



Reducing Rent Burden through Inclusive Economic Growth in Richmond, VA

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.

Honor Pledge

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

X Avery Romano

Avery Romano

Signed by: Avery Romano 4

Table of Contents

Acknowledgments.....	4
Client Overview.....	4
Executive Summary.....	4
Background	5
High Housing Cost Burdens in Richmond.....	5
Inequality in Richmond	6
Overview of Governance in Richmond	6
Leadership.....	6
Agencies, Policies, and Programs.....	7
Cost to Society of Housing Unaffordability.....	9
Literature Review	10
Alternatives	13
Alternative 1: Maintain the Status Quo	13
Alternative 2: Implement Small Area Fair Market Rents and Expand Mobility Counseling	14
Alternative 3: Pursue an Inclusive Economic Growth Strategy with Sectoral Training Component	14
Alternative 4: Promote Rent Skewing in LIHTC via Income Averaging Set-Aside	14
Criteria	15
Cost-Effectiveness.....	15
Political Feasibility.....	15
Administrative Feasibility.....	15
Equity	15
Evaluation of Alternatives.....	16
Alternative 1: Maintain the Status Quo	16
Alternative 2: Implement Small Area Fair Market Rents with Expanded Mobility Counseling.....	17
Alternative 3: Pursue Inclusive Economic Growth Strategy with Sectoral Training Component	18
Alternative 4: Promote Rent Skewing in LIHTC Properties via Income Averaging Set-Aside	19
Outcomes Matrix	20
Recommendation and Implementation.....	21
Introduction and Overview of Implementation Issues	21
Stakeholders: Roles & Perspectives.....	21
Worst-Case Scenarios	22
Conclusion.....	23

Bibliography	24
Appendices.....	27
Appendix A.....	27
Appendix B	29
Appendix C	30
Appendix D.....	32
Appendix E	34

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Client Overview

The client for whom this analysis has been conducted is the Partnership for Housing Affordability in Richmond, VA (PHARVA). PHARVA was founded in 2004 and was established as a nonprofit 501(c)(3) organization in 2006 to create awareness about affordable housing issues and to help to provide solutions with the support of concerned citizens and community and business leaders. PHARVA envisions a coordinated, regional approach to affordable housing that is supported by the citizens and elected leadership of the jurisdictions that make up the Richmond metropolitan area. PHARVA has an interest in addressing the problem stated in the forthcoming analysis. Their mission is to “champion affordable housing policies and developments that meet the needs of all citizens and strengthen the region’s economic vitality, attractiveness, and competitiveness.”

Executive Summary

The Richmond region has experienced significant growth in population and jobs over the last decade, with an influx of college-educated workers. Housing costs in the City of Richmond have subsequently increased, resulting in housing instability for lower-income residents in the form of high rent burdens and displacement to surrounding areas outside of the city. **The problem is that the cost of housing in the City of Richmond is too high for its low-income residents.**

The problem has numerous consequences for affected households and the city, underscored by Richmond's high eviction rate. In seeking to address this problem, the Partnership for Housing Affordability is committed to embracing bold solutions. With this in consideration, the analysis assesses four policy alternatives: 1) Maintain the status quo; 2) Implement Small Area Fair Market Rents (SAFMR's) and expand mobility counseling; 3) Pursue an inclusive economic growth strategy with a sectoral training component; and 4) Promote rent skewing in Low-Income Housing Tax Credit (LIHTC) properties. The recommendation resulting from the evaluation of these alternatives is Alternative 3. Pursuing an inclusive economic growth strategy has the potential for more extensive impact to address the scale of the problem as well as the underlying cause of stagnant, low wages for a subset of the population.

Background

The problem of interest in this analysis is that the cost of housing is too high for Richmond's low-income residents. The background will introduce the context and scope of this issue, as well as the contributory factors. The background section discusses population, income trends, educational attainment levels, and housing costs. The background will then discuss the structure of governance in Richmond, including leadership, agencies, programs, and policies pertaining to housing.

High Housing Cost Burdens in Richmond

Richmond has experienced approximately a 12% increase in population since the last Census in 2010. The region's urban center has been attracting higher-income households. Higher-income households crowd out lower-income households in the rental market. Consequently, households earning low incomes are pushed away from the city center, where employment is located, and out to surrounding areas. The increased population and job growth have created more demand for housing than supply can meet. Wage stagnation relative to increases in housing costs contributes to the issue.

Additionally, there is insufficient physical housing stock and mismatched supply allocation. There is a shortage of more than 15,000 units when comparing the number of units that are affordable to households in this income category to the number of households needing those units. Furthermore, at least 37% of the rental stock affordable to households with incomes less than 30% of AMI is occupied by households with incomes higher than 30% of AMI. There is enough affordable housing stock to accommodate households with incomes between 50% and 80% of AMI, 52% of this housing stock is occupied by households making more than 80% of AMI. This serves to illustrate that the rental market does not match the supply of affordable housing to households that need it, except in the case of subsidized housing (Housing the Richmond Region: Needs, Impediments, and Strategies). Figure 1 illustrates key data surrounding this situation.

RICHMOND CITY, VIRGINIA

POPULATION ESTIMATES, JULY 1, 2019 (V2019)	230,436
HOUSING UNITS, JULY 1, 2019, (V2019)	101,245
OWNER-OCCUPIED HOUSING UNIT RATE, 2015-2019	42.6%
MEDIAN VALUE OF OWNER-OCCUPIED HOUSING UNITS, 2015-2019	\$230,500
MEDIAN SELECTED MONTHLY OWNER COSTS-WITH A MORTGAGE, 2015-2019	\$1,555
MEDIAN SELECTED MONTHLY OWNER COSTS-WITHOUT A MORTGAGE, 2015-2019	\$586
MEDIAN GROSS RENT, 2015-2019	\$1,025
BUILDING PERMITS, 2019	1,240

Figure 1: Selected Census Housing Estimates (QuickFacts, 2021)

Inequality in Richmond

In 2016, Richmond ranked 262nd out of 274 cities on overall inclusion, 246th on economic inclusion, and 245th on racial inclusion. From 2013 to 2016, Richmond's economic health rank increased from 207th to 167th. Over the same time, the city became slightly less inclusive, falling from 261st to 262nd in the overall inclusion rankings (Urban Institute, 2020). There is a general theme that Richmond's low-income residents have not benefitted from the region's growth and expanded prosperity over the last decade or so. This is due to wage stagnation at lower income levels. Low wages, paired with increasing housing costs, threaten the economic security of these households and the growth potential for the city.

