind for tenants. Across Virginia, a shortage of affordable rental homes and stagnant wages for low-income workers leaves over 478,000 households burdened by high housing costs (U.S. Census Bureau, 2018).

In technical terms, *cost-burdened* renters pay 30 percent or more of their household income in gross rent, the sum of rent and utilities.[1] Prior to the mid-1990s, federal housing enterprises would not buy mortgages unless the principal, interest, tax, and insurance payment did not exceed 28 percent of the borrower's income (Schwartz and Wilson, 2006, p. 2). Since then, 30 percent of household income is considered a guidepost by government agencies on what housing is affordable enough to have income left over for discretionary spending (Schwartz and Wilson, 2006, p. 2).[2] When housing costs exceed 30 percent, renters are forced to reduce savings, spending on other necessities, and may experience housing instability, as Virginia's high-profile eviction record indicates.

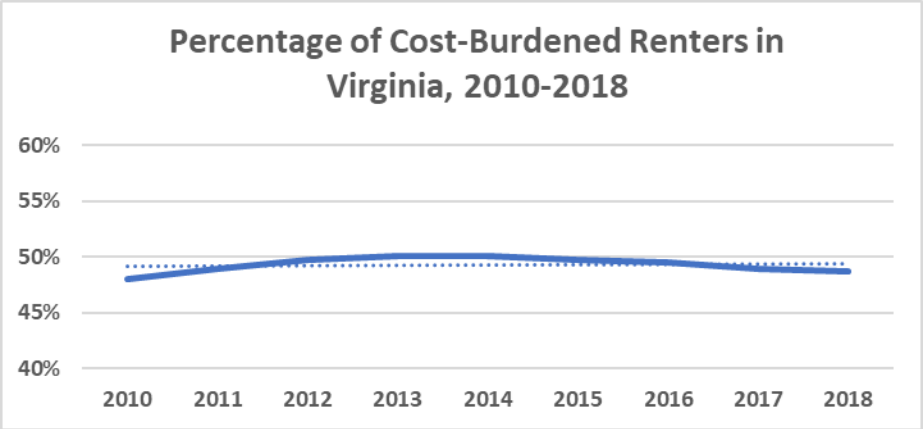
Mitigating cost burden will require a set of policy solutions that address several causes and weaknesses in current policy. This report addresses the trends in cost-burden, contributing factors, consequences, and potential solutions that Virginian policymakers should consider when addressing housing affordability challenges.

[1] U.S. Census defines income as money income before taxes, including transfers, minus capital gains. A household is defined as any group of people, related or unrelated, living in the same housing unit. For further information on definitions and alternatives, see U.S. Census Bureau's Subject Definitions **https://www.census.gov/programs-surveys/cps/technical-documentation/subject-definitions.html**

[2] There may be benefits to being cost-burdened in select cases. For instance, a renter may choose to live in a more expensive neighborhood so their child can access better schools. For this analysis, I assume that renters prefer to pay lower rent costs rather than higher.

Cost-Burdened Renters in Virginia: By the Numbers

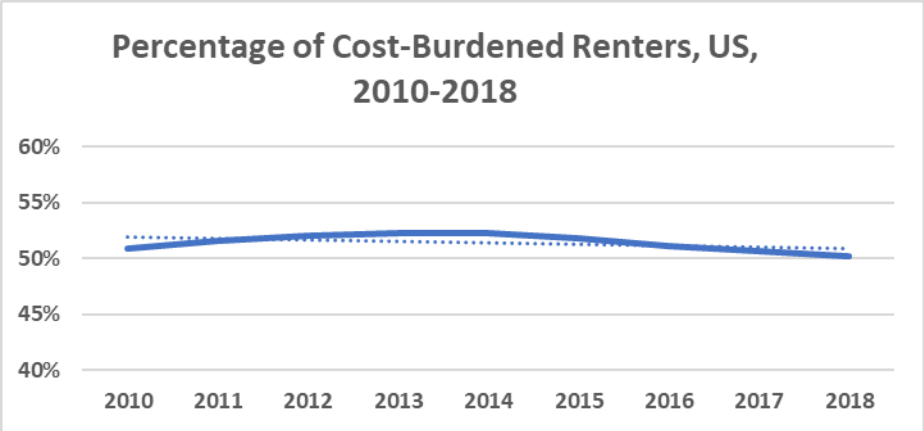
Figure 1. Percentage of Cost-Burdened Renters in Virginia, 2010-2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

The share of cost-burdened renters in Virginia has remained persistently high since 2010 (**Figure 1**). This share is slightly smaller than the national average, and recent yearly variation is consistent with national variation (**Figure 2**). The national proportion of cost-burdened renters doubled over the past fifty years, suggesting Virginia's problem is part of a larger trend in housing affordability (Molloy, 2020, p. 1). Albouy et al. (2016) demonstrates that increases in housing expenditures are primarily due to the increase in the cost of housing production and not due to changes in quality or characteristics of housing over this period (p. 486). This is driven by a variety of factors, including land availability, labor costs, construction materials, and local zoning and building regulations. At the same time, real incomes for low-income households have stagnated or declined, leaving fewer and more expensive options for renters (Anenburg and Kung, 2020, p. 3). This is particularly true in economically depressed areas of the Commonwealth, like Southwest Virginia.

Figure 2. Percentage of Cost-Burdened Renters in the U.S., 2010-2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

State and national trends housing trends conceal local housing market variation. Though large cities typically exhibit higher housing prices, the shares of cost-burdened renters vary considerably across Virginian metro- and micropolitan statistical areas (MSA). As shown in **Table 1,** cost-burden is prevalent in micropolitan areas, such as Big Stone Gap, VA MSA, as well as large metropolitan centers like Richmond and Virginia Beach. In 2018, 55.3 percent of renters in Big Stone Gap were cost-burdened, the highest of the state MSAs. The MSA with the lowest share was Bluefield, WV-VA MSA, with 45.1 percent cost-burdened. Renter cost-burden persists in rural areas primarily due to housing scarcity and low wages rather than high demand (Gabriel and Painter, 2020, p. 3). **Table 2** shows the total number of occupied units considered cost-burdened by MSA. Intuitively, larger metropolitan areas tend to have higher numbers of cost-burdened households. In 2018, the Washington, D.C. MSA had 367,013 cost-burdened households, dwarfing the next highest number, 125,280, in the Virginia Beach MSA. The lowest number was 3,229 households in Big Stone Gap MSA. Large metropolitan areas may experience high housing costs relative to more rural areas, but often exhibit higher household incomes to offset those costs.

Across Virginia, cost-burdened individuals are slightly more likely to be Black or Hispanic than white renters (JHS, 2018). On average, cost burdens become more severe as household income decreases (Mendenhall et al., 2013, p. 3). Households that make less than $15,000 in Virginia's three largest metropolitan areas are also more likely to be cost-burdened than those making over $15,000, though a substantial share that earn more are also cost-burdened (JHS, 2020).

Table 1. Percentage of Renter Households Cost-Burdened by MSA, 2018

Cost-Burden by MSA, 2018	30-34.9% (percent of renters)	35% + (percent of renters)	Total Cost-Burdened (percent of renters)
Big Stone Gap, VA Micro Area	7.7	47.6	**55.3**
Virginia Beach-Norfolk-Newport News, VA-NC Metro Area	10.4	42.8	**53.2**
Richmond, VA Metro Area	9.1	40.9	**50**
Lynchburg, VA Metro Area	9.3	39.9	**49.2**
Blacksburg-Christiansburg-Radford, VA Metro Area	8.6	40.2	**48.8**
Harrisonburg, VA Metro Area	8.5	40.2	**48.7**
Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area	9.7	38.4	**48.1**
Charlottesville, VA Metro Area	7.9	39.9	**47.8**
Roanoke, VA Metro Area	7.5	38.2	**45.7**
Danville, VA Micro Area	7.2	38.4	**45.6**
Kingsport-Bristol-Bristol, TN-VA Metro Area	8.5	36.7	**45.2**
Staunton-Waynesboro, VA Metro Area	6.9	38.3	**45.2**
Bluefield, WV-VA Micro Area	9.1	36	**45.1**

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (*asterisk (*) indicates one or more states sharing metro/micropolitan area)*

Table 2. Number of Households Cost-Burdened by MSA, 2018

Cost-Burden by MSA, 2018	Occupied Units (30-34.9 percent of income)	Occupied Units (35 percent or more of income)	Total Cost-Burden (total occupied units)
Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area*	73,735	293,278	**367,013**
Virginia Beach-Norfolk-Newport News, VA-NC Metro Area*	24,439	100,841	**125,280**
Richmond, VA Metro Area	14,327	64,374	**78,701**
Roanoke, VA Metro Area	2,871	14,677	**17,548**
Kingsport-Bristol-Bristol, TN-VA Metro Area*	2,540	10,987	**13,527**
Charlottesville, VA Metro Area	2,221	11,257	**13,478**
Lynchburg, VA Metro Area	2,453	10,539	**12,992**
Blacksburg-Christiansburg-Radford, VA Metro Area	1,907	8,878	**10,785**
Harrisonburg, VA Metro Area	1,449	6,869	**8,318**
Danville, VA Micro Area	983	5,244	**6,227**
Winchester, VA-WV Metro Area*	1,348	4,844	**6,192**
Staunton-Waynesboro, VA Metro Area	926	5,112	**6,038**
Bluefield, WV-VA Micro Area*	859	3,411	**4,270**
Martinsville, VA Micro Area	800	2,622	**3,422**
Big Stone Gap, VA Micro Area	452	2,777	**3,229**
Total	131,310	545,710	**677,020**

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (*asterisk (*) indicates one or more states sharing metro/micropolitan area)*

Consequences of High-Cost Burden

There are several reasons why high renter cost-burden constitutes a policy problem. First, high cost-burdens constrain household spending on other goods, such as nutrition, childcare, or educational pursuits (Gabriel and Painter, 2020, p.3). For example, Newman and Holupka (2014) find that moving from 30 to 60 percent cost burden decreases parental spending on child enrichment activities by a little less than $100 dollars per year (p. 96). Leventhal and Newman (2010) argue that high-cost burden creates financial hardship for parents, destabilizing home environments for children (p. 1171). Mendenhall et al. (2013) find that households with high cost-burdens save very little, and those who do tend to have unusually high levels of financial literacy (Mendenhall, 2013, p. 22). In effect, high cost-burden causes substitution from desirable goods to housing.

Second, high cost-burdens impose externalities. Gabriel and Painter (2020) note that high rent burdens often result in people moving further away from job centers in cities, resulting in higher commuting times. (p. 3). Increased commuting increases harmful emissions and congestion on city thoroughfares. Some may choose to move into lower-quality neighborhoods with higher crime rates or lower performing schools (p. 3). Calder (2018) posits that high housing costs discourages migration from rural or suburban areas, preventing prospective workers matching to jobs in city centers (p. 2).

Last, local regulations contributing to high cost-burden lack equity. Local housing market regulations, such as minimum lot sizes, single-family zoning designations, and density requirements (commonly known as “exclusionary zoning”) disproportionately affect people of color. The 1968 Fair Housing Act (FHA) prohibits racial discrimination but does not prohibit class discrimination. Exclusionary zoning tactics often render people of color unable to relocate to different neighborhoods due to high housing costs (The Century Foundation, 2016). Some may choose to relocate anyway but incur the accompanying financial hardships.

Cost to Society

Prevalent renter cost-burden imposes costs on society other than excess rents. Evictions and homelessness impost direct costs, and lost wages from economic instability and reduced economic stimulus impose indirect costs. High cost-burden is not the sole cause of these issues, but they are strongly related to a renter's ability to pay for housing.

Five Virginia cities – Richmond, Hampton, Newport News, Norfolk, and Chesapeake, respectively – rank in the top ten large cities with highest eviction rates in the United States (Poverty Action Lab, n.d.). Evictions are costly for landlords and evicted renters. In a legal or self-help eviction, landlords face repair, locksmith, and cleaning fees on top of lost rent and search costs for new residents.[3] A legal eviction is considerably more expensive, including court costs and attorney fees. Losing a home increases the propensity for employment instability among evicted renters. In a survey of low-income renters in Milwaukee, Desmond and Gershenson (2016) find that the full sample had about a one-in-six chance of losing their job; those with a forced move (legal or illegal eviction) incurred a one-in-three chance of losing their job (p. 10).

