Reducing Inequities in Low-Income Rental Assistance Programs

An Analysis for



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<u>Disclaimer</u>

The author conducted this analysis 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, by the Heritage Foundation, or by any other entity.

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

-- Vijay Kumar Menon

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May God bless you all.

Glossary of Terms and Acronyms

AHS = American Housing Survey

AMI = Area median income

CBO = Congressional Budget Office

CRS = Congressional Research Service

ELI = extremely low incomes, defined by HUD as incomes 30 percent or less of the AMI

GAO = U.S. Government Accounting Office

HASE = Housing Assistance Supply Experiment (HASE), conducted in the 1970s

HCV = Section 8 Housing Choice Vouchers

HUD = U.S. Department of Housing and Urban Development

LIHTC = Low-income housing tax credits

Omnibus = Consolidated Appropriations Act of 2018

PBRA = Section 8 Project-Based Rental Assistance

PHA = Public housing authority

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Executive Summary

The current system of low-income rental assistance provides generous subsidies to a minority of eligible households while a large majority of similarly eligible households receives no assistance. Given current fiscal realities, it is especially desirable for policymakers to "get more for less" with existing government programs. The available evidence indicates that tenant-based housing vouchers are the most cost-effective means of delivering assistance to the poorest households. This paper evaluates three options, each of which proposes to generate savings and use those savings to expand the use of vouchers; they would thus serve additional households without spending more money. Options 1 and 2 propose to expand the Section 8 Housing Choice Voucher (HCV) program with savings generated from repealing the low-income housing tax credit (LIHTC) program and increasing the tenant rent contribution, respectively. Option 3 would create a new reformed voucher program with savings generated from phasing out HUD's major rental assistance programs. This paper recommends Option 3: although this option would impose the largest additional administrative burden, it would assist significantly more households than the other two options combined without causing harm to current recipients. Because this option would involve a fundamental overhaul of the current system, it would be wise to start implementation with a demonstration program in public housing projects. Although this paper focuses on policy changes that would be undertaken primarily at the federal level, certain local reforms should not be ignored in the broader discussion of housing affordability.

Problem Statement

In the current low-income housing system, roughly three in four households that are eligible for federal rental assistance do not actually receive it. The inequity between assisted and unassisted recipients is unique to housing assistance programs; it does not exist for recipients in other parts of the federal means-tested welfare system, such as cash and food assistance. This is because housing assistance is not an entitlement, meaning that eligibility for assistance does not guarantee receipt of that assistance. Additionally, the housing subsidies received by assisted households are large relative to current appropriations; if less generous subsidies were offered, more households could be served.

The Congressional Budget Office (CBO) has called this inequity "preferential treatment of assisted households" (CBO, 2015). While assisted households pay a fixed portion of their income in rent, unassisted households receive no such benefit. Therefore, most unassisted households spend a significantly larger portion of their income on rent than do assisted households. Moreover, unassisted households are placed on waiting lists to receive assistance; these lists are notoriously long in most areas around the country.

Many argue that this problem calls for much greater spending on low-income housing programs. Certainly, increased spending would enable major housing programs to serve more families from

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¹ The overwhelming majority of low-income housing assistance goes to renters. Therefore, my analysis focuses on federal rental assistance programs and does not address programs that assist low-income homeowners. However, although it is not discussed in this paper, anti-homeownership bias in the low-income housing system is an issue that merits discussion amongst policymakers. For more information, see Olsen (2007).

their waiting lists. However, as Social Security and Medicare expenditures continue to assume an ever-expanding share of the federal budget, policymakers will necessarily face increased pressure to control discretionary expenditures. Given the reality of our country's fiscal situation, policymakers should explore ways to assist more households on a given budget for housing assistance programs; this paper considers a few policy changes that would serve more households without spending more money.

Problem Background

The fundamental inequity in the current system of low-income rental assistance is between assisted and unassisted households with the same characteristics. Unlike other major meanstested welfare programs, low-income rental assistance programs do not offer assistance to all eligible households, including many of the poorest households. In Temporary Assistance for Needy Families (TANF) – one of the nation's largest means-tested cash assistance programs – all families whose incomes fall below specified thresholds receive assistance, conditional on meeting certain program requirements. Falk (2014) notes that most state TANF programs limit enrollment to the poorest families.² On the other hand, only a minority of households that are eligible for low-income rental assistance actually receive it. The Center on Budget and Policy Priorities (CBPP) reports that roughly three-quarters of eligible households do not receive federal rental assistance (CBPP, 2017b).

A recent report by the Public and Affordable Housing Research Corporation (PAHRC) used a 2012 national survey on waiting lists to estimate that there are currently 2.8 million families on Section 8 Housing Choice Voucher (HCV) waiting lists and 1.6 million families on public housing waiting lists, and perhaps as many as 9.5 million and 2 million families, respectively, if public housing authorities (PHAs) did not close their waiting lists once they reach a certain capacity.³ Although the U.S. Department of Housing and Urban Development (HUD) recommends that wait times not exceed two years, the PAHRC report finds that families spent more than two years on waiting lists in 41 percent of HCV programs and 13 percent of public housing programs.

There is mixed evidence as to whether the current system adequately serves the poorest households, with recent statistics suggesting that they are underserved. Using data from the 11 metropolitan areas in the 1987 American Housing Survey (AHS), Crews (1995) estimates a probit model explaining whether a household receives housing assistance and found that the poorest households, welfare recipients, and unemployed persons had higher participation rates that were statistically significant at the one percent level (as cited in Olsen, 2003). Turner and Kingsley (2008) report that among the three "deep subsidy" programs operated by HUD – public housing, vouchers, and privately owned subsidized units – 75 percent of the beneficiaries have HUD-defined "extremely low incomes" (ELIs) and at least 90 percent have very low incomes.

² Falk (2014) reports that, as of July 2012, 28 states and the District of Columbia required a single mother with two children to earn less than \$795 a month – which represents about half of the 2012 federal poverty line – to be eligible for TANF aid.

³ This disparity in waiting list lengths is perhaps revealing of tenant preferences for vouchers over public housing.

Yet more recent estimates indicate that many of the poorest households remain unserved by current system. Drawing from the same national survey as the PAHRC report, the National Low Income Housing Coalition (NLIHC) estimates that ELI households – whose incomes are at or below 30 percent of the area median income (AMI) – account for roughly two-thirds of households on the average public housing waiting list and three-quarters of households on the average HCV waiting list (NLIHC, 2016). According to HUD's *Worst Case Housing Needs*, a biannual report to Congress, the number of unassisted households with "worst case" housing rose by over 40 percent – from nearly 5.9 million to 8.3 million households – between 2007 and 2015 (HUD, n.d.-b). In fact, over 80 percent of eligible but unassisted households with incomes 50 percent or less of the AMI pay more than 30 percent of their income in rent; more than half of these households pay more than 50 percent of their income toward rent (CBO, 2015).

Nevertheless, the average subsidy to the fortunate minority of households that receive housing assistance is large. For example, Olsen (2017) reports that the national mean voucher subsidy to a three-person household (one parent, two children) with no countable income was about \$12,000, or \$1,000 per month, in 2015. According to data from the 2013 AHS, the national median market rent for unsubsidized households was just over \$1,000 per month. Therefore, current vouchers enable households with no income to live in a unit that is "better" than half of available units, that is, a unit with median market rent. It is certainly suboptimal to provide this level of assistance to a relative few households while offering no assistance to many households.

Furthermore, current vouchers provides a recipient household with a level of resources that is high relative to the relevant poverty threshold, especially when viewed in the context of the means-tested welfare system as a whole. In 2015, the federal poverty threshold for a family of three was roughly \$19,000; the \$12,000 subsidy mentioned in the previous paragraph is certainly high relative to this threshold. However, households receiving housing assistance often receive other forms of public assistance, such as cash, food, and medical assistance. Rector and Sheffield (2016) estimate that a single mother with two children who worked for a full year at minimum wage in 2015 could earn over \$33,000 in means-tested benefits alone.⁸

Because the average subsidy is large relative to the amount of money appropriated for low-income rental assistance programs, only a fraction of eligible households can receive assistance. Therefore, the gap between households that do and do not receive rental assistance is driven both by the generosity of the subsidy and the fact that not all eligible households are entitled to receive subsidies.

⁴ HUD defines these households as those with incomes at or below 50 percent of the AMI that do not receive rental assistance and pay more than half their income for housing, live in severely substandard housing, or both.

⁵ See Figure C.1 in Appendix C for more details.

⁶ Author's calculation using AHS data.

⁷ Some might reasonably wonder whether subsidies must be high for households to afford units with higher market rents in more expensive housing markets. In fact, the value of the subsidy is roughly \$1,500 per month in more expensive markets such as New York and Los Angeles (Olsen, 2018b). The takeaway is that current voucher subsidies are sufficiently generous as to allow the poorest households to occupy units of about average desirability, regardless of location.

⁸ In addition to Section 8 voucher assistance, these benefits include the earned income tax credit (EITC), additional child tax credit (ACTC), food stamps, school meals, and Medicaid.

Another important inequity in the current system is significant variation in the size of housing subsidies across households with the same characteristics but living in different housing projects. The major federal rental assistance programs usually require assisted households to contribute 30 percent of income toward their housing expenses. Therefore, the general formula for calculating a household's housing subsidy is the market rent of the occupied unit minus the household's rent contribution. While households with the same characteristics pay the same rent, the market rents for the units they occupy vary substantially; for example, the best units in the best locations have high market rents, and vice versa. Therefore, the current system provides large subsidies to some households while providing comparatively small subsidies to others in similar economic circumstances (Olsen, 2017).