Overview of Governance in Richmond

Leadership

Richmond has a Council-Mayor form of local government whereby Richmond City Council serves as the governing body of city government. A mayor is elected to oversee a Chief Administrative Officer in the execution of day-to-day government operations. The mayor of Richmond is Levar Stoney. Stoney was sworn in as Richmond's 80th Mayor on December 31, 2016. He was re-elected in November 2020 for another 4-year term. He is the youngest mayor ever elected to serve the city. Regarding addressing overall housing affordability issues in the city, Stoney's last election campaign expressed a commitment to equitable, affordable housing.

There are nine voter districts in the city, each with its respective council members. City Council creates and amends local laws, provides policy and government oversight, appoints members to boards and commissions, and approves the annual Richmond Government Budget. The term length for a council member is four years. From their membership, Council elects a Council

President and Council Vice president to serve two-year terms. On average, City Council holds about a dozen official public meetings a month related to policies that affect Richmond residents. There are different types of meetings, including formal council meetings, informal council meetings, council standing committee meetings, council budget meetings, special meetings, public hearings, and special council events held on an as-needed basis. The city council plays a prominent role in how housing affordability challenges are addressed in the city.

Agencies, Policies, and Programs

Richmond Redevelopment and Housing Authority

The Richmond Redevelopment and Housing Authority is locally administered and federally funded. RRHA provides real estate development, rental housing assistance, and property management of public housing communities for low and moderate-income families throughout the City of Richmond. In addition, RRHA oversees public housing and the Section 8 Housing Choice Voucher (HCV) Program. Currently, about 3,574 HCV's are active in RRHA's jurisdiction. The Section 8 tenant-based Housing Choice Voucher (HCV) assistance program is funded by the federal government and administered by the Richmond Redevelopment and Housing Authority (RRHA) for the jurisdiction of the City of Richmond, Hanover County (Ashland), Henrico County, and Chesterfield County.

The RRHA is comprised of commissioners who serve on a board. Commissioners are appointed. The Board is responsible for ensuring the preservation and expansion of the agency's resources and the agency's continued viability. The Board appoints the Executive Director. They are responsible for compliance with federal and state law and directives and planning and budgeting for the agency. RRHA's expenditures are discussed in Appendix A.

The Department of Housing and Community Development (HCD)

The City of Richmond's Department of Housing and Community Development's (HCD) mission is to prevent homelessness and provide emergency housing and services to the most vulnerable residents while providing a continuum of affordable rental and homeownership housing opportunities to residents with limited incomes. Also, HCD seeks to revitalize the city's older neighborhoods into vibrant mixed-income communities, which are walkable to public transportation and commercial retail goods and services with community parks and facilities. HCD works with nonprofit and for-profit affiliates through its annual allocations of federal entitlement funds from the United States Department of Housing and Urban Development (HUD), which includes: Community Development Block Grant (CDBG); Home Investment Partnership Program (HOME); Emergency Solutions Grant (ESG) Program; and Housing Opportunities for Persons with Aids (HOPWA).

In addition to these programs, HCD oversees the city's Affordable Housing Trust Fund (AHTF). Richmond founded the AHTF in 2004. Residents who have particular experience or interests participate in the city's decision-making process by advising the Mayor and City Council on numerous issues via serving on the AHTF Oversight Board. There are ten members on the AHTF

Oversight Board who the mayor and city council appoint. The Board reviews regulations, program policies, and operational procedures proposed by the Chief Administrative Officer or designee.

Affordable Housing Trust Fund

Richmond's Affordable Housing Trust Fund was established in 2004. To date, nearly \$3.9 million has been awarded to 43 projects that serve a range of needs, incomes, and household types. The Trust Fund has successfully leveraged other sources—with over \$110 million leveraged from public and private sources to support these programs. The AHTF has two broad categories for funding. One is for development projects that produce or preserve affordable rentals or homeownership and the second category is for housing services. Overall, AHTF funds have been allocated 60% to development projects and 40% to providing services. AHTF funds are targeted, with over 61% of beneficiaries earning 30% AMI or below, according to the 2018-2019 impact report. The report indicates eight affordable units constructed for 30% AMI in this period; 372 units at 60% AMI; 24 units at 80% AMI; 175 units for Senior designated housing. The impact reports \$28 leveraged for every dollar awarded and 3,915 households assisted.

Low-Income Housing Tax Credits

LIHTC is a federal program administered at the state level. The federal government allocates funding to states who then give it to developers. LIHTC affordability standards are applied to units, not individual households' incomes. In the development phase, decisions for the "operating election," "set-aside," and "applicable fraction" determine the percentage of units in each building that must be LIHTC units. These are permanent once decided. Property owners must make a one-time decision to meet either the "40/60" test or the "20/50" test at the beginning of the project. This operating election determines the minimum percentage of units in the property that the owner must rent to tax credit residents and the maximum income level (adjusted for family size) for all tax credit qualified households at the property.

Low-income Housing Tax Credit (LIHTC) developments and some other forms of subsidized rental housing are not required to be permanently affordable. Based on program designs and other factors, compliance periods may last 30 or fewer years. Many LIHTC units in Richmond were placed into service in the 1980s and 1990s; therefore, their compliance periods will end soon. Richmond has 7,677 LIHTC units. One thousand nine hundred forty-two units will reach the end of their affordability compliance period in the next five years, and 1,280 units will reach the end of their compliance period in the next ten years. Presently, private and nonprofit developers create almost all new dedicated affordable apartments using the Low-Income Housing Tax Credit (LIHTC). Hundreds of new LIHTC units are produced in the region each year, but the current demand still far outpaces new supply. Only 20% of newly constructed apartments are designated as affordable. Over the past five years, dedicated affordable apartments account for less than 20% of all new rental construction in the region (PHARVA LIHTC Brief).

Cost to Society of Housing Unaffordability

Direct Costs of a lack of affordable housing are associated with reductions in other spending categories for cost-burdened households, government subsidies, and homelessness. Direct costs examined include the cost of burdens to families. These households may pay these costs themselves by diverting funds from other spending categories if they can do so. Fair market rent for a two-bedroom unit in Richmond, VA MSA is \$1,163 for FY 2021 (United States Department of Housing and Urban Development , 2021). Assuming 50% AMI for a two-person household (\$35,800), an affordable unit would be \$895. The difference in FMR and what would be considered affordable for this household is \$1,992 per year. Government spending on housing programs is also considered a direct cost of the affordability issue. The average HUD expenditure per month in Richmond is \$798 per unit for the Housing Choice Voucher program (United States Department of Housing and Urban Development, 2020).

In “Affordable Housing: Of Inefficiency, Market Distortion, and Government Failure,” Michael Diamond explains that the costs imposed by a shortage of affordable units fall on both the households seeking such units and on the society that fails to provide them. Costs to families seeking affordable units include excessive rent burdens, doubling up and overcrowding, adverse health effects due to housing conditions, lack of funds for other categories, educational deficiencies in children experiencing housing instability, and losses in job productivity. Diamond emphasizes that the public and policymakers less widely understand the costs imposed on society. These less understood costs are associated with health care and educational achievement losses, employment, productivity, and opportunity losses (Diamond, 2019).

