

# Cityscape

*A Journal of Policy  
Development and Research*

FIFTY YEARS OF TENANT-BASED RENTAL ASSISTANCE  
VOLUME 26, NUMBER 2 • 2024



**PD&R**



**Managing Editor: Mark D. Shroder**  
**Associate Editor: Michelle P. Matuga**

**Advisory Board**

Peter Bergman  
University of Texas

Martha Galvez  
New York University

Philip Garboden  
University of Chicago

Emily Hamilton  
George Mason University

Peter Hepburn  
Rutgers University

Seema Iyer  
United Nations High Commissioner for Refugees

Olatunde Johnson  
Columbia University

Michael Lens  
University of California Los Angeles

Stephanie Moulton  
Ohio State University

Vanessa Perry  
George Washington University

Jose Pinto Duarte  
Pennsylvania State University

Esther Sullivan  
University of Colorado Denver

Jack Tsai  
University of Texas Health

Margaret Walls  
Resources for the Future



**PD&R**

# Cityscape

*A Journal of Policy  
Development and Research*

FIFTY YEARS OF TENANT-BASED RENTAL ASSISTANCE  
VOLUME 26, NUMBER 2 • 2024

U.S. Department of Housing and Urban Development  
Office of Policy Development and Research

The goal of *Cityscape* is to bring high-quality original research on housing and community development issues to scholars, government officials, and practitioners. *Cityscape* is open to all relevant disciplines, including architecture, consumer research, demography, economics, engineering, ethnography, finance, geography, law, planning, political science, public policy, regional science, sociology, statistics, and urban studies.

*Cityscape* is published three times a year by the Office of Policy Development and Research (PD&R) of the U.S. Department of Housing and Urban Development (HUD). Subscriptions are available at no charge and single copies at a nominal fee. The journal is also available on line at [huduser.gov/periodicals/cityscape.html](http://huduser.gov/periodicals/cityscape.html).

PD&R welcomes submissions to the Refereed Papers section of the journal. Our referee process is double blind and timely, and our referees are highly qualified. The managing editor will also respond to authors who submit outlines of proposed papers regarding the suitability of those proposals for inclusion in *Cityscape*. Send manuscripts or outlines to [cityscape@hud.gov](mailto:cityscape@hud.gov).

**Opinions expressed in the articles are those of the authors and do not necessarily reflect the views and policies of HUD or the U.S. Government.**

Visit PD&R's website, [huduser.gov](http://huduser.gov), to find this report and others sponsored by PD&R. Other services of HUD USER, PD&R's Research and Information Service, include listservs, special interest and bimonthly publications (best practices, significant studies from other sources), access to public use databases, and a hotline (1-800-245-2691) for help with accessing the information you need.

# Contents

## *Symposium*

<i>Fifty Years of Tenant-Based Rental Assistance</i> .....	1
--	---

Guest Editors: Peggy Bailey and Brian J. McCabe

### Guest Editors' Introduction

<b>Fifty Years of Tenant-Based Rental Assistance: Introducing a Symposium on the History and Future of the Housing Choice Voucher Program</b> .....	3
---	---

<b>The Evolution of Funding Policy in the Housing Choice Voucher Program</b> .....	15
by Barbara Sard	

<b>Participation, Transition, and Length of Stay in Federal Housing Assistance Programs</b> .....	41
by Andrew J. Greenlee and Kirk McClure	

<b>Location Patterns of Housing Choice Voucher Households Between 2010 and 2020</b> .....	61
by Gretchen Armstrong, Alexander Din, Mariya Shcheglovitova, and Rae Winegardner	

<b>Section 8 in the Courts: How Civil Rights Litigation Helped to Shape the Housing Choice Voucher Program</b> .....	89
by Philip Tegeler and Sam Reece	

<b>Landlords and Housing Vouchers: 50 Years of Feedback</b> .....	107
by Philip M.E. Garboden, Eva Rosen, and Isaiah Fleming-Klink	

<b>Increasing Residential Opportunity for Housing Choice Voucher Holders: The Importance of Supportive Staff for Families and Landlords</b> .....	123
by Stefanie DeLuca and Jacqueline Groccia	

<b>Discrimination Against Voucher Holders and the Laws to Prevent It: Reviewing the Evidence on Source of Income Discrimination</b> .....	145
by Martha Galvez and Brian Knudsen	

<b>Porting to Opportunity: An Analysis of Portability in the Housing Choice Voucher Program</b> .....	163
by Greg Miller	

<b>Special Purpose Voucher Programs for People With Disabilities: How They've Evolved, What We've Learned, and Where We're Headed</b> .....	179
by Lisa Sloane, Liz Stewart, and Kevin Martone	

<b>Using Tenant-Based Vouchers To Help People Leave Homelessness: Lessons from Los Angeles</b> .....	197
by Nichole Fiore, Jill Khadduri, and Sam Dastrup	

<b>The Role of Vouchers in the Low-Income Housing Tax Credit Program</b> .....	209
by Dan Emmanuel and Andrew Aurand	

**Project Basing Housing Choice: What We Know and Need to Know About Project-Based Vouchers** ..... 223  
by Daniel Teles and Alyse D. Oneto

**Can Rental Markets Absorb a Major Voucher Expansion?** ..... 239  
by Will Fischer

**Learning from a Crisis: Strategies to Increase Flexibility in Housing Choice Voucher Implementation**..... 257  
by Sarah Gallagher, Sophie Siebach-Glover, Alayna Calabro, Victoria Bourret, and Andrew Aurand

**Direct Rental Assistance: Returning to the Roots of Housing Allowances** ..... 275  
by Paul Joice, Katherine O'Regan, and Ingrid Gould Ellen

**The Future of Rental Assistance: Lessons Learned from Implementing and Evaluating a Direct-to-Tenant Cash Assistance Program, PHLHousing+** ..... 293  
by Vincent J. Reina, Matthew Z. Fowle, Sara R. Jaffee, Rachel Mulbry, and Miranda Fortenberry

**Refereed Papers** ..... 309

**Complete Streets as a Redevelopment Strategy**..... 311  
by Arthur C. Nelson and Robert Hibberd

**Departments** ..... 383

**Data Shop**

**Improving Equitable Representation in Program Eligibility Data**..... 385  
by Tracey Farrigan and Mariya Shcheglovitova

**Calculating County-Level Housing Choice Voucher Gaps: A Methodology** ..... 401  
by Shane Dabney

**Foreign Exchange**

**Causes and Consequences of Zoning Reform in Auckland** ..... 413  
by Ryan Greenaway-McGrevy

**Learning From German Publicly Led Development Strategies to Create Mixed-Income, Mixed-Use Development Projects**..... 435  
by Yonah Freemark and Tarsi Dunlop

**Industrial Revolution**

**Mass Timber: A Sustainable Building Solution** ..... 447  
by Jackson Morrill

**Policy Briefs**

**National Scan and Narrative Review of Landlord Engagement Activities in the United States** ..... 457  
by Jack Tsai and Victoria Solis

**Referees 2023–24** ..... 489

# Symposium

*Fifty Years of Tenant-Based Rental Assistance*

*Guest Editors: Peggy Bailey and Brian J. McCabe*





*Guest Editors' Introduction*

# **Fifty Years of Tenant-Based Rental Assistance: Introducing a Symposium on the History and Future of the Housing Choice Voucher Program**

**Peggy Bailey**

Center on Budget and Policy Priorities

**Brian J. McCabe**

Georgetown University

With the passage of the Housing and Community Development Act in 1974, the U.S. Congress authorized the U.S. Department of Housing and Urban Development (HUD) to create a new paradigm for rental assistance. Up until that point, the federal government supported low-income renters through project-based public housing developments and subsidies for private developers to build affordable housing (Schwartz, 2014; Vale and Freemark, 2012). However, the radical departure from these historical models transformed the role of the federal government in the provision of housing. During the next 50 years, tenant-based rental assistance would emerge as the largest program administered by HUD. In fiscal year 2023, with Congress allocating more than \$30 billion for the Housing Choice Voucher (HCV) program, tenant-based rental assistance programs made up approximately 45 percent of HUD's total budget (HUD, 2024a).

Today, the HCV program assists more than 2.3 million low-income renter households in paying monthly housing costs. For those households able to secure a rental unit through the program, the benefits of a voucher are enormous (Fischer, 2019; Fischer, Rice, and Mazzara, 2019). Tenant-based rental assistance protects families from excessive rent burdens and reduces homelessness. In many cases, it reduces the risk of eviction. An expansive body of research, including longitudinal analyses from the Family Options Study, points to the success of vouchers in improving housing stability and ending homelessness compared with other interventions (Gubits et al., 2016; 2018). Other research shows that vouchers improve health, employment, and educational outcomes for assisted tenants and their children.

Despite these benefits to assisted households, the challenges of the voucher program remain formidable. Millions of income-eligible households cannot gain access to the program—or any other form of federal rental assistance—because funding is insufficient to reach *every* income-eligible household. The HCV program is subject to annual appropriations, which means that the program faces budget constraints imposed by Congress and the Administration. It competes for funding with other discretionary programs both inside and outside HUD's authority. This funding deficit causes many households to linger on long waiting lists before gaining access to the program or to be denied access to those waiting lists altogether (McCabe, 2023; Moore, 2016).

Although additional funding for vouchers would increase access to rental assistance, other avenues are available to improve the experiences of households already participating in the program. Additional administrative funding would empower public housing authorities (PHAs) to help households navigate the housing search and move-in process, thereby increasing success rates in the program (DeLuca, Katz, and Oppenheimer, 2023). Continued efforts to attract landlords into the program would ensure that voucher recipients have more housing options in a range of communities (Garboden et al., 2018). Within the rules HUD set, PHAs can increase payment standards, lengthen search windows, and connect tenants to community-based services to improve the experiences of assisted households. These changes would improve access for participants who have a difficult time accessing housing or maintaining units, including people exiting the criminal justice system and those with chronic conditions that require supportive health services or temporary homecare. Coupled with these programmatic changes, continued efforts to increase the supply of affordable housing will ease the burdens of the rental market (Been, Ellen, and O'Regan, 2019). Although project-based vouchers can partially address these supply constraints, additional policy changes (and funding) at the federal, state, and local levels are needed to correct the supply shortages.

On the 50th anniversary of the creation of tenant-based rental assistance, this symposium brings together practitioners, researchers, and scholars to reflect on the HCV program. The collection of articles in this symposium celebrates what the program has achieved and identifies program improvements to expand the reach of rental assistance. These articles document the evolution of tenant-based rental assistance, identify core challenges, and point to new ideas for the program. By marking this important milestone, the contributing authors hope to provide readers with an opportunity to reflect on this defining moment in American housing policy and consider the road ahead.

## **The History of Tenant-Based Rental Assistance**

Prior to the passage of the Housing and Community Development Act in 1974, the federal government relied primarily on place-based programs to address the challenges of affordable housing (Schwartz, 2014). The Housing Act of 1937 authorized the construction of public housing developments through local PHAs. These agencies responded by building thousands of developments across the country. In the 1960s, the federal government began subsidizing the construction of affordable housing units through interest rate subsidy programs like the Section 221(d)3 program and the Section 236 program. The programs operated by lowering the costs of

borrowing for developers, enabling them to charge below-market rents to low- and moderate-income households. Until the early 1970s, these programs constituted the primary involvement of the federal government in housing low-income renters.

Although these approaches to affordable housing created housing units for low- and moderate-income households, they also produced new challenges. The construction of housing targeted exclusively at low-income Americans intensified the concentration of poverty in particular neighborhoods. Increasingly, as White households left the city for the suburbs in the post-war period, these developments contributed to patterns of racial segregation of American communities. By the 1970s, with many public housing developments in need of substantial physical renovations, it was increasingly clear that capital investments were woefully underfunded. The federal government needed a new approach to rental housing.

In 1970, Congress authorized the Experimental Housing Allowance Program (EHAP) to test an alternative model of assisting renters by providing housing allowance payments directly to tenants (Struyk and Bendick, 1981; HUD, n.d.a.). These housing allowances were designed to empower tenants to search for private rental units on the existing market rather than relying on government-owned or subsidized units. Policymakers were interested in a range of research questions, including whether markets could absorb the influx of renters, how tenants responded to the housing allowances, and whether PHAs had the capacity to administer these programs.

President Nixon imposed a moratorium on the growth of the project-based assistance programs in 1973. Soon thereafter, Congress decided to authorize a national program of tenant-based rental assistance, declining to await the results of the EHAP experiments. Although researchers would continue to evaluate the EHAP program throughout the decade, ultimately releasing a comprehensive report on its findings, Congress used the Housing and Community Development Act of 1974 to reimagine rental assistance. By modifying Section 8 of the U.S. Housing Act of 1937, the legislation laid the groundwork for what would become the HCV program.

For a time, HUD administered two separate tenant-based rental assistance programs—a certificate program established by the 1974 legislation and a voucher program Congress authorized in 1983. The programs varied slightly in their details. For example, vouchers allowed households to rent units above the Fair Market Rent (FMR) as long as those households paid the difference in costs, but certificates forbade this type of renting (HUD, 1995). In 1998, the Quality Housing and Work Responsibility Act merged certificates and vouchers to establish a single program: the HCV program. Today, the moniker is used interchangeably with Section 8, but the official title emphasizes *choice* in the search for housing. In contrast to project-based programs, in which housing subsidies are tied to the units, tenant-based programs tie the assistance to the households receiving the rental assistance. In principle, tenant-based programs empower assisted households to search for housing across communities and live in the neighborhood and housing units of their choice.

## **The Current Landscape of the Housing Choice Voucher Program**

Although the federal government funds the HCV program, local PHAs in cities, states, and counties are responsible for administering it. More than 2,100 local agencies administer vouchers through

the HCV program under the HUD-set rules and guidance. HUD calculates the FMRs PHAs use to set the payment standards in their jurisdictions. The agency sets broad eligibility criteria to guide program participation, mandates reporting requirements to PHAs, and monitors program utilization. HUD pays administrative fees to PHAs to cover the costs of administering the program. When it comes to the day-to-day operations of the HCV program, PHAs have broad discretionary authority to tailor programs to meet the needs of their communities. They can prioritize certain types of applicants in the selection process, set payment standards to encourage mobility in their communities, and offer additional services (for example, navigation services) to assist clients in their housing searches.

Data reported from PHAs to HUD provide a snapshot of the clients assisted through the program. The typical household renting with a voucher reports an income of \$16,610 annually. Seventy-seven percent of households earn less than 30 percent of the median income in their communities, classifying them as extremely low-income households. Overall, 48 percent of households in the program identify as Black, and another 18 percent identify as Hispanic. Female-headed households make up 77 percent of voucher recipients, including about 35 percent of whom are female-headed households with children (HUD, 2024b). On average, households renting with vouchers spend more than 2 years (27 months) on the waiting list before being selected for vouchers. Reflecting the growing rents in housing markets across the country, the average per unit cost for housing agencies in 2023 was about \$944, representing an increase of about 46 percent from \$647 only 8 years earlier (HUD, n.d.b.).

Because the voucher program is *not* an entitlement program, Congress must allocate funding through the budget process to pay for rental assistance. Because the amount required to keep voucher holders housed has grown with increasing rental costs nationwide, Congress has increased funding to cover these rising costs. In 2023, HUD calculated the Renewal Funding Inflation Factor for vouchers at 9.6 percent, the highest level in recent years, meaning that simply maintaining the existing stock of vouchers had grown substantially more expensive. For fiscal year 2024, President Biden proposed an allocation of \$32.7 billion to maintain and expand the HCV program, including the expansion of rental assistance to an additional 50,000 households (HUD, 2024b). This proposed funding is a \$2.4 billion increase over the 2023 enacted level. The President's budget proposed an additional \$22 billion in mandatory funding over 10 years to guarantee rental assistance for youth aging out of foster care and, after a phase-in period, extremely low-income veterans.

Annual appropriations typically increase enough to keep up with inflationary rents, and they occasionally provide small increases in the number of vouchers (typically dedicated to specific populations, like veterans or people with disabilities). However, the federal government has consistently failed to fund enough vouchers to serve every income-eligible household with dire housing needs. According to HUD's *Worst Case Housing Needs* report, 8.58 million households have worst-case housing needs (Alvarez and Steffen, 2023). Millions more qualify for rental assistance because their incomes are below the community-level standards for rental assistance. Nationwide, only about one in four income-eligible households receive any type of federal assistance to pay their monthly housing costs (Kingsley, 2017). By contrast, the largest public subsidy for American homeowners, the mortgage interest deduction, is available to all qualifying homeowners. Closing this gap between housing needs and available assistance will require a major financial investment.

Congress will need to move voucher funding from the annual discretionary process to a mandatory program that is funded based on need and not capped, similar to how Medicaid, Medicare, and the Supplemental Nutrition Assistance Program are funded.

## **Innovations and Policy Reforms**

Because the challenges of renting with a voucher have increased, HUD has continued to innovate and iterate to improve the program. Some of these innovations are being tested through a select group of Moving to Work (MTW) agencies, which have administrative flexibilities to reform key aspects of the program. For example, one group of MTW agencies is testing a set of stepped and tiered rent policies to reimagine the way that tenant contributions are calculated. Other innovations are underway through large-scale demonstrations, such as the Community Choice Demonstration. Across the board, HUD is working to streamline rental assistance, reduce administrative burdens, fulfill the promise of neighborhood choice when using assistance, and deepen the involvement of landlords in the program. Taken together, these innovations hold the promise of improving the program's effectiveness and increasing its capacity to assist additional households.

Other program reforms are also intended to address challenges in the voucher program. Recognizing the way that restrictive payment standards limited opportunities for households searching with vouchers, HUD issued a rule in 2016 mandating that selected PHAs use Small Area Fair Market Rents (SAFMRs) rather than metropolitan-wide FMRs in setting payment standards in their communities. By setting the FMRs at the ZIP Code level rather than at the level of the entire metropolitan area, SAFMRs more accurately capture neighborhood-level variation in the rental market. ZIP Code-level payment standards are a tool to help households renting with vouchers find units in *every* neighborhood rather than only the poorest neighborhoods in the city. The policy helps expand choice for assisted tenants, particularly in low-poverty neighborhoods. This past year, HUD expanded the set of PHAs required to use SAFMRs in setting payment standards. HUD now mandates the use of SAFMRs in 65 metropolitan areas, and PHAs outside these communities regularly use SAFMRs as exception payment standards to create mobility opportunities to high-rent neighborhoods.