This inequity has been often mentioned but rarely studied; only a handful of studies from the 1970s and 1980s attempt to do so. These studies estimate mean housing benefits based on households characteristics such as income, family size, age, and race. Olsen (2003) standardizes the results and finds that there is a significant amount of variation in each study. Each study also finds that the mean benefit is larger for poorer and larger households, holding other characteristics constant.

Moreover, several of these studies find that the real mean benefit varies significantly across different locations among households who are otherwise similar. ¹⁰ According to Olsen (2003), Reeder (1985) finds substantial differences for the Section 8 Existing Housing Program between otherwise similar households living in expensive and inexpensive locations, while Hammond (1987) finds such differences in public housing and the entire system of housing subsidies for otherwise similar households living in different regions and in areas with differing degrees of urbanization. Similarly, when controlling for city of residence, Murray (1975) finds large differences in the real mean public housing benefit among identical households living in different urban areas; he estimates that the benefit varies among cities by as much as \$40 or more in 1971 dollars (roughly \$240 in 2017 dollars).

Because it is limited to several older studies, this body of research would be well-served by new analyses which measure this inequity using more recent and better data. My contribution to this research, which uses data from the 2013 AHS to estimate the variation in real housing subsidies among households with the same characteristics, can be found in Appendix A.

⁹ See Appendix A for more details.

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¹⁰ These studies calculated real benefit and income for their analyses. That is, they divided money benefit and income by a cross-sectional price index, which accounts for price differences across geographic locations (Olsen, 2003).

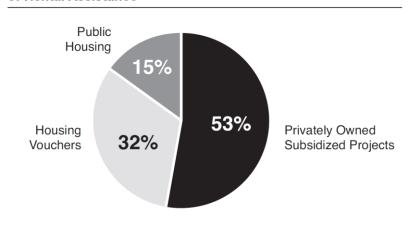
Federal Rental Assistance Programs: Background and Literature Review

Brief Overview of Major Programs

In fiscal year 2016, the federal government spent over \$55 billion on means-tested housing programs (Rector and Menon, 2018). Over 80 percent of that total was spent on four programs: Public Housing, low-income housing tax credits (LIHTC), and Section 8, which includes both Project-Based Rental Assistance (PBRA) and the Housing Choice Voucher (HCV) program. These programs, which serve the overwhelming majority of federally assisted renters, are the focus of this paper. ¹¹

The current system of low-income rental assistance is primarily one of project-based assistance, that is, assistance which attaches the subsidy to the household's dwelling unit. Figure 1 (taken from Olsen, 2017, pp. 89) shows that over two-thirds of all households that receive low-income rental assistance are served by two broad types of project-based assistance: public housing and privately-owned subsidized projects (LIHTC and PBRA projects). The remaining 32 percent are served by HCVs, the largest type of tenant-based assistance, that is, assistance which attaches the subsidy to assisted households themselves.

Figure 1. Percentage of Households That Receive Each Type of Rental Assistance



Note: Includes assistance from US Department of Housing and Urban Development and other sources

Source: Author's calculations based on 2013 American Housing Survey.

The LIHTC program is the largest active construction program in the current system, serving roughly 2.4 million households (Olsen, 2017). Unlike public housing and Section 8, the LIHTC is operated by the Internal Revenue Service (IRS), not HUD. Under the program, the federal government distributes tax credits to state agencies based on state populations. These agencies then distribute the credits to selected private developers, which "nearly always sell

them to large banks and other investors" (Edwards and Calder, 2017). About 70 percent of the credits are generally used for new construction projects, while the remainder are generally used for renovations (Edwards and Calder, 2017). As a condition of participation in the program, private developers agree to provide a specified number of units to low-income households at restricted rents under either a "20-50" or "40-60" test.¹²

¹¹ Table C.1 in Appendix C summarizes each program's costs and number of households served.

¹² Michel, Michel, and Ligon (2018) write that under a 20-50 test, for example, developers must ensure that at least 20 percent of their project's units are rent-controlled and serve tenants with incomes less than 50 percent of the AMI.

The Section 8 PBRA program provides housing subsidies for low-income occupants of privately-owned, HUD-subsidized projects, many of which were newly built or substantially rehabilitated under an earlier Section 8 program. Public housing projects are developed and operated by local public housing authorities (PHAs) established by local governments, albeit with substantial federal subsidies and regulations (Olsen, 2017). In both programs, building owners or PHAs receive subsidies that are tied to the units themselves; for example, the Congressional Research Service (CRS) notes that owners of PBRA projects can continue to receive subsidies for a unit vacated by one family if they can move another eligible family into the unit (CRS, 2014). In this case, however, the vacating family would no longer be subsidized, unless it obtained other housing assistance before it moved. CBPP (2017a) reports that Section 8 PBRA and public housing serve about 1.2 and 1 million households, respectively.

Lastly, the HCV program is the only significant program that offers tenant-based housing assistance. Administered by PHAs, the program offers vouchers to families, which use them to subsidize their rents in private market units meeting minimum HUD standards. Housing vouchers are portable, meaning that they can move with recipient families to different areas. CBPP (2017a) reports that the HCV program serves over 2.2 million households.

Low-income housing tax credits (LIHTC)

Recent literature has suggested that the LIHTC program leads to positive outcomes. The Bipartisan Policy Center (BPC), for example, recently released a report that documents the likely positive impact of the LIHTC on health outcomes. The research summarized in the report indicates that having access to affordable housing is correlated with better outcomes, presumably because households have freed-up resources to spend on food and health care, and that better-quality housing reduces the risk of health problems, particularly asthma and other respiratory issues. The report concludes that, because LIHTC is the nation's largest active supplier of affordable housing, it is thus reasonable to believe that the LIHTC contributes positively to participants' health outcomes. New York University's (NYU) Furman Center also published a research brief on studies finding positive effects for LIHTC projects. In a recent study, Stanford economists Rebecca Diamond and Timothy McQuade find that LIHTC developments revitalize low-income neighborhoods by increasing housing prices and lowering crime rates. ¹³

Yet the evidence about the LIHTC's causal effect, either positive or negative, is subject to important limitations. The BPC's report, for example, states that "not much of the exploration into the linkages between affordable housing and health has focused on LIHTC properties specifically, or looked into whether certain affordable-housing financing mechanisms affect health in different or better ways than others" (BPC, 2017, pp. 4). In other words, current literature on the LIHTC falls short because it largely fails to isolate the causal effect of the program. This is an especially important point given the significant crowd-out effect for LIHTC developments. Many studies have found that the LIHTC units replace private, unsubsidized market units at a high rate (Edwards and Calder, 2017). Eriksen and Rosenthal (2010), for example, estimate that "nearly 100 percent of LIHTC development is offset by a reduction in the number of newly built unsubsidized rental units" (Eriksen and Rosenthal, 2010, Abstract); other

¹³ Their results, however, are sensitive to the "initial state" of neighborhoods; LIHTC developments in higher-income neighborhoods caused housing prices to fall slightly.

studies provide less dramatic but still substantial estimates of the crowd-out effect. Therefore, a major difficulty in assessing the effectiveness of the LIHTC is that the unsubsidized housing market would supply a similar number of units in the absence of the program.

Further research on the LIHTC has revealed key shortcomings in the program's delivery of housing assistance. Specifically, the program costs more than other low-income housing programs, benefits investors more than tenants, and is prone to significant fraud and abuse. These findings are important because dollars spent toward unproductive purposes are dollars not spent assisting more households.

Evidence on the LIHTC shows that it is an expensive means of delivering low-income housing assistance. One study from the U.S. General Accounting Office (GAO) finds that LIHTC units are 19 to 44 percent more costly than units subsidized by housing vouchers (GAO, 2002). Deng (2005) analyzes the development subsidies for new LIHTC benefits relative to the alternative voucher cost in six major metropolitan areas and finds that overall the LIHTC is more expensive than vouchers, although the degree of excess cost varies by local housing market conditions. For example, Deng finds that the LIHTC has excess costs of only two percent relative to housing vouchers in San Jose, while LIHTC units are 66 percent more expensive than and twice as costly as voucher units in Miami and Atlanta, respectively. The CBO has repeatedly affirmed the cost-ineffectiveness of the LIHTC relative to vouchers, concluding that "the government can provide assistance of equal value to tenants through housing vouchers at a fraction of the cost of [tax] credits" (CBO, 1992, pp. 2).

The LIHTC is also poorly targeted to the poorest households. Muralidhara (2006) finds that LIHTC regulations fail to ensure that the program targets the lowest-income households, despite that being explicitly stated in the Internal Revenue Code as one of the program's primary objectives. Indeed, although the NYU research brief reports that 47 percent of LIHTC households have ELIs, that figure is higher for the other major rental assistance programs. This is because there is no requirement for units in LIHTC developments to serve ELI households; by contrast, the PBRA and Public Housing programs require 40 percent, and the HCV program requires 75 percent, of newly assisted households to have ELIs. CBO (2015) reports that while around 75 percent of assisted households in each of the major HUD programs had ELIs in 2013, only 40 percent of LIHTC-assisted households had ELIs. Moreover, LIHTC households typically have higher incomes than households receiving other types of rental assistance. GAO (1997) finds that LIHTC households have an average income that is twice that of households in HUD's "deep subsidy" programs, and they are well above poverty thresholds (as cited in Olsen, 2017).