Housing instability contributes to a host of harmful health consequences. For example, households may cope with high housing costs by "doubling up" in units. Crowded housing situations create more potential for the spread of infectious disease and contribute to stress which exacerbates existing health issues. Furthermore, low-income households spending too high a percentage of their income on housing leaves too little of their income available for health-related concerns such as wellness activities, treatment for illness or injury, prescription or over-the-counter medication, and nutrition. These effects have costs in and of themselves, and having no money to spend on health can result in unnecessary emergency room use, which is costly.

As previously discussed, high housing cost burdens can lead to housing instability in the form of evictions. According to the Eviction Lab, Richmond has an eviction rate of 11.44%, with 6,345 evictions taking place per year. Evictions have costs for all parties involved and at the society level. The University of Arizona has developed a "[Cost of Eviction](#)" calculator to compute a community's downstream costs of evictions. The costs considered include emergency shelter, inpatient and emergency medical care, child welfare services, and juvenile delinquency. Evictions are particularly costly for tenants because they remain on their record for up to seven years, jeopardizing their chances of securing quality, stable housing in the long term.

The Policy Chief of George W. Bush's Housing First programs, Phillip Mangano, indicated that the cost of keeping people on the street added up to about \$35,000 and \$150,000 per person per year. He estimated that the cost of keeping formerly homeless people housed under the housing-first programs ranged between \$13,000 and \$25,000 per person per year. Even though not all cases of homelessness are solely caused by affordability issues, affordability issues are a contributing factor (Diamond, 2019).

Economic and Productivity Costs are composed of fewer work hours and lower wages. The National Low-Income Housing Coalition cites a study that the housing affordability crisis costs the United States about \$2 trillion in productivity losses. Divided by the United States population, this amounts to about \$6,122 per person per year. NLIHC also states that "researchers estimate that the growth in GDP between 1964 and 2009 would have been 13.5% higher if families had better access to affordable housing. This would have led to a \$1.7 trillion increase in income, or \$8,775 in additional wages per worker" (Hsieh & Moretti, 2015).

Diamond also discusses the relationship between unaffordable housing and presenteeism and the associated costs to society. Presenteeism is "being present at work but unable to be fully engaged in the work environment." Issues relating to housing instability and financial problems trigger high stress for individuals facing these problems, thus impairing their abilities at work. This condition leads to a measurable loss of productivity. It has been estimated that the annual cost of presenteeism to the economy in the first decade of the twenty-first century was \$180 billion. This condition can have downstream effects such as job loss if an employer terminates a householder's employment due to lower-than-expected performance.

Literature Review

The literature review was conducted to establish context and background relevant to examining insufficient affordable housing and housing affordability challenges in Richmond, VA. Relevant literature on housing affordability and cost burdens, affordable housing policy and programs, inclusive growth, and workforce development has been evaluated to inform potential solutions to the policy problem.

Housing Affordability and Cost Burdens

Across the literature, there is a generally accepted rule that a housing unit is "affordable" so long as a household pays no more than 30% of its income on housing. The broadest point of agreement is that "affordable housing" is best defined as housing that people can rent for less than 30% of a below-median income. This standard was derived from an old aphorism that a household should devote "a week's wages to a month's rent" in the 1800s. In the 1960s and 1970s, a 25% of income standard was used to evaluate housing assistance needs. In the early 1980s, the measure was increased to 30% of income. Research has been conducted on this standard to assess whether the rationale for it is still valid.

The literature agrees that there is no “best” way to measure affordability. The metric used most often by researchers is the housing cost to income ratio. Across the literature, there are criticisms of this longstanding measure of determining the affordability of housing. These criticisms note that the housing cost to income ratio is overly simplistic. Additional concerns relate to whether it generalizes across income groups. Higher-income households may not necessarily face burdens even if they pay more than 30% of their income for housing because other necessary expenses do not necessarily increase with income.

Furthermore, the lowest income households cannot afford to spend even 30% of their income and still have enough money remaining for other necessities. Moreover, the notion of spending no more than 30% of income on housing for it to be affordable is “usually propagated without any recourse to household composition, size, housing quality or neighborhood characteristics, income levels, age groups, and location. However, the 30% standard has remained the reference point for housing policy’s purposes of allocating housing vouchers, tax credits, etc. (Stephen Ezennia & Hoskara, 2019).

Hulchanski identifies six contemporary uses for the housing cost-to-income ratio. These six uses are (1) description of a typical household’s housing expenditure; (2) analysis of trends to compare different household types; (3) administration of rules defining who can access housing subsidies; (4) definition of housing need for public policy purposes; (5) prediction of ability to pay rent or mortgage; and (6) selection of households for a rental unit or mortgage. Hulchanski contends that the first three uses can be considered valid and useful when used correctly. He cautions against using the standard for definition, prediction, and selection as it can be invalid and unreliable. He elaborates that the use of the ratio in these cases is overly simplistic and fails to conceptualize income correctly for its purposes. Other criticisms given are that the ratio does not account for the diversity in household types, stages in the lifecycle of the maintainer(s) of each household, the great variety in household consumption patterns, and the problem of defining income—the focus on only cash income” (Hulchanski, 1995).

The residual income approach is another “conventional” measure of housing affordability. Stone explores the use of the residual income approach and its implications for the housing affordability paradigm. The approach recognizes that housing has distinctive physical attributes compared to other necessities and has the most considerable and least flexible claim on households’ after-tax income. That is, housing costs largely determine how much is left to spend in other categories. This means that a household has a housing affordability problem if it cannot meet its non-housing needs at some basic level of adequacy after paying for housing. The appropriate indicator of the relationship between housing costs and incomes is thus the difference between them—the residual income left after paying for housing—rather than the ratio. Stone continues to say that the implications of using the residual income affordability standard differ from the conventional ratio approach on the dimensions of analysis of housing needs, eligibility and payment standards for subsidies, and mortgage underwriting standards (Stone, 2006). The weakness of this approach is summarized as follows: “Its confusion with poverty measurement; insensitive to the living cost

of different areas; does not account for the influence of housing quality on location preference on housing cost (no account of location tradeoffs); creates a certain threshold above which affordability becomes increasingly subjective; focuses on the economic dimension of affordability; requires an element of generalization and judgment about household type" (Ezennia & Hoskara, 2019).

Considering the debate over appropriate measures, research conducted at the Harvard Joint Center for Housing Studies finds that the 30-percent standard tends to overstate housing affordability challenges for high-cost markets and for higher-income and smaller households but yields similar results regarding overall levels of affordability. For this reason, caution is urged when using the 30-percent standard to assess challenges among different income levels (Herbert, Hermann, & McCue, 2018).