Other interventions expand choice and opportunity in the program by providing assisted tenants with additional resources to navigate housing markets, identify high-opportunity neighborhoods, and interact with landlords. In Seattle and King County, the Creating Moves to Opportunity initiative shows the value of housing navigators and counseling to encourage mobility from high-poverty neighborhoods. HUD's Community Choice Demonstration is building additional evidence about the way that housing mobility services can assist families with children in gaining access to high-opportunity neighborhoods. In 2022, HUD issued an important notice clarifying that housing agencies can use their regular voucher administrative funding for a wide range of uses, including security deposits, application fees, and owner incentives. This notice ensures that PHAs have flexibility to provide assistance to households in successfully using vouchers.

Landlords in the HCV program regularly express concern about the inspection process required before a HUD-assisted tenant moves into a rental unit. Under the previous Housing Quality Standards (HQS) system, landlords noted that the inspection process was cumbersome and

tedious. When their units sat vacant awaiting inspections, landlords forewent valuable monthly rent payments. In response to these longstanding concerns about the inspection process across HUD-assisted programs, the agency recently rolled out the NSPIRE standards to replace the HQS inspections. These standards focus on building deficiencies that threaten the health and safety of renters, ultimately lessening the burden on landlords participating in the program. In addition, the 2016 Housing Opportunity Through Modernization Act made a series of changes designed to update and strengthen the voucher program and other federal rental assistance, including streamlining rent and income determinations, making it easier for PHAs to use project-based vouchers and creating flexibility in the voucher inspection rules while strengthening protections for families in cases when owners violate quality standards.

Finally, HUD is learning from the Emergency Housing Voucher (EHV) program, which the 2021 American Rescue Plan Act established to aid survivors of violence and people experiencing or at risk of homelessness. Housing agencies administering EHV were provided with special “service fees” to fund housing support services for participants. To ensure that the program could effectively assist people with the greatest needs, HUD required participating agencies to use longer search times and ease certain barriers to admission. These policies contributed to the successful implementation of the EHV program, which assisted more than 62,000 households by the end of 2023.

## Looking Forward, Looking Backward

In recognition of the 50th anniversary of tenant-based rental assistance, this symposium brings together scholars, practitioners, and researchers to take stock of this historic moment. The goals of the symposium are two-fold. On the one hand, the articles reflect on the program’s history and evolution by considering ways that tenant-based rental assistance has changed during the past 5 decades. The contributing authors examine the consequences of those changes for tenants, landlords, and PHAs. On the other hand, the articles look to the program’s future by addressing important policy issues, including landlord participation, neighborhood access, and portability between PHAs.

Although the collection of articles documents many of the program’s core issues, it is certainly not exhaustive of the topics that could contribute to this volume. Even though some of the articles touch on administrative burden, the MTW cohort expansion, and payment calculation reforms for tenants, no single article addresses these issues exclusively. The articles also do not offer a comparative international perspective. The United Kingdom and several Western European countries, including the Netherlands, administer demand-side rental assistance programs that operate as entitlement programs (Priemus, Kemp, and Varady, 2005; Schuetz and Crump, 2021). Cross-national comparative research provides exciting opportunities to learn lessons applicable to the American program.

The symposium opens with an article by Sard tracing the program’s funding history. Sard looks at the ways that Congress has funded renewal funds, administrative fees, and newly authorized vouchers. Because funding decisions shape the way PHAs administer their programs, Sard’s richly descriptive history creates an opportunity for a steadier approach to future funding decisions. In the next article, Greenlee and McClure draw on administrative records to look at changes in

program participation during the past 2 decades. Many of their descriptive findings are striking. The program has served about 7 million households since 2002. The share of elderly households in the program has climbed as the share of nonelderly, able-bodied households has declined. Next, Armstrong, Din, Shcheglovitova, and Winegardner update two previous reports on the locational outcomes of assisted tenants to show that more HCV households are living in low-poverty neighborhoods. Even so, they report many HCV households live in communities that are densely populated by other voucher holders and find that HCV concentration has increased at the metropolitan level.

The next article by Tegeler and Reece walks readers through the litigious history of the voucher program in the U.S. court system. Beginning with the *Gautreaux* case in the 1960s and continuing through the Inclusive Communities Project case, which spurred the development of SAFMRs, the authors demonstrate how legal challenges both highlighted core issues in the voucher program and led to meaningful policy changes. In the next article, Garboden, Rosen, and Fleming-Klink describe the changing role of landlords. After a brief history of landlord involvement, the authors offer examples to show how landlords affect program use and mobility for assisted tenants. They remind readers of the challenges of landlord nonparticipation and suggest strategies for overcoming these obstacles. Building from recent work in the *Creating Moves to Opportunity* project and the Baltimore Housing Mobility Program, DeLuca and Groccia consider the promise of housing navigators and services to promote mobility in the voucher program. Movement to high-opportunity, low-poverty neighborhoods has been an elusive goal of the HCV program, but their analysis underscores the power of supportive staff and resources to encourage mobility.

Although many households want to move to high-opportunity, low-poverty neighborhoods, Galvez and Knudsen remind readers that source of income discrimination limits these opportunities. Reporting the findings of a recent convening on the topic, they chart new avenues for monitoring and enforcing legislation prohibiting source of income discrimination. Expanding on the topic of mobility, Miller provides a data-driven analysis of portability in the HCV program by following a single cohort of voucher users. Miller notes that portability, which empowers assisted families to move outside their jurisdictions without losing their vouchers, often creates moves to neighborhoods of opportunity, thereby suggesting an underused tool within the program to expand neighborhood choice.

The next set of articles considers subpopulations and programs within the HCV program. Sloane, Stewart, and Martone highlight the role of the voucher program in serving special populations, including persons with disabilities. Noting that special purpose vouchers comprise a substantial portion of the voucher program, the authors point to the program's evolution to serve special populations and raise important questions about the needs of these subgroups. In the following article, Fiore, Khadduri, and Dastrup present lessons from Los Angeles to understand the opportunities for the HCV program to better serve households experiencing homelessness. Perhaps more than anywhere else in the country, the PHAs in Los Angeles have devoted voucher resources to solving the challenges of homelessness. Given the extraordinary challenges of housing people who are unhoused throughout the country, these lessons from Los Angeles are likely to resonate with readers across the country. Reaching across affordable housing programs, Emmanuel and

Aurand direct readers' attention to the relationship between vouchers and the Low-Income Housing Tax Credit (LIHTC) program. Despite persistent data challenges, which the authors highlight in their article, LIHTC is an important companion to the HCV program. Their analysis highlights opportunities to integrate these affordable housing tools better. Teles and Oneto point to the role of project-based vouchers in creating housing stability. In the past 2 decades, the importance of project-based vouchers expanded significantly, especially as project-based vouchers comprise a larger portfolio of Rental Assistance Demonstration conversions. With the expansion of project-based vouchers within the HCV program, the authors ask about the policy design and discuss concerns about the reconcentration of poverty.

The final set of articles looks to the future of the HCV program. Reflecting advocates' commitment to expand access to rental assistance to create an entitlement program—or at least a program that more closely reflects the demand for it—Fischer begins by asking whether housing markets can absorb a voucher program expansion. Historically, the question of market absorption was central to EHAP. Today, Fischer argues that available evidence suggests that markets could absorb additional vouchers but that broader rental market interventions that minimize effects on market rents should accompany any expansion. Turning to the U.S. Department of the Treasury's Emergency Rental Assistance (ERA) program, Gallagher et al. share lessons from this important policy during the COVID-19 pandemic. From efforts to increase landlord participation to those that reduce burdens on assisted tenants, ERA programs offer insight for streamlining and improving the voucher program.

In the final two articles, the authors invite readers to consider direct rental assistance as an alternative to the existing voucher program. After noting the origins of this idea in EHAP, Joice, Ellen, and O'Regan discuss some fundamental design choices when considering direct rental assistance programs. Building from HUD's expressed interest in learning from local pilot programs about the idea, the article presents options for subsidy calculations, research design, and inspection criteria that local agencies would need to address. Finally, Reina et al. report on the development of a program in Philadelphia designed to test an alternative model of rental assistance. Philadelphia's Housing Plus program is currently running a randomized control trial from the city's HCV waiting list to understand the effect of cash assistance on tenants awaiting rental assistance. The program in Philadelphia is the first rigorous pilot to test a direct cash assistance model for housing, and Reina et al. offer practitioners some core lessons about program implementation and design.

With this collection of articles, the contributing authors offer readers a launching pad to reflect on this historical moment. Fifty years ago, the development of tenant-based rental assistance programs transformed the way the federal government provides rental assistance to the lowest-income Americans. As the nation celebrates the accomplishments on this 50th anniversary and acknowledges some of the contemporary challenges, the authors hope this symposium contributes to strengthening the HCV program and improving federal policies to provide a decent, affordable home to every American.



## Acknowledgments

In addition to commending the authors of these articles for their incisive, provocative contributions to this symposium, we also want to acknowledge the teams at HUD and the Center on Budget and Policy Priorities that played a role in this symposium. Our colleagues graciously stepped up to review articles, provide feedback, and think through the contours of this volume. We are particularly grateful to the following colleagues for their input and involvement in this process: Sonya Acosta, Thyria Alvarez, Anna Bailey, Danielle Bastarache, Allison Bell, Nick Bilka, Dominique Blom, Claire Bufalino, Calie Carpentier, Will Fischer, Anne Fletcher, Mandy Griego, Brendan Goodwin, Solomon Greene, Mike Hollar, Paul Joice, Ryan Jones, Peter Kahn, Steve Lucas, Brent Mast, Marina Myrhe, Madeleine Parker, Todd Richardson, Elizabeth Rudd, Aaron Shroyer, Teresa Souza, Carol Star, Maren Trochmann, and Emily Warren.

## Authors

Peggy Bailey is the vice president for housing and income security at the Center on Budget and Policy Priorities. Brian J. McCabe is a Provost's Distinguished Associate Professor of Sociology at Georgetown University. He previously served as the deputy assistant secretary for policy development at HUD.

## References

Alvarez, Thyria, and Barry L. Steffen. 2023. *Worst Case Housing Needs: 2023 Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Been, Vicki, Ingrid Gould Ellen, and Katherine O'Regan. 2019. "Supply Skepticism: Housing Supply and Affordability," *Housing Policy Debate* 29 (1): 25–40. <https://doi.org/10.1080/10511482.2018.1476899>.

DeLuca, Stephanie, Lawrence F. Katz, and Sarah C. Oppenheimer. 2023. "When Someone Cares About You, It's Priceless': Reducing Administrative Burdens and Boosting Housing Search Confidence to Increase Opportunity Moves for Voucher Holders," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 179–211. <https://doi.org/10.7758/RSF.2023.9.5.08>.

Fischer, Will. 2019. "Rental Assistance Cuts Homelessness and Poverty, but Doesn't Reach Most Who Need It," *Off the Charts blog*, December 5. <https://www.cbpp.org/blog/rental-assistance-cuts-homelessness-and-poverty-but-doesnt-reach-most-who-need-it>.

Fischer, Will, Douglas Rice, and Alicia Mazzara. 2019. *Research Shows Rental Assistance Reduces Hardship and Provides Platform to Expand Opportunity for Low-Income Families*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/housing/research-shows-rental-assistance-reduces-hardship-and-provides-platform-to-expand>.

Garboden, Philip M.E., Eva Rosen, Stefanie DeLuca, and Kathryn Edin. 2018. "Taking Stock: What Drives Landlord Participation in the Housing Choice Voucher Program," *Housing Policy Debate* 28 (6): 979–1003. <https://doi.org/10.1080/10511482.2018.1502202>.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia Solari, Scott Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.ssrn.com/abstract=3055295>.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Scott R. Brown, Samuel R. Dastrup, and Stephan H. Bell. 2018. "What Interventions Work Best for Families Who Experience Homelessness? Impact Estimates from the Family Options Study," *Journal of Policy Analysis and Management* 37 (4): 835–866. <https://doi.org/10.1002/pam.22071>.

Kingsley, G. Thomas. 2017. *Trends in Housing Problems and Federal Housing Assistance*. Washington, DC: Urban Institute. <https://www.urban.org/sites/default/files/publication/94146/trends-in-housing-problems-and-federal-housing-assistance.pdf>.

McCabe, Brian J. 2023. "Ready to Rent: Administrative Decisions and Poverty Governance in the Housing Choice Voucher Program," *American Sociological Review* 88 (1): 86–112.

Moore, M. Kathleen. 2016. "Lists and Lotteries: Rationing in the Housing Choice Voucher Program," *Housing Policy Debate* 26 (3): 474–487. <https://doi.org/10.1080/10511482.2015.1129984>.

Priemus, Hugo, Peter A. Kemp, and David P. Varady. 2005. "Housing Vouchers in the United States, Great Britain, and the Netherlands: Current Issues and Future Perspectives," *Housing Policy Debate* 16 (3–4): 575–609. <https://doi.org/10.1080/10511482.2005.9521556>.

Schuetz, Jenny, and Sarah Crump. 2021. *What the U.S. Can Learn From Rental Housing Markets Across the Globe*. Washington, DC: Brookings Institution. <https://www.brookings.edu/articles/intro-rental-housing-markets/>.

Schwartz, Alex F. 2014. *Housing Policy in the United States*. New York: Routledge. <https://doi.org/10.4324/9780203458204>.

Struyk, Raymond J., and Marc Bendick, Jr. 1981. *Housing Vouchers for the Poor: Lessons From a National Experiment*. Washington, DC: Urban Institute.

U.S. Department of Housing and Urban Development (HUD). n.d.a. "Experimental Housing Allowance Program." <https://www.huduser.gov/portal/EHAP.html>.

———. n.d.b. "Housing Choice Voucher (HCV) Data Dashboard." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/dashboard).

———. 2024a. "Picture of Subsidized Households." <https://www.huduser.gov/portal/datasets/assths.html>.

———. 2024b. *2024 Budget in Brief*. Washington, DC: HUD, Office of Policy Development and Research.

———. 1995. *Vouchers and Certificates: How Well Do They Work?* Washington, DC: HUD, Office of Policy Development and Research. <https://www.huduser.gov/periodicals/ushmc/summer95/summer95.html>.

Vale, Lawrence J., and Yonah Freemark. 2012. “From Public Housing to Public-Private Housing,” *Journal of the American Planning Association* 78 (4): 379–402. <https://doi.org/10.1080/01944363.2012.737985>.

---

# The Evolution of Funding Policy in the Housing Choice Voucher Program

Barbara Sard  
Housing Policy Consultant

---

## Abstract

Concerns about Housing Choice Voucher program funding often center around whether the U.S. Congress will provide sufficient funding to cover vouchers currently in use or increase the number of families benefiting from rental subsidies. These issues are important, and Congress has frequently failed on both measures. Indeed, only about 1 million more families received housing voucher assistance in 2023 than 30 years earlier, and most of that increase replaced other types of rental assistance. Efforts to limit the overall amount of federal spending drove the reduction in new vouchers and major changes in funding policy that are the focus of this article. Congress shifted from multiyear to annual funding of housing vouchers in the mid-1990s. Aware of the challenges this shift posed for local program administration, Congress required the U.S. Department of Housing and Urban Development (HUD) to negotiate a new renewal funding rule with stakeholders but then overrode most of the rule's key components. As a result, more than 250,000 vouchers are no longer funded, about one in four public housing agencies lack the funding reserves necessary to withstand unpredictable changes in program costs, and the program is more challenging to manage. The article concludes with recommendations to better achieve the program's goals and serve more people.

## Introduction

By the end of its first 2 decades in 1994, the Housing Choice Voucher (HCV) program could provide rental subsidies for about 1.4 million families (HUD, 2000).<sup>1,2</sup> The multiyear funding for these vouchers began to expire in the early 1990s, the same period that the U.S. Congress first imposed caps on the overall amount of federal discretionary spending (in contrast to programs like Social Security that are not subject to annual appropriations). To reduce annual funding needs,

<sup>1</sup> For simplicity, this article uses the current HCV program name for the predecessor housing certificate and voucher programs that began in 1974 and 1983, respectively, and were merged into the current HCV program by the Quality Housing and Work Responsibility Act of 1998.

<sup>2</sup> The term “families” in this article includes all types of households, consistent with HUD’s terminology.

by the mid-1990s, Congress shifted to renewing vouchers for only a year at a time and sharply reduced the number of new vouchers authorized. Beginning in 2003, Congress also drastically altered renewal funding policy and failed to fully fund the evolving renewal policy in many years.

As a result, in 2023, only about 2.4 million families nationally received rental assistance through federal housing vouchers,<sup>3</sup> and three out of four low-income households with housing needs receive no federal housing assistance to help pay rent (Gartland, 2022). The reduction in the number and changes in the types of new vouchers funded affected their geographic distribution, leaving states with greater population growth in recent decades with fewer vouchers (and other federal rental assistance) per needy family. The targeting of most incremental vouchers after 2002 to people with disabilities and veterans also sharply reduced the share of vouchers assisting families with children (Greenlee and McClure, 2024).

After directing HUD to develop a new regulation through a negotiated rulemaking process with key stakeholders to guide annual renewal funding for expiring vouchers beginning in 2000, Congress began overriding key aspects of the new policy within a few years. Most significantly, Congress required HUD to renew funding only for vouchers in use in the previous year, rather than all vouchers previously allocated, and forced HUD to reduce sharply the amount of funds state and local administering agencies could draw on to meet cost increases. These policy changes, combined with severe renewal funding shortfalls in the mid-2000s and again in 2013 and 2017, caused the loss of funding for more than 250,000 vouchers by 2023.

The renewal funding policy changes, combined with funding instability, also made the HCV program more challenging to administer. Persistent shortfalls in funding for administrative costs and congressional opposition to HUD's proposal to base the formula to allocate administrative fees on objective, evidence-based factors that drive administrative cost differences among public housing agencies (PHAs) have compounded these difficulties.