To calculate the cost of evictions, I apply a standardized cost estimate for evictions to the number of completed evictions and an estimated legal cost of filing to the number filed but not completed.[4] Eviction data comes from the Eviction Lab at Princeton University.[5] Virginia eviction data comes from 2016. Costs are shown below in **Table 3.**

Table 3. Cost of Evictions in Virginia

Category	Number	Cost (2019 Dollars)
Completed Evictions	54,146	$290,000,000
Filed but Incomplete Evictions	98,985	$218,000,000
Total	153,131	$507,000,000

Source: Eviction Lab (2016), Landlordology (2019), and author's calculations. Dollar amounts are rounded to millions.

In addition, I estimate the value of lost work due to homelessness as an indirect cost. I use Desmond and Gershenson's (2016) estimate that a forced move for a low-income worker is associated with a 30 percent chance of losing a job.[6] Using Bureau of Labor Statistics (2019) data for median duration of unemployment, I find the median time in hours of unemployment for the

[3] A self-help eviction is any kind of eviction that takes place outside the legal framework for eviction.
[4] Eviction costs can vary greatly by county and state. Attorney costs also vary. These estimates are assumptions, not precise calculations.
[5] This research uses data from The Eviction Lab at Princeton University, a project directed by Matthew Desmond and designed by Ashley Gromis, Lavar Edmonds, James Hendrickson, Katie Krywokulski, Lillian Leung, and Adam Porton. The Eviction Lab is funded by the JPB, Gates, and Ford Foundations as well as the Chan Zuckerberg Initiative. More information is found at evictionlab.org.
[6] This is an imperfect assumption but captures the low-income worker population that makes up most cost-burdened households.

third of evicted renters that lose their jobs.[7] I multiply this figure by the minimum wage, $7.25, to get the total cost of lost wages. The value of lost wages equals $43,000,000.[8]

Table 4. Opportunity Costs of Lost Wages in Virginia due to Housing Instability

Opportunity Cost of Lost Wages	Estimates
Number of Evictions	54,146
Job Loss Following Eviction Rate	0.3
Median Number of Weeks Unemployed	9.1
Weekly Work Hours	40
Minimum Wage	$7.25
Total Cost of Lost Wages	$43,000,000

Source: Eviction Lab (2016), Desmond and Gershenson (2016), Bureau of Labor Statistics (2019), author's calculations. Total cost is rounded to millions.

Individuals and households with housing and employment instability may experience spells of homelessness. HUD, states, and non-profits work together to provide emergency shelter, transitional housing, and permanent supportive housing to the homeless.[9] For instances of first-time homelessness, HUD estimates the average cost of emergency shelter to be between $17.75 and $77.36 per day. The average cost of transitional housing is between $36.78 and $69.75 per day (PD&R, 2010, p. 3-3)[10]. In Virginia, the number of individuals experiencing homelessness minus the number of chronically homeless is 4,902 (United States Interagency Council on Homelessness, 2020).[11] The median days spent in a homelessness program were between 10 and 24 (PD&R, 2010, ES-7). The total cost estimates are shown below in **Table 5.**

Table 5. Cost of Homelessness in Virginia

Cost of Homelessness (2019 Dollars)	Emergency Shelter	Transitional Housing	Total
Upper Estimates	$9,000,000	$8,000,000	$17,000,000
Lower Estimates	$1,000,000	$2,000,000	$3,000,000
Average	$5,000,000	$5,000,000	$10,000,000

Source: HUD PD&R, 2010, USICH, 2020. Costs are rounded to millions.

Other indirect costs and externalities may exist but estimates of their magnitude are inconsistent. For instance, Glaeser and Gyourko (2018) and Hsieh and Moretti (2017) estimate the impact of high housing costs on GDP, but their results differ by a factor of four. Sultana (2002) finds high housing costs contributes to separation of jobs from workers, which is correlated to increases in commuting time and congestion. Sultana's estimates are made in the Atlanta metro region, which would likely overstate the effect in Virginia.

[7] I use the median because there is a large skew in the data. The median is 9.1; the mean is 20.8.
[8] I assume a 40-hour work week.
[9] I do not consider permanent supportive housing since those individuals do not participate in the housing market and are unlikely to be affected by cost-burden.
[10] PD&R estimates are inflated from 2006 dollars to 2019 dollars.
[11] The total homeless population in January 2019 was 5,783. The number of chronically homeless is 881.

Summing these costs, to total annual cost to society is roughly $560,000,000. These figures serve as a guidepost for the societal savings associated with mitigating renter cost-burden. They provide a valuation of costs used to assess the cost-effectiveness of potential alternatives.

Why Are So Many Renters Cost-Burdened?

There are several reasons why many renters are cost-burdened, none of which are unique to Virginia's housing markets. High cost-burdens occur when renter purchasing power is too low, housing prices are too high, or a combination of both.

Renter Income and Neighborhood Composition

Stagnating wages and declining renter purchasing power contribute to the share of cost-burdened households. Virginia currently uses the federal minimum wage at $7.25.[12] According to the National Low-Income Housing Coalition (NLIHC), a minimum wage worker can afford a maximum rent of $377 per month before being cost-burdened, a considerably low rent, even for a small, one-bedroom apartment (NLIHC, 2020). While an increase in the minimum wage would ease some of this cost, correlative evidence from NLIHC suggests this will not solve the affordability problem (NLIHC Out of Reach, 2018).[13] Other policies, such as job training or education subsidies, may indirectly ease cost burden by raising incomes.

Neighborhood gentrification is a common concern, particularly in inner cities. Gentrification occurs when low- to moderate-income housing is bought and redeveloped into higher-income housing. If the incomes of the current residents do not change, their purchasing power decreases. Housing units that were formerly affordable are not replaced, resulting in a net loss of affordable housing units and an increase in the local market rental rate (Schuetz and Freeman, 2017, p. 218). Schuetz and Freeman (2017) note that evidence of residents being priced of neighborhoods by rent increases is mixed. Instead, many residents leave because they no longer feel welcome in a developing neighborhood (p. 218-219). Residential turnover in poorer neighborhoods is generally higher than in moderate- to high-income neighborhoods, and gentrification may reduce affordable relocation options for prospective residents (p. 218). As a result, the share of affordable rental units in desirable locations shrinks.

Local Housing Policy and Regulation

Several authors (Metcalf (2018); Gabriel and Painter (2020); Been, Ellen, O'Regan (2018); Calder (2018); Molloy (2020)) point to the effect of local housing regulation and urban planning, particularly in zoning codes, as drivers of high renter cost burden. At the state level, the Department of Housing and Community Development (DHCD) develops building standards as codes and regulations (DHCD, n.d.). At the local level, elected planning commissions work with planning departments to develop building, zoning, and environmental regulations. Land-use regulations govern what activities or purposes land can be used for. For example, only some properties in a city can be used for residential construction, while others can only be used for

[12] Legislation recently passed that will raise Virginia's minimum wage beginning in May, 2021.

[13] This assumes that the minimum wage will not have negative employment effects, reductions in total earnings for minimum wage workers, or other potential reductions in income.

commercial activities. Such regulations include restrictions on building heights, housing densities (how many housing units can be in one building), set-back distance (how far a building must be from a street), rear-yard requirements, and special designations, such as historic districts (Metcalf, 2018, p. 66). Building codes governs how structures are built, such as materials requirements, window size, room size, heat loss through walls, and other features (p. 67). These rules indirectly reduce the supply of housing by reducing usable space or increasing the cost of housing production. Land-use regulations have become increasingly popular in U.S. cities over the past several decades, and are usually designed to promote environmental, sustainability, and community safety goals (Calder, 2018, p. 2).

Measuring the costs and benefits of individual regulations is difficult. Since many are closely related, estimates typically reflect the sum of an area's regulations rather than those individually. According to the National Association of Home Builders, the average cost of complying with local regulations is about $84,000 per house, or roughly 24 percent of the sale price of a new home (Molloy, 2020, p. 2). Aurand (2010) finds that neighborhoods with higher housing density and greater varieties of housing likely have greater quantities of affordable units. He estimates that a ten percent increase in residential density predicts a 3.71 percentage increase in affordable rental units (p. 1032). Jackson (2016) attempts to estimate the effect of individual zoning restrictions on multifamily home permits in California using a two-way fixed effects model. He finds that reductions in density, building height, and required voter approval to increase density have the most significant negative impact on multifamily permit issuance (p. 53).

Affordability and regulations are endogenous in Aurand's analysis, so his estimates are not causal. If regulations substantially affect affordability, they should also cause households to sort spatially across locations with variation in regulation. When this occurs, standard measures like cost-burden depend partially on the effect of sorting because the local distribution of income, prices, and rents change as well (Molloy, 2020, p. 3). Furthermore, critics argue that reducing regulations to add to the housing supply may not add affordable supply. However, Been et al., (2018) note that housing units "filtering," or previously market-rate rents becoming affordable over time due to aging, were the largest source of additions to the affordable housing stock between 2003-2013. This suggests that investing in total supply will create affordable housing in the long run (p. 6).

Politics of Local Housing Markets

Last, oversight of local housing markets is subject to local control. Building approval processes are lengthy and vary by location. Approval is often required from more than one elected group or regulatory body. Added time costs developers money through consultant, attorney, and architect fees, as well as delayed revenue streams from new construction. This makes it difficult for housing markets to nimbly respond to new demand and reduces competition (Schuetz, 2020).

Residents often protest affordable housing developments, claiming they damage property values, increase crime, traffic, and the number of students in local schools (Scally and Tighe, 2015, p. 759). Opposition to affordable housing developments due to the effect on property values is typically unsubstantiated. The likelihood that property values will decline due to affordable housing increases when they are poorly maintained, heavily clustered, or sited in already

dilapidated neighborhoods. When sited in relatively healthy, mixed-income neighborhoods and management is responsive, there are usually no negative effects on property values (Nguyen, 2005, p. 23-24).

Virginia Governance and Housing Policy

State governments help administer some federal programs and implement a variety of smaller programs to fill gaps in federal and local programs. The Virginia Department of Housing and Community Development (DHCD) is the primary agency involved in administering housing policy at the state level, supervised by the Secretary of Commerce and Trade within the Governor's cabinet. The director is appointed by the Governor, and the General Assembly provides funding for the agency's budget. In 2019, the budget was $167.3 million (Data Point, n.d.). DHCD administers several programs designed to improve the quality of existing affordable housing, encourage production of affordable housing, and assist homebuyers and renters in acquiring housing. DHCD programs are summarized below in **Table 6** (DHCD, n.d.).[14]

Table 6. Survey of Department of Housing and Community Development Programs

Housing Assistance	Housing Development and Rehabilitation	Homeless Assistance and Prevention	Landlord Tenant Handbook
-Housing Repair and Energy Efficiency -Homebuyer Resources -Tax Credit Programs -Virginia Housing Search -2-1-1 Virginia -Virginia Eviction Reduction Program	-Multifamily Housing Development -Housing Rehabilitation -Housing Innovations in Energy (HIEE)	-Virginia Homeless Solutions Program (VHSP) -Housing Opportunities for Persons with Aids -Virginia Housing Trust Fund Homeless Reduction Grants -Continuum of Care/Balance of State	-Virginia Residential Landlord and Tenant Act Handbook

Source: DHCD, 2020

Allocation and administration of federal assistance, including Housing Choice Vouchers (HCV) and Low-Income Housing Tax Credits (LIHTC), is managed by Virginia Housing, formerly Virginia Housing Development Authority (Virginia Housing, n.d.). Virginia Housing was established in 1972 by the General Assembly to administer state housing policy as a state housing finance agency (HFA). The 1968 Housing Act provided federal funds to states to improve state rental housing, and the 1968 Revenue and Expenditure Control Act permitted the use of tax-exempt revenue bonds to finance HFAs. Bonds were initially sold to support rental housing programs, but beginning with Virginia in 1974, were expanded to support homeownership programs (Moulton, 2013, p. 3-4). Besides federal tax expenditures (including the LIHTC and others to incentivize

[14] See https://www.dhcd.virginia.gov/all-programs for a complete list of programs.

bonds), revenue comes from selling bonds and mortgage-backed securities to investors, interest on loans, program fees, and investment income. In 2019, the organization had operating revenues of $375,157,622 and a total net position of $3,466,016,930 (VHDA, 2020). Virginia Housing receives no operational funding from Virginia's state budget (VHDA, 2020). In addition to administering federal programs, they offer several other programs, summarized in **Table 7** (Virginia Housing, n.d.).