Low-Income Housing Tax Credits

In "Rethinking Local Affordable Housing Strategies," researchers from the Brookings Institution and the Urban Institute discuss their literature findings. This report emphasizes that the literature "indicates that rental production programs are successful in making rental housing more affordable. However, affordability is a relative term; the extent of affordability (affordable for whom) depends on how deep the subsidy is. Due to differences in program structure, funding, and regulations, subsidized units may not be affordable for the lowest-income households." The report elaborates on some of the significant downfalls of LIHTC. Firstly, it does not include long-term operating subsidies. Secondly, "LIHTC produces housing at rent levels that are affordable for households with incomes between 40 and 60 percent of the area median. These units are not affordable for households with lower incomes without additional subsidies.

Consequently, the rent burden for households in LIHTC projects appears to be slightly higher than for those in public housing. Approximately 50 percent of LIHTC households report rent burdens of 30 percent of gross income. However, 13 percent of LIHTC households have rent burdens of more than 50 percent, which qualifies by most definitions as "worst-case housing needs." This report was written in 2003 but continues to be relevant as these themes are present in more recent literature (Katz, Brown, Turner, Cunningham, & Sawyer, 2003).

Defining Inclusive Growth

The concept of inclusive growth has gained popularity due to rising concerns about the scale and consequences of inequality. An additional factor in its increased popularity is the growing economic and political importance of cities. Differences in local opportunity structure indicate that the city and region are critical scale to address the trends of diminished mobility and rising inequality. Despite its increased salience, inclusive growth remains a fuzzy concept such that "if you ask five economists to define the concept [of inclusive growth], you will likely end up with six answers" (Duran, 2015). One key component of the definition of inclusive growth that seems to have general agreement is that it focuses on both the pace and pattern of growth, paying particular attention to its distribution (Lee, 2019).

Joseph Parilla from the Brookings institute identifies a framework for inclusive growth that operates on the axes of “practice, policy, and partnership.” Practice entails expanding access to business networks and better targeting programs that help companies. Policy means advocating for new investments in transit and affordable housing. Partnerships present opportunities for actors to use their “convening power to unite and educate leaders across sectors and communities” (Parilla, 2017).

In support of inclusive growth, research has found that greater equality of opportunity yields greater growth. Katherine Bradbury and Robert Triest establish that reducing inequality of opportunity does not need to come at the expense of economic growth or efficiency (Bradbury & Triest, 2016). The literature on the distributional impact of growth shows that while growth has the potential to benefit those with low incomes, it is not inevitable that it will. Furthermore, the growth-poverty relationship has been found to depend on the nature of growth in terms of its sectoral structure, and local context, such as initial inequality (Lee, 2019).

Workforce Development

The literature on workforce development and inclusive economic growth illustrates the promise of sector strategies for increasing the incomes of workers without a college degree. A pivotal study on the promise of sector strategies for low-income populations is MDRC's evaluation of the WorkAdvance Demonstration. WorkAdvance is one of the evidence-based programs that researchers replicated through a national Social Innovation Fund project sponsored by the Mayor's Fund to Advance New York City and the Mayor's Office for Economic Opportunity (NYC Opportunity). The program helps participants prepare for and enter quality jobs in selected sectors with opportunities for career growth. Once participants were placed, the program provided further assistance to guide them on a path of career advancement. The evaluation found that WorkAdvance had no effect on employment but increased average earnings and the likelihood of individuals having high incomes. The overall pattern of economic impact findings suggests that the earnings-based impacts are driven by WorkAdvance group members having higher wages than control group members, rather than being employed at a higher rate. This finding suggests WorkAdvance group members are advancing over time, as intended by the WorkAdvance model. Of particular interest are the conclusions of the benefit-cost analysis, which are positive from the perspectives of the participants, the government, and society at all four sites. The WorkAdvance Demonstration foregrounds how research can improve sectoral strategies to be more consistently successful (Schaberg & Greenberg , 2020).

Alternatives

Alternative 1: Maintain the Status Quo

Maintenance of the status quo is always an option to consider. Therefore, it is evaluated against other proposed alternatives. Maintaining the status quo entails freezing all rules, regulations, and spending levels as they exist at the time of this analysis. Projected levels of rent-burdened

households over the next decade are based on continuing the current trend of approximately 48% of renter households paying an excess of 30% of income for housing.

Alternative 2: Implement Small Area Fair Market Rents and Expand Mobility Counseling

The Small Area FMR (SAFMR) rule reforms voucher payment standards. Whereas traditional Fair Market Rents determine a single rent standard for an entire metropolitan region, SAFMRs set varying rent standards in different U.S. Postal Service ZIP codes in a metro region. This method of setting payment standards can help voucher recipients move to higher-opportunity neighborhoods where rents are higher than the average for a metropolitan region. Under the rule, PHAs retain the flexibility to set payment standards between 90% and 110% of a SAFMR to account for recent changes in rental markets. That flexibility also allows PHAs to pursue aggressive strategies for expanding access, such as encouraging more movement into higher-opportunity neighborhoods by paying more than the SAFMR in those areas (National Low Income Housing Coalition, 2019). Findings suggest that reductions in residential segregation by race and income segregation may improve housing affordability for HCV households, even if local rents change in response to households' mobility (Dawkins & Jeon, 2017).

Alternative 3: Pursue an Inclusive Economic Growth Strategy with Sectoral Training Component

An inclusive economic growth strategy is *“a process that encourages long-run growth (**growth**) by improving the productivity of individuals and firms in order to raise local living standards (**prosperity**) for all (**inclusion**)”* (Parilla, 2017). An inclusive growth strategy seeks to address skills, dynamism, and access for the regional workforce, emphasizing those who have been excluded from historical or recent gains in prosperity. A sector-focused approach to job training can help low-income adults build skills for jobs in high-demand fields with opportunities for career growth. Broad-based prosperity and associated income gains for trainees would serve to alleviate housing cost burdens.

Alternative 4: Promote Rent Skewing in LIHTC via Income Averaging Set-Aside

The Consolidated Appropriations Act of 2018 created a new minimum set aside election for new Low Income Housing Tax Credit ("LIHTC") projects. Income Averaging allows LIHTC owners to elect to serve households with incomes of up to 80% of area median income (AMI) and have these households qualify as LIHTC units, so long as the average income/rent limit in the project remains at 60% or less of AMI. VHDA is Virginia's Housing Finance Agency and is responsible for administering and monitoring the federal housing credit program in Virginia. The main benefit of the average income set aside is that it makes the federal housing credit program more effective at addressing housing needs by allowing properties to serve households above and below 60% AMI.