Understanding how funding is currently provided for the major components of the HCV program and how these policies have evolved, plus the risks to program stability and growth from reliance on annual discretionary appropriations, is important to guide effective future policies to sustain, improve, and expand the HCV program. This article first compares current policy governing the allocation of annual renewal funding for existing housing vouchers, and how it evolved, with the renewal policy in HUD regulations that resulted from the congressionally mandated negotiated rulemaking. In addition, the article discusses key features of the history of funding policy for the other two major HCV program components—administrative costs and new vouchers. It then highlights the challenges and risks posed to the program by reliance on annual discretionary funding and outlines recommendations for future improvements in each program component.

---

<sup>3</sup> HUD data indicate that 2.3 million vouchers in the regular HCV program (including project-based vouchers), plus another 56,000 vouchers for people with disabilities under the Mainstream voucher program (note 31), were leased in November 2023, and 61,500 Emergency Housing Vouchers (EHVs; note 32 and related text) were in use as of December 11, 2023. HUD's HCV and EHV Data Dashboards are at [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/dashboard) and [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/ehv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/ehv/dashboard).

## Current Housing Choice Voucher Funding

Beginning in 2003, Congress provided annual funding for the HCV program primarily through three separate streams of funds:

1. *Renewal funds* for existing vouchers (those allocated in prior years) to pay subsidies for rental costs to landlords (and sometimes utility companies) on behalf of low-income families participating in the HCV program.
2. *Administrative fees* to enable state and local PHAs to cover the costs of issuing vouchers to new families, contracting with landlords, and ensuring that families and landlords comply with program requirements.
3. First year costs of *newly authorized vouchers*.

HUD provides each of the more than 2,000 PHAs that administer the HCV program with amounts for renewal funds and administrative fees primarily based on formulas that divide the funds Congress appropriates for these purposes each year. If an appropriations act provides funding for new vouchers, HUD awards the new vouchers to selected PHAs and allocates funds to cover subsidy costs for the initial year the vouchers are in use. Along with specifying annual funding amounts for the components of the HCV program, each year's appropriations law has included policies that at times were highly controversial guiding how these funds are allocated to PHAs.<sup>4</sup>

## Evolution of Voucher Renewal Funding Policy

For the initial decades after Congress authorized Section 8 tenant-based rental assistance in 1974, it provided long-term funding (typically 15 years) for any new rental subsidies and related administrative costs included in HUD's annual appropriations act.<sup>5</sup> After selecting the PHAs to receive a portion of the newly authorized vouchers, HUD calculated the amount of budget authority committed to each PHA for the duration of the contract for the new vouchers, using assumptions that built in flexibility for cost increases during the period of the funding commitment.<sup>6</sup>

As a result, PHAs—as well as landlords and participating families—could rely on funding remaining available for many years to continue to pay rental subsidies, without the risks inherent in reliance on congressional action. In addition, as participating families left the program, PHAs could reissue the subsidies to new families using the already committed funds, thereby maintaining the number of families assisted.

---

<sup>4</sup> The Appendix of Annual HUD Appropriations Laws, 1990–2023, has citations and links to each year's law.

<sup>5</sup> See HUD Handbook 7420.3, chapter 6, section 6-2(b)(4), effective July 1979, <https://www.hud.gov/sites/documents/74203C6PIHH.PDF>

<sup>6</sup> For these early long-term contracts, HUD calculated the amount of budget authority (defined at 24 C.F.R. 982.4(b)) to commit based on its Fair Market Rents for the area (or higher HUD-approved amount). HUD Handbook 7420.3, chapter 3, section 8(a)(1)(a), effective July 1979, <https://www.hud.gov/sites/documents/74203C3PIHH.PDF>. Because families are required to contribute a share of income toward rent and utility costs (initially 25 percent and later 30 percent), HUD's methodology intentionally built in extra budget authority that could cover unanticipated increases in prevailing rents and fluctuating tenant incomes. Consistent with recent appropriations bills, this article uses the term “authorized” vouchers as equivalent to HUD's terminology of “Annual Contributions Contract (ACC) units,” “reserved units,” and “adjusted baseline vouchers.”

As these long-term contracts between HUD and PHAs began to expire in the early 1990s, Congress provided additional funding for the already authorized vouchers. Early renewal contracts were for 5 years. By the mid-1990s, renewal funding was provided a year at a time. HUD calculated each PHA's annual renewal funding need based on the estimated cost in the funding year of the PHAs authorized vouchers for which funding commitments would expire.

This shift to shorter, and then annual, renewal funding contracts coincided with the imposition of enforceable statutory caps on total "discretionary" funding for the first time beginning in 1991.<sup>7</sup> Congress made the net cost of renewal funding more affordable within the constraints of the budget caps by shortening the duration of renewal contracts and also by recapturing and rescinding unspent budget authority that had been committed to the initial long-term contracts. Such cancellation of previously appropriated budget authority counted as an offsetting savings.<sup>8</sup>

### 1999 Negotiated Rulemaking on Housing Choice Voucher Renewal Funding

In the midst of the shift toward annual HCV renewal funding in the mid-1990s, Congress was working to enact major legislation to improve the management of public housing and merge the housing certificate and voucher forms of tenant-based assistance into a single program. Rather than specifying a renewal policy in the Quality Housing and Work Responsibility Act of 1998 (QHWRA), Congress required HUD to set a renewal policy through negotiated rulemaking involving key stakeholders.<sup>9</sup>

During the months of discussion among stakeholders and HUD in 1999 as part of the negotiated rulemaking process, the central dispute was whether to retain the key feature of the prevailing renewal policy: funding all expiring authorized vouchers at the best available estimate of their cost in the coming year (a so-called "unit-based" funding policy). Proponents argued that only such a policy would avoid funding shortfalls and encourage PHAs to serve additional families up to the

---

<sup>7</sup> "Discretionary" funding is that made available in congressional appropriations acts other than "direct spending," which includes funding provided as an ongoing entitlement and budget authority provided by laws other than appropriations acts. The Balanced Budget and Emergency Deficit Control Act of 1985, as amended, sections 250(c)(7) and (8), 2 U.S.C. §900(c) (7) and (8). The first enforceable caps on discretionary funding were enacted in the Budget Enforcement Act of 1990 and became effective in fiscal year 1991. These enforceable caps were extended through 2002 in subsequent laws. Notes 42 and 43 and the related text discuss later laws capping discretionary spending.

<sup>8</sup> If multiple years of funding were to be appropriated for long-term renewal contracts, the cost in the initial year of the contract renewal would be much greater than for a single year of funding, potentially endangering the ability to fund other popular programs within the limit the discretionary caps set.

<sup>9</sup> Section 556 of QHWRA, P. L. 105-276, 112 STAT. 2613, has two parts. Subsection (a) inserted Section 8(dd) of the U.S. Housing Act, 42 U.S.C. §1437f(dd), which requires HUD to renew expiring contracts beginning in fiscal year 1999 by inflating an "allocation baseline" using local or regional data. At a minimum, the allocation baseline for a PHA had to be sufficient to assist the actual number of families assisted on October 1, 1997. HUD defined the "baseline" units to be renewed as the higher of the number of authorized vouchers or leased units as of October 1, 1997, plus any additional vouchers awarded to a PHA during federal fiscal year 1998. See Notice PIH 98-65, 64 Federal Register (FR) 8188, February 18, 1999. HUD's inclusion of all authorized vouchers was a more generous policy than the leasing-focused measure Congress set as a minimum. In subsection 556(b), Congress directed HUD to issue final regulations governing voucher renewal policy within 1 year, developed using federal procedures for negotiated rulemaking. HUD announced the establishment of the Negotiated Rulemaking Advisory Committee on Section 8 Tenant-Based Contract Renewal Allocation by notice published at 64 FR 20232, April 26, 1999. The stakeholders on the advisory committee included 20 PHAs of various sizes from around the country, three national PHA organizations, and four public interest groups, including the Center on Budget and Policy Priorities (which the author represented in the process), the Disability Rights Action Coalition, and the New Orleans Section 8 Resident Council. 64 FR 56882, October 21, 1999.



level Congress had previously authorized. In addition, some of the stakeholders—particularly those from tenant organizations and the Center on Budget and Policy Priorities (CBPP)—argued that unless the funding policy supported the higher per-voucher costs PHAs incurred to assist the neediest families or enable voucher holders to afford rental costs of units in well-resourced communities, key program goals could not be achieved.

HUD staff argued for shifting to a “dollar-based” policy. Such a policy “would fund PHAs ... without considering how many units were rented through the program in the previous year.”<sup>10</sup> It also would disregard changes in actual subsidy costs due to reductions in tenant incomes and lock in low voucher utilization rates at agencies not using all their vouchers when the policy was initially implemented or that later used fewer vouchers. Fluctuations in PHAs’ annual HCV leasing rates are common (Finkel et al., 2003). Despite these drawbacks, many PHA representatives initially thought a “dollar-based” policy would be simpler for them to administer, because they would be able easily to predict the amount of funding they would be eligible to receive in future years.

Ultimately, the consensus was in support of continuing a unit-based policy designed to provide sufficient funding for all authorized vouchers.<sup>11</sup> Data analyses demonstrating that the most reliable predictor of future renewal costs was the change in total subsidy costs in the year prior to the funding year, not simply the types of changes for which an inflation factor could adjust, such as changes in local market rents or the gap between tenant incomes and rents, were key to achieving this consensus. A metric of changes in total subsidy costs reflects the number of vouchers used and the cost effects of various policies, some mandatory (such as income targeting of most new admissions) and some in PHAs’ discretion (such as the percentage of the HUD Fair Market Rent set as the maximum voucher subsidy), in addition to changes in rents.

In addition to supporting the continuation of annual renewal funding for all authorized vouchers at their likely cost in the funding year, the committee agreed that to help address the unmet need for rental assistance, the renewal policy should include other components to encourage the use of more vouchers. The three most important complementary policies were—

- **Substantial, Reimbursable Reserves.** HUD agreed to maintain a reserve account for each PHA with up to one-sixth (16.67 percent, or about 2 months) of the PHAs’ projected expenditures in the coming year. PHAs could access up to one-half of these funds to meet cost increases above the HUD inflation factor or to increase the number of families they assisted up to the authorized level. If PHAs depleted their reserves for these reasons, restoration of their reserve account would be added to their renewal funding eligibility in the subsequent

---

<sup>10</sup> “Renewal of Expiring Annual Contributions Contracts in the Tenant-Based Section 8 Program; Formula for Allocation of Housing Assistance,” 64 FR 56883.

<sup>11</sup> 64 FR 56883 and 24 C.F.R. §982.102.

year. This reserve policy was more limited than the one then in effect but consistent with prior policy goals and continuing statutory requirements.<sup>12</sup>

- **Approval of Temporary “Overleasing.”** The committee recognized that PHAs typically must issue more vouchers than the authorized level to fully use all authorized vouchers, because some families will not succeed in leasing up. However, PHAs would be unlikely to overissue if they were penalized for temporarily exceeding the authorized level. To eliminate this disincentive, the committee recommended and HUD issued guidance clarifying that overleasing was permitted, and allowing PHAs to access reserve funds if needed temporarily to support the cost of vouchers above the authorized level.<sup>13</sup>
- **Reallocation Authority.** To increase voucher utilization, the negotiated rule allows HUD to reduce the number of vouchers a PHA is authorized to administer if the PHA failed to adequately lease vouchers and reallocate some of the unused vouchers and the related funding to other agencies.<sup>14</sup> This reallocation policy, called “use it or lose it,” was intended as a powerful prod to PHAs to improve their program management sufficiently to avoid losing resources, while also ensuring that at least a portion of the unused vouchers would benefit other families (Sard, 2001).<sup>15</sup> HUD published the criteria and procedures to reduce some PHAs’ vouchers and reallocate them to other PHAs, but it appears that little reallocation occurred under the regulatory policy, perhaps because Congress indicated in 2003 that it did not approve of the policy (Sard, 2003).<sup>16</sup>

### Subsequent Evolution of Renewal Funding Policy, 2002–23

Use of the renewal funding policy established through the congressionally mandated negotiated rulemaking was short-lived. Congress directed HUD to reduce PHAs’ voucher program reserves

---

<sup>12</sup> See 65 FR 21088, April 19, 2000. Previous HUD policy required HUD to establish a project reserve for each PHAs tenant-based rental assistance program “to assure that housing assistance payments are increased on a timely basis to cover increases in monthly rents or decreases in family income. The Department is required to amend ACCs to replenish the project reserve so that sufficient annual contributions are available for the number of units authorized in the ACC for the remaining ACC term. PHAs must not be placed in the position of refusing to issue certificates or to renew contracts because needed amendment authority is not identified and provided in a timely manner.” Chapter 8.2(c) of HUD Handbook 7420.3, Section 8 Housing Assistance Payments Program, Existing Housing and Moderate Rehabilitation Processing Handbook, issued April 1990 (emphasis added). HUD based this policy on what is now section 8(c)(5) of the U.S. Housing Act, 42 U.S.C. 1437f(c)(5).

<sup>13</sup> 65 FR 21090–21091.

<sup>14</sup> 24 C.F.R. 982.102(i), 64 FR 56888.

<sup>15</sup> PHAs increased voucher utilization from 92 to an estimated 96 percent of authorized vouchers from 2000 to 2004, in part due to the incentive to avoid permanent loss of vouchers through reallocation (Sard, 2003).

<sup>16</sup> HUD published the criteria for PHAs subject to reallocation at 65 FR 21091-2 (April 19, 2000), and for PHAs it would select to receive reallocated units at 66 FR 55523 (November 1, 2001). In January 2003, the Senate directed HUD to proceed with reallocation pursuant to the 2021 notice within 150 days. That directive was not included in the final 2003 appropriations bill, likely due to cost concerns. The conference report indicated it had been rejected (H. Rept. 108-10 at 1370).

from 2 months to 1 month in 2002.<sup>17</sup> Beginning in 2003, the HUD appropriations act required HUD to cease providing renewal funding for all *authorized* vouchers and, instead, base PHAs' funding on the actual cost of *leased* vouchers in the prior year, adjusted for inflation (McCarty, 2005).<sup>18</sup>

From 2004 through 2006, the Bush Administration, together with the Republican-controlled Congress, made a series of changes in voucher renewal policy. Combined with funding levels insufficient to fund all vouchers eligible for renewal, these changes caused the loss of voucher assistance for about 150,000 families by early 2007 compared with early 2004 (Sard and Rice, 2007). The motivation behind these changes appeared to be to control rising spending to meet increasing rental costs to keep a lid on the HUD budget at the same time the Administration was seeking congressional approval to cut taxes and enact a new Medicare prescription drug program (CBPP, 2019; Sard and Fischer, 2004a).

The Administration's fiscal years 2004–06 budget proposals, congressional appropriations bill language, and HUD's implementation decisions shifted toward the dollar-based renewal funding policy that the negotiated rulemaking committee had rejected. As implemented, renewal funding amounts were based on just 3 months of data on leasing and costs in middle of the prior year (or even 2 years earlier) rather than 12 months of data.<sup>19</sup> In addition, the 2004 and 2005 appropriations acts reduced and then eliminated supplemental funds to help PHAs cover cost or leasing increases not reflected in the renewal formula, and the 2005 act directed HUD to reduce PHA reserves to no more than 1 week. In both 2005 and 2006, Congress short-funded the revised renewal policy by more than 4 percent.<sup>20</sup>

---

<sup>17</sup> The fiscal year 2002 appropriations act directed HUD to reduce allowable reserves to the 1-month level and to recapture \$640 million in PHAs' reserves above this level. According to HUD's implementing notice, PIH 2002-6, the conference report also directed HUD to ensure that PHAs have the funds to administer all section 8 contracts in a normal manner. Consequently, HUD policy in implementing the bill was "to fully fund a one month reserve and to provide enough additional funds for high utilizing PHAs to lease up their number of units reserved." PIH 2002-6, #3. HUD's website at [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/publications/notices](https://www.hud.gov/program_offices/public_indian_housing/publications/notices) allows the public to find notices relevant to the HCV program and its predecessors back to 1994, although some notices from the earlier years are missing.

<sup>18</sup> Both the Senate and House 2003 funding bills included policies to limit renewal funding to leased rather than all authorized vouchers and additional funds that PHAs could request to meet leasing or cost increases. The House bill (H.R. 5605) included a *finite* amount in a HUD central fund, although the Senate bill provided an *indefinite* amount ("such sums as may be necessary") for the central fund to ensure PHAs had sufficient funds available. This language for a current indefinite appropriation was not included in the final bill (H. Rept. 108-10 at 1370, February 13, 2003; Sard and Fischer, 2003).

<sup>19</sup> In 2004, HUD adopted a more stringent policy than the final appropriations bill appeared to require, basing PHAs' renewal funding on their leasing and cost data from May to July 2003. CBPP estimated that PHAs received sufficient funding for only about 95 percent of expiring authorized vouchers in 2004, whether or not leased at some point during the prior year (Sard, Lawrence, and Fischer, 2005: Technical Appendix). Despite the apparent severe funding cut, HUD administrative data show no proration in renewal funding for 2004, likely because HUD determines the extent of any proration based on the funds PHAs were eligible to receive under its interpretation of the renewal policy. As a practical matter, many PHAs experienced severe and unanticipated funding cuts in 2004 (Sard and Fischer, 2004b). The 2005 appropriations act based renewal funding on leasing and cost data for 3 months in the middle of 2004, and the 2006 appropriations act directed HUD to base 2006 funding on PHAs' funding eligibility in 2005 with minor adjustments, meaning that the "baseline" in 2006 remained PHAs' HCV subsidy spending in mid-2004. See PIH 2006-5.

<sup>20</sup> Prorations are from HUD administrative data. CBPP estimated that the 2005 proration would cut funding for about 83,000 vouchers in use in mid-2004 (Sard, Lawrence, and Fischer, 2005). The conference committee report on the 2005 final act directed HUD to reduce PHA reserves to 1 week to meet the act's required rescission of \$1.55 billion, which helped offset the cost of the entire act. PIH 2005-1, paragraph 8.