Table 7. Survey of Virginia Housing Programs

Homebuyers	Veterans and U.S. Military	Homeowners	Renters	Business Partners
-Homeownership Education -Home Loans -Virginia Housing Plus Second Mortgage Down Payment Assistance Grant -Closing Cost Assistance Grant -Mortgage Credit Certificates	-Home Loans for Veterans and members of the U.S. Military -Grants for Virginia's Disabled Veterans	-Automatic Payment Plan -Borrower's Financial Package	-Accessible Rental Housing -Housing Choice Vouchers Program	-Multifamily Financing -LIHTC Program -REACH Virginia Financing

Source: Virginia Housing, 2020

Policy changes at the state level are administered through these agencies. The General Assembly may legislate new programs into law directly or direct DHCD or Virginia Housing to create them. Housing legislation in the General Assembly moves through the Committee on General Laws and the Subcommittee on Housing/Consumer Protection, though this may vary based on the details of the legislation (LIS, 2020).[15] The Governor may also direct agencies to pursue new initiatives or rules by writing executive orders. Both the DHCD and Virginia Housing have rulemaking and regulatory authority, and Virginia Housing has authority to create and administer its own programs, per Virginia Code §36-55.30:3. [16] Some housing policy is conducted on behalf of the federal government by local public housing agencies (PHAs), who manage the day-to-day administration of LIHTC, Section 8, and HCV properties. These operate independently of state government, despite serving local jurisdictions.

As a Dillon Rule state, Virginia's localities may only exercise powers that are explicitly given to them (NLC, 2021). As a result, most Virginia cities and towns have restricted zoning authority. Code §15.2-2305 regulates the extent to which local governments can amend certain zoning restrictions. The potential benefits of allowing more flexibility are discussed in detail in state policies.

[15] For instance, legislation to create a Virginia LIHTC moved through the Finance Committee because it concerned the tax code (LIS, 2021).

[16] Per Virginia Code §36-55.30:3, Virginia Housing has the power to adopt, amend, and repeal regulations consistent with the laws of its enactment.

Existing Policies and Evidence

Numerous federal, state, and local government policies have been implemented to mitigate renter-cost burden. An effective program reduces the cost of rental housing and/or increases real income for renters. Different programs approach this using different methods. Subsidizing housing production through tax credits, loans, or grants are popular mechanisms at the state level and contribute by increasing the housing supply by reducing the cost of housing production. Direct provision of housing and subsidies to renters are primarily done at the federal level. These programs are divided into "project-based," indicating support is provided in the form of a physical structure, and "tenant-based," indicating support is provided directly to the tenant as a subsidy. These programs increase renter purchasing power relative to their income. Reducing production costs by deregulating housing and land markets is generally the purview of local governments, which increases the housing supply over time.

Existing programs at the federal and local levels that cannot be augmented at the state level are considered fixed when weighing potential policy changes at the state level. Policy effectiveness from these programs is considered when it can be leveraged by the state or is used as evidence for analogous state programs. Some detailed discussions of federal policy evidence are included in the subsection on State Policies for this reason.

Federal Programs

Public Housing

The most aggressive form of project-based housing support is direct provision. Public housing was first established by the federal government with the Housing Act of 1937. Though most funding comes from the federal government, most policy implementation occurs at a local level (Collinson et al., 2016, p. 65). Public Housing Agencies (PHA), funded by HUD, own and operate public housing developments established by local governments and control housing location, design, and tenant selection (p. 65). In Virginia, 31 PHAs oversee the regional management of public housing resources (HUD, n.d.). The program peaked in the 1990s but has declined. The Housing and Opportunities for People Everywhere VI (HOPE VI) program led to the demolition of about 11 percent of the nation's public housing stock, with plans to replace roughly half (Collinson et al., p. 66-67).

Low-Income Housing Tax Credit

The federal government subsidizes privately-owned housing through the low-income housing tax credit (LIHTC). The LIHTC is the largest subsidy to produce rental housing in the U.S. After several increases, allocations were set in 2002 to $1.75 per capita of their population, adjusted for inflation, which authorizes a ten-year stream of tax credits. In 2021, this will equal $2.8125 per person (Keightley, 2021, p. 4).[17] State agencies select developers and administer the allocations. In Virginia, LIHTC credits are managed by Virginia Housing. To qualify for a project, 20 percent of

[17] This is higher than the inflation-indexed prediction because of an omnibus spending provision that provided a temporary 12.5 percent increase from 2018-2020. See the full chart at https://www.novoco.com/sites/default/files/thumbnails/image/2020-09-new-per-capita-credits.gif (Novogradac, 2020).

the development tenants must have incomes below 50 percent of the Area Median Income (AMI, calculated by HUD), or 40 percent must have incomes below 60 percent AMI (Collinson et al., p. 69).[18] Since 2018, tenants with 80 percent AMI could live in LIHTC units as long as the average tenant AMI was below 60 percent (Scally, 2018, p. 2). Investors bid on projects and are eligible to receive either a 9 percent or 4 percent tax credit to offset federal taxes for a ten-year period.[19] Projects commit to a thirty-year period of affordability (PD&R, 2012)[20]. Unused allocations for 9 percent credits are reallocated into a national pool. As of 2015, the LIHTC accounted for more than 90 percent of affordable rental housing and about one-third of new rental housing units built in the U.S. (Oluku, 2019, p. 216-217). Some states have created additional housing tax credits to amplify low-income housing production. Since this is a policy option for Virginia, a discussion of LIHTC effectiveness is included in State Policies.

Housing Choice Vouchers

The Housing Choice Voucher Program (HCV; formerly known as Section 8) is a federally funded, tenant-based subsidy program administered locally by PHAs. Rather than targeting place-based affordable housing like the LIHTC and public housing, HCVs subsidize participants to move to housing that they choose. Acceptable housing units must meet certain size and quality standards determined by the PHA, and voucher recipients are not limited to subsidized housing (HUD, n.d.). Tenants typically pay 30 percent of their income towards private market rent and the federal government pays the difference between that price and a specified maximum, known as Fair Market Rent (FMR) (HUD Fair Market Rents, n.d.). Rather than expanding the supply of affordable housing, HCVs increase the purchasing power of renters so they can afford higher housing costs. Acceptable housing units must meet certain size and quality standards determined by the PHA (HUD, n.d.). The federal HCV program is the largest housing subsidy program for low-income households (Collinson et al., 2016, 70). However, the reach of the program is relatively low; only 25 percent of income eligible households receive a voucher (Metcalf, 2018, p. 64). Since this is a state policy option, a discussion of effectiveness is included in State Policies.

Grants and Aid to States

The federal government provides aid to states and funding for housing programs through three large grant programs. HUD finances Community Development Block Grants (CDBG), HOME Investment Partnerships Program (HOME), and Choice Neighborhoods. CDBG and HOME offer formula grants to state and localities to create and maintain affordable housing. Choice Neighborhoods is an application-based grant to revitalize distressed HUD housing and assisted housing (HUD, n.d.).

[18] It is unclear why individual allocations are used to fund the program (p. 68).

[19] 9 percent tax credits are capped, but 4 percent credits are available for any low-income housing development financed with tax-exempt bonds (Collinson et al., p.8).

[20] Prior to 1990, the affordability period was only 15 years. However, states now only monitor for compliance for the first 15 of the 30-year period (PD&R, 2012).

Table 8: Overview of Major Federal Programs in Virginia, 2019

Federal Programs (2019)	Number of Units	Number of Households	Total HUD Spending
Public Housing	15,466	14,378	$11,000,000
Housing Choice Vouchers	54,882	49,453	$42,000,000
Project Based Section 8	30,823	29,203	$24,000,000
LIHTC*	91,094	n/a	$24,000,000

Source: HUD Picture of Subsidized Households, 2019. Costs are in 2019 dollars, rounded to millions.
*LIHTC unit data comes from HUD LIHTC Property-Level Data. LIHTC cost is estimated 2020 allocation (Novogradac, 2020)

Local Policy

Local governments rely on a patchwork of different policies to stimulate housing production. In response to local regulatory policies that inhibit the production of new housing units, some cities adopted inclusionary zoning (IZ) policies. Inclusionary zoning is the countermand to exclusionary zoning, or a loosely defined set of policies such as minimum lot sizes, single-family zoning, low housing density requirements, and others that increase housing development costs (Lerman, 2006, p. 386). Inclusionary zoning policies require developers to set aside a percentage of newly built units to be priced below-market in exchange for incentives, such as density bonuses or fast-tracked approval. The percentage varies by program, but usually falls around 10-15 percent of the units created in a single project. Proponents of IZ policies argue that it expands the supply of below market-rate housing and promotes social integration through mixed income communities (Mukhija et al., 2015, p. 222). IZ programs tend to be popular because they shift cost-burden to private developers; citizens and local governments face little, if any, direct program costs (Freeman and Schuetz, p. 223). IZ policies can be voluntary or mandatory, depending on the program. Mandatory programs typically offer "in-lieu" fees, which allow developers to buy-out rather than build affordable units (Mukhija et al., 2010, p. 237). The extent to which affordable units are subsidized is also mixed. Developers may opt to target lower-income households in exchange for a smaller percentage of affordable units, and vice versa (p. 247).

State Policies – Existing Evidence and Best Practices

The following section describes state policies from Virginia and across the country. In some instances, evidence from federal programs is used to describe the effectiveness of analogous state programs, such as LIHTC developments and vouchers, in lieu of quality state program evidence. Cost and effectiveness measures discussed in this section will be used to project effectiveness of potential policy alternatives.

Voucher Programs

Several states offer tenant-based subsidy programs comparable to the federal HCV program. Some of these programs are offered to the public and some targeted to at-risk subpopulations, such as the elderly or those with mental illnesses.[21] For example, Massachusetts' Rental Voucher Program (MRVP) operates similarly to the federal HCV program, except that 200 percent of the

[21] See the National Low-Income Housing Coalition's State and City Funded Rental Housing Programs database at https://reports.nlihc.org/rental-programs.

federal poverty line is used for initial eligibility rather than AMI (Verilli, 2009), p. 18). About half of these vouchers may be used at any housing unit that meets state sanitary codes, and the other half are used at project-based housing (MRVP, 2021).[22] In 2009, the Citizens' Housing and Planning Association found that MRVP assisted 5,171 households. These are broken into tenant-based subsidies (2,164 households) and project-based subsidies (3,007 households) (Verrilli, 2009, p. 8). Tenant-based vouchers cost $903-$933 per month and project-based vouchers cost $926-$1,564, on average (Verilli, p. 8). In 2009, the total cost of the voucher program was $35.8 million (Verrilli, p. 3). The estimated cost of maintaining 4,800 family and individual homelessness shelter beds in Massachusetts for the same year was $140 million (Verrilli, p. 3).

Participation in the federal HCV program, on average, produces positive benefits for renters. By requiring households to pay 30 percent of their income in rent, the HCV program, by design, does not eliminate cost-burden. McClure (2005) estimates that about 38 percent of renters in the federal HCV program pay more than 31 percent of their income in housing costs (p. 10).[23] However, it does reduce the extent to which recipients are cost-burdened. In a randomized experiment, Mills et al. (2006) finds that voucher recipients spent $211 per month less on rent and utilities compared to a control group (p. 139). Additionally, some program benefits come from positive externalities accruing to low-income households by moving to higher-income neighborhoods. In a randomized experiment known as Moving to Opportunity (MTO), HUD studied a group of voucher recipients and a group living in other subsidized housing for ten years (Office of Policy Development and Research (PD&R), 2003, p. 2). MTO increased mobility among voucher holders and had positive effects on the quality of neighborhoods where they lived (p. 149). On average, those who used their vouchers reported living in cleaner neighborhoods, greater perceived safety, and greater satisfaction with their housing (p. 151). Evidence from subsequent studies indicates the program generated positive impacts on children. Chetty et al. (2015) estimate that children who moved with a voucher before age 13 had incomes 31 percent higher in their mid-20s relative to the control group. They are also more likely to attend college and attend better colleges (p. 2-3). State programs utilizing a similar structure, like the MRVP program, likely produce similar impacts.