Criteria

Cost-Effectiveness

The main outcome of interest is the number of rent-burdened households. The effectiveness of the policies is evaluated according to the extent to which they reduce the number of rent-burdened households in the City of Richmond. Costs are established for a baseline scenario which includes program spending for HCD, RRHA, and VHDA. Then these costs are projected over the next ten years with an annual increase of 2% inflation. This inflation factor was selected since it is the factor that RRHA uses. Then the net present value of costs over the ten-year period is calculated using a discount rate of 3%. Cost-effectiveness is the ratio of the reduction in rent-burdened households for each dollar expended for the policy. The effectiveness for each alternative is estimated based on case study data and is calculated by the respective adjustments to the baseline projections. Cost-effectiveness is typically heavily weighted in any policy analysis. It is assigned a weight of 40%.

Political Feasibility

Political feasibility measures the degree to which relevant decision-makers and the public would accept the policy alternative. In assessing the political feasibility of each alternative, actors' expressed beliefs and implied motivations were considered. The dynamics of the relevant decision-making arena are also weighed. A policy's enactment depends on its political feasibility level, so this criterion is weighted at 20%.

Administrative Feasibility

Administrative feasibility is the degree of ease of implementation of the policy. In assessing administrative feasibility, factors of capacity, commitment, and technical expertise are considered. Administrative feasibility underlies the potential for any proposed policy alternative to be successfully implemented and, therefore, weighted at 20%.

Equity

For this analysis, equity will be defined as the distributional impact between rent-burdened households who receive housing assistance and rent-burdened households who do not receive housing assistance. A weight of 20% is assigned to the equity criterion.

The requisite recommendation is made based on evaluating the projected outcomes of each alternative in relation to the criteria and their assigned weights.

Evaluation of Alternatives

Alternative 1: Maintain the Status Quo

Cost-Effectiveness

In assessing the cost-effectiveness of the status quo, projected incremental increases in the number of rent-burdened households were estimated over ten years of allowing current trends in rent-burdens to continue. The costs for this alternative were projected by utilizing the baseline costs with an inflation rate of 2% applied year over year. Cost estimates for the baseline are estimated from budget data for the Richmond Department of Housing and Community Development, RRHA, and VHDA, which administers LIHTC. The net present value for each year was calculated using a discount rate of 3%. The cost-effectiveness for this alternative is 519.05. See Appendix B for detailed estimates and calculations.

Political Feasibility

In the maintenance of the status quo, the primary decision-makers would be Mayor Stoney and City Council. Mayor Stoney has repeatedly expressed a commitment to addressing the city's housing affordability challenges and has taken steps to do so. In "One Richmond: An Equitable Affordable Housing Plan," the mayor expresses the sentiment that "safe, quality housing is a human right and that every resident of Richmond deserves housing that is affordable." Maintaining the status quo would not be consistent with his expressed belief. Therefore, political feasibility is low.

Administrative Feasibility

Maintenance of the status quo does not involve additional administrative burdens. However, there are currently several openings in agencies that administer housing programs in Richmond. This shortcoming demonstrates a potential lack of capacity. Administrative feasibility scores medium-low.

Equity

The two groups considered for this analysis regarding equity are those who receive housing assistance and those who do not. RRHA administers 3,574 Housing Choice Vouchers (HCV's), whereas an estimated 24,273 renter households are cost-burdened, exemplifying the distribution of benefits and burdens in this scenario. Equity is low.

Alternative 2: Implement Small Area Fair Market Rents with Expanded Mobility Counseling

Cost-Effectiveness

The main costs associated with this alternative are the cost of mobility counseling. The "Moving to Opportunity" study gives the figure for the cost of mobility counseling per family, which equals around \$3,118 in 2021 dollars. The costs of counseling were calculated for the first year following implementation of SAFMR's by multiplying the cost per family by the total estimated number of voucher holders. For the subsequent years through 2031, it is assumed that the number of voucher holders who will be enrolled in mobility counseling will increase at a rate of 2.5%, which was the rate of increase between FY2019 and FY2020 as determined from RRHA's audited financials. The implementation of SAFMR's has the potential to expand the number of units affordable to voucher holders. An analysis conducted by NYU Furman Center found that PHA's that implemented SAFMR's experienced an aggregate increase in the number of affordable units equal to 8.9%. The cost-effectiveness for this option is 529.46. See Appendix C for more information on these calculations.

Political Feasibility

Mayor Stoney has expressed a commitment to reducing concentrated poverty in Richmond, a key goal of SAFMR's. RRHA would be an integral decision-maker in the process. RRHA faces frequent leadership turnover. Significantly, the agency currently has an interim CEO and is in the process of searching for a CEO. The CEO position has been described as a "revolving door," indicating tenuous leadership conditions at the agency. For this reason, this alternative is not likely to be maximally politically feasible currently. Political feasibility is low.

Administrative Feasibility

SAFMR's are not an entirely new program for RRHA to oversee; rather, implementing SAFMR's involves a change in payment standards for HCV's. This entails updates to software to accommodate calculating rents at the zip code level. RRHA has identified funding of hardware and software as a budget challenge in their FY2020 operating budget. Due to these constraints, the administrative feasibility of this alternative presently is low.

Equity

In evaluating equity for this option, it is essential to note that voucher participants would be the main beneficiaries of this policy. Households that do not receive vouchers could not experience benefits in the form of potentially lower cost burdens or greater mobility. Therefore, equity is also low.

Alternative 3: Pursue Inclusive Economic Growth Strategy with Sectoral Training Component

Cost-Effectiveness

The cost-effectiveness of this alternative is based on projected costs of delivering sectoral training to a pool of participants, which increases incrementally over the ten-year span. The cost per training participant is estimated at \$6,500. These costs are added to the baseline costs with an inflation of 2% added for each year. The net present value of the costs for all ten projected years is calculated using a discount rate of 3%.

The effectiveness of this program is estimated by using the number of enrollees, a completion rate of 80%, and a rate experiencing a sufficient wage increase of 85%. A sufficient wage is one that would allow a household to no longer be rent-burdened. I used the "housing wage" as reported by the National Low Income Housing Coalition as a reference. Additionally, the Brookings Institute has calculated a "family-sustaining wage" equal to \$20/hr. See Appendix D for further detail.

The cost-effectiveness for this alternative is 536.03.

Political Feasibility

This alternative is likely to be considered acceptable by decision-makers, though it is uncertain. Currently, Richmond is considering a casino as a form of economic development. Mayor Stoney has supported this proposal stating that "this is about growth. We want economic development, which, to me, is economic justice for all of our residents." His rhetoric would suggest that he would be open to an inclusive economic growth strategy. Political feasibility is medium.

Administrative Feasibility

This alternative is likely to involve multiple agencies and organizations, which could complicate implementation. The capacity of economic development organizations to implement this type of strategy is uncertain due to the variety of funding mechanisms involved. Often, EDO's must begin the process without an initial influx of resources. They must manage this alongside existing commitments rather than use it as a replacement. Hence, the administrative feasibility is likely to be medium-low.