Coinciding with these changes in renewal policy in annual appropriations acts, the Bush Administration sought congressional approval to change the U.S. Housing Act to eliminate entirely the unit basis of voucher funding and convert funding to a dollar-based block grant with additional significant HCV policy changes (McCarty, 2005). However, Republican-led authorizing committees rejected the proposals to convert the HCV program into a block grant divorced from actual voucher costs (Sard and Fischer, 2005, 2006).

After the return of Democratic control of the House in the 2006 election, Congress revised the voucher renewal policy to return to basing funding on actual leasing and costs in the prior 12-month period and increased the funding level for fiscal year 2007 to restore some of the vouchers cut in the 2004–06 period. In most years since then, Congress has claimed that its goal was to provide at least the amount of funding needed to prevent terminating assistance to any families currently relying on voucher subsidies (CRS, 2019: 12). Often the stated goal has been to fund all vouchers in use in the prior year, thereby allowing the HCV program to continue to serve the same number of families.

### **Renewal Funding Policy in 2023 Is Substantially Different From the 1999 Negotiated Rule**

In 2023, renewal funding is unit-based, as the negotiated rule required, and tied to PHAs' actual average cost of the number of voucher subsidies paid in the prior calendar year, capped at the number of authorized vouchers and adjusted for inflation.<sup>21</sup> However, through detailed provisions in annual appropriations acts, Congress has changed every other significant component of renewal funding policy in the negotiated rule, which nonetheless remains unchanged in HUD regulations at 24 C.F.R. 982.201. The major changes include—

- **Leased, Not Authorized Vouchers.** The core of the negotiated renewal rule was a commitment to fund all *authorized* vouchers. The current renewal funding formula is based on vouchers *leased* in the prior year, adjusted for recently allocated vouchers that were not in use for the prior 12 months. This fundamental policy shift has contributed to the loss of funding for more than 250,000 authorized housing vouchers.<sup>22</sup>
- **Reduced Reserves.** Rather than being able to draw on substantial funding reserves to meet voucher costs that rise more than anticipated in the renewal policy and to increase authorized vouchers in use, protected reserves now are reduced from 16.7 to 4.0 percent for PHAs

---

<sup>21</sup> Improvements in HUD's data systems have made it possible to base calendar year funding on expenditures in the immediately prior calendar year.

<sup>22</sup> HUD data show that in September 2023, PHAs not participating in the Moving to Work (MTW) demonstration had 261,653 authorized vouchers that were unleased and unfunded. In addition, MTW PHAs had 66,523 unused authorized vouchers, but HUD does not provide data necessary to determine whether these agencies had uncommitted funds available that could support any of these authorized vouchers (HUD HCV Data Dashboard). In August 2023, for the first time, HUD awarded \$113 million to 118 PHAs to restore about 9,500 authorized vouchers to use. HUD Press Release No. 23-186, August 31, 2023, [https://www.hud.gov/press/press\\_releases\\_media\\_advisories/HUD\\_No\\_23\\_186](https://www.hud.gov/press/press_releases_media_advisories/HUD_No_23_186). It is not clear whether the September 2023 data reflect this funding.

administering the large majority of vouchers.<sup>23</sup> PHAs are not entitled to any additional federal funds to replenish reserves. Beginning in 2006, however, Congress has often included in the annual appropriations act up to \$200 million in adjustment funds for varying specified purposes. However, most PHAs do not benefit from these additional funds and cannot rely on receiving them due to the limited amount and HUD's application process.

- **Prohibition on “Overleasing.”** To encourage PHAs to use all their authorized vouchers, the negotiated rule made clear that a PHA could lawfully issue more than its authorized number of vouchers to aim to achieve 100 percent leasing and allow all families issued vouchers who find an eligible unit to enter into an HCV-supported lease, even if that puts the PHA over its authorized voucher cap (hence, the term overleasing). In every year from 2003 through 2023, however, Congress prohibited the use of renewal funds to support overleasing for the calendar year. HUD implements this prohibition by requiring any PHAs that overleased to restore the inappropriately used funds to their reserve account.<sup>24</sup> This stiff sanction likely discourages PHAs from aggressive efforts to increase leasing up to the authorized level, given the inevitable risk that more families than anticipated may succeed in using vouchers, or fewer current families may exit the program.
- **No Ability to Serve More Families by Reallocating Unused Authorized Vouchers.** Unlike the “use it or lose it” policy described previously, HUD has no authority under the specific language of recent annual appropriations acts to reallocate persistently unused vouchers to other PHAs with records demonstrating they are likely to use the already-authorized vouchers to serve more families.

## **Administrative Funding**

Congress provides funds annually for PHAs to administer the HCV program.<sup>25</sup> For 2023, 10 percent of the total funding Congress made available for the HCV program was for PHAs' administrative costs. PHAs earn administrative “fees” based on the number of vouchers leased, meaning that a contract exists between the PHA and a landlord to pay a rental subsidy on behalf of the resident family. Tying administrative fees to leased vouchers, not just the number of vouchers a PHA is authorized or funded to administer, is an important financial incentive for PHAs to use as many vouchers as they have funds to support.

---

<sup>23</sup> Current HUD policy considers reserves as “excess” if they exceed 4 percent of renewal funding—about one-half of a month's costs—for PHAs with 500 or more authorized vouchers. For PHAs that administer fewer vouchers, the threshold is increased to 6 percent for PHAs with 250 to 499 vouchers and to 12 percent of renewal funding for the smallest PHAs, those with fewer than 250 authorized vouchers. The 126 PHAs in the MTW demonstration are subject to somewhat different renewal and reserve offset policies. PIH Notice 2023-07, revised October 26, 2023, page 35 and Appendix B, page 44. PHAs' HCV reserves are also referred to as “net restricted assets accounts” and include HUD-held programmatic reserves.

<sup>24</sup> PIH Notice 2023-07 paragraph 21, page 36.

<sup>25</sup> Key administrative functions include maintaining a waiting list, issuing vouchers to eligible families, verifying families' income to determine eligibility and how much they are required to contribute toward housing costs, and making subsidy payments to landlords. In addition, PHAs are responsible for ensuring that families' homes meet program safety and quality standards and that the requested rent is “reasonable.” In addition to these time-consuming activities required by federal law, PHAs set discretionary policies and may offer services, such as assistance with recruiting landlords to participate in the program and to help families find housing.

As part of the congressional effort to manage spending in the HCV program that began in earnest in the 2003 appropriations law, Congress set maximum limits on the total amounts HUD could allocate for administrative fees and that PHAs could retain for fee reserves. In 2004, Congress restricted how PHAs could use administrative fees, primarily to prevent PHAs from shifting funds to supplement their public housing budgets. These 2003 and 2004 policy changes ensured that funding for housing assistance payments (rent subsidies) would never be used to cover administrative costs, and funding for administrative fees generally could be used only for administrative and other expenses in administering HCVs. Similar policies continue to be in effect.<sup>26</sup>

Although these constraints protect the use of funds for rental subsidies, the separation of administrative funding from renewal funds has facilitated Congress' underfunding administrative fees to a greater extent than rental subsidy funds, because ensuring that voucher holders do not lose their homes is a more compelling use of scarce funds than program administration. In every year beginning in 2008, Congress has funded administrative fees below the level needed to fully fund the current fee formula (explained in the following text). In 12 of the 16 years from 2008 through 2023, fees have been reduced by more than 10 percent below formula eligibility. In 4 of those years—2013, 2014, 2017, and 2019—fees were cut by more than 20 percent, according to HUD administrative data.

Congress requires HUD to distribute by formula nearly all the funds it provides annually for HCV administration. For each month a voucher is leased, a PHA is eligible to receive an amount based primarily on local rent costs as reflected in HUD's Fair Market Rents in the area for two-bedroom units in 1993 or 1994, multiplied by an inflation factor that captures the increase in local wage rates over time. The actual fee paid is reduced by any proration due to insufficient funding (Turnham et al., 2015). PHAs with smaller voucher programs receive a somewhat higher fee per voucher.<sup>27</sup>

The consensus is that basing the fee formula primarily on Fair Market Rents “does not have a strong theoretical link to administrative costs” (Turnham et al., 2015: xiv).<sup>28</sup> For this reason, and perhaps to have a more empirically sound basis to persuade Congress to fully fund a fee formula, HUD commissioned a major study designed to determine what characteristics of well-managed

---

<sup>26</sup> See PIH Notices 2015-17, “Use and Reporting of Administrative Fee Reserves,” and 2004-7 paragraph 4. PHAs may use prior year administrative funds in their reserve account for rent subsidy expenses if HCV renewal funds are insufficient. In 2022, HUD issued guidance that somewhat expanded the use of current year fees and fee reserves, based on the longstanding appropriations language that fees are “available for administrative *and other* expenses” in administering the HCV program. This notice made clear that PHAs could use current year fees and not just fee reserves for expenses such as security deposits or landlord incentive payments to facilitate families renting units with their vouchers. PIH Notice 2022-18, “Use of Housing Choice Voucher (HCV) and Mainstream Voucher Administrative Fees for Other Expenses to Assist Families to Lease Units,” supersedes the 2015 notice in part.

<sup>27</sup> HUD establishes two different fee rates for each PHA each year. The higher rate (“column A”) applies to the first 600 vouchers leased annually (7,200 unit months). The lower rate (“column B”) applies to additional leased vouchers. This policy makes the per-voucher average fee for PHAs leasing 600 or fewer vouchers higher than the overall average fee earned by PHAs leasing more than 600 vouchers. See [https://www.hud.gov/sites/dfiles/PIH/documents/CY\\_2023\\_AdminFeeRateDescription\\_May2023.pdf](https://www.hud.gov/sites/dfiles/PIH/documents/CY_2023_AdminFeeRateDescription_May2023.pdf).

<sup>28</sup> See also the Foreword to the Turnham et al. (2015: viii) report by then Assistant Secretary Katherine O'Regan: “Since the beginning of the Housing Choice Voucher (HCV) program in the mid-1970s, the formula for allocating administrative fees has largely relied on differences in Fair Market Rents (FMRs) for determining administrative fee allocations, with agencies in areas with high FMRs getting higher fees per voucher than agencies with lower FMRs. This allocation is based on the weak theory that FMRs correlate with wage rates and other costs of operation.”

HCV programs best accounted for the differences in their administrative costs and to propose an evidence-based revision of the fee formula. The HUD study, based on data collected primarily in 2013, found a number of potentially significant cost drivers that do not correlate with relative area rents (Turnham et al., 2015).

In 2016, HUD proposed a new fee formula based on the research findings and subsequent public comments.<sup>29</sup> It would have changed the share of administrative funding many PHAs received, with some receiving increases and others suffering reductions, depending in part on whether Congress fully funded the new formula. Members of the appropriations subcommittees with jurisdiction over HUD funding indicated their opposition to the proposed changes (likely due to local impacts), and HUD has not proceeded with the proposed formula change.

The status quo on administrative fees is unsatisfactory. The combination of a poorly designed fee formula and persistent congressional underfunding of that formula makes it challenging for many PHAs to carry out required activities, let alone undertake additional efforts such as expanding housing choices for families or partnering with other state and local organizations to reduce homelessness. Even if HUD does not revise the current formula, it may be able to make other modifications to fee policy that would have beneficial effects, as discussed in the final section of this article.

## Funding for “New” Vouchers

The third category of HCV program funding that Congress provides in some years is for “new” vouchers. This apparently simple term encompasses two broad categories.

1. *Incremental* vouchers add to the number of authorized vouchers that HUD has allocated to PHAs and increase the overall number of HUD-assisted rental units because they were not issued to replace other HUD-assisted units. About 1.83 to 2.0 million of the 2.69 million vouchers HUD reported as authorized in November 2023 are in this category.<sup>30</sup> In addition, Congress has provided 71,217 “Mainstream” vouchers for people with disabilities that are now renewed as part of the HCV program.<sup>31</sup> Beginning in 2021, Congress authorized and funded some 70,000 *temporary* incremental vouchers, called Emergency Housing Vouchers (EHVs), primarily to assist households that were homeless or at risk of homelessness.<sup>32</sup>

---

<sup>29</sup> HUD, “Housing Choice Voucher Program – New Administrative Fee Formula,” 81 Fed. Reg. 44100, July 6, 2016, <https://www.govinfo.gov/content/pkg/FR-2016-07-06/pdf/2016-15682.pdf>.

<sup>30</sup> The estimated range of incremental vouchers is based on HUD (2000) for the years from 1975 to 2000 and CBPP calculations from HUD data and Federal Register notices for the remaining years through 2023. The total of incremental vouchers includes about 210,000 “special purpose” vouchers that are restricted to specified demographic groups. The total number of authorized vouchers is from HUD’s HCV Data Dashboard (note 3).

<sup>31</sup> HUD does not include Mainstream vouchers in the number of authorized vouchers in the HCV Data Dashboard, and they do not count to determine the number of vouchers a PHA may project-base, which is based on the number of vouchers under the regular HCV ACC. Until 2011, Mainstream vouchers were funded under the Section 811 Supportive Housing for People with Disabilities program, 42 U.S.C. §8013(d)(4). The Frank Melville Supportive Housing Investment Act of 2010, P.L. 111-374, §2, directed that all Mainstream vouchers were to be funded like regular housing vouchers. HUD requested this change as part of then-Secretary Donovan’s initiative to streamline HUD rental assistance programs.

<sup>32</sup> EHVs were funded in the American Rescue Plan Act of 2021 (ARP), P.L. 117-2. Funding for these vouchers expires at the end of federal fiscal year 2030, or when fully expended if earlier. Reissuance of EHVs to new households has not been permitted since September 30, 2023. Id., §3202. See PIH Notices 2021-15 and 2023-14 for HUD’s relevant policy guidance.

2. *Tenant protection* vouchers also add to the number of authorized vouchers that HUD has allocated to PHAs. Unlike incremental vouchers, tenant protection vouchers do not increase the total number of HUD-assisted rental units, because they replace units previously assisted under other HUD programs (primarily public housing and Section 8 project-based rental assistance). Roughly 689,000 of the 2.69 million authorized vouchers originated as tenant protection vouchers.<sup>33</sup> Most of these vouchers can be reissued to any type of eligible family on public housing agencies' waiting lists after the initial families leave the HCV program.<sup>34</sup> Beginning in 2015, however, Congress has restricted some tenant protection vouchers for use only by the family originally issued the voucher, meaning that these designated "relocation" vouchers cannot be reissued to other families and do not permanently increase the number of authorized vouchers. The rationale for this policy change is that replacement vouchers, which can be reissued, are not needed if the unit the family had been living in is being rehabilitated or rebuilt and will be available to eligible families at the completion of construction.<sup>35</sup>

### **Funding for Incremental HCVs Declined Sharply Starting in 1995**

In the first 20 years of what is now the HCV program, Congress added incremental certificates or vouchers every year. By 1994, 1,390,005 incremental vouchers had been authorized and funded (HUD, 2000: 9). In 1995, the newly Republican-controlled Congress rescinded more than \$3 billion in funding for incremental vouchers that Congress had previously enacted and provided no funding for incremental vouchers for the next 3 years.<sup>36</sup> For the 3 years from 1999 to 2001, then-Secretary Cuomo persuaded Congress to add 189,000 incremental vouchers, and Congress funded about 18,000 incremental vouchers in 2002, bringing the total number of incremental vouchers funded through 2002 to about 1.6 million (Khadduri, 2015).

After 2002, Congress provided few incremental vouchers until fiscal year 2022, with the exception of the 70,000 EHV's that rely on mandatory funding. The only incremental vouchers funded in the appropriations acts for 2003 through 2021 were about 200,000 special purpose vouchers, nearly all for people with disabilities and homeless veterans.<sup>37</sup> In the fiscal year 2022 and 2023 appropriations acts, in addition to about 8,000 special purpose vouchers, Congress provided

---

<sup>33</sup> CBPP staff and the author calculated that 689,401 tenant protection vouchers (TPVs) were issued in the 30 years from 1994 through 2023, using a variety of HUD data sources, primarily Federal Register notices beginning in 1994 and Rental Assistance Demonstration program data on public housing units approved for conversion to project-based vouchers, and estimated the number of TPVs funded in 2020 and 2023 based on the congressional appropriation because HUD has not published data for those years. A larger number of current authorized vouchers may have originated as TPVs than publicly available data indicate.

<sup>34</sup> Project-based TPVs that preserve "hard" affordable units are an exception. Families moving into such units must qualify for the unit's number of bedrooms and meet other applicable criteria. For background on project-based vouchers, see Sard (2023).

<sup>35</sup> P.L. 113-235, 128 STAT. 2731. HUD has not published data on the number of TPVs designated as relocation-only since 2015, but if the original families who received the vouchers had exited the program before the end of November 2023, their vouchers presumably would no longer be included in the HUD data on authorized vouchers.

<sup>36</sup> P.L. 104-19, 109 STAT. 232, 233 (July 27, 1995); HUD (2000).

<sup>37</sup> CBPP staff calculations. Some of these were Mainstream vouchers funded in the past decade that HUD's total authorized voucher figure may not include.

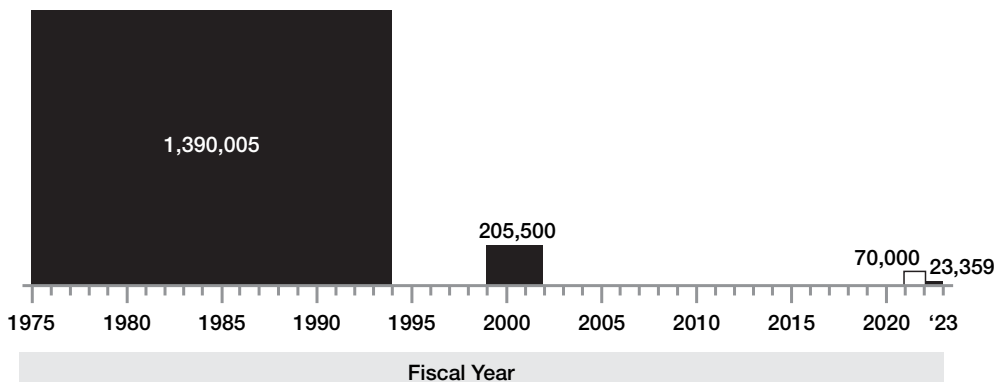


funding for more than 23,000 general purpose “fair share” vouchers, the first such awards in 2 decades.<sup>38</sup> Exhibit 1 shows these allocations.