Between FY2014-2018, Virginia Housing administered 8,895 federal vouchers per year on average. Rent, utilities, and administrative costs totaled $93.46 million (CRA, 2020, p. 29). Virginia currently supports the federal HCV program with the Communities of Opportunity Tax Credit (COPTC). Enacted in 2010, the COPTC awards tax credits to landlords with property in census tracts with poverty rates of less than ten percent and who participate in the HCV program. Only housing units in the Richmond and Virginia Beach MSAs are eligible (DHCD, n.d.). The amount of tax credit for an eligible property is based on ten percent of annual FMR for the unit. In 2010, there was $450,000 per year for tax credits. This amount was reduced to $250,000 in 2013 (DHCD, 2019, p. 5). On July 1st, 2020, new laws took effect barring landlords with more than four housing units to turn away tenants with income supported by HCVs (Modlin-Jackson, 2020). This may increase the number of landlords participating in the HCV program, but it is unclear how this

[22] There is also a project-based arm of the program where tenants pay 35% or 40% of their adjusted gross income in rent.

[23] It is unclear why the author uses 31 percent of income as a benchmark instead of 30 percent.

change will affect the number of landlords that claim the COPTC. Providing support directly to tenants could better serve those eligible for vouchers. For example, New Jersey's State Rental Assistance Program (SRAP) is made available only to state residents who do not hold a federal voucher (NJ Department of Community Affairs, 2021). This increases the HCV program's penetration (only 25 percent of households qualified for the HCV program receive a voucher) without creating a duplicative program (Metcalf, 2018, p.64). Instituting a similar program in Virginia would buttress the HCV program, provide positive externalities and benefits to renters, and minimize policy overlap.

Capital Programs

Several states and cities operate loan programs, bond programs, or housing trust funds to raise capital for housing production. The Virginia Housing Trust Fund (VHTF), administered by Virginia DHCD, provides loans for affordable rental housing and homeownership and targeted homelessness prevention grants. 20 percent of the funds are set aside as grants for efforts to reduce homelessness, and 80 percent is used for loans to reduce the cost of homeownership and rental housing. A smaller portion of the endowment is for the Vibrant Community Initiative, a community revitalization program. The loans are allocated by a competitive application process (DHCD, 2020). Housing Trust Funds are advantageous for localities because they do not carry the spending restrictions of federal money. Virginia's Biennium Budgets for 2016-2018 and 2018-2020 allocated $11 million each over two years to the VHTF. In the 2017-2018 award allocation year, $5.5 million were utilized, creating or preserving 330 affordable housing units, or roughly $16,700 per affordable unit (VHTF, 2019).

Virginia Housing also offers the REACH Virginia program, a subsidized lending program for developing affordable housing and serving low-income populations. Loans are funded using taxable bonds, tax-exempt bonds, internal funding, or a combination (Virginia Housing, n.d.) Between FY2014-2018, REACH Virginia provided $120.1 million in subsidies, creating 8,909 housing units for $13,480 per unit (CRA, 2020, p. 26). Other cities and states have similar loan and bond programs bundled with trust funds or HFAs.

Tax Credits and LIHTC Policy

Tax credits incentivize developers to build new housing by reimbursing part of their tax liability. The LIHTC is federally funded but administered by state HFAs. In Virginia, the federal LIHTC accounted for 26,309 low-income units between 2013 and 2018, an average of 4,384 per year (CRA, 2020, p. 25). In addition to allocations, states can package 4 percent tax credits with tax-exempt bonds, which are uncapped. In 2014, Virginia's LIHTC allocation was about $19,200,000, but used about $4,000,000 worth of allocations in bond-financed deals (Novogradac, 2020).[24] In Several states (18 currently in effect, three proposed) offer programs that augment the national Low-Income Housing Tax Credit (LIHTC) program (Novogradac, 2021).

Despite being one of the largest vessels for affordable housing production, the effectiveness of the LIHTC in reducing cost-burden is mixed. Oluku (2019) and Williamson (2011) find that the

[24] See Novogradac's LIHTC Utilization Charts at https://www.novoco.com/resource-centers/affordable-housing-tax-credits/data-tools/annual-lihtc-utilization-charts.

LIHTC rent pricing schedule works best for tenants in the 50-60 percent AMI income range. Using housing unit characteristics as instruments to estimate the market rent for LIHTC properties, Oluku (2019) finds that those earning 50-60 percent of local AMI pay roughly 30 percent of their income for their LIHTC housing. The remaining 80 percent of the sample were still cost-burdened (p. 228). Oluku also finds that LIHTC housing units saved tenants in St. Louis, Missouri roughly $139 to $546 in housing costs, depending on age of the unit, number of rooms, and amenities (p. 227). Using a sample from Tallahassee, Florida, Burge (2011) finds that LIHTC units saved about $20-$117 per unit on monthly rent. Most of the savings Burge finds are attributable to utilities allowances, a requirement that landlords account for when pricing units (p. 89). He finds that the present value cost per LIHTC unit is $40,000 while the present value rent savings are slightly less than $14,000, indicating that the benefit of the credit is partially captured by developers (p. 91-92). As a result, the LIHTC may be less efficient than programs like HCV.

LIHTC properties create externalities in local housing markets. Eriksen and Rosenthal (2010) find that LIHTC properties crowd out, or replace, unsubsidized rental housing at a nearly 1:1 rate. Because subsidized properties are administered by state organizations and not market prices, some units may be allocated to people who would rent on the private market anyway. The private market adjusts to lower demand that the subsidized market has absorbed. As a result, the total housing stock is not increased by the same number of units subsidized because some that would be built anyway are not built (Sinai and Waldfogel, 2005, p. 2143-2144). Eriksen and Rosenthal (2010) find no evidence of crowding out in owner-occupied units, suggesting displacement is confined to the rental sector (p. 964). Sinai and Waldogel (2005) find that only about one third of housing units produced from federal supply-side programs truly increases the housing stock (p. 2161). Schwartz et al. (2006) find that place-based housing developments can have positive externalities by removing and redeveloping dilapidated and unappealing neighborhood properties (p. 680).

There are lingering complications with assessing the effectiveness of the LIHTC. First, federal reporting requirements for LIHTC unit and tenant data did not become law until 2012, so comprehensive analysis was not possible prior to then (Williamson, 2011, p. 780). Since state agencies administer the LIHTC, there may be unobserved differences across states administrative practices. Both Williamson's (2011) and Burge's (2011) samples are from taken from Florida, a state with the third largest LIHTC allocation per year (Williamson, 2011, p. 777). It is possible that larger states developed better practices than smaller ones that have less funding. Last, as Olsen (2009) notes, ideal evaluation includes the life cycle of the housing unit, which captures lingering externalities once the tax credits are paid (p. 5-6). These externalities could be positive or negative. For instance, LIHTC-funded developments could increase investor attraction or economic growth in an area. While these possibilities do not directly combat renter cost-burden, they may create indirect benefits for those who are cost-burdened over a long period of time.

"Fair Share" Laws

Three states, including California, Massachusetts, and New Jersey have adopted statewide affordable housing mandates, commonly known as "fair share" laws. Fair share laws require localities to contribute to the state's affordable housing supply. The laws differ drastically in scope, however. California's law requires local governments to offer density bonuses to

developers of any project meeting a minimum share of affordable housing. Massachusetts' law (Chapter 40B) allows for the state to overrule local zoning to grant permission for housing projects containing a minimum affordable share, contingent on existing affordability criteria (Freeman and Schuetz, p. 221). In New Jersey's fair share law, localities must adopt a state-certified plan to reach their contribution through building or rehabilitating affordable housing directly, allowing density bonuses for more affordable housing, or even paying other localities in the same region to provide up to half of their housing obligation (Schuetz et al., 2011, p. 300).

New Jersey's Council on Affordable Housing (COAH) was limited by being voluntary and using incentives to encourage membership. The key incentive was legal protection from builders who may argue that the municipality did not zone enough land for affordable housing. Additionally, municipalities gained access to state funds and financing to help implement an affordable housing plan, along with the ability to join a regional contribution agreement (RCA), through which they could shift their housing obligation to other municipalities (PlaHovinsak, 2020, p. 808).[25] PaHovinsak (2020) finds that while the incentive structure did draw wealthier counties to participate, it also encouraged them to pay to not build affordable housing (p. 818). A mandatory compliance schema with smaller opportunities to exchange housing obligations would likely create a larger impact on affordable housing development.

Descriptive evidence suggests that these programs created modest amounts of housing: 810 units per year in Massachusetts, 1,673 per year in New Jersey, and 9,000 per year in California. For comparison, the LIHTC program created 1,902, 380, and 16,329 units per year in these states, respectively (Freeman and Schuetz, p. 226). Importantly, existing data on program outputs is not sufficient for rigorous analysis. Statewide trends conceal important regional variation, and production from these programs is deeply endogenous to economic growth.

Inclusionary Zoning Policy

In Virginia, state government regulates the extent to which localities can implement IZ policies. Virginia Code §15.2-2304 allows for inclusionary zoning laws in Albemarle and Loudoun Counties and the Cities of Charlottesville, Fairfax and Alexandria, where developers are allowed density bonuses in exchange for below-market housing (VA §15.2-2304, 1989). This statute provides flexibility for determining how much density bonus is granted and the number of affordable units required. All other Virginia localities are governed by Code §15.2-2305.1, which is more restrictive. Under Code §15.2-2305.1, localities are required to maintain a ratio between the size of the density bonus and the number of affordable units (VA §15.2-2305.1, 2020). These localities may enact voluntary IZ programs. This provision makes IZ policy more difficult and less binding in most parts of Virginia (Virginia Poverty Law Center, 2018).

Evaluations of IZ programs tend to suggest modest housing production. In a study of IZ programs in the San Francisco Bay Area and Boston, Scheutz et al. (2011) find that longer-standing programs and those that offer density bonuses to developers produce more affordable housing (p. 314). They find that IZ programs put upward pressure on housing prices in rising regional markets (p. 321). Other evaluations, such as Sturtevant (2016), suggest IZ programs have no

[25] RCAs in New Jersey were abolished in 2008 (PlaHovinsak, p. 818).

consistent impact on housing prices and long-run housing supply (p. 5). In a study of IZ programs surrounding Los Angeles, Mukhija et al. (2015) find that voluntary programs are less effective than mandatory ones. Furthermore, they argue that in-lieu fees for mandatory programs are often set too low, resulting in more developers buying-out and damaging program performance (p. 247). Sturtevant (2016) similarly concludes that mandatory programs with cost-offsetting incentives and clear, predictable guidelines tend to be most effective (p. 8-9).

A common problem for IZ evaluation is that cities are not required to (and usually do not) collect consistent data (Mukhija et al., (2015); Freeman and Schuetz, (2017); Sturtevant (2016)). It is also difficult to account for all confounding variables, such as local legal frameworks, existing housing market conditions, and economic growth, which limits generalizability of effective IZ programs (Sturtevant, 2016, p. 3). Localities that adopt IZ may be implementing other programs to spur housing growth, or IZ may be a response to inhibiting regulations (Schuetz et al., 2011, p. 310). Amending Virginia's density bonus code would allow flexibility to areas with growing urban centers, like Richmond or Norfolk. Legalizing mandatory IZ would increase usage in areas that can only use voluntary programs. This would likely not have an impact in Southwest Virginia, where housing markets are not expanding significantly and cost-burden is predominantly a function of low incomes.[26]

Public Land Development

Finally, governments can utilize public land for affordable housing development. In theory, this can take place at the state or local level of government as long as the land is owned by the government. Developers generally report land costs between 5 and 35 percent of total development costs (Hickey and Sturtevant, 2015, p. 6). Land can be sold at a reduced cost to developers in return for affordable housing development. This is achieved without levying higher taxes or fees on existing residents, making it a politically attractive policy (NVAHA, 2014, p. 3). Several Northern Virginian jurisdictions have already used this, including Alexandria, Arlington, and Fairfax. These projects yielded 64 units, 122 units, and 270 units of affordable housing, respectively (NVAHA, 2014, p. 6-7). While this may not represent large quantities of housing, it costs very little to taxpayers to implement.