Recent evidence indicates that benefits from the LIHTC mainly accrue to investors instead of low-income tenants, although this has been known for some time. The CBO reached this conclusion well over two decades ago, finding that "housing that is subsidized through credits is more suited to the needs of investors than poor renters" (CBO, 1992, pp. 2). Burge (2011) estimates that tenants capture only 35 percent of the tax credits provided to developers in the form of rent savings. Olsen (2018) combines this estimate with another estimate that finds tax credits account for roughly two-thirds of development subsidies for LIHTC projects, concluding that "tenants capture at most 24 percent of the development subsidies" (Olsen, 2018a, pp. 2). On the other hand, corporations and big banks seem to benefit the most from the LIHTC. For

example, Edwards and Calder (2017) report findings that the overwhelming majority of credits are claimed on corporate tax returns, and that, in one recent year, about 85 percent of total LIHTC equity investments were made by banks, with the five largest U.S. banks accounting for half that total.

Lastly, the LIHTC program's incentives have made it susceptible to fraud and abuse. Olsen (2003) reports that credits which subsidize new construction pay 70 percent of a project's development cost. Developers thus have an incentive to inflate their reported construction costs in order to obtain larger subsidies. Edwards and Calder (2017) document multiple major cases of LIHTC fraud in major cities such as Miami, Dallas, and Los Angeles. In Miami, for example, developers received \$34 million in excess subsidies for 14 LIHTC projects. Edwards and Calder (2017) report that the IRS audits just 13 percent of the state agencies that distribute the credits, so it is reasonable to expect that the scale of LIHTC fraud is much larger than can be detected. Even without fraud, though, the LIHTC produces large-scale abuse when developers spend hundreds of thousands of dollars *per unit* on new projects. Olsen (2017) documents such projects in San Francisco and Portland, Oregon, where the cost of building one LIHTC *apartment* unit was similar to or even greater than the median value of owner-occupied *houses*. He asserts that these cases are not uncommon as the HUD website features many examples of such units.

Project-Based versus Tenant-Based Assistance

The empirical literature provides strong evidence that tenant-based assistance provides more cost-effective housing than project-based assistance; specifically, tenant-based vouchers provide equally good housing at a much lower cost than older project-based programs, such as public housing and the now-defunct Section 8 New Construction program. Mayo et al. (1980) finds that public housing in Phoenix and Pittsburgh had excess costs of 64 and 91 percent, respectively, when compared to housing vouchers providing equally good housing. Similarly, Wallace et al. (1981) estimates the nationwide excess costs of the Section 8 New Construction program to be between 44 and 78 percent when compared to the tenant-based Section 8 existing housing certificate program. ¹⁴ Olsen (2008) notes that both studies have the most detailed data on housing characteristics for the purposes of defining what constitutes equally good housing, which presumably yields precise results. Although these studies are decades-old, current estimates also demonstrate the excess costs of project-based programs. For example, GAO (2001) finds excess costs ranging from 12 to 27 percent for major active construction programs.

Estimates from the literature suggest that a complete transition to tenant-based rental assistance would serve many more eligible households. Olsen (2008) reports that even the smallest estimates indicate the new tenant-based system would serve at least 20 percent more households; many estimates show larger increases in the number of households served. According to Olsen (2008), the results in Wallace et al. (1981) suggest that housing vouchers could have provided equally good housing at the same rent to 72 percent more households with similar characteristics than the Section 8 New Construction program. Olsen (2014) estimates the long-term effects on program participation for a transition to a reformed housing voucher system. ¹⁵ His analysis finds

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¹⁴ In 1998, the Section 8 certificate program was merged into the HCV program, with all certificates being converted to vouchers.

¹⁵ I discuss more details of Olsen (2014) later in this paper.

that a reformed voucher system which reduces spending by 10 percent or more would still serve 75 percent more people in total, with the largest increases going to those who are most underserved by the current system. Additionally, a reformed housing voucher system would be equitable in the sense that it would offer the same assistance to all eligible households in the same circumstances.

Despite the strong evidence demonstrating the cost-effectiveness of tenant-based vouchers, they have not been immune to criticism; I thus consider a few of the major arguments against vouchers and offer some counterpoints. First, it is often argued that vouchers will not work well in the tightest housing markets, that is, metropolitan areas with below-average vacancy rates, because there will be too few vacant affordable units meeting the program's minimum standards. In fact, vouchers appear to work better than expected in these markets. Results from the Housing Assistance Supply Experiment (HASE), conducted in the 1970s, speak to the effectiveness of vouchers in tight markets. This experiment offered tenant-based housing allowances to all eligible households in two counties – Brown County, Wisconsin and St. Joseph County, Indiana. Although Brown County had a vacancy rate that was less than half that of St. Joseph County (5.1 percent compared to 10.6 percent), the former experienced a somewhat higher participation rate than the latter (Olsen, 2008). Olsen (2008) also reports the finding that tenant-based assistance alone increased the supply of affordable housing in these counties by a greater percentage in five years than all of the federal government's production programs have produced in the past 65 years. Moreover, GAO (2001) finds that vouchers were more cost-effective than productionbased programs in each of seven metropolitan areas with vacancy rates below the national average, which was 7.8 percent at the time of the study.

Second, some critics are concerned that landlord discrimination against voucher recipients impedes their ability to use vouchers. Indeed, voucher families often have a harder time than unsubsidized families in finding suitable housing because many landlords will not rent to them. Reasons for this range from landlords' concerns that voucher households will not make good tenants¹⁶ to landlords' general unwillingness to get involved in the "bureaucratic hassle" of dealing with local PHAs (Turner, 2003). Critics alleging landlord discrimination, as well as those alleging vouchers' ineffectiveness in tight markets, often point to Finkel and Buron's (2001) finding that HCVs only had a 69 percent national success rate in 2000. In other words, only 69 percent of all households authorized to search for a unit using a housing voucher were successful in finding one. However, the voucher *utilization rate*, that is, the fraction of vouchers that are actually used, is consistently well over 90 percent (CBPP, 2013). Olsen (2008) describes that this is because PHAs overissue vouchers early in the year and recycle unused ones to ensure that they at least come close to using their entire voucher budget. Although high voucher utilization rates do not indicate that landlord discrimination does not exist, they do perhaps demonstrate that most recipients of vouchers, particularly the poorest ones, have a heightened incentive to use them. Turner (2003) suggests that more aggressive outreach to landlords by local PHAs could increase the number of landlords participating in the HCV program.

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¹⁶ For example, from a landlord perspective, a large family might be viewed less favorably than an elderly household, which would generally be expected to cause fewer disturbances, create less property damage, etc. (Olsen, 2008).

Third, critics express concern over vouchers' "portability" feature. This unique feature, which enables vouchers to move with assisted households, has proven beneficial for recipients. For example, Olsen (2017) highlights research finding that voucher recipients tend to live in lower-poverty, lower-crime neighborhoods than recipients of project-based programs; this is a likely consequence of voucher recipients' increased ability to choose the neighborhoods in which they live. Nevertheless, the portability feature has been a "bureaucratic nightmare" (Turner, 2003, pp. 1). According to CRS (2014), when a voucher household moves to a new area, the sending and receiving PHAs must negotiate regarding the administration of that voucher; in some cases, the sending PHA is billed for the cost of the voucher, while in other cases, the receiving PHA offers the household one of its own vouchers. Turner (2003) argues that this latter solution is undesirable because the receiving PHA would use up a voucher that could have served another family on its waiting list. All this is to say that "the administration of portability has proven to be complicated for PHAs" (CRS, 2014, pp. 8) despite its benefits for recipients. Turner (2003) suggests that regional collaboration or administration of vouchers could ease the administrative obstacles to portability across different PHA jurisdictions.

Evaluative Criteria

Several criteria are used to evaluate the policy options proposed in this paper. Quantitative criteria, such as savings and effectiveness, are projected using current data and best estimates from the literature. Qualitative criteria, such as harm to current recipients, additional administrative burden, and political feasibility, are evaluated using a scale ranging from Low to High. Because my alternatives affect policy at the federal level, I conduct my evaluation nationwide for all households receiving low-income rental assistance. For all criteria, I consider a 10-year implementation window, but evaluation of qualitative criteria necessitates some short-term analysis as well.

Savings

With this criterion, I estimate the 10-year savings to the federal government that would be generated by each policy option. Each option proposes to achieve some amount of savings, which would then be reallocated in order to serve additional households. This criterion considers the savings that would be achieved *before* that money is used for other purposes. Per the recommendation of Office of Management and Budget (OMB) Circular A-4, I assume a 3 percent discount rate to calculate the present value of my 10-year savings estimates. Also, my estimates are calculated with respect to pre-Omnibus spending levels, so they almost certainly underestimate the actual savings that could be achieved by each alternative.

Effectiveness

The "effectiveness" of each proposed alternative is evaluated by the number of additional households it would be able to serve. Alternatives that serve more households reduce the inequity between assisted and unassisted households and as such are more desirable. Furthermore, alternatives that are more effectively targeted to the poorest households, namely those with incomes 30 percent or less of the AMI, are more desirable. Part of the reason why

Options 1 and 2 reallocate savings to the HCV program as opposed to another HUD program is that HCVs most effectively target the poorest households.

Effectiveness calculations for Options 1 and 2 are based on a recent CBO estimate which finds that "a onetime 10 percent increase in the number of vouchers would assist roughly 200,000 additional households and cause federal spending to increase by a total of \$18 billion from 2016 through 2025" (CBO, 2015, pp. 19). For my evaluation, I thus assume that an expansion of the HCV program at a 10-year federal cost of \$18 billion would serve 200,000 additional households. This assumption is reasonably justified by a quick calculation using HUD data. Furthermore, I estimate the number of ELI households that are served under Options 1 and 2 by assuming that these households comprise 75 percent of newly assisted households. This figure comes from the HCV program requirement that at least 75 percent of newly assisted households have incomes 30 percent or less of the AMI and as such constitutes a lower-bound estimate.