**Exhibit 1**

**Incremental Vouchers Decreased Sharply After First 20 Years**

**General purpose housing vouchers authorized by years**



*Notes: Incremental vouchers funded in annual appropriations acts remain available only if the U.S. Congress continues to renew funding. In 2021, Congress funded 70,000 Emergency Housing Vouchers for up to 10 years. Data do not include the more than 280,000 special purpose vouchers restricted to particular demographic groups and the estimated 690,000 nonincremental tenant protection vouchers that Congress has funded beginning in the early 1990s.*

*Sources: Fiscal years 1975–2000 data—HUD (2000); later years—congressional reports, HUD documents, and analyses by Center on Budget and Policy Priorities staff and the author*

The sharp decline in new incremental vouchers after 1994 exacerbated the increase in “worst case” housing needs in the ensuing decades (Alvarez and Steffen, 2023: ES-1). More nuanced effects have also prevailed. For example, because most new vouchers after 2002 were reserved for people with disabilities and homeless veterans, the share of vouchers housing families with children declined significantly. At the same time, the share of vouchers received by seniors and people with disabilities without children increased (Mazzara, Sard, and Rice, 2016).

In addition, the geographic distribution of vouchers has been significantly affected, stemming from two aspects of the history of the allocation of new vouchers. First, the large majority of new vouchers allocated based on relative need—fair share vouchers—were funded before 2003. In the years when most of these vouchers were allocated, HUD had selection policies in place that disadvantaged PHAs in large urban areas relative to suburban areas (Sard, 1995). Second, about 25 percent of current authorized vouchers have been issued to replace subsidies that HUD committed primarily before 1990 through the public housing and privately owned, project-based assisted housing programs. Places that received more of these early allocations tend to have been relatively more populated in the latter half of the 20th century than in the 21st century.

<sup>38</sup> HUD allocates “fair share” vouchers based on relative need for rental assistance in different states and smaller geographic areas if funds permit. See 24 C.F.R. 982.101(b)(2)(iii). Within the allocation areas, funds typically have been awarded competitively to PHAs. To allocate the 2022 and 2023 fair share vouchers, HUD modified the selection criteria and process somewhat pursuant to the congressional authorization and added PHA capacity criteria in 2023. See PIH Notices 2023-21 and 2022-29.

As a result, many rural areas, plus states in the East and Midwest, have a higher ratio of federal rental assistance, including housing vouchers, relative to current need than places that grew substantially in the 21st century. For example, Alabama has sufficient federal rental assistance to serve nearly one-half of the state's families in greatest need of rental subsidies, and Illinois can provide federal rental assistance to about one in three of its neediest families, whereas California can serve only about one in four families, and Arizona has federal rental assistance for less than one in five similar families.<sup>39</sup> Taken together, these historic factors make it even more difficult for places in the West and Southwest, as well as large cities in other areas, to address their disproportionately high rates of homelessness.

## **Funding the HCV Program Annually Through the Discretionary Budget Is Harmful to Families and Challenging for PHAs to Administer**

Since 2003, when Congress began basing renewal funding primarily on voucher leasing and costs in the prior year—on top of earlier decisions to provide only single-year rather than multiyear funding commitments for all program components—the HCV program has been more challenging for PHAs to administer. Predicting future subsidy costs or voucher turnover rates with a high degree of accuracy is inherently difficult for HUD, Congress, and PHAs. Consequently, HUD and Congress may err in the amount of renewal funding requested or provided, and PHAs may be too cautious or too generous in setting maximum voucher subsidies or in deciding how many vouchers to issue to families on their waiting lists. Any of these judgment errors could prevent PHAs from maintaining the number of families their HCV programs assist.

Voucher costs may increase due to many factors. Factors largely outside of PHAs' control or ability to predict include increasing local market rents, declining family incomes, larger families admitted to the program that qualify for larger (and, therefore, more expensive) units, more families searching for new rentals succeeding in securing units, and more participating families moving to neighborhoods with higher rents. If more families leave the program than had been typical, costs also are likely to increase (unless the vouchers are not reissued) for two reasons: the newly admitted replacement families are likely to have lower incomes, and the rent for newly occupied units will be higher in a rising market. Taken together, these factors will increase the rental subsidy replacement families receive.

Better data, analytic tools, and technical assistance to help PHAs predict future leasing and costs more accurately have helped PHAs manage the challenges inherent in annual renewal funding. However, if predictions about cost-drivers turn out to be wrong, and HUD's inflation factor is not sufficient to meet the current year's actual costs, PHAs need access to additional funds—through

---

<sup>39</sup> Author's calculation of Center on Budget and Policy Priorities estimates of households receiving housing voucher subsidies and other units of federal rental assistance in 2011 or 2012 compared with estimated unmet rental housing needs by state (Sard and Fischer, 2013: Appendix 3b).

their reserves or receipt of supplemental funding—to avoid having to reduce the number of families they serve or increase the share of housing costs that families are required to pay, or both.<sup>40</sup>

In the worst case, PHAs may have to terminate the subsidies of currently participating families, resulting in loss of housing and possible homelessness. Terminating subsidy contracts with landlords—or unilaterally reducing subsidy payments—undermines landlords' willingness to participate in the program (Sard, 2004). Furthermore, if PHAs use fewer vouchers in a year than usual or otherwise spend less on voucher subsidies, their next year's renewal funding will be reduced, locking in a loss of HCV subsidies unless the PHAs can increase the rent subsidies they provide by drawing on reserves or other supplemental funds.

These risks exist even if Congress fully funds the renewal formula, particularly if the formula does not rely on recent calendar year data (as was the case in 2004–06), the inflation factor does not keep pace with rapidly rising rents, reserves are low, or supplemental funding is inadequate. In the best of cases under recent renewal policy, fully funding the renewal formula only allows PHAs to continue to assist the same number of families, without the means to lease up more than 250,000 vouchers that are authorized but unfunded in 2023 (note 22).

In all but 6 years in the period from 2005 to 2023, however, Congress provided less than the amount of funding needed to fully fund that year's renewal policy. In 4 years—2005, 2006, 2013, and 2017—voucher renewal funding levels were so inadequate that many PHAs were forced to reduce the number of families receiving vouchers or take other measures harmful to families and the program's reputation (Rice, 2013; Rice, 2017a; Sard and Rice, 2007).<sup>41</sup>

To restore more vouchers to use after some of these severe cutbacks, Congress made additional renewal funding, above the level needed to fully fund the renewal policy, available in the 2007, 2008, and 2015 appropriations acts. These funds also may have enabled some PHAs to add to their reserves. Despite these brief remedial efforts, periodic funding shortfalls and the effect on PHA management have caused fewer vouchers to be available in many communities. For example, due to the funding cuts in 2013, about 100,000 fewer families received HCV assistance, only about one-half of which were restored by the end of 2015 (Rice, 2016).

The steepest proration in the history of the HCV program (below 94 percent) was in 2013, largely due to the “sequestration” cut of nearly \$1 billion from the HCV program that the caps on discretionary spending agreed to in the 2011 Budget Control Act (BCA) required (Reich, 2015; Rice, 2013). Despite Congress moderating the BCA caps somewhat after 2013, housing assistance funding overall was 4.6 percent less in 2016 than in 2010, adjusted for inflation (Rice, 2016). The

---

<sup>40</sup> HCV families who rent units costing more than the maximum subsidy a PHA provides have to pay the remaining rent cost in addition to 30 percent of income.

<sup>41</sup> According to HUD administrative data, the renewal formula was fully funded in 2007, 2008, 2015, and 2021–23. The prorations in the 4 years of deep cuts were 2005: 0.95917; 2006: 0.958351792; 2013 (for all but vouchers for homeless veterans under the Veterans Affairs Supportive Housing program): 0.93976; and 2017: 0.97000. In the other 9 years, the gap was less than 1 percent, and HUD may have been able to narrow or close the gap with other funds, including reducing funding awarded to PHAs with “excess” reserves.

budget caps, not hostility to HUD programs generally, drove these cuts (Rice, 2017b).<sup>42</sup> Funding for the HCV program was reduced by less in dollar terms—and much less proportionally—than other HUD programs such as public housing, the HOME block grant, and housing for elderly people and people with disabilities (Rice, 2016). The new nondefense discretionary caps that apply in 2024 and 2025, which do not allow for inflation-related increases, may again drive shortfalls in funding for voucher renewals or in other HUD programs to enable HCV funding to be increased enough to cover the steep increase in rental costs that began during the pandemic (Reich, 2023).<sup>43</sup>

Programs that Congress funds annually make up only a small share (14 percent) of the federal budget, but they are the programs that Congress can control most directly and, therefore, are most likely to be the focus of policymakers looking to cut spending (CBPP, 2023). Discretionary programs are also at risk of funding delays and gaps due to Congress's failure to timely enact annual appropriations. Since 2005, when Congress shifted renewal funding to a calendar year basis for all PHAs, Congress has failed in 9 years (through 2023) to enact HUD's annual appropriations law until after the calendar funding year began (Appendix: Annual HUD Appropriations Laws, 1990–2023).

Nondefense discretionary spending has been declining as a share of the economy since 2010, with the exception of COVID-19-related spending in 2020 (CBPP, 2023). As the largest single component of the HUD budget—and one that often requires funding increases just to assist the same number of families due to the growing gap between rents and tenant incomes—the HCV program is vulnerable to policymakers' recurring efforts to “control” spending. As long as the HCV program is funded entirely through annual appropriations bills, funding for voucher renewals and administrative fees may be shortchanged. Systemic pressures to control nondefense discretionary spending also make the prospects dim for the needed major increase in the number of families receiving rental assistance.

## Lessons for the Future

The history of the key changes in funding of the three components of the HCV program—voucher renewals, administrative costs, and new vouchers—reveals areas for possible future improvements to enable the program to better achieve its goals and serve more households.

### Voucher Renewal Policy Recommendations

At least in the near term, it is unlikely that there will be the political will to make funding of voucher renewals and related administrative costs more reliable by returning to multiyear funding commitments or shifting this spending from the discretionary to the mandatory side of the budget.

<sup>42</sup> Comparing final appropriations for 2017 to 2010, the year prior to the enactment of the BCA, CBPP found that Congress reduced HUD program funding (adjusted for inflation) by 9 percent, while cutting nondefense discretionary programs overall by 13.4 percent (Rice, 2017b).

<sup>43</sup> The Fiscal Responsibility Act of 2023 (also known as “the debt limit deal”) established enforceable discretionary spending caps for fiscal years 2024 and 2025. P. L. 118-5, §101(a), 2 U.S.C. §901(c)(9) and (10). CBPP estimated that the Senate and House fiscal year 2024 HUD appropriations bills would leave 80,000 to 112,000 housing vouchers in use in 2023 unfunded, respectively (Acosta, 2024). The compromise final bill appears to have increased voucher renewal funding to the level needed to maintain the number of funded vouchers or at least prevent cuts of this magnitude but reduced funding for many other HUD programs (Parrott, 2024).

Funding designated as mandatory—such as Social Security, Medicare, or the Supplemental Nutrition Assistance Program—recurs consistent with the specified policies, independent of annual appropriations acts, unless Congress changes the particular laws or a “sequester” reduces the amount of funding made available under particular mandatory programs (CBPP, 2022).

However, Congress could include in annual discretionary appropriations bills the following changes in HCV renewal policy to promote the efficient utilization of available funds, modestly increase the number of families receiving HCV assistance, and give PHAs the greater financial security they need to take the steps necessary to accomplish these and other program goals, such as expanding families’ housing choices.

### **Enable Eligible Families to Use Authorized but Unfunded Vouchers**

Nearly 400,000 authorized vouchers (out of nearly 2.7 million) were not in use to pay rent subsidies as of November 2023. HUD estimates that PHAs do not have funds available to support at least 250,000 of these unused vouchers, as discussed previously.

One way to put more of the unfunded authorized vouchers to use would be to reallocate them to PHAs that use all or nearly all their authorized vouchers. As of the end of September 2023, more than 130 non-Moving to Work agencies were leasing 98 percent or more of their authorized vouchers and have little or no ability to serve more families without an increase in the number of authorized vouchers as a result.<sup>44</sup> If Congress does not provide additional funds for the initial cost of these vouchers, excess reserves that HUD recaptures and reallocates could fund them. HUD requested similar reallocation authority in the fiscal year 2023 budget, but Congress did not approve it.<sup>45</sup> Such a policy would restore a key element of the negotiated rule on renewal funding policy HUD issued in 1999 discussed previously, which was designed to use more already authorized vouchers and give PHAs an incentive to increase their voucher utilization or risk loss of future leasing capacity.

In addition, Congress could allow HUD to provide additional funds to PHAs that effectively use available voucher renewal funds but have numerous authorized vouchers that they cannot use due to lack of funding. Two options to provide such funds are to make it an eligible use of excess reserve funds shifted from other PHAs or to make it an eligible category of uses of the supplemental funds set aside within the renewal amount, or both.<sup>46</sup>

---

<sup>44</sup> CBPP calculation of HUD data.

<sup>45</sup> HUD requested authority to reallocate authorized vouchers from PHAs with a history of significant underutilization of funded vouchers to PHAs that have high HCV utilization rates, are leasing all or nearly all their authorized vouchers, and have demonstrated capacity to serve additional families. President’s Budget for Fiscal Year 2023, page 559, [https://www.whitehouse.gov/wp-content/uploads/2022/03/hud\\_fy2023.pdf](https://www.whitehouse.gov/wp-content/uploads/2022/03/hud_fy2023.pdf). Although Congress did not include general HCV reallocation authority in the fiscal year 2023 HUD appropriations act, it has given HUD authority to reallocate unused vouchers for foster youth in recent years (P.L. 117-103, 136 STAT. 732) and unleased EHV and associated funds (ARP §3202(b)(4)(B), 135 STAT. 59).

<sup>46</sup> HUD requested this authority in the fiscal year 2023 budget. HUD, “Tenant-based Rental Assistance Congressional Justifications 2023,” pages 6–12, <https://www.hud.gov/sites/dfiles/CFO/documents/2023HUDCongressionalJustificationsFINALElectronicversion.pdf>. The final 2023 appropriations act did not include it.

### **Allow PHAs to Use More Than the Authorized Number of Vouchers**

It is common for PHAs to issue vouchers to more families than the number who succeed in leasing up. For PHAs near their authorized cap, however, this strategy is risky under current policy. If more families than expected enter into HCV rental agreements, the PHAs may be required to repay HUD the amount of rent subsidies provided during the year for more than the number of authorized vouchers. Congress could eliminate the prohibition in appropriations laws on leasing more than the authorized number of vouchers—and its deterrent effect—while still controlling costs by continuing to base renewal funding on the cost of leasing authorized vouchers but eliminating the requirement to pay HUD back for the cost of subsidies provided to families above the authorized cap.

### **Provide Funding, Above the Amount to Fully Fund the Renewal Formula, to Restore PHA Reserves to the HUD-Determined Reasonable Level**

Given the uncertainty of congressional funding levels and in voucher costs from year to year, having sufficient reserves is essential to PHAs' willingness to administer their HCV programs in ways that would maximize the benefit of existing funding. For example, PHAs that increase the number of vouchers in use during the year, or increase payment standards to reduce families' rent burdens and enable families to access costlier units in neighborhoods with more opportunities, are taking the risk that they will have sufficient funds to sustain these policies in subsequent years. Even if fully funded, the renewal formula used in recent appropriations acts would cover only average costs in the prior year plus inflation. Higher leasing rates or payment standards in the latter part of the year can only be sustained in the following year by drawing on reserves. Even if Congress gives HUD authority to provide supplemental funds for these purposes, receipt by any particular PHA is not guaranteed given the many claims on such funds.

At the end of 2022, nearly 500 PHAs—close to 1 of every 4 PHAs administering vouchers—had lower reserve levels than HUD considers reasonable for their program size and, therefore, could be constrained from adopting policies that would increase the effectiveness of their HCV programs.<sup>47</sup> Once PHAs have reduced their reserves below the reasonable level, they are on their own to build up reserves. HUD has no authority or funding to fill this gap. To do so, PHAs generally must “save” some of their annual renewal funding by serving fewer families or reducing per-voucher costs by reducing payment standards or altering other discretionary policies. Particularly when the problem stems directly from underfunding of voucher renewals in appropriations legislation, Congress should aim to compensate by providing additional funding in subsequent years to restore reserves, in addition to providing full renewal funding under the formula. Alternatively, Congress could give HUD authority to restore reserves using funds recaptured from excess PHA reserves and other HUD programs.

### **Incorporate Voucher Renewal Funding Policy in Authorizing Law, Including Using Mandatory Funding to Prevent Prorations**

As discussed previously, in every year beginning in 2003, annual HUD appropriations bills have overridden the congressionally mandated negotiated rule on voucher renewal policy, often with new changes in HCV renewal policy. Congress has never incorporated an updated voucher renewal

<sup>47</sup> Author's calculations from HUD data.

funding policy into the U.S. Housing Act, and the 1999 negotiated rule is still in HUD's regulations (24 C.F.R. 982.102). The flexibility to rewrite voucher renewal policy annually in appropriations acts helped improve the calamitous policy changes from 2003 to 2006. By now, however, plenty of time has passed to learn from experience, and PHAs would greatly benefit from the security of having renewal policy incorporated into the Housing Act. Congress is less likely to ignore or override policies included in authorizing laws approved by a current or prior Congress, rather than just in agency regulations, so such a change would bring more predictability to voucher renewal funding. The legislation could allow HUD to continue to develop policy in some areas through notice or new regulations.