Much of this work is done locally on a case-by-case basis. A key issue for states' public land utilization is creating an inventory. In January 2019, California initiated a state-wide effort to identify excess state-owned property that could be used for redevelopment and will prioritize developers that will dedicate at least 25 percent of a project's units as affordable housing units (Local Housing Solutions, 2020). Centralizing this information will likely facilitate project and site matching beyond what local governments alone could do. The drawback is that state land can only be sold once, and the existing supply of surplus land may not be in areas that are viable for redevelopment.

[26] By design, IZ only works in areas with strong market-rate housing production (Sturtevant, 2016, p. 8).

Table 9: Evidence Summary Matrix

Program/Metric	Method	Cost	Effectiveness	Cost-Effectiveness	Political Obstacles
Tax Credits (LIHTC programs)	Increase housing production by reducing developer tax liabilities	High, annual, direct state costs	1000-2000+ units per year; low cost-burden reduction	Low per unit, very low per reduction in cost-burdened households	Medium
Vouchers (HCV)	Increase renter purchasing power by subsidizing housing consumption	High, annual, direct state costs	Mobile vouchers produce no housing; large cost-burden reduction	Medium per voucher, high per reduction in cost-burdened households	Medium
Capital Programs (loans, bonds, trust funds)	Increase affordable housing through subsidized loans and grants	Ad hoc state contributions based on anticipated need	300-1000+ units per year (VHTF;REACH VA); unclear reduction in cost-burden	Medium per unit created, unclear per reduction in cost-burdened households	Low
"Fair Share" Laws	Increase affordable housing by legally requiring local contributions	Low direct state cost (activity occurs at local level)	Modest housing production, unclear reduction in cost-burden	Unclear due to program variation	Very high
IZ	Increases affordable housing by offering developers favorable zoning incentives	Low direct state cost (activity occurs at local level)	Low local housing production in high-growth areas, unclear reduction in cost-burden	Medium per unit created, unclear per reduction in cost-burdened households	High (due to current Dillon Rule limitations)
Public Land Development	Increases affordable housing by selling public land at low-cost to developers	Opportunity cost of sold land and negotiations	Low local housing production, unclear reduction in cost-burden	High per unit created, unclear per reduction in cost-burdened households	Unclear

Criteria

Using the evidence presented in the background and literature review, I assess policy alternatives against five criteria: cost, effectiveness, equity, political feasibility, and ease of implementation.

Cost

Cost is a salient issue in any government intervention. This criterion evaluates each alternative by the net present value of its total cost using a three percent discount rate. This includes program costs and an estimate of externalities when applicable. A lower total cost is preferable to higher costs and will be reported as net present value over ten years, 2022-2031. A more detailed cost-effectiveness analysis will also be performed for direct comparison.

Effectiveness

The evidence presented suggests that current policies vary considerably in their outcomes. This criterion evaluates programs based on how well they address cost-burden. Utilizing existing cost data, I estimate the cost-effectiveness of each alternative. Cost-effectiveness is defined as the net present value of the total cost of the alternative divided by the desired outcome, reduced cost-burdened households. All cost estimates will be forecasted and discounted ten years, using three percent discount rate. Alternatives will then be ranked based on their cost-effectiveness estimates.

Equity

Equity captures how each alternative impacts renters above and below 50 percent AMI. Many programs create affordable housing but fail to target the lowest income-earners who are most cost-burdened (JHS, 2018). Equitable housing policy benefits those who need it most. Alternatives will be qualitatively assessed and given a score of high, medium, or low, with high as most desirable.

Political Feasibility

Alternatives only impact cost-burden if they are passed. With political feasibility, I assess the process of passing the alternative. This considers the General Assembly, the Governor, and when applicable, complying agencies. Considerations will include relevant lawmakers, funding sources of alternatives, and strength of outside advocates. Alternatives will be qualitatively assessed and given a score of high, medium, or low, with high as most desirable.

Ease of Implementation

Finally, ease of implementation captures how challenging alternatives will be to implement. Actions like establishing a new program or creating a new funding source will likely be more difficult than utilizing existing resources. Successful implementation strategies need to have agreement on priorities from the agencies involved, information technology infrastructure, a

realistic timeline, adequate financing, and ownership by the bureaucracy. Alternatives will be qualitatively assessed and given a score of high, medium, or low, with high as most desirable.

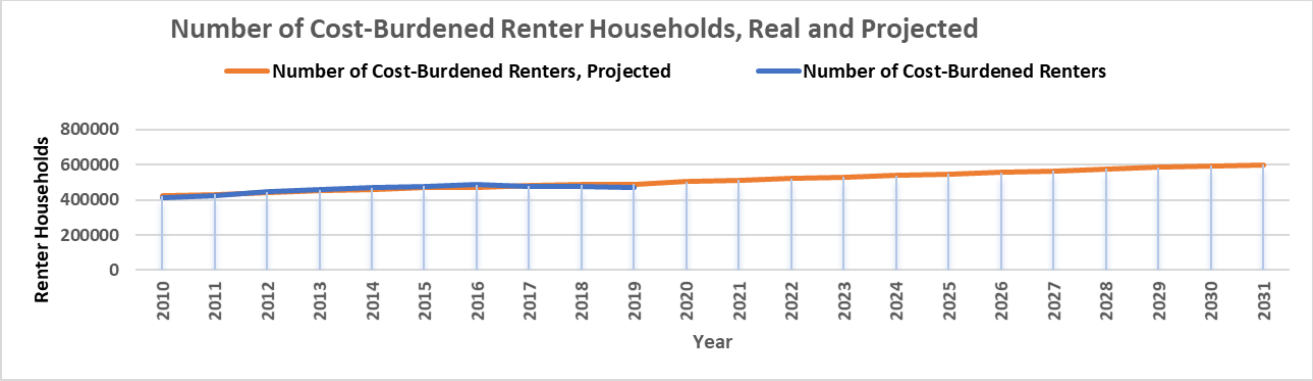
Policy Alternatives and Findings

Cost to Society Projection Methodology

In the absence of intervention, the costs to society from increasing numbers of rent-burdened households will grow. I project the cost to society previously calculated for 2019 for ten years, from 2022-2031. I make two key assumptions. First, I assume that the cost grows in proportion to the number of rent-burdened households. Second, I assume that the cost to society per rent-burdened household, on average, is fixed. I find the per rent-burdened household cost by dividing the cost to society I previously found for 2019 by the number of rent-burdened households in that year.

To project the number of rent-burdened households, I use the Weldon Cooper Center for Public Service's population projections for Virginia as a leading indicator. These estimates are reported decennially; I assume population growth is constant between 2020, 2030, and 2040 and interpolate the values in between by dividing each ten-year increase by ten. I then regress Virginia's population on the number of rent-burdened households for years 2010-2019.[27] Using these results, I project values for years 2020-2031[28]. The real and projected number of cost-burdened households are shown below in **Figure 3.**

Figure 3: Real and Projected Number of Cost-Burdened Renter Households in the Commonwealth of Virginia



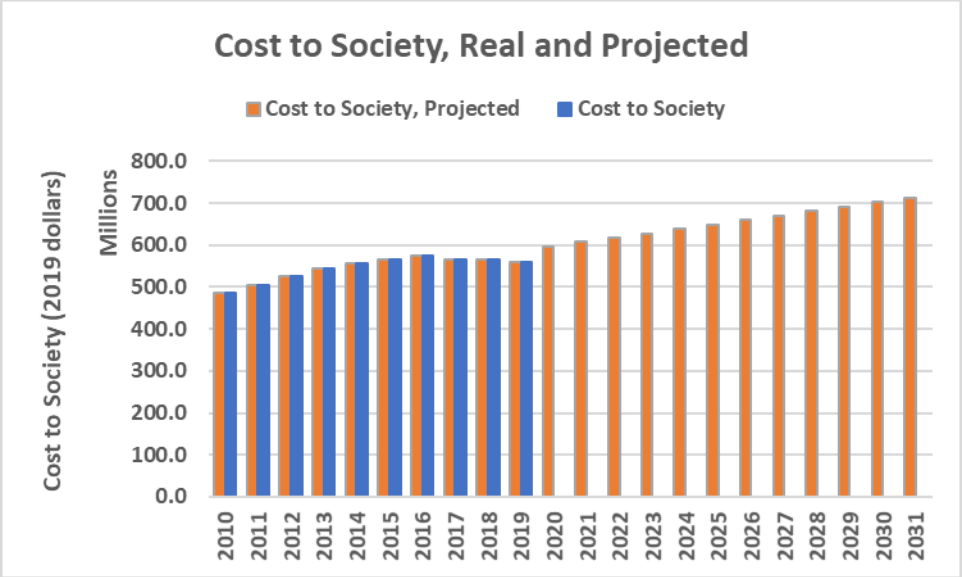
Source: U.S. Census ACS 5-Year Estimates; author's projections

Combining the two previous steps, I multiply the projected number of rent-burdened households by the cost to society per household, producing the total cost to society.

[27] Regression completed in Stata 16.

[28] Cost-burden data from U.S. Census ends in 2019. Years 2020 and 2021 are projected as well.

Figure 4: Cost to Society, Real and Projected



Source: U.S. Census ACS 5-Year Estimates; author's projections

Finally, I add the projected costs of DHCD program spending in Virginia. No new legislative changes since January 2021 will be considered in the baseline cost estimate. I use spending data classified as Housing Assistance Services, which captures grants to Virginia Housing, substate government units, direct program costs, and administrative costs associated with DHCD housing assistance programs.[29] Government expenditure data is publicly available on Data Point for years 2017-2021 (Data Point, 2021). DHCD spending in Housing Assistance Services nearly doubled in 2021, likely from COVID-19 aid. I omit this year given the dramatic and unusual increase. Using the remaining data, I forecast the growth in expenditures to 2031. I assume that DHCD spending grows with the rate of inflation, which I also forecast to 2031 using Federal Reserve Bank of St. Louis CPI data.[30] I assume that both grow linearly. I add this cost to the cost to society and discount them ten years using a 3 percent discount rate. The total costs are shown below in **Table 10.**

Table 10: Total 10-Year Discounted Costs (2019 Dollars)

	10-Year Discounted Costs (2019 Dollars, 2022-2031)
Cost to Society	$5,821,000,000
State Spending	$1,487,000,000
Total	$7,308,000,000

Source: Author's tabulations and projections of Data Point expenditure data and U.S. Census ACS 5- Year Estimates

[29] This method also captures non-renter assistance services as well. Since the emphasis of this exercise is on the change in spending from alternatives, I consider this issue of secondary importance.
[30] This forecast was completed using Excel's linear forecast function.

The policy alternatives that follow will be compared to this baseline estimate of costs. Discounted and annual costs are reported rounded to millions; per-unit costs are rounded to the dollar.

Policy Option 1: Maintain Status Quo

Maintaining the status quo requires no action by state policymakers. Growth in the number of cost-burden renters will continue as projected. The state would incur no additional spending resulting from new programs, but the total cost to society from high renter-cost burden would continue to grow in the absence of intervention.

Cost

The state incurs no additional direct costs from allowing trends to continue. State housing program spending will grow as projected. Costs associated with eviction, homelessness, and program spending are captured in the baseline cost to society projections of the status quo. The status quo option generates **zero** costs beyond the baseline.

Effectiveness

Allowing current trends to continue does not differentially reduce the number of cost-burdened renters at all. Therefore, the effectiveness (measured by the change in number of cost-burdened renter households) is **zero** against the baseline projection.

Equity

Existing housing policy targets across income ranges equitably but does not deliver desired results. HUD's largest housing policy expenditure is the HCV program, which targets below 50 percent AMI (Schuetz, 2019). However, this income band, particularly those making $15,000 per year or less, remains the most cost-burdened group in Virginia, suggesting current efforts are insufficient (JHS, 2018). Because maintaining the status quo creates no change for disadvantaged groups, I assume that these inequities persist. As a result, the status quo scores **low** on equity.