Equity

Benefits would accrue to those who participate in the training. The intended workforce segment would be low-income workers with a high school diploma. These are likely housing rent-burdened individuals due to their relatively low incomes. The benefits of this policy could be distributed more broadly between current housing assistance recipients and households that do not receive assistance even if they need it. Therefore, equity is high.

Alternative 4: Promote Rent Skewing in LIHTC Properties via Income Averaging Set-Aside

Cost-Effectiveness

Industry experts stress the recency of the introduction of this set aside when considering applicability. This makes specific effectiveness challenging to project. This alternative is not likely to substantially increase costs since it does not involve a new program or appropriations. The main cost considered is hiring an additional staff person to administer training on the Average Income Set Aside to developers, property managers, and other parties. The Bureau of Labor Statistics estimates the annual mean wage for a compliance officer at the state level as \$60,900. The cost-effectiveness is uncertain due to factors related to implementation. Appendix E displays associated cost projections.

Political Feasibility

Relevant decision-makers for this policy alternative include the Virginia Housing Development Authority (VHDA). VHDA is Virginia Housing, which is self-supporting and receives no state taxpayer dollars to fund their programs, which removes politics to a degree. However, VHDA is subject to certain supervisory powers of the governor and Virginia Assembly. Additionally, there is uncertainty surrounding the implementation of this set-aside. The IRS published a notice of proposed guidance on the AIT on October 30, 2020. The proposed regulations for the AIT conflict with VHDA's guidance allowing unit designation changes ("floating units"). VHDA is awaiting the final rule to ensure that existing Average Income Projects can comply with the final rule (Virginia Housing, n.d.). Due to these complicating factors, political feasibility is medium-low.

Administrative Feasibility

This policy alternative likely involves the cooperation of the housing finance agency (VHDA), developers, and advocates. VHDA would have the largest role in deciding how to promote this minimum set aside and how to address the set aside in their Qualified Allocation Plan (QAP). However, there are other actors involved that could affect the administration, such as developers. Developers may be hesitant to engage with the Average Income set aside because of the perceived risk of falling out of compliance when electing this set aside over others. Based on these considerations, administrative feasibility is medium.

Equity

This alternative would theoretically result in more properties being constructed with the average income minimum set aside. The average income minimum set aside is designed to expand the range of households served by LIHTC. To the extent that it enables households who would not qualify for other housing assistance to be served (such as those at 80% AMI), it receives a score of medium for equity.

Outcomes Matrix

	COST- EFFECTIVENESS	POLITICAL FEASIBILITY	ADMINISTRATIVE FEASIBILITY	EQUITY
ALTERNATIVE 1: MAINTAIN THE STATUS QUO	519.05	LOW	MEDIUM-LOW	LOW
ALTERNATIVE 2: IMPLEMENT SAFMR'S AND EXPAND MOBILITY COUNSELING	529.46	LOW	LOW	LOW
ALTERNATIVE 3: PURSUE INCLUSIVE ECONOMIC GROWTH STRATEGY WITH SECTORAL TRAINING COMPONENT	536.03	MEDIUM	MEDIUM-LOW	HIGH
ALTERNATIVE 4: PROMOTE RENT SKEWING IN LIHTC PROPERTIES VIA INCOME AVERAGING	UNCERTAIN	MEDIUM-LOW	MEDIUM	MEDIUM

Recommendation and Implementation

Introduction and Overview of Implementation Issues

Researchers at Brookings Institute have defined inclusive economic growth as “*a process that encourages long-run growth (**growth**) by improving the productivity of individuals and firms in order to raise local living standards (**prosperity**) for all (**inclusion**).*” Richmond’s housing affordability issue is at least partially attributed to stagnant, relatively low incomes. A strategy designed to increase incomes for those most likely to be affected by high housing cost burdens could serve to alleviate such burdens. As part of the inclusive growth approach, a sector strategy is recommended. A sector strategy is a workforce development approach that targets the needs of a specific industry sector and may involve the collaboration of education and training providers, businesses, community organizations, state agencies, and others.

Guidance on implementation was derived from reports released by Brookings Inclusive Economic Development Lab and MDRC's Guide to Implementing WorkAdvance. One of the key challenges highlighted within the literature is the issue of coordination between stakeholders. There are competing interests within the field of economic development, but alignment is possible to a great extent under a new framework. An additional concern for implementation is the lack of resources. It is often the case that Economic Development Organizations must seek to implement these strategies without a significant infusion of resources. Scholars in the area of economic development emphasize that it will be necessary for members of these organizations to “work smarter” given this consideration.

Stakeholders: Roles & Perspectives

Economic Development Organizations (EDO's) have a significant role to play in implementing an inclusive economic growth strategy. Specifically, they should “do what markets alone cannot by coordinating action and correcting local market failures to facilitate economic growth.” Research conducted by the Brookings Institute's Inclusive Economic Development Lab indicates that a change in narrative is a necessary first step to successfully advance an inclusive growth strategy and that EDO's have a prominent role in developing this narrative. The change in the narrative must present compelling evidence to the EDO's members, boards, and partners that inclusive growth is “more than a moral imperative, but also a growth and competitiveness imperative” (Donahue, McDearman, & Barker, 2017) This step is not a substitute for action, but it is necessary prior to action to gain committed buy-in and assure alignment with the EDO and key partners. It is important to distinguish between the “business case” and the “growth case” of economic development. Those who do not think that economic exclusion is a detriment to growth must be convinced that there are substantial costs associated with the status quo to fully commit to a new approach. This process takes time, but it is an important foundation for the next steps. For reference, EDOs that participated in Brookings Inclusive Economic Development Learning Lab took six months of intensive work to perfect their narratives. The process is non-linear and often complex. Brookings researchers present five core questions that EDOs considered when building their cases for inclusive growth:

1. How to narrow the scope?
2. Who is excluded?
3. What barriers led to their exclusion?
4. What are the costs?
5. What is the role of an EDO?

Once a change in narrative has been established, EDO's can move on to addressing barriers in the areas of dynamism, skills, and access. This will involve new practices, policies, and partnerships with systems related to workforce development, community development, transportation and land use, and innovation and entrepreneurship (Parilla, 2017). The WorkAdvance Model provides lessons for practitioners on implementing a sectoral strategy. It is emphasized that considering the current state of training, population characteristics, and the interests of local stakeholders is a necessary early step.

Firms have a vested interest in whether EDO's are involved in inclusive growth. They want as many qualified workers as possible in the regional labor pool to avoid the higher costs of hiring in a tight labor market. Firms often are against raising wages and have a short-term horizon for when they expect results from strategy.