As part of such an amendment to the Housing Act, Congress could include a provision requiring the U.S. Department of the Treasury to provide additional funds to HUD if an annual appropriations act is insufficient to fully fund voucher renewal needs. Such a provision, called a permanent indefinite appropriation, would effectively eliminate the risk of annual appropriations bills underfunding the renewal policy required by the act. The additional funds would be considered “mandatory” and, therefore, would not count against any applicable discretionary cap.<sup>48</sup>

### **Administrative Funding Improvements**

Improving the adequacy of administrative fees requires revamping the formula for allocating funds based on evidence of key cost-drivers, and not just fully funding the current irrational policy that is largely based on rent costs 30 years ago, as discussed previously. If opposition from key members of Congress continues to make it impractical for HUD to attempt to revise the formula, HUD could nonetheless take some important steps to encourage PHAs to implement discretionary policies that entail additional administrative costs. By regulation or notice, HUD could establish supplemental or bonus fees for PHAs that adopt particular policies or initiatives. For example, PHAs that increase the share of vouchers used in low-poverty (or otherwise higher-opportunity) areas could be eligible for additional fees. To have flexible funds available to use for such bonuses, it may be necessary for HUD to request—and Congress approve—a higher amount of administrative funding that HUD may distribute separately from the fee formula.<sup>49</sup>

### **Mandatory Funding for Additional Incremental Vouchers**

A major expansion of the number of incremental vouchers Congress funds is essential to make significant progress in reducing severe rent burdens, housing instability, and homelessness, which all have worsened considerably during the past 2 decades (Alvarez and Steffen, 2023; de Sousa et

---

<sup>48</sup> Congress included a similar provision in section 3202(a)(4) of the ARP, but it applied only to funding shortfalls for particular reasons in fiscal year 2021 and, therefore, was a “current indefinite” provision, not the proposed permanent indefinite authorization.

<sup>49</sup> In the 2023 appropriations act, Congress gave HUD discretion over the allocation of only \$30 million, about 1 percent of the \$2.78 billion provided for “administrative and other expenses of public housing agencies in administering the section 8 tenant-based rental assistance program.” P.L. 117-328, 136 STAT. 5144.

al., 2023; JCHS, 2024).<sup>50</sup> However, the lesson of the past 30 years is that a substantial increase in spending for new housing vouchers is unlikely as part of the discretionary budget due to caps on discretionary spending and the greater vulnerability of discretionary programs to funding cuts.<sup>51</sup>

To establish precedent of authorizing mandatory funding for additional permanent housing vouchers, it makes sense to start with proposals to increase vouchers for politically popular groups that also have severe housing needs. That approach has gained some traction in recent years. The President's fiscal year 2024 budget request included two such proposals, one that would make 50,000 new vouchers available for extremely low-income veterans with severe housing needs (an estimated 450,000 households once fully implemented) and the other to guarantee housing vouchers to all youth aging out of foster care (about 20,000 per year). As proposed, mandatory funding for these new vouchers would be provided for 10 years, with the expectation that the funding would be extended, thereby allowing the vouchers to be reissued to qualifying families.<sup>52</sup> This is the first time that a President has included such mandatory funding proposals for additional vouchers as part of the annual budget.

Congress has shown some willingness to provide new funding for housing vouchers through the mandatory rather than discretionary budget. As noted previously, Congress provided mandatory funding for about 70,000 EHV in 2021 to provide up to 10 years of rental subsidies for people who otherwise would be homeless or at risk of homelessness. Also in 2021, the House of Representatives approved a proposal for mandatory funding for an estimated 300,000 incremental vouchers and their renewal for no more than 10 years, including related administrative costs (Fischer, 2022).<sup>53</sup> Taken together, these congressional actions and recent administration proposals are a foundation on which a future Congress, with both houses supporting a substantial increase in housing vouchers, could build.

---

<sup>50</sup> Nearly two-thirds of households earning less than \$30,000 paid more than one-half their incomes in rent in 2022, and these households are far more likely than higher-income households to experience homelessness and other housing-related hardship (JCHS, 2024). HUD's most recent analysis of "worst-case" housing needs found that 8.5 million unassisted households with incomes at or below 50 percent of local median income paid more than one-half their incomes for rent or lived in severely inadequate housing in 2021, up from 5.0 million in 2001 (Alvarez and Steffen, 2023).

<sup>51</sup> It makes sense to continue to rely on discretionary funding for the initial year of the relatively small and changeable number of new tenant protection vouchers needed each year due to multifamily owners' decisions not to renew their contracts with HUD, or public housing conversion or reconstruction. If Congress does not enact legislation to substantially expand the availability of housing vouchers with mandatory funding, then it should provide additional discretionary funding for incremental vouchers.

<sup>52</sup> HUD, "2024 Congressional Justifications, Mandatory Affordable Housing Programs," pages 2-1 through 2-4, <https://www.hud.gov/sites/dfiles/CFO/documents/2024-HUD-Congressional-Justifications.pdf>. Congress has not advanced these proposals.

<sup>53</sup> "Build Back Better Act," H.R. 5376, section 40009, November 18, 2021. The Senate never formally considered the House Build Back Better bill because it did not have sufficient support to pass.



## Appendix

### Exhibit A1

#### Annual HUD Appropriations Laws, 1990–2023 (1 of 2)

Fiscal Year	Citation	Link
1990	P.L. 101-144, 103 STAT. 839, 844* (Nov. 9, 1989)	<a href="https://www.congress.gov/101/statute/STATUTE-103/STATUTE-103-Pg839.pdf">https://www.congress.gov/101/statute/STATUTE-103/STATUTE-103-Pg839.pdf</a>
1991	P.L. 101-507, 104 STAT. 1351, 1356 (Nov. 5, 1990)	<a href="https://www.congress.gov/101/statute/STATUTE-104/STATUTE-104-Pg1351.pdf">https://www.congress.gov/101/statute/STATUTE-104/STATUTE-104-Pg1351.pdf</a>
1992	P.L. 102-139, 105 STAT. 736,743 (Oct. 18, 1991)	<a href="https://www.congress.gov/102/statute/STATUTE-105/STATUTE-105-Pg736.pdf">https://www.congress.gov/102/statute/STATUTE-105/STATUTE-105-Pg736.pdf</a>
1993	P.L. 102-389, 106 STAT. 1571, 1579 (Oct. 6, 1992)	<a href="https://www.congress.gov/102/statute/STATUTE-106/STATUTE-106-Pg1571.pdf">https://www.congress.gov/102/statute/STATUTE-106/STATUTE-106-Pg1571.pdf</a>
1994	P.L. 103-124, 107 STAT. 1275, 1282 (Oct. 28, 1993)	<a href="https://www.congress.gov/103/statute/STATUTE-107/STATUTE-107-Pg1275.pdf">https://www.congress.gov/103/statute/STATUTE-107/STATUTE-107-Pg1275.pdf</a>
1995	P.L. 103-327, 108 STAT. 2298, 2305 (Sept. 28, 1994)	<a href="https://www.congress.gov/103/statute/STATUTE-108/STATUTE-108-Pg2298.pdf">https://www.congress.gov/103/statute/STATUTE-108/STATUTE-108-Pg2298.pdf</a>
1996	P.L. 104-134, 110 STAT. 1321-266 (Apr. 26, 1996)	<a href="https://www.govinfo.gov/content/pkg/STATUTE-110/pdf/STATUTE-110-Pg1321.pdf">https://www.govinfo.gov/content/pkg/STATUTE-110/pdf/STATUTE-110-Pg1321.pdf</a>
1997	P.L. 104-204, 110 STAT. 2874, 2882 (Sept. 26, 1996)	<a href="https://www.congress.gov/104/plaws/publ204/PLAW-104publ204.pdf">https://www.congress.gov/104/plaws/publ204/PLAW-104publ204.pdf</a>
1998	P.L. 105-65, 111 STAT. 1344, 1351 (Oct. 27, 1997)	<a href="https://www.congress.gov/105/plaws/publ65/PLAW-105publ65.pdf">https://www.congress.gov/105/plaws/publ65/PLAW-105publ65.pdf</a>
1999	P.L. 105-276, 112 STAT. 2461, 2469 (Oct. 21, 1998)	<a href="https://www.congress.gov/105/plaws/publ276/PLAW-105publ276.pdf">https://www.congress.gov/105/plaws/publ276/PLAW-105publ276.pdf</a>
2000	P.L. 106-74, 113 STAT. 1047, 1055 (Oct. 20, 1999)	<a href="https://www.congress.gov/106/plaws/publ74/PLAW-106publ74.pdf">https://www.congress.gov/106/plaws/publ74/PLAW-106publ74.pdf</a>
2001	P.L. 106-377, 114 STAT. 1441, 1441A-11 (Oct. 27, 2000)	<a href="https://www.congress.gov/106/plaws/publ377/PLAW-106publ377.pdf">https://www.congress.gov/106/plaws/publ377/PLAW-106publ377.pdf</a>
2002	P.L. 107-73, 115 STAT. 651, 659 (Nov. 26, 2001)	<a href="https://www.congress.gov/107/plaws/publ73/PLAW-107publ73.pdf">https://www.congress.gov/107/plaws/publ73/PLAW-107publ73.pdf</a>
2003	P.L. 108–7, Div. K, Title II; 117 STAT. 11, 483 (Feb. 20, 2003)	<a href="https://www.congress.gov/108/plaws/publ7/PLAW-108publ7.pdf">https://www.congress.gov/108/plaws/publ7/PLAW-108publ7.pdf</a>
2004	P.L. 108-199, Div. G, Title II; 118 STAT. 3, 371 (Jan. 23, 2004)	<a href="https://www.congress.gov/108/plaws/publ199/PLAW-108publ199.pdf">https://www.congress.gov/108/plaws/publ199/PLAW-108publ199.pdf</a>
2005	P.L. 108-447, Div. I, Title II; 118 STAT. 2809, 3295 (Dec. 8, 2004)	<a href="https://www.congress.gov/108/plaws/publ447/PLAW-108publ447.pdf">https://www.congress.gov/108/plaws/publ447/PLAW-108publ447.pdf</a>
2006	P.L. 109-115, Div. A, Title II; 119 STAT. 2396, 2440 (Nov. 30, 2005)	<a href="https://www.congress.gov/109/plaws/publ115/PLAW-109publ115.pdf">https://www.congress.gov/109/plaws/publ115/PLAW-109publ115.pdf</a>
2007	P.L. 110-5, Sec. 21033, 121 STAT. 8, 51 (Feb. 15, 2007)	<a href="https://www.congress.gov/110/statute/STATUTE-121/STATUTE-121-Pg8.pdf">https://www.congress.gov/110/statute/STATUTE-121/STATUTE-121-Pg8.pdf</a>
2008	P.L. 110-161, Div. K, Title II; 121 STAT. 1844, 2412 (Dec. 26, 2007)	<a href="https://www.congress.gov/110/statute/STATUTE-121/STATUTE-121-Pg1844.pdf">https://www.congress.gov/110/statute/STATUTE-121/STATUTE-121-Pg1844.pdf</a>
2009	P.L. 111-8, Div. I, Title II; 123 STAT. 524, 950 (Mar. 11, 2009)	<a href="https://www.congress.gov/111/plaws/publ8/PLAW-111publ8.pdf">https://www.congress.gov/111/plaws/publ8/PLAW-111publ8.pdf</a>
2010	P.L. 111-117, Div. A, Title II; 123 STAT. 3034, 3074 (Dec. 16, 2009)	<a href="https://www.congress.gov/111/plaws/publ117/PLAW-111publ117.pdf">https://www.congress.gov/111/plaws/publ117/PLAW-111publ117.pdf</a>
2011	P.L. 112-10, Div. B, Sec. 2235; 125 STAT. 38, 195 (Apr. 15, 2011)	<a href="https://www.govinfo.gov/content/pkg/PLAW-112publ10/pdf/PLAW-112publ10.pdf">https://www.govinfo.gov/content/pkg/PLAW-112publ10/pdf/PLAW-112publ10.pdf</a>

**Exhibit A1**

## Annual HUD Appropriations Laws, 1990–2023 (2 of 2)

Fiscal Year	Citation	Link
2012	P.L. 112-55, Div. C, Title II; 125 STAT. 552, 672 (Nov. 18, 2011)	<a href="https://www.govinfo.gov/content/pkg/PLAW-112publ55/pdf/PLAW-112publ55.pdf">https://www.govinfo.gov/content/pkg/PLAW-112publ55/pdf/PLAW-112publ55.pdf</a>
2013	P.L. 113-6, Div. F, Title VIII, Sec. 1807; 127 STAT. 198, 434 (Mar. 26, 2013)	<a href="https://www.congress.gov/113/plaws/publ6/PLAW-113publ6.pdf">https://www.congress.gov/113/plaws/publ6/PLAW-113publ6.pdf</a>
2014	P.L. 113-76, Div. L, Title II; 128 STAT. 5, 604 (Jan. 17, 2014)	<a href="https://www.govinfo.gov/content/pkg/PLAW-113publ76/pdf/PLAW-113publ76.pdf">https://www.govinfo.gov/content/pkg/PLAW-113publ76/pdf/PLAW-113publ76.pdf</a>
2015	P.L. 113-235, Div. K, Title II; 128 STAT. 2130, 2727 (Dec. 16, 2014)	<a href="https://www.govinfo.gov/content/pkg/PLAW-113publ235/pdf/PLAW-113publ235.pdf">https://www.govinfo.gov/content/pkg/PLAW-113publ235/pdf/PLAW-113publ235.pdf</a>
2016	P.L. 114-113, Div. L, Title II; 129 STAT. 2242, 2866 (Dec. 18, 2015)	<a href="https://www.govinfo.gov/content/pkg/PLAW-114publ113/pdf/PLAW-114publ113.pdf">https://www.govinfo.gov/content/pkg/PLAW-114publ113/pdf/PLAW-114publ113.pdf</a>
2017	P.L. 115-31, Div. K, Title II; 131 STAT. 135, 756 (May 5, 2017)	<a href="https://www.govinfo.gov/content/pkg/PLAW-115publ31/pdf/PLAW-115publ31.pdf">https://www.govinfo.gov/content/pkg/PLAW-115publ31/pdf/PLAW-115publ31.pdf</a>
2018	P.L. 115-141, Div. L, Title II; 132 STAT. 348, 1005 (Mar. 23, 2018)	<a href="https://www.congress.gov/115/plaws/publ141/PLAW-115publ141.pdf">https://www.congress.gov/115/plaws/publ141/PLAW-115publ141.pdf</a>
2019	P.L. 116-6, Div. G, Title II; 133 STAT. 13, 431 (Feb. 15, 2019)	<a href="https://www.congress.gov/116/plaws/publ6/PLAW-116publ6.pdf">https://www.congress.gov/116/plaws/publ6/PLAW-116publ6.pdf</a>
2020	P.L. 116-94, Div. H, Title II; 133 STAT. 2534, 2973 (Dec. 20, 2019)	<a href="https://www.congress.gov/116/plaws/publ94/PLAW-116publ94.pdf">https://www.congress.gov/116/plaws/publ94/PLAW-116publ94.pdf</a>
2021	P.L. 116-260, Div. L, Title II; 134 STAT. 1182, 1865 (Dec. 27, 2020)	<a href="https://www.congress.gov/116/plaws/publ260/PLAW-116publ260.pdf">https://www.congress.gov/116/plaws/publ260/PLAW-116publ260.pdf</a>
2022	P.L. 117-103, Div. L, Title II; 136 STAT. 49, 725 (Mar. 15, 2022)	<a href="https://www.congress.gov/117/plaws/publ103/PLAW-117publ103.pdf">https://www.congress.gov/117/plaws/publ103/PLAW-117publ103.pdf</a>
2023	P.L. 117-328, Div. L, 136 STAT. 4459, 5139 (Dec. 29, 2022)	<a href="https://www.congress.gov/117/plaws/publ328/PLAW-117publ328.pdf">https://www.congress.gov/117/plaws/publ328/PLAW-117publ328.pdf</a>

*\*The second page in the "STAT." component of the citation is the page on which text begins relating to HUD appropriations. Provisions relating to the Housing Choice Voucher program are usually at or near the beginning of the HUD section.*

## Acknowledgments

The author appreciates the Center on Budget and Policy Priorities' (CBPP) financial support for the writing of this article and the invaluable assistance of CBPP staff Sonya Acosta (analyses of HUD funding data), Urvi Patel (historical and other research), Liv Garahan (graphic design), and Will Fischer (recent policy history and insights). Particular thanks to Richard Kogan, CBPP budget expert extraordinaire, for his guidance on the budget laws that have affected discretionary funding since 1990.

## Author

Barbara Sard is a consultant on housing policy. Until 2019, she led Housing work at the Center on Budget and Policy Priorities for more than 20 years. From 2009 to 2011, she was the Senior Advisor for Rental Assistance to HUD Secretary Shaun Donovan.

## References

- Acosta, Sonya. 2024. "Added Funding Needed to Prevent Harmful Cuts to Housing Vouchers and Other Rental Assistance Programs in 2024." Center on Budget and Policy Priorities. <https://www.cbpp.org/blog/added-funding-needed-to-prevent-harmful-cuts-to-housing-vouchers-and-other-rental-assistance>.
- Alvarez, Thyria A., and Barry L. Steffen. 2023. *Worst Case Housing Needs: 2023 Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Department and Research. <https://www.huduser.gov/portal/portal/sites/default/files/pdf/Worst-Case-Housing-Needs-2023-Executive-Summary.pdf>.
- Center on Budget and Policy Priorities (CBPP). 2019. "Policy Basics: The 'Pay-As-You-Go' Budget Rule." <https://www.cbpp.org/research/policy-basics-congresss-pay-as-you-go-budget-rule>.
- . 2022. "Policy Basics: Introduction to the Federal Budget Process." <https://www.cbpp.org/research/policy-basics-introduction-to-the-federal-budget-process>.
- . 2023. "Policy Basics: Non-Defense Discretionary Programs." <https://www.cbpp.org/sites/default/files/atoms/files/PolicyBasics-NDD.pdf>.
- Congressional Research Service (CRS). 2006. *The Department of Housing and Urban Development (HUD): FY2006 Budget*. CRS Report RL32869. Washington, DC: Library of Congress. [https://www.everycrsreport.com/files/20060228\\_RL32869\\_dde8536852e4a1ebd8dd68e313c9927837f7f530.pdf](https://www.everycrsreport.com/files/20060228_RL32869_dde8536852e4a1ebd8dd68e313c9927837f7f530.pdf).
- . 2019. *Department of Housing and Urban Development (HUD): Funding Trends Since FY2002*. Washington, DC: CRS. <https://crsreports.congress.gov/product/pdf/R/R42542>.
- de Sousa, Tanya, Alyssa Andrichik, Ed Prestera, Katherine Rush, Colette Tano, and Micaiah Wheeler. 2023. *The 2023 Annual Homelessness Assessment Report (AHAR) to Congress: Part 1: Point-in-Time Estimates of Homelessness*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Community Planning and Development. <https://www.huduser.gov/portal/sites/default/files/pdf/2023-AHAR-Part-1.pdf>.
- Finkel, Meryl, Jill Khadduri, Victoria Main, Linda Pistilli, Claudia Solari, Kristin Winkel, and Michelle Wood. 2003. *Costs and Utilization in the Housing Choice Voucher Program*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Department and Research. <https://www.huduser.gov/Portal/Publications/PDF/utilization.pdf>.
- Fischer, Will. 2022. *Housing Investments in Build Back Better Would Address Pressing Unmet Needs*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/housing/housing-investments-in-build-back-better-would-address-pressing-unmet-needs>.
- Gartland, Eric. 2022. *Chart Book: Funding Limitations Create Widespread Unmet Need for Rental Assistance*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/housing/funding-limitations-create-widespread-unmet-need-for-rental-assistance>.