Harm to Current Recipients

This criterion measures the extent to which current recipients of low-income rental assistance programs would be made worse off by the proposed options. Current recipients are harmed if they face increased costs, less preferable housing options than their current housing, or other adverse effects which lower their well-being. In general, policy options that minimize the harm to current recipients are more preferable. The degree of harm done to current recipients is evaluated according to a Low-Medium-High scale.

Additional Administrative Burden

This criterion considers the extent of added administrative difficulty that would be created by the proposed options. It takes account of the various administrative entities that would be affected by each option and evaluates how they might experience an increase, a decrease, or no change in their administrative tasks. In general, policy options that minimize additional administrative tasks or fees are more preferable. The additional administrative burden for each option is evaluated according to a Low-Medium-High scale.

Political Feasibility

This criterion evaluates the likelihood of Congress passing legislation in the near term that authorizes each of the proposed options. In doing so, this criterion considers current and past legislative history as well as the views of stakeholders who either support or stand to lose from the proposed options. In general, policy options that have a greater likelihood of being enacted into law in the near term are more preferable. As with the previous two criteria, political feasibility is evaluated according to a Low-Medium-High scale.

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¹⁷ See Appendix B: Technical Appendix, calculation 1 for details.

Weighting of Evaluative Criteria

Table 1 – Weighting of Evaluative Criteria

Criterion	Weight
Savings	0.1
Effectiveness	0.4
Harm to Current Recipients	0.2
Additional Administrative Burden	0.2
Political Feasibility	0.1

Table 1 shows the relative weighting for each criterion in my analysis. Effectiveness is weighted most heavily because assisting additional households is the main goal of my policy options. While options that generate more savings are generally more desirable, each of my options proposes to spend no additional money; therefore, savings are valuable insofar as they increase the option's ability to serve additional households and as such are weighted less heavily. Harm to current recipients and additional administrative burden receive relatively greater weight in my analysis; options that minimize the negative impact on current recipients and administering entities while serving additional households are viewed more favorably. Lastly, political feasibility is weighted less heavily due to the current legislative environment. The reality is that these options are unlikely to be placed on the legislative agenda in the near term – but they are analyzed nonetheless. When Congress next considers major reforms to low-income housing programs, this paper could serve as a resource of deficit-neutral solutions that would assist more households. Until then, the feasibility of legislation in the short term is not given as much weight.

Policy Options

In this section, three policy options are evaluated using the criteria described in the previous section: repeal the LIHTC and expand the HCV program (Option 1); increase the tenant rent contribution and expand the HCV program (Option 2); and phase out major HUD programs and create a reformed housing voucher system (Option 3). Although the "status quo" does not receive formal consideration in my analysis, largely owing to the fact that it spends additional money, it nonetheless merits discussion at least as a reference point for the proposed options.

Let present trends continue ("Status quo")

In recent years, federal funding has shifted away from public housing and toward the more privately-oriented HCV, PBRA, and LITHC programs. CBO (2015) reports that real spending for public housing declined by \$3 billion over the 2000-2014 period, while real spending on the Section 8 programs and LIHTC program increased by a respective \$6.9 billion and \$1.7 billion over that same period. As a result, the stock of public housing units has declined by over 400,000 units since it peaked in 1991 (Olsen, 2017). CBO (2015) suggests that this shift towards more private involvement in low-income housing has been beneficial for tenants by reducing the geographic concentration of low-income households and providing tenants with a wider range of housing options from which to choose.

Nevertheless, the recently enacted Consolidated Appropriations Act of 2018 ("Omnibus") increased funding for HUD programs, including public housing, by nearly 10 percent. Table C.1 in Appendix C summarizes the changes. The public housing and HCV budgets were increased by nearly \$1 billion and \$1.7 billion, respectively, above 2017 enacted levels, while PBRA received full renewal funding (Sard, 2018). The Omnibus bill also increased allocation levels for the LIHTC program by 12.5 percent over four years at an additional cost of \$2.8 billion over a 10-year period (Michel, Michel, and Ligon, 2018). Furthermore, it added another allocation test for LIHTC projects, allowing developers to build units that include tenants earning up to 80 percent of the AMI (Michel, Michel, and Ligon, 2018). This addition unfortunately increases the program's inability to target the poorest households.

Although the Omnibus bill will likely result in more households being assisted, it does so at a significant additional taxpayer cost. Additionally, it maintains proportional reliance on project-based programs, which have been shown to be cost-ineffective relative to vouchers. Overall, the most likely outcome of letting present trends continue is that the current system will assist a slightly higher number of low-income households than it currently does while keeping the current system intact at an added cost.

Option 1: Repeal the LIHTC, and expand the HCV program with the savings

C	ummary	,
U	ununu j	y

	Summary of Option 1		
Criteria		Option 1: Repeal LIHTC & expand HCV	
ive	Savings (\$)	\$73,000,000,000	
Evaluative	Effectiveness (# addt. households served)	811,000	
ival	Harm to Current Recipients	Low	
Щ	Additional Administrative Burden	Low/Medium	
	Political Feasibility	Low	

Description

Despite being the largest and fastest-growing program in the current system, the LIHTC has escaped significant scrutiny, owing in no small part to the fact that it is permanently enacted in the tax code and does not depend on appropriated spending. However, recent research on the program's cost-ineffectiveness, poor targeting of subsidies to low-income households, and distorted incentives argues strongly for its elimination. This option proposes that Congress halt new authorizations under the program beginning in fiscal year 2019; current contractual obligations would be honored for the life of the contracts. The second part of this policy would use the savings generated by repealing the LIHTC to increase the budget of the HCV program.

The primary rationale for this option is that shifting expenditures to a more cost-effective form of assistance will enable housing programs to serve additional households. In fact, CBO (2016)

suggests that a repeal of the LIHTC program could be paired with an expansion of the HCV program. Because HCVs "are typically a less expensive way to provide housing assistance than the LIHTC," using all the savings from repeal of the LIHTC to expand the HCV program "would increase the total number of households receiving assistance...[while] deficits would be unaffected, on balance" (CBO, 2016, pp. 190). Advocates of the LIHTC argue that its elimination would reduce the supply of affordable housing available to low-income households. This would not be the case if the savings were used to offer housing vouchers to such households. In fact, portable vouchers increase the affordable housing stock for low-income families as such vouchers can be used outside of designated housing projects (Olsen, 2008). Olsen (2018a) concludes that the housing affordability problem does not argue for the subsidized construction of LIHTC units because the HCV program could make the same number of units available and affordable at a much lower taxpayer cost.

Savings

OMB (2018) estimates that the LIHTC program cost federal taxpayers \$8.31 billion in 2017. I assume that a repeal of the LIHTC program would achieve this amount in savings in each year over the 10-year implementation window. Using a 3 percent discount rate, I estimate that this option would yield a 10-year savings to the federal government of \$73 billion in present value terms.

This estimate almost certainly understates the amount of savings that would actually be achieved. First, it does not account for the recent Omnibus changes, which are projected to increase LIHTC allocations by \$2.8 billion over 10 years. Second, this estimate does not account for automatic increases in program spending, based on factors such as population growth, that would occur over the 10-year period. In considering how much money would be available for reallocation to the HCV program over a 10-year period, it is worthwhile to consider projections that account for automatic growth in LIHTC tax expenditures over this period; I consider such projections as an upper-bound savings estimate in the Technical Appendix. 19

Effectiveness

Per CBO's estimate, I assume that an expansion of the HCV program by \$18 billion over 10 years would serve 200,000 additional households. Therefore, I estimate that an expansion of the HCV program by \$73 billion over 10 years – the estimated amount saved from a repeal of the LIHTC program – would serve about **811,000** additional households. At least **608,000** of these households would have incomes 30 percent or less of the AMI, assuming that 75 percent of the newly assisted households have ELIs.

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¹⁸ The staff of the Joint Committee on Taxation (JCT) estimates that repealing the LIHTC would increase revenues by \$33.5 billion over a 10-year period (CBO, 2016). According to CBO (2015), "revenue estimates, unlike estimates of tax expenditures, take into account the interaction between tax provisions and people's behavioral responses to a change in the tax code" (CBO, 2015, pp. 28). However, housing policy expert Ed Olsen believes that this figure severely underestimates savings, probably because it does not account for current commitments, and that using tax expenditures to project savings is more appropriate (Olsen, 2018b). Nevertheless, I consider \$33.5 billion as a lower-bound savings estimate in the Technical Appendix.

¹⁹ See Appendix B: Technical Appendix, calculation 2.

Harm to Current Recipients

The LIHTC program offers tax credits to developers for new construction and substantial renovation of existing projects. Repealing the program would thus have little adverse effect on low-income households that occupy already-built LIHTC units. CBO (2016) notes that the poorest households often cannot even afford the rent-restricted units in LIHTC projects without additional subsidies. In fact, GAO (1997) finds that owners of LIHTC projects received Section 8 assistance on behalf of about 40 percent of their tenants; this is roughly equivalent to the percentage of ELI households that were assisted by the LIHTC in 2013. These households would not lose their additional subsidies from a repeal of the LIHTC. Overall, this option would cause **Low** harm to current recipients.