Political Feasibility

Though this option does not require officials to do anything, legislators are under more intense pressure to act on affordable housing policy. Media attention on Virginia's high eviction rates spurred calls for reform, and debates over racial justice issue now include safe, affordable housing, particularly within the Democratic Party (Gordon, 2020). Given these developments, legislators will likely find it beneficial to act rather than nothing. I score the status quo **medium** on political feasibility.

Ease of Implementation

With no new housing policies created, allowing trends to continue will create no major bureaucratic changes. As a result, the status quo is ranked **high** in ease of administration.

Policy Option 2: Implement State Housing Choice Voucher Program

Overview

Policy Option 2 proposes implementing a tenant-based, 10,000-voucher state program to complement federal resources. Tenants may redeem their voucher at any housing unit, paying the difference between the voucher and rent cost. This typically falls at or below 30 percent of income and is capped at 40 percent of income (HUD, 2021). To qualify, households need to fall below 200 percent of the federal poverty line (FPL), which equates to roughly 30-35 percent AMI (Verilli, 2009, p. 15).[31] The initial program includes only tenant-based vouchers. These are typically more expensive per capita than project-based vouchers but provide indirect benefits resulting from living in more desirable neighborhoods (PD&R, 2003, p. 149). They also require less overhead to implement since new buildings do not need to be constructed.

To prevent policy overlap, a Virginia HCV program will include an eligibility requirement that households cannot hold a federal voucher and must be on the federal HCV waitlist. Metcalf (2018) notes that on average, only 25 percent of those eligible for vouchers receive them, and many jurisdictions are plagued with long waitlists, indicating demand for vouchers exceeds what is currently provided (p. 64). Implementing a tenant-based HCV program in Virginia will capitalize on the effectiveness of the federal program and increase participation for eligible households.

Cost

I project the cost of implementing a 10,000-voucher program using the voucher cost estimates of the MRVP, adjusted for inflation.[32] Since the vouchers are tenant-based, there are no additional costs from maintaining project-based housing properties. I use salary data on average state employee from the Bureau of Labor Statistics to estimate the cost of four additional full-time equivalent employees to manage the program. Furthermore, I estimate the cost of office space in Richmond using rental data from the Greater Richmond Partnership. I assume that the program will take two years to implement, so there are no matching credits paid out for the first two years. Alone, these costs are roughly $450,000. On average, the matching program would cost approximately $11,000,000 per year following the first two years. The 10-year discounted cost is approximately **$78,000,000 dollars**.

Effectiveness

Though there is excess demand for vouchers, researchers note that take-up rate from households offered is not perfect. Chyn et al. (2019) report several estimated take-up rates. I use the most recent, 71 percent. Within the number of households that accept vouchers, the voucher program does not perfectly reduce rent-burden. McClure (2005) finds that 38 percent of renters in the federal HCV program are rent-burdened. I apply the rate of households that are not rent burdened to the results to account for this. Over the course of ten years, the program reduces

[31] Based on the Massachusetts Rental Voucher Program (MRVP). Their qualifications have since changed to 80 percent AMI to better align with federal programs. This comes at the expense of deeper income range targeting, a key feature of the program.

[32] The MRVP estimates were in 2009, dollars; I inflate them to 2019 dollars.

the number of rent-burdened households by **35,216 households**. The cost of a one household reduction in the total number of rent-burdened households is **$2,228.**

Equity

By targeting 200 percent FPL, or roughly 30-55 percent AMI, the HCV program reaches a significantly lower income range than other affordable housing programs. The HCV program also provides externalities from decentralizing poverty that other programs do not. The HCV program scores **high** in equity.

Political Feasibility

Creating an HCV program will require the General Assembly to pass new legislation creating and funding the program, likely through the Committee on General Laws. Because the cost is large and ongoing, funds will likely need to come from tax revenues. In the past two years, Governor Ralph Northam has invested considerable amounts of money in affordable housing projects suggesting he may be amenable to a large, new program (Wilt, 2019). Furthermore, tenant-based housing policies have gained traction from non-government actors. State-level affordable housing advocates generated momentum in 2020 with anti-discrimination policy for voucher holders, and groups like the Legal Aid Justice Center advocate for voucher expansion (Gordon, 2020). The HCV program scores **medium** in political feasibility.

Administrative Feasibility

Because Virginia Housing already administers one HCV program, relevant bureaucratic infrastructure, including IT, supportive services, and regulatory knowledge already exists. Furthermore, the program does not radically alter Virginia Housing or DHCD's mission, so bureaucratic resistance will not likely be an issue. The HCV program scores **high** in administrative feasibility.

Policy Option 3: Implement Full Low-Income Housing Tax Credit Matching Program

Overview

Policy Option 3 proposes a state LIHTC matching program. The federal LIHTC program is the largest source of affordable housing production in the U.S., and 18 states have adopted state-level programs to increase funding. These programs vary how they increase funding and by how much. For example, Arkansas caps their state contribution at 20 percent of the federal award, Georgia matches the federal allocation, and Maine matches the federal credit up to a total outlay of $10 million (Novogradac, 2021). In Virginia, LIHTC funds would be allocated to Virginia Housing, who will then receive competitive bid applications from housing developers. Developers can bid on 4 percent tax credits or 9 percent tax credits, depending on how much affordable housing they intend to build, like with the federal LIHTC. Developers will receive additional tax credits against their state tax liabilities. Credits would be good for a period of ten years in exchange for

30 years of compliance with below-market rate unit requirements. Since the state program would match the federal allocation, Virginia would effectively double its LIHTC funding.

Cost

I estimate the cost of an LIHTC matching program by utilizing existing cost-effectiveness data rather than projecting the growth in spending. As a result, yearly cost and unit production figures are averages. I assume the program will produce no housing units in its first two years while the program is being implemented. The only costs are four full-time equivalent employees, calculated using Bureau of Labor Statistics wage data, and office space, using rental estimates from the Greater Richmond Partnership. This amount is roughly $450,000. When the program starts matching credits, I assume that the matching program will double the costs of the previously existing program.[33] The Center for Regional Analysis at George Mason University (2020) reports that Virginia Housing allocated $222,804,949.00 between 2013 and 2018, creating 26,309 LIHTC units (p. 26).[34] This equals an average cost of $8,468 per unit across the six years reported. I then multiply this cost by the average number of units built per year, 4,384, to get an annual cost estimate of $38,000,000, including personnel costs. The 10-year discounted cost is **$257,000,000.**

Effectiveness

Using the CRA production data, I estimate the total number of units the matching program could create between 2022 and 2030. I assume that a doubling in LIHTC program funding doubles the production of LIHTC units. Under this assumption and given that no extra housing is built in the first two years, the matching program creates an additional 35,072 units over ten years. Though the LIHTC produces a large quantity of housing, it does not reduce renter cost-burden at a one-to-one rate per unit. Burge (2010) estimates that about 80 percent of LIHTC renters are cost-burdened (p. 228). I apply that rate to the number of households that are not rent-burdened to account for this. Despite producing 35,072 units over ten years, a matching program only reduces the number of rent-burdened households by **7,014 households**.[35] The cost of a one household reduction in the total number of rent-burdened households is **$36,633.00**.

A secondary benefit of expanding the LIHTC is the downward pressure on market-rate rental prices units may create once they phase out of their affordability requirement. While this is possible, this occurs after 30-years of low-income affordability. Since this analysis projects only ten years into the future, I do not include those benefits.

Equity

Developers construct projects that include 40 percent of their units below 60 percent AMI or 20 percent of their units below 50 percent AMI. In practice, however, there is little incentive for developers to price units below 60 percent AMI (Scally, 2018, p. 2). Typically, households in the

[33] The state only pays half of this total amount because Virginia Housing administers the federal LIHTC credits but does not add to them.
[34] They do not report whether this is an inflation-adjusted figure or not.
[35] I assume that one household occupies one unit.

50-60 percent AMI income band experience the best affordability, and those below continue to be rent-burdened (Oluku, 2019, p. 228). The LIHTC scores **medium** on equity.

Political Feasibility

To enact the LIHTC matching program, the General Assembly's Committees on General Laws could create an earmarked revenue source, or the Finance and Appropriations Committees could write a matching credit in the tax code. While either would work, providing funding on an annual basis from DHCD funds reduces the complexity of tax filing for developers. Outside support for expansion will likely come from housing developers, who benefit from the tax credits (National Association of Homebuilders, 2021). Expanding the LIHTC is one of Virginia Housing Alliance's primary 2021 policy priorities as well (VHA, 2021). The LIHTC matching program scores **medium** on political feasibility.

Administrative Feasibility

Like the HCV program, Virginia Housing already administers the federal LIHTC program, so relevant bureaucratic infrastructure, including IT, supportive services, and regulatory knowledge already exists. Similarly, the program does not radically alter Virginia Housing or DHCD's mission, so bureaucratic resistance will not likely be an issue. The LIHTC matching program scores **high** in administrative feasibility.

Policy Option 4: Amend Virginia Codes §15.2-2304 and §15.2-2305.1: Inclusionary Zoning Policy

Overview

Inclusionary zoning (IZ) practices are difficult to implement in most Virginia cities. As a Dillon Rule state, Virginia state government significantly constrains the power of local governments, including their ability to manipulate zoning code. Virginia Code §15.2-2305.1 caps the ratio of density bonuses to total units localities can offer developers in a housing development. Density bonuses are the most powerful tool local IZ programs use to create new affordable housing (Schuetz et al., 2016, p. 314). Virginia Code §15.2-2304, which governs Albemarle, Charlottesville, Loudoun, Fairfax, and Alexandria, allows for local governments to establish mandatory IZ regulations. Amending Virginia Code §15.2-2305.1 to resemble Virginia Code §15.2-2304 will allow localities to implement more effective IZ programs and produce more affordable housing units.

Cost

The cost of implementing the legal change is negligible and may be done in the normal course of a General Assembly section. Following the legal change, I assume 400 hours of full-time equivalent work (roughly three months) dedicated to producing a report on IZ policy and guidance for local governments on implementing it. This cost equals $27,528.00.

For this analysis, I assume that five areas that were formerly not allowed to implement IZ programs will following the rule change – Virginia Beach, Richmond, Roanoke, Norfolk, and Newport News. These are all within the top four MSAs with the highest numbers of rent-

burdened households. I estimate the cost using one FTE employee per area to implement the program. Annually, this costs $578,000. Discounted ten years, this cost equals **$4,930,000**.

Effectiveness

I assume that each IZ program produces the average number of IZ units per year reported in a survey of programs by Sturtevant (2016). Furthermore, I assume that an IZ unit alleviates cost burden for a household, since income targeting is set at the local level.[36] This equals roughly 70 affordable housing units per year, after two years of zero initial production and one year of half production. The annual total from year 2024-2031 (years of full production) is 352 affordable units. The total production over 10 years for all five programs, and reduction in rent-burdened households is **2,640 households.** Under this program, the cost of a one household reduction in the total number of rent-burdened households is **$1,868.00.**

Equity

IZ programs typically do not target below 50 percent AMI. Ramakrishnan et al. (2019) find in a survey of 185 programs, nearly all target incomes between 50-80 percent AMI or higher (p. 4). Because IZ needs profitable new construction to subsidize affordable housing, IZ only works in rising housing markets, so there is less incentive to construct low-AMI housing units (Sturtevant, 2016, p. 11). IZ reform scores **low** on equity.

Political Feasibility

This alternative creates very little administrative change and does not explicitly require any locality to do anything, two usual obstacles to political feasibility. To pass it, the General Assembly would need to revise the applicable Virginia law and promulgate the change. The bill would move through the Committee on General Laws. A bill addressing this issue did not leave committee debate in the 2020 legislative session but will likely receive more attention given Governor Northam's investments in affordable housing policy (Wilt, 2019). Furthermore, IZ received support from outside housing advocates, such as the Legal Aid Justice Center (Gordon, 2020). Finally, 70 percent of all IZ policies have been put in place over the past decade, indicating increasing national popularity (Ramakrishnan et al., 2019, p. 2). IZ reform scores **high** in political feasibility.

Administrative Feasibility

While passing the reform requires little resources, there is enormous uncertainty as to whether local governments will implement IZ programs. Therefore, the reform's translation into actual housing production is questionable. As a result, administrative feasibility scores **low.**

[36] Since there are no statewide standards for IZ affordability, there is no average number of cost-burdened renters to adjust for.