Greenlee, Andrew, and Kirk McClure. 2024. "How Many Households are Served by the Housing Choice Voucher Program?" *Cityscape* 26 (2): 41–59.

Joint Center for Housing Studies of Harvard University (JCHS). 2024. *America's Rental Housing 2024*. Cambridge, MA: Harvard University. [https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard\\_JCHS\\_Americas\\_Rental\\_Housing\\_2024.pdf](https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_Americas_Rental_Housing_2024.pdf).

Khadduri, Jill. 2015. "The Founding and Evolution of HUD: 50 Years, 1965-2015." In *HUD at 50: Creating Pathways to Opportunity*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Mazzara, Alicia, Barbara Sard, and Douglas Rice. 2016. *Rental Assistance to Families with Children at Lowest Point in Decade*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/rental-assistance-to-families-with-children-at-lowest-point-in-decade>.

McCarty, Maggie. 2005. *Section 8 Housing Choice Voucher Program: Funding and Related Issues*. Congressional Research Service Report RL31930. Washington, DC: Library of Congress. [https://www.everycrsreport.com/files/20050810\\_RL31930\\_4588a70ddb23fafce78503b219292581397c3ef0.pdf](https://www.everycrsreport.com/files/20050810_RL31930_4588a70ddb23fafce78503b219292581397c3ef0.pdf).

Parrott, Sharon. 2024. "Spending Bill Rightly Prioritizes Vital WIC and Housing Voucher Funding; Rejects Calls for Deeper Cuts." Center on Budget and Policy Priorities. <https://www.cbpp.org/press/statements/spending-bill-rightly-prioritizes-vital-wic-and-housing-voucher-funding-rejects>.

Reich, David. 2015. *Sequestration and Its Impact on Non-Defense Appropriations*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/sequestration-and-its-impact-on-non-defense-appropriations>.

———. 2023. *Debt Ceiling Deal Squeezes Non-Defense Appropriations, Even With Agreed-Upon Adjustments*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/federal-budget/debt-ceiling-deal-squeezes-non-defense-appropriations-even-with-agreed-upon>.

Rice, Douglas. 2013. *Sequestration Could Deny Rental Assistance to 140,000 Low-Income Families*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/sequestration-could-deny-rental-assistance-to-140000-low-income-families>.

———. 2016. *Chart Book: Cuts in Federal Assistance Have Exacerbated Families' Struggles to Afford Housing*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/chart-book-cuts-in-federal-assistance-have-exacerbated-families-struggles-to-afford-housing#section01>.

———. 2017a. "Policymakers Cut Housing Vouchers in 2017." Center on Budget and Policy Priorities. <https://www.cbpp.org/blog/policymakers-cut-housing-vouchers-in-2017>.

———. 2017b. *Budget Caps, Not Rent Aid, Forcing HUD Budget Cuts*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/budget-caps-not-rent-aid-forcing-hud-budget-cuts>.

Sard, Barbara. 1995. "Creating a Nondiscriminatory Section 8 Allocation System," *Poverty & Race* 4 (4): 11–14. <http://www.prrac.org/newsletters/julaug1995.pdf>.

———. 2001. "Section 8 Renewal Rule: Use It or Lose It," *Journal of Housing & Community Development* 58 (3): 27–32. <https://www.cbpp.org/sites/default/files/archive/5-31-01hous.pdf>.

———. 2003. *Administration Uses Misleading Arguments to Justify Proposed Housing Voucher Block Grant*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/archive/3-17-03hous.pdf>.

———. 2004. *Funding Instability Threatens to Erode Business Community's Confidence in the Housing Voucher Program*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/funding-instability-threatens-to-erode-business-communitys-confidence-in-the-housing>.

———. 2023. *Project-Based Vouchers: Lessons from the Past to Guide Future Policy*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/housing/project-based-vouchers-lessons-from-the-past-to-guide-future-policy>.

Sard, Barbara, and Will Fischer. 2003. *Senate Housing Voucher Plan Would Protect Low-Income Families and Result in Sounder Program Budgeting*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/archive/1-24-03hous.pdf>.

———. 2004a. *Nearly All Recent Section 8 Growth Results From Rising Housing Costs and Congressional Decisions to Serve More Needy Families*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/nearly-all-recent-section-8-growth-results-from-rising-housing-costs-and-congressional>.

———. 2004b. *Further Action by HUD Needed to Halt Cuts in Housing Assistance for Low-Income Families*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/archive/4-26-04hous.pdf>.

———. 2005. *Administration Housing Proposal Lays Groundwork for Planned Funding Reductions*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/administration-housing-proposal-lays-groundwork-for-planned-funding-reductions>.

———. 2006. *Bipartisan Bill in House Would Make Marked Improvements in Housing Voucher Program*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/bipartisan-bill-in-house-would-make-marked-improvements-in-housing-voucher-program>.

———. 2013. *Renters' Tax Credit Would Promote Equity and Advance Balanced Housing Policy*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/renters-tax-credit-would-promote-equity-and-advance-balanced-housing-policy>.

Sard, Barbara, Peter Lawrence, and Will Fischer. 2005. *Appropriations Shortfall Cuts Funding for 80,000 Housing Vouchers This Year*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/archive/2-11-05hous.htm>.

Sard, Barbara, and Douglas Rice. 2007. *The Effects of the Federal Budget Squeeze on Low-Income Housing Assistance*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/archive/2-1-07/hous2.pdf>.

Turnham, Jennifer, Meryl Finkel, Larry Buron, Melissa Vandawalker, Bulbul Kaul, Kevin Hathaway, and Chris Kubacki. 2015. *Housing Choice Voucher Program Administrative Fee Study: Final Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. [https://www.huduser.gov/portal/publications/pdf/AdminFeeStudy\\_2015.pdf](https://www.huduser.gov/portal/publications/pdf/AdminFeeStudy_2015.pdf).

U.S. Department of Housing and Urban Development (HUD). 2000. *Section 8 Tenant-Based Housing Assistance: A Look Back After 30 Years*. Washington, DC: HUD. <https://www.huduser.gov/portal/Publications/pdf/look.pdf>.

# Participation, Transition, and Length of Stay in Federal Housing Assistance Programs

Andrew J. Greenlee

University of Illinois at Urbana-Champaign

Kirk McClure

University of Kansas

---

## Abstract

*The U.S. Department of Housing and Urban Development's (HUD) suite of federal housing assistance programs—including public housing, the Housing Choice Voucher (HCV) program, the Section 8 Project-Based Rental Assistance program, and other HUD-administered multifamily housing programs—form an important national and local ecosystem of support for eligible low-income households. Research and program evaluation have tended to focus on the performance or outcomes associated with participation spells in one program, although the potential exists for multiple participation spells across multiple programs and administrative transfers between programs. Drawing from program administrative data covering more than 18.4 million low-income households receiving federal housing assistance from 2000 to 2022, this article describes household-level participation in federal housing assistance programs and the prevalence of transitions between programs.*

*The authors find that more than 80 percent of households participated only for a single episode of rental assistance between 2000 and 2022, and the median length of stay was around 4 or 5 years. About one in five subsidized households made a transition between programs during their participation, with evidence of a cumulative shift toward the HCV program. Although this analysis portrays a picture of relative stability, the demographic composition of HUD's assisted households is changing. The programs increasingly serve racial and ethnic minority populations and older adults, and the share of households with children is declining.*

## Introduction

Housing policy researchers have long been concerned with how best to measure the effect of housing subsidies on low-income households' decisions on where to locate. Existing research compares aggregate household residential locations over time—an approach that has been further expanded on using longitudinal spatial data analysis strategies to identify the likelihood of certain behaviors for households based on demographics and residential locations. Both strategies help to understand the location of assisted households and clarify what programmatic and household factors contribute to residential location choices and outcomes.

However, these approaches are typically focused on either cross-sectional analysis of the entire program or are designed to identify the likelihood of specific episodic behavior such as voucher portability. This article takes a more expansive approach, using program administrative data to compare evolving program characteristics, including length of stay, location choice, and participant transitions between programs. This approach identifies patterns of behavior that help to classify program participation across both space and time and between the public housing, project-based Section 8, and Housing Choice Voucher (HCV) programs.

This article focuses on three key dimensions of program participation—length of stay, participation episodes, and transitions between programs. Working across the period from 2000 to 2022, the authors question how these dimensions have changed over time and what insights they can provide about evolving program dynamics and populations served. This article begins with a brief review of the evidence regarding key measures of program participation, including length of stay and residential location choice. The article then discusses the methodology and provides an overview of the findings and broader implications for policy and program management.

## Length of Stay

Housing policy researchers and other social commentators have examined length of stay as a behavioral proxy for dependency within a social welfare system. For instance, Husock (2017) argues that comparatively long lengths of stay within the HCV program suggest that low-income households develop a dependency on housing assistance. Freeman (2005) examined length of stay in the HCV program using administrative data and found that household length of stay in the program was around 5 years on average. Freeman (2005) also noted the need for a more nuanced view of dependency in the program, acknowledging that longer stays for older adults and people with disabilities should be expected based on their situations and examined separately from other households potentially experiencing *duration dependency*—a loss of motivation to seek housing alternatives due to housing assistance. Freeman (2005) notes that his empirical results are “inconsistent with this more nuanced notion of dependency [...] suggest[ing] that housing assistance serves as a substitute for low-income affordable housing that is unavailable in the private market” (Freeman, 2005: 132).

Focusing on public housing, the HCV program, and project-based Section 8, McClure (2018) examined length of stay using survival analysis to assess which household demographic factors are associated with program exit. Exit rates for each program vary, with a longitudinal study average of



14 percent for the HCV program, 18 percent for public housing, and 17 percent for project-based Section 8 developments. Across the course of his analysis, program exits peaked between 2006 and 2008. Examining demographic and programmatic drivers of length of stay, McClure (2018) concludes that in addition to household characteristics such as age, disability status, and presence of children, various housing market dynamics all influence length of stay. These results are consistent with prior studies, including an earlier hazard analysis study conducted across a similar suite of programs and work looking at housing assistance dynamics in the Survey of Income and Program Participation (SIPP; Ambrose, 2005; Hungerford, 1996).

## **Residential Location Outcomes**

A large body of literature has focused on the spatial location of assisted households in both project based and tenant-based programs (for instance, see Basolo and Nguyen, 2005; Basolo and Yerena, 2017; McClure, 2008; McClure, Schwartz, and Taghavi, 2015). Many of the evaluations of location attainment draw on theories of neighborhood effects (Sampson, 2008; Sampson, Morenoff, and Gannon-Rowley, 2002; Sharkey and Faber, 2014). In general, these studies conclude that households in the HCV program tend to locate in neighborhoods with more favorable demographic characteristics than the neighborhoods where public housing is located, but voucher households locate in neighborhoods with less favorable characteristics than the overall population of renter households.

Although differences between project- and tenant-based subsidized housing mean that different parties are directly responsible for shaping potential location outcomes, such outcomes are an important global measure of program performance. For tenant-based programs, these measures provide insight into the location of the supply of accessible housing opportunities and the revealed choices of assisted households and market actors. These metrics shed an important light on the housing search process and the potential for decision support tools to help households identify and optimize both housing and neighborhood characteristics (Basolo and Nguyen, 2009; Walter and Wang, 2016). For tenant-based programs, location outcomes provide important information on the location of the supply of subsidized units, particularly relative to place resources such as employment opportunities, schools, and health care.

## **Longitudinal Analysis of Program Participation**

This article incorporates a holistic approach to program tenure and participation across HUD's assisted housing portfolio. The authors use a modified version of sequence analysis as an analytical approach to the longitudinal household data contained in the HUD Family Report (HUD, n.d.b.) data. The application of sequence analysis within the social sciences has been used to study a range of social phenomena (Abbott and Tsay, 2000). Although scant, relevant examples within the housing policy literature include Lee, Smith, and Galster's (2017a) analysis of the neighborhood trajectories of low-income households, Lee, Smith, and Galster's (2017b) analysis of neighborhood trajectories of subsidized households using panel data, and Magnusson Turner and Hedman's (2014) analysis of the housing careers of immigrants in Sweden. Lee, Smith, and Galster's (2017a, 2017b) two articles rely on data from the Panel Study of Income Dynamics, and Magnusson Turner and Hedman (2014) make use of administrative data in household location and tenure in Sweden.

Unlike stochastic approaches to longitudinal data such as time series and event history analysis that focus on the factors that predict the occurrence of a specific event, in social sequence analysis, the sequence of events is the unit of analysis. In this application, individual household program administrative histories are treated as the unit of analysis to identify common patterns of program participation. By looking at participation trajectories instead of specific event occurrences, it is possible to identify the cumulative effect of a series of diverse programmatic, social, and economic processes on household outcomes. The authors first describe participation dynamics associated with length of stay and participation spells and then use this information to inform an understanding of sequences of program participation.

## Methodology

Public use files, particularly those available from HUD's Picture of Subsidized Households, provide important point-in-time data at widely used geographies (HUD, n.d.a.). Although these data provide insight into the spatial distribution of subsidized households, they do not allow for longitudinal analysis of household program participation across space and over time. By contrast, the authors employ program administrative data to create longitudinal portraits of program participation for assisted households to better understand program participation dynamics over time and across HUD's entire portfolio of assisted housing programs.

This research brings a household-level longitudinal approach to existing research on HUD-assisted housing programs. Most existing analyses focus on point-in-time portraits of assisted household locations (for example, see McClure, 2013; McClure, Schwartz, and Taghavi, 2015; Walter and Wang, 2016). Existing longitudinal analyses have focused primarily on mobility behavior such as voucher portability in the HCV program (Climaco et al., 2008; Feins and Patterson, 2005).

Action codes are in the HUD Family Report (HUD, n.d.b.) data that describe administrative changes within and across programs. These data can be analyzed as a sequence alongside household demographic information (including age, disability status, income, rent, and family composition) and related information on the geographic location of housing units. When examined longitudinally, these records provide a portrait of how each household has proceeded through assisted housing over time.

Resulting sequences contribute several important pieces of knowledge. First, they provide insight regarding distinct patterns of program participation that would otherwise be hard to discern at the national or even local levels. This information has the potential to help better understand the influence of housing trajectories. Second, knowledge of housing trajectories will help to differentiate how participant demographics influence program participation, such as decisions to exit or to transition to another program.

## Results

The authors begin with a general description of the data. The combined HUD-assisted dataset contains records covering 18,447,592 unique households that received housing assistance between 1995 and 2022. Particularly within some of the earlier data during this period, missingness is high,

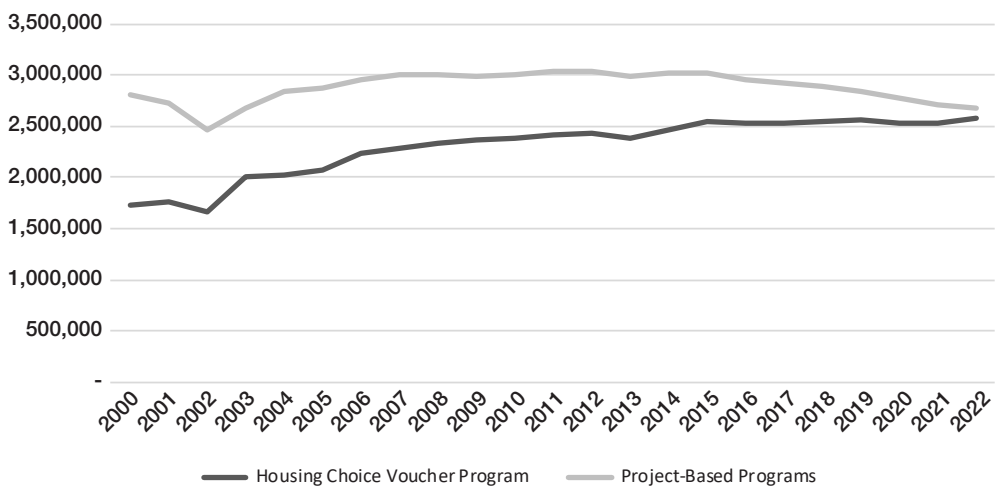
partly due to the rollout and adoption of more robust automated data reporting to HUD. Data are more reliable for the approximately 14 million households from 2000 to 2022, and consequently, although earlier data are accessible, this analysis focuses on the period from 2000 to 2022.

### How Many Households Are Assisted?

During this period, on average, the HCV program served 2.3 million households each year, and HUD’s project-based portfolio served 2.8 million households each year (exhibit 1). During this 22-year period, 7.0 million unique households were active in the HCV program, and 6.9 million unique households were active in HUD’s project-based portfolio. Although some households participated in a program during the entire period, many entered or exited at least one program, accounting for the difference between annual snapshots of participation and cumulative participation during the 22-year period. Further analysis addresses this length of stay within programs and episodes of program participation.