Additional Administrative Burden

The CRS writes that "the process of allocating, awarding, and then claiming the LIHTC is complex and lengthy" (Keightley, 2018, pp. 2). GAO (1997) finds that the complex administrative process consumes 10 to 27 percent of the equity on LIHTC projects. Edwards and Calder (2017) estimate that LIHTC administration costs state bureaucracies more than \$100 million per year; they also note the proliferation of numerous law and accounting firms whose growth has almost single-handedly been fueled by the need to administer the LIHTC. All this is to suggest that repealing the LIHTC would reduce the large administrative burden associated with the program.

Still, transferring the savings to expand the HCV program would be difficult as a practical matter. Olsen (2017) points out that it would be difficult to arrange this transfer between the congressional committees that oversee the LIHTC and HCV programs; in the Senate, the Finance Committee oversees the IRS and LITHC, while the Committee on Banking, Housing, and Urban Affairs oversees HUD programs. Overall, while a repeal of the LIHTC would likely ease existing administrative burdens, the reallocation of savings to the HCV program would prove difficult. As such, I evaluate this option as imposing a **Low/Medium** additional administrative burden.

Political Feasibility

Despite the demonstrated inadequacies of the LIHTC, it remains a popular, bipartisan program. Edwards and Calder (2017) argue that this is because the LITHC generally appeals to the ethos of both major political parties: Republicans support it because it is a tax break, while Democrats support it because it constitutes welfare spending. Moreover, a broad coalition of beneficiaries and supporters of the LIHTC wields significant political influence; this coalition includes private developers, financial intermediaries, law and accounting firms, state housing agencies, and anti-poverty groups. For the most part, these various organizations stand to lose significant profits from a repeal of the LIHTC. Indeed, Michel, Michel, and Ligon (2018) assert that Congress' initial decision not to expand the LIHTC in the Tax Cuts and Jobs Act of 2017 was "a small victory over the myriad business interests who lobbied to increase their subsidy" (Michael, Michel, and Ligon, 2018, pp. 3). However, the Omnibus bill expanded the LIHTC, and current proposals in Congress would expand it further; for example, a bipartisan Senate bill sponsored by Sen. Maria Cantwell (D-WA) and Sen. Orrin Hatch (R-UT) would expand the program by 50

percent, well above the Omnibus increase. Given the strong political forces that support the LIHTC, I evaluate the political feasibility of repealing the program as **Low**, even if the savings were used to serve additional households.

Option 2: Raise tenant rent contribution, and expand the HCV program with the savings

Summary

	Summary of Option 2		
Criteria		Option 2: Increase tenant rent & expand HCV	
	Savings (\$)	\$20,400,000,000	
Evaluative	Effectiveness (# addt. households served)	227,000	
valı	Harm to Current Recipients	Medium/High	
田	Additional Administrative Burden	Low	
	Political Feasibility	Low	

Description

In major HUD programs, the value of a housing subsidy is the market rent of a dwelling unit minus the tenant rent contribution, generally 30 percent of the household's adjusted income. Olsen (2014) argues that there is no compelling rationale for this particular percentage; prior to 1982, the standard was 25 percent. Therefore, this option proposes to increase tenants' rent contribution from 30 to 35 percent of the household's adjusted income. This increase would be implemented as soon as is administratively feasible, but would apply only to households that are not headed by a person who is elderly or disabled. Additionally, the proposed rent changes would include "hardship exemptions" akin to those included in the Trump administration's recent rent reform proposal (HUD, 2018). Under this provision, PHAs or building owners would be authorized to grant exemptions to households that would be unable to pay the higher rent due to financial hardship; households could be exempted if they experienced certain circumstances, including a recent loss of employment or death in the family, or if they faced eviction as a result of the policy change. The second part of this policy would use the savings achieved from the altered rent structures to increase the budget of the HCV program.

Equity is the primary rationale behind this option. By expanding the HCV program to serve additional households, this option reduces the inequity between assisted and unassisted households. Moreover, it reduces the "preferential treatment" of assisted households by putting them on more equal footing with eligible yet unassisted households. As described earlier, more than half of the latter spend more than 50 percent of their income toward rent; this option would reduce the rental payment disparity between assisted and unassisted households. Although newly assisted households would also be required to contribute 35 percent of their income toward rent, this contribution would be lower than their payment without assistance in the overwhelming majority of cases. Households that would be worse off with assistance than without will simply not participate. This would target more assistance to the poorest households, which typically pay the largest share of their income toward rent in the absence of assistance. Overall, this option

aligns with assumed taxpayer preferences about equity, namely that it is better to assist three households at reduced subsidy levels than it is to provide subsidies to two households while offering nothing to the third.

Savings

CBO (2016) estimates the savings that would result from a similar policy option if it were enacted in October 2017. Under this option, "tenants' rental contribution would, starting in 2018, gradually increase from 30 percent of adjusted household income to 35 percent in 2022, then remain at that higher rate" (CBO, 2016, pp. 107). CBO estimates that this option would reduce total outlays on HUD's deep subsidy programs by \$18 billion from 2018 through 2026. However, this is only a nine-year period; assuming that outlays would be reduced by the same amount in 2027 as in 2026, CBO's estimates suggest a savings of \$21 billion over 10 years.

More recently, Fischer (2018) describes CBPP's estimates of the effects of the Trump administration's rent reform proposal. CBPP's analysis finds that the proposal would result in a total annual rent increase of \$2,256,334,000 to affected households in HUD's deep subsidy programs. I assume that this total rent increase is equivalent to federal government savings and is the same for each year over the 10-year implementation window. After proper discounting is applied, CBPP's analysis suggests that the Trump administration's proposal would result in 10-year federal government savings of roughly \$19.82 billion.

There is limited information about the methodology employed in the CBO and CBPP analyses. Both analyses focus on HUD's three major rental assistance programs – HCV, PBRA, and Public Housing – but that is the only known similarity between the two analyses. In fact, they likely differ across some important dimensions. For example, CBPP limits its analysis to non-elderly households, while it is not known whether CBO does the same. Additionally, CBO considers a five percent increase in *adjusted* household income – that is, gross income less deductions, such as those for dependents and for certain medical and child care expenses (CBO, 2015). On the other hand, CBPP analyzes the Trump administration's proposal, which increases tenants' rent contribution from 30 percent of *adjusted* income to 35 percent of *gross* income – a larger increase than that proposed by CBO's option.

Given that both the CBO and CBPP analyses include elements that pertain to my particular proposal, and that the difference between the two estimates (about \$1.2 billion over 10 years) is relatively small, my evaluation averages the CBO and CBPP estimates. Thus, I estimate that this option would result in federal government savings of roughly **\$20.4** billion over a 10-year period.

Effectiveness

Per CBO's estimate, I assume that an expansion of the HCV program by \$18 billion over 10 years would serve 200,000 additional households. Therefore, I estimate that an expansion of the HCV program by \$20.4 billion over 10 years – the estimated amount saved by increasing tenants' rent contribution – would serve roughly **227,000** additional households. At least **170,000** of these households would have incomes 30 percent or less of the AMI, assuming that 75 percent of the newly assisted households have ELIs.

Harm to Current Recipients

This option would create **Medium/High** harm to currently assisted households. Because these households would have to pay a larger portion of their income in rent under this proposal, they would have less money to spend on other necessities or work-related expenses, such as child care or transportation. Fischer (2018) estimates that over 1.7 million affected households would see their rent payments increase by an average of 32 percent, or \$120 per month.

Additionally, increasing the rent contribution would effectively increase the marginal tax on tenants' earnings and thus would discourage work (CBO, 2015). Current subsidy formulas in major HUD programs generally reduce the value of subsidies by 30 cents for every additional dollar of household income. Olsen and Zabel (2015) summarize the literature examining the work disincentive effects in major HUD programs, finding that the results are consistent across these programs: on average, they induce adult recipients to earn 10 to 15 percent less income. For example, Jacob and Ludwig (2012) estimate that the receipt of a housing voucher reduced labor force participation among Chicago households between 1997 and 2003 by 6 percent and labor earnings by 10 percent on average. Of course, such studies estimate the work disincentive effects for adults that go from receiving no subsidy to receiving a subsidy which requires them to pay 30 percent of their income toward rent. An increase in this rent contribution from 30 to 35 percent would surely have a smaller adverse effect on earnings. However, work is a necessary pathway out of poverty; this option would make currently assisted households worse off in this regard.

Additional Administrative Burden

From an administrative perspective, this option would be relatively easy to implement. Implementing the altered rent structure would impose little additional burden to administering PHAs and building owners as it involves a relatively simple technical change to existing subsidy formulas. Granting hardship exemptions would likely involve additional work for administrating bodies, but this work would not differ substantially from current administrative tasks. Moreover, the number of households that would qualify for such exemptions would likely be small. For these reasons, this option is expected to impose a **Low** additional administrative burden.

Political Feasibility

In late April 2018, HUD Secretary Ben Carson released the Trump administration's proposed legislation to change federal rental assistance programs. Among other provisions, this legislation would raise the tenant rent contribution in major HUD programs from 30 percent of adjusted income to 35 percent of gross income. In fact, HUD documents state that this provision would be implemented as a pilot in PBRA and other smaller HUD programs in 2018 (HUD, n.d.-a). However, a full implementation of this provision in the public housing and HCV programs requires congressional approval. Housing advocates such as NLIHC and CBPP have already condemned this proposal as one which would impose yet another burden on low-income households (O'Donnell, 2018; Fischer, 2018). It would be sure to face opposition from Democrats and perhaps some Republicans in Congress for the same reason, even if the savings were reallocated to serve additional households; the increase in the rent contribution itself would

surely be a non-starter for many policymakers. As such, I evaluate this option as having **Low** political feasibility.