Recommendation

I recommend Policy Option 2, starting a state Housing Choice Voucher program. This option is the most effective at reducing rent-burdened households and cost-effective in implementation. This is driven by HCV requirements targeting deep income ranges of AMI: 30-50 percent of AMI, opposed to 50-60 percent like many LIHTC properties, reducing rent-burden at a greater rate per unit.

The HCV program earns the most consistently high marks in other categories. It has the greatest impact on low-income and minority communities and is instrumental in creating mixed-income neighborhoods. Though voucher holders were historically discriminated against by landlords, recently passed legislation prohibiting most discrimination by landlords will improve neighborhood accessibility for voucher holders. This policy momentum and the COVID-19 rent crisis will likely increase the salience of demand-side, deep income-targeting housing policies, increasing political feasibility. Finally, given Virginia Housing's current administration of the federal HCV program, layering another voucher program will be much more administratively feasible than creating an entirely new program from scratch.

There are some trade-offs for using a demand-side affordable housing policy like HCVs. Since they do not create any new housing, they do not create any downward pressure on housing prices in the long run like supply-side policies would. A secondary policy alternative should address the processes, such as building approval processes and zoning code, that increase the costs of producing housing or the supply of housing itself, such as subsidies to builders. In the long-run, a mixed approach to housing policy will positively impact renters across the board rather than only those at the bottom of the income range.

Table 11: Outcome Matrix

	Status Quo	HCV Program	LIHTC Matching Program	Inclusionary Zoning Legal Reform
Cost (expenditures over baseline, discounted 2021-2031; 2019 dollars)	**N/A** No change in costs	**$78,000,000 dollars**	**$257,000,000**	**$4,930,000**
Effectiveness (reduction in rent-burdened households over ten years; cost per reduction)	**N/A** No reduction in rent-burdened households	**35,216 households** **$2,228.00per household**	**7,014 households** **$36,633.00per household**	**2,991 households** **$1,868.00 per household**
Equity (low, medium high)	**Low**	**High**	**Medium**	**Low**
Political Feasibility (low, medium high)	**Medium**	**Medium**	**Medium**	**High**
Administrative Feasibility (low, medium high)	**High**	**High**	**High**	**Low**

Implementation

Implementing a state housing choice voucher (HCV) program will require several steps and key linkages between Virginia Department of Housing and Community Development (DHCD), Virginia Housing, and local public housing agencies (PHAs). Implementing the program will likely take two years, with housing vouchers being administered to eligible households by 2024.

Agency Roles

Before any program design takes place, legislation must be passed to create the program and to provide it budget authority. Once the program is enacted, Virginia DHCD will provide the money to Virginia Housing in the form of grants, who will administer the program on their behalf. This is a reliable method of organizing housing assistance spending. Virginia Housing administers the LIHTC allocation process on behalf of the state government and manages the Virginia Housing Trust Fund as well (Virginia Housing Development Authority, 2019, p. 24). DHCD may stipulate rules, regulations, or any other high-level policy priorities at this point in the process; their role primarily shapes how the policy will operate legally. Aligning state HCV priorities with existing HCV administrative policy at the state and PHA level will be a crucial component of the first two years of development. A key issue at this stage is addressing a formula that Virginia Housing can use to distribute vouchers.

Virginia Housing serves a managerial role in forming the program. They will coordinate with DHCD to resolve legal matters and structure the financing of the program. Virginia Housing will also primarily address the technical aspects of the program, such as information technology, reporting standards and voucher documentation, that need to be standardized across PHAs. Addressing as many of these concerns prior to PHA involvement is paramount. Virginia Housing and DHCD should consider establishing an implementation unit – a small team that is tasked with fulfilling the implementation. This creates a centralized team that inhabits members with both high-level oversight as well as technical managerial knowledge. It also reduces the amount of communication necessary to answer relevant questions (Lindquist, 2007, p. 319).

The most tenuous linkage is between Virginia Housing and PHAs, who oversee the federal HCV waitlists. There are 31 PHAs in Virginia and coordinating with each of them will pose a challenge. As soon as new legislation is passed, PHAs will need to prepare to process increased quantities of applications for HCVs. This will include reporting waitlist size and data on the scope of the regional HCV program to Virginia Housing.

Stakeholder Perspectives

Considering the perspectives of each agency stakeholder involved informs potential concerns. Virginia Housing will likely pose the least resistance in implementation. Since they already administer a similar program, implementing a state HCV will likely not cause disruption. It is also aligned with their values as an organization, to promote safe and affordable housing. The same is true of DHCD, with the exception that their staff has considerably less experience with the minutiae of the HCV program. Together, both agencies have a large degree of control over the program and will likely be supportive.

Resistance may occur at the PHA level. PHA employees wield very little say in crafting policy but do most of the day-to-day maintenance once guiding regulations are established at a high level. An additional program to administer may exacerbate tension across management levels. Implementers should be wary not to inundate PHA staff with excess responsibility or unnecessary complications. Furthermore, the reliability of PHA data is critical to the success of the HCV rollout. State-level implementers should pay particular attention to compliance and morale across PHAs.

Worst-Case Pitfalls

Among other risks, there are two worst-case scenarios that could jeopardize this recommendation. First, it is possible that the voucher take-up rate among households offered a voucher is so low that the program is ineffective. Given the number of households eligible, this extreme seems very unlikely, but a voucher surplus is possible, especially in the first few years. To mitigate this likelihood, Virginia Housing can estimate the number of households that will take the voucher based on how full PHA waitlists are. Additionally, DHCD can allocate grant money in stages. This will prevent Virginia Housing from receiving far more money than necessary due to extremely low take-up rates. Nonetheless, procedures should be in place for recovering unused funds.

Another scenario is that so many households take up vouchers that local housing markets become strained. Since the recommendation is for mobile vouchers only, new Section 8 housing (where many voucher holders would live under project-based subsidy rules) is not being constructed. This issue will be more difficult to pre-emptively counteract. PHAs can be proactive in identifying available properties within their region, as well as track those that accepted housing vouchers in the past.

The most important takeaways in implementing HCVs are PHA coordination and consistency, up-to-date and compatible information technology systems, and policy and goal alignment at the state and local levels. Enacting a fail-safe policy, such as a method to recover unused funds, will prevent problems resulting from underutilization in the initial years. Finally, managing grievances and morale at the PHA level is critical to successful implementation.

Appendix A: Secondary Alternatives

For a variety of reasons, these alternatives were not impactful enough to include in the main report. However, they are worthwhile to consider in future housing policy discussions.

Secondary Policy Option 1: Evaluate COPTC Effectiveness

Overview

The Community of Opportunities Tax Credit provides tax credits to landlords participating in the federal HCV program in distressed areas in Virginia. However, legislation recently passed reducing opt-out options for landlords previously unwilling to accept HCV vouchers. As a result, the tax credit may become a redundant expenditure. Alternatively, if Virginia implements state housing vouchers, the COPTC could be expanded to other areas that receive increases in vouchers. This alternative directs Virginia Tax to evaluate the new legislation's effect on COPTC claims.

Implementation

Virginia Tax will monitor COPTC tax credit claims following passage of the Virginia Fair Housing Law to observe whether a large spike in COPTC claims occurs. Virginia Tax will then report findings to Virginia DHCD, who will determine whether the COPTC meaningfully impacts HCV applicant acceptance. This process will take two years to complete, and the General Assembly will need to pass new legislation to repeal the tax credit if it is found ineffective.

Secondary Policy Option 2: Statewide Surplus Land Survey and Data Collection

Overview

A persistent theme throughout the affordable housing literature is the lack of quality data collected at the local level (Freeman and Schuetz, 2017); Mukhija et al., (2015)). To serve state and local affordable housing programs, Virginia could initiate a statewide data collection effort. Emphasis will be given to collecting information on surplus municipal and state land that would be usable for housing expansion. Additional information, such as presence of affordable housing programs, estimates of housing production, and subsidized housing properties in the area will also be collected. Recommendations to localities for data collection best practices will also be used.

Implementation

Virginia's DHCD will organize the data collection effort on behalf of the Commonwealth. Because this project is much smaller in scope, it can likely be accomplished with existing funding or a small reallocation from other programs. DHCD will rely on local PHAs and Virginia Housing for data on federally funded programs. At the conclusion of the collection period, DHCD will evaluate which, if any, state-owned properties are eligible to be used for affordable housing. The collection effort will likely take one year to complete, and any public land development will occur on a case-by-case basis thereafter.

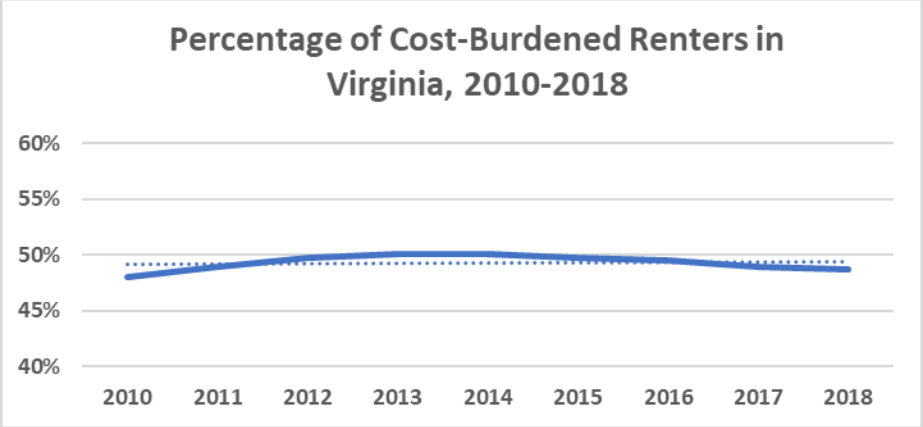
Secondary Policy Option 3: Continue Investment in Virginia Housing Trust Fund (VHTF) and REACH Virginia

Overview

As mentioned in Existing Policies and Evidence, the VHTF created or preserved 330 affordable housing units in the 2017-2018 award year, or roughly $16,700 per affordable unit (VHTF, 2019). It is unknown how many of the households in these units remain cost-burdened. However, VHTF is far more cost-effective per unit than the LIHTC. Similarly, REACH Virginia created 8,909 at a cost of $13,480 per unit, far more cost-effective than the LIHTC as well. Continued investment in VHTF and REACH Virginia through DHCD should be a priority.

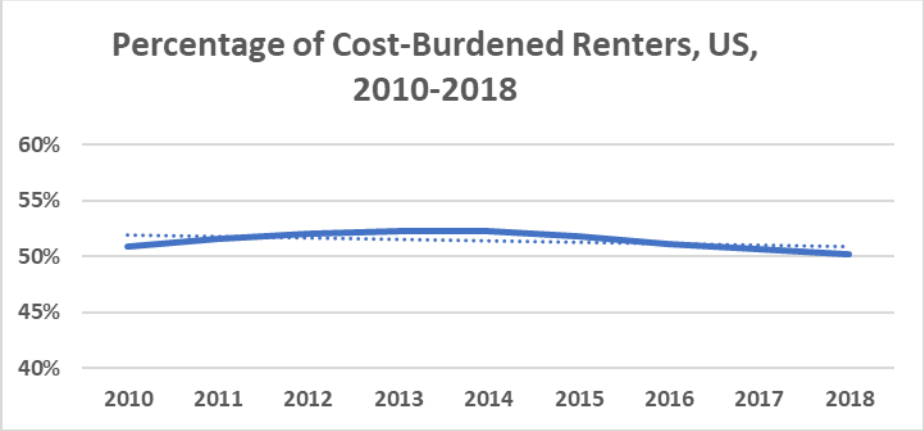
Tables and Figures

Figure 1. Percentage of Cost-Burdened Renters in Virginia, 2010-2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

Figure 2. Percentage of Cost-Burdened Renters in the U.S., 2010-2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