Community Development Organizations (CDO's) are somewhat aligned with the interests of firms in that they prefer maximum labor force participation. However, they view higher wages as a key objective. They want this outcome so that workers can fully participate in their communities. With this viewpoint, they are willing to invest in long-term efforts for change.

Mayors and other elected officials are likewise invested in wide-ranging, local solutions. They are like firms in that they have a short horizon and are primarily interested in visible outcomes, such as job creation. Mayors are often seen as the face of changes within a city, whether they are positive or negative.

Worst-Case Scenarios

The main pitfalls of this type of strategy have been described in research conducted by researchers at the Brookings Institute. It is always possible that any attempt at promoting inclusive growth devolves into whatever can be moved through City Council the fastest. Expedient "solutions" are cautioned against because they will not necessarily generate the inclusive aspect of growth. Capacity issues are another pitfall of this strategy. Most EDOs need to begin this process without an infusion of new resources. EDOs are expected to add inclusive growth to their portfolio, often without new resources. Then, EDO's need to consider how their strategy appeals to local and national funders' interests. A worst-case scenario would be a failure to manage resources effectively.

Conclusion

On balance, the recommendation of pursuing an inclusive growth strategy with a sectoral training component has the most wide-ranging impact on the low, stagnant wages that underly a significant part of Richmond's housing affordability challenges. The cost of housing is too high for Richmond's low-income renters. High housing cost burdens are a feature of paying too much of one's income for rent. The recommended alternative of pursuing inclusive growth seeks to increase the real incomes of the households most affected by rent-burden, particularly lower-income households where the head of household does not have a college degree. Increasing incomes for these households has the additional benefit of positive spillover effects, such as a stronger tax base and increased spending in the local economy.

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Appendices

Appendix A

BASELINE COST PROJECTIONS

Baseline cost projections are based on relevant budget data for select departments, programs, or agencies that deal with housing in Richmond. These costs are tabulated in Table 1 below.

<i>Program/Agency/Department</i>		
<i>Richmond HCD</i>	Program Budgets	Amended Budget FY 2020 ^a
	CDBG Budget	\$5,503,386
	HOME Budget	\$1,705,440
	HOPWA	\$1,186,209
	ESG	\$376,954
	FY 2019 total agency summary ^b	\$13,989,812
	AHTF Allocation ^c	\$2,900,000
<i>RRHA</i>	Program Expenses (2019 Actuals) ^d	
	Administrative	\$10,435,695
	Tenant Services	\$501,645
	Ordinary Maintenance & Operation	\$8,897,261
	Utilities	\$12,949,274
	General Expenses	\$3,684,856
	Housing Assistance Payments	\$27,077,529
	Cost of Property Sold	\$57,519
	Depreciation	\$3,960,175
<i>LIHTC</i>	Total Available (Rankings for	\$1,966,048
	VHDA Operating Expenses FYE	\$331,940,616
<i>TOTAL</i>		\$427,132,419

TABLE 1

^a (Richmond Housing and Community Development , 2020)

^b (City of Richmond, Virginia , 2021)

^c (City of Richmond, Virginia , 2021)

^d (Richmond Redevelopment and Housing Authority , 2019)

^e (Virginia Housing, 2020)

^f (Virginia Housing , 2020)

Baseline Outcome Projections

To establish baseline parameters, I retrieved the number of households from ACS data. Estimate number of households for (2015-2019) is given as 90,301. I used population estimates from the Weldon Cooper Center to project year-to-year population estimates. I calculated a growth rate as follows: Growth rate=0.5434267. I held the proportion of households to the population constant for the next ten years to project the number of households year to year. I retrieved the proportion of renter households in the City of Richmond from ACS data that describes housing costs by tenure. The data yields approximately 56% of households in the city as renter households and approximately 48% of renter households are paying more than 30% of income housing.

Richmond city, Virginia

	Estimate	Margin of Error
<i>Total:</i>	89,878	±2,207
<i>Renter-occupied housing units:</i>	50,697	±2,755
<i>Less than \$20,000:</i>	13,924	±1,988
<i>30 percent or more</i>	11,416	±1,876
<i>\$20,000 to \$34,999:</i>	9,319	±1,829
<i>30 percent or more</i>	7,577	±1,652
<i>\$35,000 to \$49,999:</i>	6,523	±1,232
<i>30 percent or more</i>	3,579	±976
<i>\$50,000 to \$74,999:</i>	9,614	±1,864
<i>30 percent or more</i>	1,645	±627
<i>\$75,000 or more:</i>	8,257	±1,210
<i>30 percent or more</i>	358	±354
<i>Zero or negative income</i>	1,937	±918
<i>No cash rent</i>	1,123	±691
<i>Total Households</i>	89,878	
<i>Number of Renter Households</i>	50,697	
<i>Proportion of Renter Households</i>	0.564064621	
<i>Number of Renter HH's 30 percent or more</i>	24575	
<i>Proportion of Rent Burdened HH's</i>	0.484742687	

TABLE 2

(AMERICAN COMMUNITY SURVEY , 2019)

Appendix B

Alternative 1: Maintain the Status Quo

Costs for maintaining the status quo were projected over ten years. This involved applying inflation of 2% for each year. Then the net present value of the cost projections over ten years was calculated using a discount rate of 3%. See Table 3 below for information.

Year	Base Costs	Total Costs w/Inflation	NPV	Outcome	Cost Projections
					Cost- Effectiveness
2021	427,132,419		\$143,332,984	276,143	519.05
2022		\$435,675,067			
2023		\$444,388,569			
2024		\$453,276,340			
2025		\$462,341,867			
2026		\$471,588,704			
2027		\$481,020,478			
2028		\$490,640,888			
2029		\$500,453,706			
2030		\$510,462,780			
2031		\$520,672,035			

TABLE 3

Outcomes for maintaining the status quo were projected by continuing the existing trends over the next ten years. These results are in table 4 below.

Year	Total Number of Households	Number of Renter Households (56%)	Number of Rent- Burdened Households	Outcome Projections	
				Outcome	
2021	90,807	50,852	24,409	276,143	
2022	91,315	51,137	24,546		
2023	91,827	51,423	24,683		
2024	92,341	51,711	24,821		
2025	92,858	52,000	24,960		
2026	93,378	52,292	25,100		
2027	93,901	52,584	25,241		
2028	94,427	52,879	25,382		
2029	94,955	53,175	25,524		
2030	95,487	53,473	25,667		
2031	96,022	53,772	25,811		

TABLE 4

Appendix C

Alternative 2: Implement SAFMR's and Expand Mobility Counseling

This alternative would impact Housing Choice Voucher recipients in RRHA's jurisdiction. Currently, RRHA administers 3,574 HCV's. Using an NYU Furman Center analysis which found that PHA's that implement SAFMR's saw an aggregate increase of 8.9% in the number of units affordable to voucher holders, I projected a relative increase in voucher recipients and assume that they are not "rent-burdened" due to the intended effect of the voucher which is to limit family payment to 30% of income. The change in SAFMRs would only happen once since it is a switch in payment standards. However, the expanded mobility counseling would likely continue to be administered to additional voucher holders over the ten years. I assume that the number of voucher holders will continue to increase at a rate of 2.5%, which is the relative increase in HCV's that RRHA administered between 2019 and 2020. Using these relative changes, I project that outcomes of households that will be rent-burdened over ten years. I also use the relative changes to determine costs for the ten-year time period. Costs are estimated on a per-family basis. The Moving to Opportunity Study estimates the cost of mobility counseling per family to be \$3,118 in 2021 dollars.