Option 3: Phase out major HUD programs, and create a reformed housing voucher program with the savings

Summary

	Summary of Option 3			
Evaluative Criteria		Option 3: Phase out major HUD programs & create reformed voucher program		
ive	Savings (\$)	\$269,000,000,000		
uat	Effectiveness (# addt. households served)	2,426,000		
`val	Harm to Current Recipients	Low		
Щ	Additional Administrative Burden	Medium/High		
	Political Feasibility	Low		

Description

Under this option, public housing and Section 8 would be gradually phased out, and a reformed housing voucher program would be established at the same taxpayer cost of the phased-out programs. This reformed voucher program would differ from the HCV program in important respects. First, new voucher households would not be allowed to live in subsidized projects; according to Olsen (2014), the reason for this restriction is that each voucher household living in a subsidized project would take the place of another household that could be assisted and would receive larger subsidies than similar voucher households living in otherwise unsubsidized units. Second, the reformed program would offer assistance to all families eligible to receive it, but this eligibility would be limited to the poorest households. I follow Olsen's approach by limiting eligibility to households in the lowest two real income deciles; this approach is similar to that of HASE, which offered tenant-based assistance to all of the poorest 15 to 20 percent of households. Third, new voucher households would receive less generous subsidies than current HCV households. According to CRS (2014), the maximum subsidy available to HCV households, also known as the payment standard, is set by local PHAs at a level between 90 and 110 percent of HUD-defined fair market rents (FMRs). By contrast, Olsen (2014) estimates that the payment standard in the reformed program would be 20 to 30 percent less than FMRs. Although some believe that reduced payment standards will prevent the poorest households from participating, Olsen (2014) finds that these households will not only be able to afford market-rate housing, but also will actually experience above-average increases in participation under the reformed program.

The justification for this option is based on cost-effectiveness and equity. The implication of the empirical literature is that tenant-based vouchers could provide current recipients of project-based assistance with equally good housing for the same rent at a significantly lower taxpayer cost. This argues strongly for transitioning from project-based assistance to tenant-based

assistance. By offering reduced subsidies to more of the poorest households, this option also serves taxpayers' assumed preferences about equity, as described in Option 2.

Savings

As a first step, this option proposes phasing out HUD's major programs, namely public housing and Section 8 HCVs and PBRA. In fiscal year 2016, reported federal outlays for these programs totaled about \$36.8 billion (Rector and Menon, 2018). Per Olsen (2014), I exclude the portion of this budget that serves single non-elderly people. Following his approach, I assume that 16.7 percent of the \$36.8 billion goes to these excluded households, which leads to the conclusion that about \$30.7 billion is spent per year on households included in the analysis. After proper discounting is applied, this estimate suggests that phasing out public housing and Section 8 programs would save federal taxpayers roughly \$269 billion over a 10-year period. However, this figure understates the amount of taxpayer savings because it does not account for the recent Omnibus increases nor other taxpayer costs which are not included in reported HUD outlays.

Effectiveness

One of the main purposes of Olsen (2014) is to estimate the long-run effect of transitioning to a reformed voucher system on the number of households served. Table C.2 in Appendix C shows his results broken down by household type. Most relevant for my analysis is his finding that 55 percent more households would be served under the reformed voucher program than under the current system. Table C.1 shows that about 4.4 million households are served by public housing, PBRA, and HCVs. Multiplying this total by 55 percent indicates that roughly **2.4 million** additional households would be served under the reformed program. Virtually all of these households would be in the first or second real income deciles. Moreover, Olsen finds that households that are most underserved by the current system experience the largest participation increases; for example, the number of Hispanic-headed households and households with five or more members is estimated to increase by 134 and 175 percent, respectively.

Harm to Current Recipients

This option could be implemented with **Low** harm to households in the current system. Current recipients would be grandfathered into the reformed voucher program, that is, they would continue to receive the same subsidies that they would have received in the absence of reform. For example, current voucher recipients could continue to receive the more generous subsidies offered through the HCV program while newly assisted households would receive less generous subsidies in order to serve more households. Olsen (2014) argues that although newly assisted households will generally have less money spent on their behalf, they will not necessarily be served less well than under the current system. Indeed, evidence suggests that current recipients of project-based assistance could be served equally well by vouchers at a lower cost, so the amount of money spent per household is a poor indicator of how well they are served. Additionally, many households could potentially benefit from a well-designed transition. Public housing tenants, for example, could be offered a choice between staying in their unit under the

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²⁰ Olsen excludes these individuals from his analysis because he "did not have a good basis for predicting their participation rates" (Olsen, 2014, pp. 8).

same terms and receiving a housing voucher.²¹ Overall, current recipients would not be hurt by a properly designed transition to a reformed voucher program.

Additional Administrative Burden

In some ways, the transition to a reformed voucher program could result in a smaller additional administrative burden than might be expected. The new program would still be administered through local PHAs, which already administer the public housing and HCV programs. Additionally, Olsen (2014) posits that the per-recipient household administrative cost for the reformed program would likely be less than that of the current HCV program; this is because the reformed program would serve a greater number of large families, so PHAs would have to deal with fewer households per recipient. Current programs could be phased out gradually to ease the administrative burden associated with such a fundamental reform.

Nonetheless, transitioning to a reformed voucher system is just that – a fundamental reform – and would surely create a fairly large additional administrative burden on local PHAs. In addition to serving current public housing and HCV households, these agencies would be responsible for serving about 3.6 million additional households. ²² This added responsibility would exacerbate existing administrative difficulties associated with vouchers, such as complex coordination between PHAs regarding vouchers' portability feature. Following assumptions from Olsen (2014), I estimate that administrative costs could account for as much as 14 percent of the reformed voucher program's total costs, although this is almost certainly an overestimate. ²³ Overall, given the magnitude of added responsibility on PHAs that would be created, I evaluate this option as imposing a **Medium/High** additional administrative burden.

Political Feasibility

Vouchering out existing project-based programs is not a new idea. Olsen (2014) recalls that the Clinton administration proposed comprehensive legislation for phasing out project-based assistance, and Bob Dole also supported the concept during the 1996 presidential campaign. The 1998 Quality Housing and Work Responsibility Act (QHWRA) mandated the conversion of public housing projects to tenant-based assistance in some cases and allowed it in others (Olsen, 2008). However, the fundamental overhaul of the low-income housing system proposed in this option seems unlikely to receive serious consideration in the current legislative environment. Such reform would likely encounter resistance from stakeholders involved in the current system, such as PHAs, while housing advocates and anti-poverty groups would reject the proposed program due to its less generous subsidies, if for no other reason; in general, these groups prefer increased federal funding for low-income housing programs. For these reasons, I evaluate this option as having **Low** political feasibility.

²¹ More on this in the Implementation section.

²² This includes the roughly 1.2 million households currently served by PBRA and 2.4 million additional households that this option is estimated to serve.

²³ Details on this calculation can be found in Appendix B: Technical Appendix, calculation 3.

Recommendation

Table 2 – Outcomes Matrix

	Policy Options				
Criteria		Option 1: Repeal LIHTC & expand HCV	Option 2: Increase tenant rent & expand HCV	Option 3: Phase out major HUD programs & create reformed voucher program	
Evaluative	Savings (\$)	\$73,000,000,000	\$20,400,000,000	\$269,000,000,000	
lua	Effectiveness (# addt. households served)	811,000	227,000	2,426,000	
ūνa	Harm to Current Recipients	Low	Medium/High	Low	
	Additional Administrative Burden	Low/Medium	Low	Medium/High	
	Political Feasibility	Low	Low	Low	

Based on my analysis of the three proposed options (summarized in Table 2), I recommend Option 3: Phase out major HUD programs and create a reformed voucher program with the savings. Overall, this option would serve a significantly greater number of additional households than Options 1 and 2 while doing minimal harm to current recipients. Still, this option would impose a larger additional administrative burden than Options 1 and 2. It could thus be argued that Option 1 is preferable to Option 3; although Option 1 serves fewer additional households, it would do so without hurting current recipients or imposing a large additional administrative burden. However, the primary goal of each of these options is to serve additional households that are unassisted in the current system; this is why the effectiveness criterion is weighted most heavily in my analysis. Therefore, the large number of additional households that could be served by Option 3 easily justifies the additional administrative workload and fees it would generate.

Option 3 could also be combined with Options 1 and/or 2 to create further positive outcomes. For example, Olsen (2014) indicates that an increase in the tenant rent contribution to 35 percent of income would require higher payment standards to maintain the same taxpayer cost for the reformed voucher system. This would serve the interest of equity by leading to higher subsidies for the poorest households and lower subsidies for households with higher incomes. Additionally, Olsen (2014) predicts that the poorest households in LIHTC projects would gradually be replaced by higher-income households because new voucher recipients under the reformed program would not be allowed to live in these projects. This might provide further justification for eliminating the program as it would increasingly deviate from its stated purpose of serving the poorest households. As before, savings from a repeal of the LIHTC could be used to assist additional households in the reformed voucher program without hurting current recipients.