Table 1. Percentage of Renter Households Cost-Burdened by MSA, 2018

Cost-Burden by MSA, 2018	30-34.9% (percent of renters)	35% + (percent of renters)	Total Cost-Burdened (percent of renters)
Big Stone Gap, VA Micro Area	7.7	47.6	**55.3**
Virginia Beach-Norfolk-Newport News, VA-NC Metro Area	10.4	42.8	**53.2**
Richmond, VA Metro Area	9.1	40.9	**50**
Lynchburg, VA Metro Area	9.3	39.9	**49.2**
Blacksburg-Christiansburg-Radford, VA Metro Area	8.6	40.2	**48.8**
Harrisonburg, VA Metro Area	8.5	40.2	**48.7**
Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area	9.7	38.4	**48.1**
Charlottesville, VA Metro Area	7.9	39.9	**47.8**
Roanoke, VA Metro Area	7.5	38.2	**45.7**
Danville, VA Micro Area	7.2	38.4	**45.6**
Kingsport-Bristol-Bristol, TN-VA Metro Area	8.5	36.7	**45.2**
Staunton-Waynesboro, VA Metro Area	6.9	38.3	**45.2**
Bluefield, WV-VA Micro Area	9.1	36	**45.1**

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (*asterisk (*) indicates one or more states sharing metro/micropolitan area)*

Table 2. Number of Households Cost-Burdened by MSA, 2018

Cost-Burden by MSA, 2018	Occupied Units (30-34.9 percent of income)	Occupied Units (35 percent or more of income)	Total Cost-Burden (total occupied units)
Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area*	73,735	293,278	**367,013**
Virginia Beach-Norfolk-Newport News, VA-NC Metro Area*	24,439	100,841	**125,280**
Richmond, VA Metro Area	14,327	64,374	**78,701**
Roanoke, VA Metro Area	2,871	14,677	**17,548**
Kingsport-Bristol-Bristol, TN-VA Metro Area*	2,540	10,987	**13,527**
Charlottesville, VA Metro Area	2,221	11,257	**13,478**
Lynchburg, VA Metro Area	2,453	10,539	**12,992**
Blacksburg-Christiansburg-Radford, VA Metro Area	1,907	8,878	**10,785**
Harrisonburg, VA Metro Area	1,449	6,869	**8,318**
Danville, VA Micro Area	983	5,244	**6,227**
Winchester, VA-WV Metro Area*	1,348	4,844	**6,192**
Staunton-Waynesboro, VA Metro Area	926	5,112	**6,038**
Bluefield, WV-VA Micro Area*	859	3,411	**4,270**
Martinsville, VA Micro Area	800	2,622	**3,422**
Big Stone Gap, VA Micro Area	452	2,777	**3,229**
Total	131,310	545,710	**677,020**

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates (*asterisk (*) indicates one or more states sharing metro/micropolitan area)*

Table 3. Cost of Evictions in Virginia

Category	Number	Cost (2019 Dollars)
Completed Evictions	54,146	$290,000,000
Filed but Incomplete Evictions	98,985	$218,000,000
Total	153,131	$507,000,000

Source: Eviction Lab (2016), Landlordology (2019), and author's calculations. Dollar amounts are rounded to millions.

Table 4. Opportunity Costs of Lost Wages in Virginia due to Housing Instability

Opportunity Cost of Lost Wages	Estimates
Number of Evictions	54,146
Job Loss Following Eviction Rate	0.3
Median Number of Weeks Unemployed	9.1
Weekly Work Hours	40
Minimum Wage	$7.25
Total Cost of Lost Wages	$43,000,000

Source: Eviction Lab (2016), Desmond and Gershenson (2016), Bureau of Labor Statistics (2019), author's calculations. Total cost is rounded to millions.

Table 5. Cost of Homelessness in Virginia

Cost of Homelessness (2019 Dollars)	Emergency Shelter	Transitional Housing	Total
Upper Estimates	$9,000,000	$8,000,000	$17,000,000
Lower Estimates	$1,000,000	$2,000,000	$3,000,000
Average	$5,000,000	$5,000,000	$10,000,000

Source: HUD PD&R, 2010, USICH, 2020. Costs are rounded to millions.

Table 6. Survey of Department of Housing and Community Development Programs

Housing Assistance	Housing Development and Rehabilitation	Homeless Assistance and Prevention	Landlord Tenant Handbook
-Housing Repair and Energy Efficiency -Homebuyer Resources -Tax Credit Programs -Virginia Housing Search -2-1-1 Virginia -Virginia Eviction Reduction Program	-Multifamily Housing Development -Housing Rehabilitation -Housing Innovations in Energy (HIEE)	-Virginia Homeless Solutions Program (VHSP) -Housing Opportunities for Persons with Aids -Virginia Housing Trust Fund Homeless Reduction Grants -Continuum of Care/Balance of State	-Virginia Residential Landlord and Tenant Act Handbook

Source: DHCD, 2020

Table 7. Survey of Virginia Housing Programs

Homebuyers	Veterans and U.S. Military	Homeowners	Renters	Business Partners
-Homeownership Education -Home Loans -Virginia Housing Plus Second Mortgage Down Payment Assistance Grant -Closing Cost Assistance Grant -Mortgage Credit Certificates	-Home Loans for Veterans and members of the U.S. Military -Grants for Virginia's Disabled Veterans	-Automatic Payment Plan -Borrower's Financial Package	-Accessible Rental Housing -Housing Choice Vouchers Program	-Multifamily Financing -LIHTC Program -REACH Virginia Financing

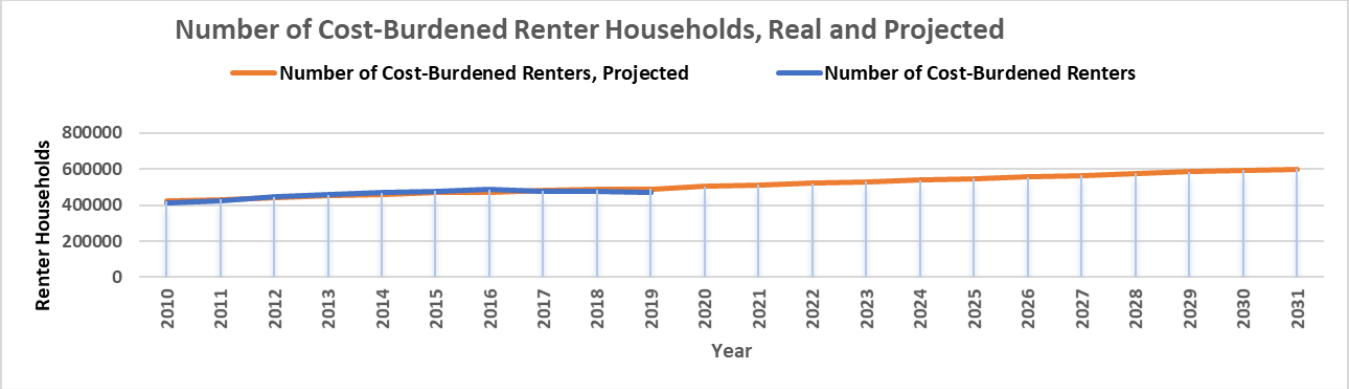
Source: Virginia Housing, 2020

Table 8: Overview of Major Federal Programs in Virginia, 2019

Federal Programs (2019)	Number of Units	Number of Households	Total HUD Spending
Public Housing	15,466	14,378	$11,000,000
Housing Choice Vouchers	54,882	49,453	$42,000,000
Project Based Section 8	30,823	29,203	$24,000,000
LIHTC*	91,094	n/a	$24,000,000

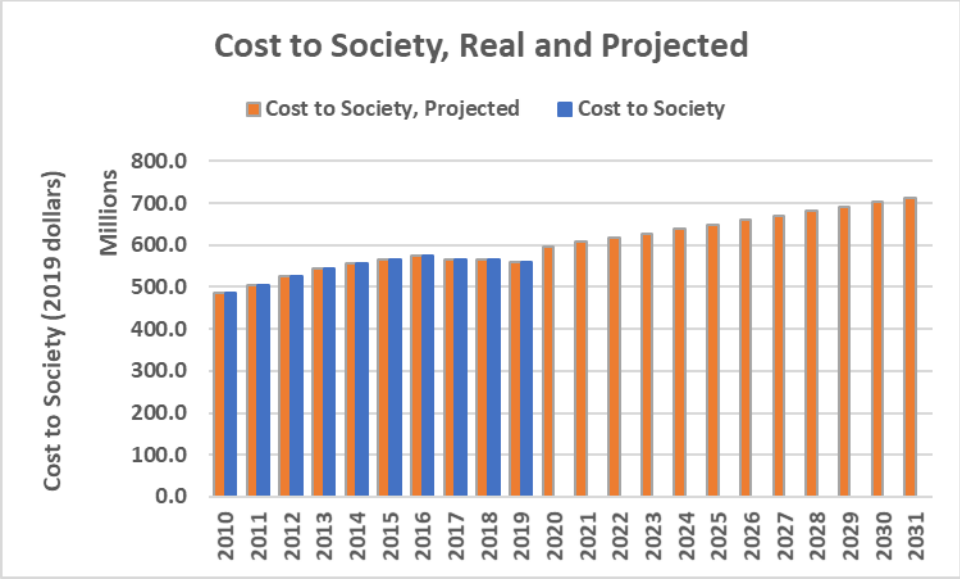
Source: HUD Picture of Subsidized Households, 2019. Costs are in 2019 dollars, rounded to millions.
*LIHTC unit data comes from HUD LIHTC Property-Level Data. LIHTC cost is estimated 2020 allocation (Novogradac, 2020)

Figure 3: Real and Projected Number of Cost-Burdened Renter Households



Source: U.S. Census ACS 5-Year Estimates; author's projections

Figure 4: Cost to Society, Real and Projected



Source: U.S. Census ACS 5-Year Estimates; author's projections

Table 9: Evidence Summary Matrix

Program/Metric	Method	Cost	Effectiveness	Cost-Effectiveness	Political Obstacles
Tax Credits (LIHTC programs)	Increase housing production by reducing developer tax liabilities	High, annual, direct state costs	1000-2000+ units per year; low cost-burden reduction	Low per unit, very low per reduction in cost-burdened households	Medium
Vouchers (HCV)	Increase renter purchasing power by subsidizing housing consumption	High, annual, direct state costs	Mobile vouchers produce no housing; large cost-burden reduction	Medium per voucher, high per reduction in cost-burdened households	Medium
Capital Programs (loans, bonds, trust funds)	Increase affordable housing through subsidized loans and grants	Ad hoc state contributions based on anticipated need	300-1000+ units per year (VHTF;REACH VA); unclear reduction in cost-burden	Medium per unit created, unclear per reduction in cost-burdened households	Low
"Fair Share" Laws	Increase affordable housing by legally requiring local contributions	Low direct state cost (activity occurs at local level)	Modest housing production, unclear reduction in cost-burden	Unclear due to program variation	Very high
IZ	Increases affordable housing by offering developers favorable zoning incentives	Low direct state cost (activity occurs at local level)	Low local housing production in high-growth areas, unclear reduction in cost-burden	Medium per unit created, unclear per reduction in cost-burdened households	High (due to current Dillon Rule limitations)
Public Land Development	Increases affordable housing by selling public land at low-cost to developers	Opportunity cost of sold land and negotiations	Low local housing production, unclear reduction in cost-burden	High per unit created, unclear per reduction in cost-burdened households	Unclear

Table 10: Total 10-Year Discounted Costs (2019 Dollars)

	10-Year Discounted Costs (2019 Dollars, 2022-2031)
Cost to Society	$5,821,000,000
State Spending	$1,487,000,000
Total	$7,308,000,000

Source: Author's tabulations and projections of Data Point expenditure data and U.S. Census ACS 5- Year Estimates

Table 11: Outcomes Matrix

	Status Quo	**HCV Program**	**LIHTC Matching Program**	**Inclusionary Zoning Legal Reform**
Cost (expenditures over baseline, discounted 2021-2031; 2019 dollars)	**N/A** No change in costs	**$78,000,000 dollars**	**$257,000,000**	**$4,930,000**
Effectiveness (reduction in rent-burdened households over ten years; cost per reduction)	**N/A** No reduction in rent-burdened households	**35,216 households** **$2,228.00per household**	**7,014 households** **$36,633.00per household**	**2,991 households** **$1,868.00 per household**
Equity (low, medium high)	**Low**	**High**	**Medium**	**Low**
Political Feasibility (low, medium high)	**Medium**	**Medium**	**Medium**	**High**
Administrative Feasibility (low, medium high)	**High**	**High**	**High**	**Low**

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