Cost Projections

Year	Base Costs	Additional Costs	Total Cost w/Inflation	NPV	Outcome	Cost-Effectiveness
2021	\$427,123,419	-	\$427,132,419	\$144,711,863	273,318	529.46
2022	\$435,675,067	\$12,157,082	\$456,788,792			
2023	\$444,388,569	\$303,388	\$448,075,291			
2024	\$453,276,340	\$310,973	\$453,593,532			
2025	\$462,341,867	\$318,747	\$462,666,989			
2026	\$471,588,704	\$326,716	\$471,921,954			
2027	\$481,020,478	\$334,884	\$481,362,060			
2028	\$490,640,888	\$343,256	\$490,991,009			
2029	\$500,453,706	\$351,837	\$500,812,580			
2030	\$510,462,780	\$360,633	\$510,830,626			
2031	\$520,672,035	\$369,649	\$521,049,077			

TABLE 5

<i>Outcome Projections</i>				
<i>Year</i>	<i>Additional Households</i>	<i>Number of Rent-Burdened Households</i>	<i>Outcome Calculation</i>	<i>Outcome Total</i>
2021		24,273	24,273	273,318
2022	318	24,409	24,091	
2023	97	24,546	24,448	
2024	100	24,683	24,583	
2025	102	24,821	24,719	
2026	105	24,960	24,855	
2027	107	25,100	24,993	
2028	110	25,241	25,130	
2029	113	25,382	25,269	
2030	116	25,524	25,408	
2031	119	25,667	25,548	

TABLE 6

Appendix D

Alternative 3: Pursue Inclusive Economic Growth Strategy with Sectoral Training Component

The costs for this alternative were projected by assuming the corresponding number of participants for each year. I phased in the training as this is best practice to allow adjustments to be made before serving more people in the program. The estimated cost is given as \$6,500 per participant. This estimate is from a benefit-cost analysis of WorkAdvance, a sector-based training demo. Total costs were calculated by multiplying the per year training costs by the inflation factor and adding the projected “base case” costs which were already adjusted for inflation.

Year	Cost Projections					
	Base Costs	Additional Cost	Total Costs (w/inflation)	NPV	Outcome	Cost-Effectiveness
2021	\$427,123,419	\$3,250,000	\$430,447,419	\$144,448,782	269,479	536.03
2022	\$435,675,067	\$3,250,000	\$438,990,067			
2023	\$444,388,569	\$3,250,000	\$447,703,569			
2024	\$453,276,340	\$5,200,000	\$458,580,340			
2025	\$462,341,867	\$5,200,000	\$467,645,867			
2026	\$471,588,704	\$6,500,000	\$478,218,704			
2027	\$481,020,478	\$6,500,000	\$487,650,478			
2028	\$490,640,888	\$6,500,000	\$497,270,888			
2029	\$500,453,706	\$7,800,000	\$508,409,706			
2030	\$510,462,780	\$7,800,000	\$518,418,780			
2031	\$520,672,035	\$9,750,000	\$530,617,035			

TABLE 7

Outcomes for this alternative were projected by phasing in the training over ten years with an increasing number of participants. This is best practice to allow for the training to adapt and fine-tune. Then a completion rate of 85% was used to estimate the number of enrollees who would finish the training and earn the corresponding credential. This completion rate was borrowed from a Per Scholas brochure. The Per Scholas also reports that of those who complete the training, approximately 80% of them are placed in jobs earning at least \$21.49 per hour (Per Scholas). Brookings researchers project that the "family-sustaining wage" is \$20/hr. The National Low Income Housing Coalition calculates the "housing wage." The housing wage is the wage required in order to not be rent-burdened. This information is given by zip code. Information for select zip codes is tabulated below.

Outcome Projections

<i>Year</i>	<i>Number of Rent-Burdened Households</i>	<i>Number Enrolled in Training</i>	<i>Number Who Complete Training</i>	<i>Number Placed in Job Earning \$21.49/hr +</i>	<i>Outcome</i>
2021	24,409	500	425	340	24,069
2022	24,546	500	425	340	24,206
2023	24,683	500	425	340	24,343
2024	24,821	800	680	544	24,277
2025	24,960	800	680	544	24,416
2026	25,100	800	680	544	24,556
2027	25,241	1000	850	680	24,561
2028	25,382	1000	850	680	24,702
2029	25,524	1200	1020	816	24,708
2030	25,667	1200	1020	816	24,851
2031	25,811	1500	1275	1020	24,791
					269,479

TABLE 8

"Housing Wage"

<i>Zip Code</i>	<i>Two-Bedroom Housing Wage</i>	<i>One Bedroom Housing Wage</i>
23219	\$20.00	\$17.50
23220	\$23.46	\$20.58
23221	\$22.88	\$20.19

TABLE 9

(NATIONAL LOW INCOME HOUSING COALITION)

Appendix E

Alternative 4: Promote Rent Skewing in LIHTC Properties via Income Averaging

The main costs associated with this alternative, as I have conceived, are the cost of hiring a compliance specialist to administer training regarding the income average set aside and conduct outreach with developers. As of now, there remains significant uncertainty in the implementation of the income averaging set aside. This uncertainty paired with unfamiliarity may cause unwillingness to use this set aside in LIHTC properties despite its potential advantages for expanding the reach of the program and feasibility for projects.

Year	Base Costs	Additional Cost	Total Costs w/Inflation	Cost Projections
				NPV
2021	\$427,132,419	\$60,900	\$427,193,319	\$143,353,385
2022	\$435,675,067	\$60,900	\$435,737,185	
2023	\$444,388,569	\$60,900	\$444,450,687	
2024	\$453,276,340	\$60,900	\$453,338,458	
2025	\$462,341,867	\$60,900	\$462,403,985	
2026	\$471,588,704	\$60,900	\$471,650,822	
2027	\$481,020,478	\$60,900	\$481,082,596	
2028	\$490,640,888	\$60,900	\$490,703,006	
2029	\$500,453,706	\$60,900	\$500,515,824	
2030	\$510,462,780	\$60,900	\$510,524,898	
2031	\$520,672,035	\$60,900	\$520,734,153	

TABLE 10