Implementation

As previously mentioned, transitioning to a reformed voucher program would constitute a sweeping transformation of current rental assistance programs. Because of this, it is difficult to anticipate the potential consequences of such a transition. Olsen (2008) suggests that it would be prudent to begin with a demonstration program in public housing; such a program would be useful for policymakers because it would produce evidence on the effects of this proposal and

highlight potential problem areas for improvement.²⁴ In this demonstration program, willing PHAs would implement a version of the reformed voucher program on a random subset of their public housing projects. These PHAs would receive additional administrative funds for their efforts, but would otherwise receive the same amount of federal money as they would have under the current system. Similar to HASE, the demonstration program would require PHAs to offer a tenant-based voucher to all current recipients of these public housing projects; these recipients could choose between accepting the voucher and remaining in their current units on the same terms. Households coming off of waiting lists would be offered an equivalent choice when current recipients leave the public housing program or give up the vouchers they used to move from public housing units. Olsen (2008) writes that the results of HUD's Moving to Opportunity (MTO) demonstration program indicate that public housing projects would at least initially retain most of their tenants, although tenants in projects located in higher-poverty neighborhoods would likely accept vouchers and move out at a higher rate.

By offering current recipients the choice between a voucher and their current unit, the program would ensure that current recipients are made at least no worse off by the program. Indeed, many recipients will benefit from using a housing voucher to move out of their current units. However, Olsen indicates that some current tenants could be made worse off, namely those who want to remain in a project that a PHA decides to sell and who would be forced to move. Although these tenants would be offered the choice between vacant units in other public housing projects and a housing voucher, their new housing may be less desirable to them than their previous housing. Olsen suggests some ways to minimize the harm to these tenants, such as a legislative requirement that requires a certain percentage of a public housing project's tenants to approve the sale. In general, however, the potential negative impact to current recipients must be balanced against the potential benefits to newly assisted households. This demonstration program would go a long way toward implementing the reformed voucher program on a large scale, which ultimately will benefit many additional households.

A Note on Local Regulatory Reforms

Each of the options in this paper proposed a policy that could be enacted by the federal government to serve additional households. However, a growing literature suggests that local reforms should be strongly considered when addressing the housing affordability problem, particularly those which would scale back zoning and land-use regulations. Currently, these regulations serve to limit the affordable housing supply by artificially increasing the cost of new developments (Edwards and Calder, 2017). Instead of relying on federally-subsidized housing projects, state and local governments could enact reforms to their zoning and land-use regulations in order to substantially increase the supply of affordable housing.²⁵

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²⁴ The following discussion of the demonstration program largely follows the approach outlined in Olsen (2008).

²⁵ For more information, see Calder (2017); she provides an excellent introduction to and analysis of this issue.

Appendix A: Data Analysis and Methodology

This appendix describes the methodology and results of my analysis of the 2013 American Housing Survey (AHS).

Estimating Market Rent and Subsidy for Subsidized Households

The AHS does not report the market rents for units occupied by subsidized households. To estimate the market rents of these units, I closely follow Early and Olsen's (2012) approach. ²⁶ These authors estimate a hedonic regression equation that explains market rent for unsubsidized households. ²⁷ In this equation, gross market rent is regressed on numerous explanatory variables. According to the authors:

Explanatory variables include structural characteristics (number of bedrooms, existence of working kitchen appliances, adequate heat in the unit, etc.), neighborhood characteristics (problems with crime, vacant buildings, etc.), and contract conditions (whether the unit has been rented for more than one year, number of persons per bedroom, etc.). We [also] include a dummy variables for each [geographic] area to control for differences in housing costs across areas. (pp. 401)

Table A.1 reports the regression results and summary statistics of the variables used in the hedonic equation. For the most part, Table A.1 replicates Early and Olsen's Table 12.5. There are minor differences between the two tables; for example, I do not include the neighborhood variables indicating whether crime or noise is a problem because these variables are not included in the 2013 AHS. Like Early and Olsen, I do not report the coefficients on the roughly 140 area dummies included in my equation.

Using this hedonic regression equation, I predict the market rent for subsidized households. Following Early and Olsen, I estimate the value of a housing subsidy by taking the difference between the estimated market gross rent (unit rent plus utilities cost) of a subsidized unit and the tenant rent, that is, the amount the tenant reports paying for rent plus utilities. However, this is a nominal value, so I convert it (along with income) into real 2013 dollars using imputed Consumer Price Index (CPI) data.

Results

Olsen (2003, Table 6.18) reports the results of older studies estimating the variation in the real mean housing *benefit* across households with similar characteristics; similarly, my results estimate the variation in the real mean housing *subsidy* across similar characteristics.²⁸ (Table 6.18 is reproduced below.) Each of the studies included in the table includes income, family size, race of the head of household, and age of the householder in their regression equations. I follow Olsen and Barton's approach (1983); these authors also include sex of the head of household in their equation.

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²⁶ See Early and Olsen (2012), Table 12-5, pp. 400-403. Their approach expanded on the available literature "by accounting more fully for unit and neighborhood attributes when determining the value of housing subsidies" (pp. 400)

²⁷ Ed Olsen says that this equation comes at the end of a 4-5 year process, so it is quite well-estimated.

²⁸ This is not a fundamental difference for the purpose of this analysis.

Table A.1 Results of Hedonic Regression Explaining Market Rent with 2013 AHS Data and Summary Statistics for Variables Involved

Statistics for variables hirvorved				
	Mean	Std. Dev.	Coefficient	Std. Erro
Log of gross rent	6.783	0.658	-	
One and one half bathrooms	0.099	0.299	0.068*	0.017
Two or more full baths	0.285	0.452	0.124*	0.014
No bedrooms	0.019	0.135	-0.307*	0.038
One bedroom	0.267	0.443	-0.118*	0.013
Three bedrooms	0.244	0.429	0.105*	0.014
0.25 times the number of bedrooms, if number				
of bedrooms is greater than three	0.082	0.284	0.184*	0.020
One other room	0.021	0.142	-0.135*	0.035
Three other rooms	0.320	0.467	0.048*	0.011
0.25 times the number of other rooms, if number				
of other rooms is greater than three	0.096	0.309	0.082*	0.017
Single-family detached	0.295	0.456	-0.004	0.015
Single-family attached or duplex	0.075	0.264	0.02	0.020
Three- or four-unit multifamily	0.109	0.312	0.033*	0.017
10- to 19-unit multifamily	0.111	0.314	0.058*	0.017
20-unit or larger multifamily	0.166	0.372	0.188*	0.016
Age of the building	51	27	-0.013*	0.002
Age of the building squared	3278	2910	0.000*	0.000
Age of the building cubed	241,424	282,845	-0.000*	0.000
Central electric heat	0.284	0.451	-0.008	0.013
Built-in electric units	0.069	0.254	0.015	0.020
Nonelectric, vented, or unvented room heaters	0.017	0.128	-0.186*	0.037
Central heat burning fuel oil	0.017	0.116	0.025	0.037
Other heating system not specified above	0.014	0.292	-0.106*	0.019
No air conditioning	0.143	0.350	-0.064*	0.017
At least one room air conditioner but no central	0.115	0.330	0.001	0.017
air conditioning	0.341	0.474	-0.077*	0.014
Building problems (1)	0.015	0.122	-0.008	0.039
Unit lacks important features (2)	0.088	0.283	-0.026	0.017
Multiple equipment breakdowns (3)	0.054	0.226	0.054*	0.021
	0.001	0.220	0.001	0.021
Tenant rates neighborhood quality as excellent	0.377	0.485	0.119*	0.022
Tenant rates neighborhood quality as good	0.566	0.496	0.086*	0.021
Tenant observed signs of rats in last 90 days	0.011	0.106	0.005	0.044
Census enumerator observed abandoned				
buildings on the street	0.045	0.208	-0.072*	0.023
Tenants are disturbed by trash, litter, or junk in				
the area	0.015	0.120	-0.01	0.042
Head of the household is black	0.168	0.374	-0.081*	0.014
Head of the household is Hispanic	0.196	0.397	-0.076*	0.014
Head of the household is another race (non-				
white)	0.080	0.271	-0.059*	0.018
Number of persons per room	0.530	0.301	0.124*	0.017

Table A.1 (Continued)

	Mean	Std. Dev.	Coefficient	Std. Error
Length of tenure in years	4.673	7.444	-0.018*	0.001
Length of tenure squared	77.246	307.714	0.000	0.000
Electricity is included in rent	0.090	0.286	-0.037*	0.018
Gas heat is included in rent	0.153	0.360	-0.055*	0.015
Oil heat is included in rent	0.051	0.219	0.023	0.025
Other fuel is included in rent	0.003	0.056	-0.178*	0.088
Other utilities included in rent	0.716	0.451	0.079*	0.011
	Number of observations		15,	116
	Adjusted R-sq	Adjusted R-squared		251

Notes: * indicates significance at the 5 percent level. Unless otherwise noted, all variables are coded 1 if condition exists; 0 otherwise. (1) Building problems = 1 if the unit has two or more of the following problems: basement leaks, roof leaks, open cracks or holes in walls or ceilings, holes in floor, or broken plaster or peeling paint over an area exceeding one square foot; 0 otherwise. (2) Unit lacks important features = 1 if unit has any of the following deficiencies: lacks complete plumbing; lacks complete kitchen facilities; sewer system is a chemical toilet, privy, outhouse, facilities in another structure, or some sewage/toilet facilities; wiring in the house not concealed; or some rooms lack working electrical outlets; 0 otherwise. (3) Multiple equipment breakdowns = 1 if unit has any of the following equipment breakdowns: two or more water breakdowns lasting six hours or more; two or more flush toilet breakdowns lasting six hours or more; two or more public sewer breakdowns lasting six hours or more; or fuses or circuit breakers blew two or more times within the last 90 days; 0 otherwise. Dummies identifying areas are omitted from the above table.

My regression results are presented in Table A.2. They are consistent with the major findings of the previous studies summarized in Olsen (2003), namely that the real subsidy varies significantly and negatively with income and significantly and positively with family size. In other words, my results show that poorer and larger families receive larger real housing subsidies, all else equal. Additionally, my analysis shows that households with an older head receive larger subsidies; this positive, statistically significant relationship between householder age and subsidy/benefit is also found in multiple older studies. Similar to the results in Olsen and Barton (1983), I find that the sex of the household head has no significant relationship with the size of the subsidy received. Interestingly, though, I find that black-headed households received a statistically significant, roughly \$76 lower real monthly subsidy than white-headed households. There are several possible explanations for this result: blacks may live in poorer neighborhoods than whites and as such receive smaller subsidies on average; blacks and whites may live in units that differ on certain unobservable characteristics; and my analysis may underestimate the subsidy to black-headed households.

Olsen (2003) defines the amount of variation present as the standard deviation of the error term divided by the mean benefit. Similarly, I estimate the amount of variation as the root mean squared error (MSE) reported by the regression (447.2) divided by the value of the real mean subsidy (461.10). This yields a standardized variation measure (SE/Subsidy) of roughly 0.97, indicating a large amount of variation in the housing subsidy among households with similar characteristics in the 2013 AHS.²⁹ This measure constitutes an estimate that is higher than all but

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²⁹ This variation measure should be understood as follows. Among households with the same characteristics, there is a distribution in the subsidy, that is, many receive more generous and less generous subsidies relative to the mean.

one such measure among the older studies; notably, the study with the highest measure also considers all low-income housing programs, as opposed to one specific program.

Table 6.18 Distribution of Benefits Among Program Recipients

		0 0	•			
	Income	Family Size	Black	Age	SE/Benefit	Sample
Public housing						
Olsen and Barton (1983), 1965	**	+**			0.38	1,366
Olsen and Barton (1983), 1968	**	+**	_	_	0.43	1,515
Murray (1975)	-	+	+**	+**		1,388
Kraft and Olsen (1977)	**	+**			0.93	333
Hammond (1987)	**	+**	_	+**	0.89	804
Section 8 Existing (tenant-based)	_					
Reeder(1985)	**	+**	_	+	0.42	1.099
All programs	_					,
Hammond (1987)	**	+**	+	+**	1.23	1,088
, /	_					,

Notes: This table summarizes the results from multiple regression analyses in several articles. In each case, the benefit is regressed on the variables presented in the first four columns and other variables. Olsen-Barton and Kraft-Olsen included sex of the head of the household; Hammond included sex and education of the head and dummy variables for region of the country and size of the locality; and Reeder included dummy variables for sex of the head, other minority, and nonmetropolitan residence as well as an overall price index and the squares of income and family size. In Murray, age is a dummy variable that indicates whether the head is 62 years or older. Murray also includes dummy variables for different household compositions rather than a single variable for family size. The signs presented in the table indicate whether mean benefit varies directly (+) or inversely (-) with the household characteristic. The fifth column presents the standard deviation of the error term divided by the mean benefit, as a measure of the amount of variation present. Finally, the last column gives the number of observations used in the regression.

*The coefficient was statistically significant at the 5 percent level.

Table A.2 Distribution of Housing Subsidy Among Subsidized Households

Family characteristics	Real monthly subsidy
Real monthly income	-0.065*
	(0.003)
Number of persons	9.079*
	(4.361)
Head of household is black	-76.20*
	(12.58)
Head of household is Hispanic	-14.36
	(15.74)
Head of household is other race (non-white)	30.25
	(20.48)
Age of household head in tens of years	16.50*
	(3.064)
Head of household is female	1.768
	(12.01)
Constant	456.0*
	(25.74)
Observations	7,364
Adjusted R-squared	0.074

Notes: * indicates significance at the 5 percent level. Standard errors are in parentheses. Source data is the 2013 American Housing Survey.

Indeed, the variation should be viewed relative to the mean. Say a reported standard error estimate from the regression was 200; this might seem large if the mean subsidy was \$300, but not as much if it was \$1000.

Appendix B: Technical Appendix

1. Justifying CBO's estimate that 200,000 additional households could be served in the HCV program at a 10-year federal cost of \$18 billion

Using HUD's *Picture of Subsidized Households* data portal, I find that the average HUD expenditure in the HCV program per household per month was \$775 in 2015. Multiplying by 12 yields an estimate of the average yearly HUD expenditure of \$9,300 per household in the HCV program. Multiplying that estimate by 200,000 suggests that it would have cost HUD \$1.86 billion in one year to serve 200,000 additional households in the HCV program. Multiplying \$1.86 billion by 10 produces a crude, undiscounted estimate of \$18.6 billion for the 10-year federal cost of serving 200,000 additional households in the HCV program; the fact that this figure is similar to CBO's estimate suggests that the latter is reasonably justified for use in my evaluation.

2. LIHTC sensitivity analysis calculations

If the JCT estimate is to be taken at face value, a repeal of the LIHTC would increase federal government revenues by \$33.5 billion over a 10-year period. Using this lower-bound amount of savings, I estimate that the HCV program could assist roughly 370,000 additional households, including at least 280,000 ELI households. This would still be greater than the number of additional households that would be assisted under Option 2.

Alternatively, it is worthwhile to consider the automatic spending increases the program would experience over this period. I consider the projected increases in OMB (2018, Table 13-1) as the automatic changes that would occur in the program absent legislative changes. I use the figures reported for the 10-year period spanning 2017-2026, and discount each figure appropriately using a 3 percent discount rate. This yields an estimated 10-year savings to the federal government of \$82.1 billion in present value; I consider this a rough upper-bound approximation of the amount of savings that could be achieved by a repeal of the LIHTC. If these savings were used to expand the HCV program, I estimate that about 913,000 additional households could be served, including at least 685,000 ELI households.

3. Calculating administrative costs for the reformed voucher program

I assume that the per-recipient household administrative fee of the reformed voucher program is the same as that of the HCV program; Olsen (2014) estimates that the latter was \$625 per household in 1999. As mentioned in the discussion of Option 3, the former will likely be less than the latter, so this assumption will likely overstate administrative costs. To calculate the total administrative cost of the reformed voucher program, I multiply this per-household fee by the total number of households that are estimated to be served under the proposed program. The latter number is equal to the number of households that are currently served by major HUD programs (4,412,000) plus the estimated number of additional households that will be served (2,426,000): 4412000 + 2426000 = 6,838,000 total households. Therefore, the total yearly administrative cost of the reformed voucher program is roughly \$4.27 billion. After proper discounting is applied, I estimate that 10-year administrative costs would total \$37.5 billion.

Simply dividing this by \$269 billion (the 10-year present-value savings achieved by phasing out major HUD programs, or the 10-year present-value taxpayer cost of the reformed voucher program) leads to my conclusion that as much as 14 percent of the reformed voucher program's total costs will be administrative costs.

Appendix C: Tables and Figures

Table C.1 – Major Rental Assistance Programs

Program	Number of Households Served	Cost	
LIHTC	2,400,000	\$8.3B in 2017	
PBRA	1,175,000	\$11.5B (same as 2017)	
Public Housing	1,020,000	\$7.3B (~\$1B above 2017)	
HCV	2,217,000	\$22B (\$1.7B above 2017)	

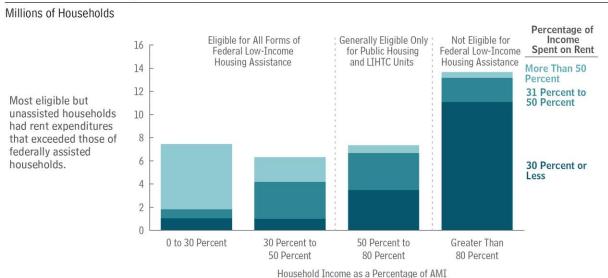
Sources: Olsen (2017); CBPP (2017a); Sard (2018); Michel, Michel, and Ligon (2018).

Note: All costs include Omnibus budget increases except for the LIHTC.

Figure C.1

Figure 4. Return to Reference

Households That Rent but Do Not Receive Federal Low-Income Housing Assistance, by Income and Rent Expenditure, 2013



Source: Congressional Budget Office based on data from Department of Housing and Urban Development, *Worst Case Housing Needs: 2015 Report to Congress* (April 2015), Table A-1A, p. 30, www.huduser.org/portal/publications/affhsg/wc_HsgNeeds15.html.

Note: AMI = area median income; LIHTC = Low-Income Housing Tax Credit.

Source: CBO (2015), pp. 44

 ${\bf Table~C.2}$ ${\bf Summary~of~Effects~of~Basic~Proposed~Reform~on~Number~of~Households~Served}$

Number of Households

Group	Current	Proposed	Absolute	Percentage
	System	Program	Increase	Increase
All	3,339,409	5,186,888	1,847,479	55%
White	1,846,794	2,955,666	1,108,872	60%
Black	1,360,794	1,430,366	69,572	5%
Hispanic	461,222	1,080,702	619,480	134%
Elderly	1,202,217	1,269,977	67,760	6%
Non-Elderly	2,137,192	3,916,910	1,779,718	83%
Metro	2,728,184	4,229,808	1,501,624	55%
Non-Metro	611,225	957,079	345,854	57%
First Real Income Decile	2,239,993	3,864,270	1,624,277	73%
Second Real Income Decile	852,240	1,287,250	435,010	51%
1-2 person	1888015	2196347	308,332	16%
3-4 person	1102278	2031811	929,533	84%
5+ person	349116	958729	609,613	175%

Source: Olsen (2014)

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