#### Exhibit 1

Households in HUD Rental Assistance Programs Reported From 2000 to 2022



Source: HUD Longitudinal Household Data 1995–2022

Housing policy researchers are often concerned with what proportion of eligible low-income households are being served through HUD’s assisted housing program portfolio. As researchers, it is hard to assess how well these longitudinal participant statistics comport to the types of annual cross-sectional program count information that is frequently reported and analyzed. HUD’s rental assistance programs assisted 14.0 million households during a 22-year period. This number needs to be compared with the count of all the extremely low-income renter households that experienced housing affordability problems during the period. Census data provide good insights on counts for cross-sectional data. The number of extremely low-income households that experience housing cost burden at any one point in time can be known, but the data do not track individual households during a long period of time. Campbell and Shamsuddin (2023) provide

some insights. They examined panels of respondents to SIPP from 2014 to 2017.<sup>1</sup> They identified the number of times each respondent experienced housing costs greater than 30 percent of income. They found that, for the lowest income quartile, 80 percent experienced high housing cost burden for at least 1 year, but a much smaller share experienced it for all 4 years. Approximately 20 percent experienced hardship for only 1 year, and another 20 percent experienced hardship for 2 years. Still, another 20 percent experienced hardship for 3 years, with the last 20 percent experiencing hardship for 4 years. These findings suggest that not all households with high housing cost burdens at any one point in time will remain cost-burdened for a long period of time. Approximately one-half will experience housing cost burden for only 1 or 2 years. Thus, from the extremely low-income population, the number of years of experiencing high housing costs across a 4-year period, a little less than one-half need rental assistance in any 1 year. Thus, it is possible that the 14 million households served is less than one-half of the extremely low-income households suffering from high housing cost burden.

However, the authors have information to assess the scale of the 5.2 million households that receive some form of HUD assistance on average each year in the data. By nature, these HUD programs tend to serve the chronically poor. Although the number of households eligible for assistance varies over time, demand for HUD's assisted housing stock far exceeds supply. In 2021, American Community Survey data reported that 10.2 million renters in the United States had annual incomes below \$20,000. Of these households, 7.6 million (around three-fourths) were cost-burdened, paying more than 30 percent of their incomes on housing. To relieve the housing cost burden present among this population of extremely low-income renters, HUD funding would need to expand by about 150 percent. It is important to note that this hypothetical expansion focuses only on extremely low-income households. It does not account for housing need among very low-income households (30 to 50 percent of Area Median Income). Expanding coverage to meet the needs of this population would require an additional expansion to HUD's budget authority and programs.

With these general estimates of participation in mind, the authors next take a finer look at the HCV program, Section 8 Project-Based Rental Assistance (PBRA), and public housing and look at a range of additional housing programs consolidated into the category of HUD multifamily programs (exhibit 2).<sup>2</sup>

---

<sup>1</sup> Initiated in 1983, SIPP is a nationally representative longitudinal survey focused on the economic and household characteristics of the civilian noninstitutionalized population in the United States.

<sup>2</sup> Program groupings make some tradeoffs here. Grouping programs by the overall mechanism used to deliver affordable housing and the type of entity that owns and operates the housing is the focus. Low-Income Housing Tax Credit units are also omitted from the analysis, which represented 3.55 million housing units in 2021, of which 3.32 million are targeted toward low-income households.

## Exhibit 2

Years Active and Episodes of Households in Various HUD Programs, 2000 and 2022

Program	2022					2000				
	Subprogram Households	Program Households	Program Percent (%)	Average Years in Program	Average Number of Episodes	Subprogram Households	Program Households	Program Percent (%)	Average Years in Program	Average Number of Episodes
Tenant-Based Voucher Conventional	2,280,404		43.4			1,108,764				
Tenant-Based Voucher Moving to Work	300,580		5.7			0				
Section 8 Existing Housing Certificate	101		0.0			627,423				
<i>Housing Choice Voucher</i>		2,581,085	49.1	15.1	1.4		1,736,187	38.2	12.4	1.7
<i>Section 8 Project-Based Rental Assistance</i>		1,421,760	27.1	13.3	1.3		1,276,048	28.1	11.7	1.3
Public Housing	954,864		18.2			1,259,681				
Section 8 Project-Based Voucher	85,463		1.6			0				
Public Housing		1,040,327	19.8	14.0	1.4		1,259,681	27.7	11.8	1.8
Section 8 Rent Supplement	0		0.0			12,765				
Section 8 Home Ownership	2,023		0.0			0				
Section 8 RAP	1		0.0			16,223				
Section 236	4,689		0.1			82,727				
BMIR	448		0.0			17,996				
Section 202 PRAC	139,496		2.7			51,640				
Section 811 PRAC	35,366		0.7			15,137				
Section 202/162 PRAC	1,369		0.0			19				
Moderate Rehab	22,883		0.4			73,636				
Miscellaneous	3,580		0.1			0				
HUD Multi-Family Programs		209,855	4.0	12.9	1.2		270,143	5.9	10.2	1.4
<b>Total</b>		<b>5,253,027</b>	<b>100.0</b>	<b>14.4</b>	<b>1.4</b>		<b>4,542,059</b>	<b>100.0</b>	<b>11.9</b>	<b>1.6</b>

Source: HUD Longitudinal Household Data 1995–2022

The HCV program has grown substantially, representing 38 percent of HUD's assisted housing portfolio in 2000 and 49 percent of the portfolio in 2022. The Section 8 PBRA program is growing slowly, representing 27 percent of the portfolio in 2022. In the authors' view, this program's growth is not so much growth as it is largely comprised of absorbing units converted from other programs. Public housing continues to contract, representing 20 percent of the portfolio. Part of this decline is likely due to unit conversions under the Rental Assistance Demonstration program, which is ultimately reflected as a loss of public housing units and an increase in project-based Section 8 units. The remaining units bundled under HUD multifamily programs reflect 4 percent of the overall portfolio, with many of these units allocated to legacy programs, some of which no longer actively operate.

Taking this fine-grained program-level view into account, these measures have not changed greatly over time when looking at the key measures related to time in assistance and episodes of assistance. The average years of participation grew over time, but this change is likely due to the programs' overall aging. The averages reported in exhibit 2 may also be biased high because they represent a cross-sectional average from a single year. Long-term participants are represented, but in cross-sectional data, the averages may underrepresent those participants who receive assistance for only a short period of time (less than a year). The cross-sectional data from 2022 indicate that the average length of stay in assisted housing is 14.4 years, up from 11.9 years in 2000. The average years of participation by program in 2022 were 15.1 for the HCV program, a slightly lower 14.0 years for public housing, and a still lower 13.3 years for the Section 8 PBRA program.

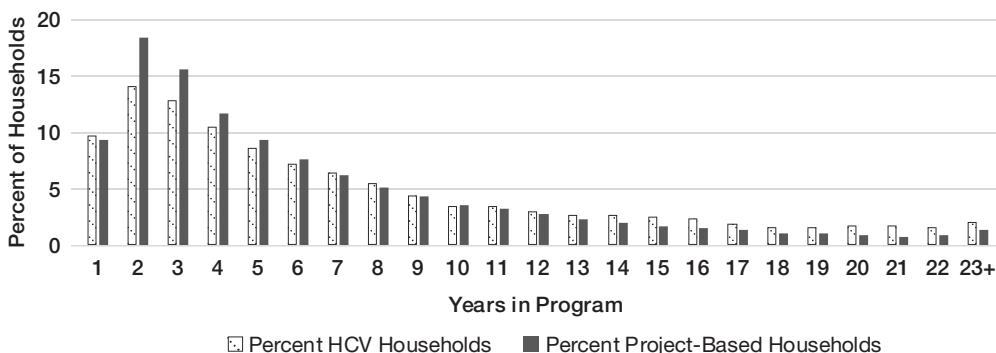
The conclusions from this fine-grained analysis are consistent—the dynamics of participation and episodes of participation within a single program remain stable. Looking over time, the average number of episodes of participation has declined slightly from 1.6 in 2000 to 1.4 in 2022. Most program participants experience one spell of participation in an assisted housing program, with little variation across the programs.

### **How Long Do Households Participate?**

Many policymakers are concerned with length of participation in assisted housing programs, relating length of participation to broader questions about program accessibility and conversations on dependence within public welfare programs. To answer this question, the authors begin by looking at lengths of participation in individual programs. The overall maximum length of participation observed is 23 years—the duration of the longitudinal data. Conforming with prior findings from longitudinal data, the median length of participation is 5 years in the HCV program and 4 years in project-based programs (exhibit 3; McClure, 2018)

**Exhibit 3**

Distribution of Households by Years Active in HUD Rental Assistance Programs, 2000–22



HCV = Housing Choice Voucher.

Source: HUD Longitudinal Household Data 1995–2022

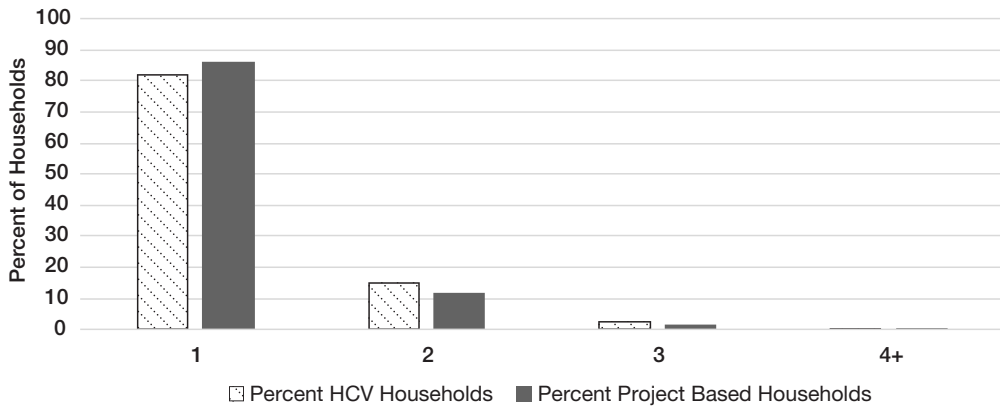
Given the longitudinal nature of the data, the authors next look at the number of episodes of program participation for each household. An episode of program participation is a period in which a household participates in one program without interruption. More than 80 percent of households in either the HCV or the project-based programs participated in only a single episode of rental assistance during the study period. Twenty percent of households with multiple episodes of participation showed evidence of participation for a period of time, left an assistance program, and returned later to that or another program. The authors observed a maximum of eight participation episodes across the 22 years of data. However, this number should be interpreted with caution.<sup>3</sup> Keeping this precaution in mind, 82 percent of those households whose first program participation was in the HCV program experienced only one continuous episode of participation (including future transitions to other programs), and 15 percent experienced two episodes of participation. The numbers for project-based programs were 86 and 12 percent, respectively, indicating slightly more consistency of participation for project-based housing recipients (exhibit 4).

The bottom line from the data is that the typical assisted household enters rental assistance for a single period of 4 to 5 years and then exits rental assistance. Although participation tends to be slightly longer in the HCV program compared with project-based recipients, participation episodes and length of participation are largely similar between the two programs.

<sup>3</sup> Program entry and exit codes are unreliable in these data, so gaps in data reporting are used to delineate episodes of program participation. Unfortunately, it is not possible to distinguish unreported years of program participation from genuine stops in program participation, which results in the likely overreporting of participation episodes.

**Exhibit 4**

Distribution of Households by the Number of Episodes of Rental Assistance, 2000–22



HCV = Housing Choice Voucher.

Source: HUD Longitudinal Household Data 1995–2022

**How Do Length, Time, and Number of Episodes Vary by Program Demographics?**

HUD and researchers have long been concerned with how dynamics of participation vary by household characteristics such as age, disability status, and household composition (Goering, Kamely, and Richardson, 1997). This article breaks down participation episodes and length of stay based on a range of characteristics and by race, noting that the overall number of households for which complete data are available is less than in prior analyses, largely due to missingness in racial identifiers (exhibit 5). The start point is updated to 2002 for this analysis because of better representation of race and ethnicity identifiers in the data.



**Exhibit 5**

Years Active and Episodes of Households in the Housing Choice Voucher Program by Household Type and Race and Ethnicity, 2002 and 2022 (1 of 2)

Household Type		2022					2002				
		Households	Percent by Race/Ethnicity (%)	Percent by Household Type (%)	Average Years in Programs	Average Number of Episodes	Households	Percent (%)	Average Years in Programs	Average Number of Episodes	Percent by Household Type (%)
Elderly No Children	White Non-Hispanic	241,742	39		15.7	1.3	147,013	60	11.7	1.4	
	Black Non-Hispanic	217,351	35		17.2	1.6	47,687	20	13.1	1.6	
	Other Non-Hispanic	38,586	6		16.9	1.4	10,685	4	14.4	1.4	
	Hispanic Any Race	120,730	20		17.6	1.5	37,672	15	13.7	1.6	
	Subtotal	618,409	100	32	16.7	1.4	243,057	100	12.4	1.5	15
Non-Elderly Disabled No Children	White Non-Hispanic	141,092	42		14.2	1.4	163,810	61	14.2	1.4	
	Black Non-Hispanic	142,547	42		15.8	1.6	71,364	27	15.2	1.6	
	Other Non-Hispanic	10,330	3		14.4	1.4	6,971	3	15.2	1.5	
	Hispanic Any Race	43,905	13		16.1	1.5	25,554	10	16.1	1.5	
	Subtotal	337,874	100	17	15.1	1.5	267,699	100	14.7	1.5	16
Non-Elderly No Children	White Non-Hispanic	43,929	17		13.9	1.4	48,658	35	11.1	1.4	
	Black Non-Hispanic	146,241	58		16.6	1.5	62,837	45	14.1	1.6	
	Other Non-Hispanic	9,106	4		15.2	1.4	4,824	3	13.4	1.5	
	Hispanic Any Race	51,895	21		16.6	1.4	22,752	16	14.9	1.6	
	Subtotal	251,171	100	13	16.1	1.5	139,071	100	13.1	1.5	8
Elderly With Children	White Non-Hispanic	5,851	19		16.0	1.5	3,486	22	12.1	1.5	
	Black Non-Hispanic	15,905	52		18.3	1.7	8,008	50	14.1	1.6	
	Other Non-Hispanic	1,899	6		16.2	1.4	1,285	8	14.5	1.5	
	Hispanic Any Race	6,857	22		18.4	1.6	3,131	20	14.5	1.6	
	Subtotal	30,512	100	2	17.8	1.6	15,910	100	13.8	1.6	1

**Exhibit 5**

Years Active and Episodes of Households in the Housing Choice Voucher Program by Household Type and Race and Ethnicity, 2002 and 2022 (2 of 2)

Household Type		2022					2002				
		Households	Percent by Race/Ethnicity (%)	Percent by Household Type (%)	Average Years in Programs	Average Number of Episodes	Households	Percent (%)	Average Years in Programs	Average Number of Episodes	Percent by Household Type (%)
Non-Elderly Disabled With Children	White Non-Hispanic	30,053	26		12.8	1.4	49,812	40	13.1	1.5	
	Black Non-Hispanic	65,522	56		15.0	1.5	52,424	42	16.0	1.7	
	Other Non-Hispanic	3,873	3		13.3	1.4	5,894	5	15.5	1.5	
	Hispanic Any Race	17,804	15		14.5	1.4	16,919	14	16.2	1.6	
	Subtotal	117,252	100	6	14.3	1.4	125,049	100	14.8	1.6	8
Non-Elderly With Children	White Non-Hispanic	96,144	16		11.9	1.2	262,385	31	9.9	1.4	
	Black Non-Hispanic	366,358	63		13.4	1.3	418,999	49	14.1	1.6	
	Other Non-Hispanic	19,241	3		12.0	1.2	29,155	3	12.6	1.5	
	Hispanic Any Race	102,027	17		12.8	1.2	149,425	17	13.0	1.5	
	Subtotal	583,770	100	30	13.0	1.3	859,964	100	12.6	1.5	52
Total Households With Full Data	White Non-Hispanic	558,811	29		14.4	1.3	675,164	41	11.7	1.4	
	Black Non-Hispanic	953,924	49		15.3	1.5	661,319	40	14.3	1.6	
	Other Non-Hispanic	83,035	4		15.1	1.3	58,814	4	13.6	1.5	
	Hispanic Any Race	343,218	18		15.7	1.4	255,453	15	13.8	1.5	
	Subtotal	1,938,988	100	100	15.1	1.4	1,650,750	100	13.1	1.5	100

Source: HUD Longitudinal Household Data 1995–2022

Between 2002 and 2022, HUD's assisted housing portfolio increasingly served racial and ethnic minorities. In 2002, non-Hispanic Whites were the largest population served at 41 percent. In 2022, non-Hispanic Whites represented 29 percent of the households served. The largest population served across the assisted housing stock remained nonelderly able-bodied individuals, comprising 43 percent of heads of households served in 2022, down from 60 percent in 2002. The increase in the share of older adult households served explains part of this reduction. In 2002, households with an older adult head made up 23 percent of assisted households. In 2022, older adult households comprised 34 percent of households served. Likewise, the share of households with children declined substantially. In 2002, 61 percent of households served had children. In 2022, households with children represented 38 percent of those receiving assistance. The share of households that have members with disabilities remained relatively stable over time, decreasing from 24 percent in 2002 to 23 percent in 2022.

Looking now at the two primary measures, length of participation and number of episodes, all household types and all racial and ethnic groups remain active in the HCV program for more years over time. Likewise, following the overall trends, a slight contraction is noted across the board in the number of episodes of participation by household compositional characteristics and race. However, the observed changes are small and continue to reflect the narrative that most households participate for one episode, with episodes on average lasting around the same amount of time independent of race, ethnicity, or household type.

### **How Does Residential Mobility Factor Into Tenant-Based Program Participation?**

A major feature of tenant-based programs such as the HCV program is that they allow for residential mobility. This provision is one explanation for the overall popularity of the HCV program among both participating households and policymakers. Residential mobility should allow households to move as their household circumstances, neighborhood preferences, and location preferences change (Greenlee, 2011; Rosenbaum and Harris, 2001; Varady and Walker, 2003).

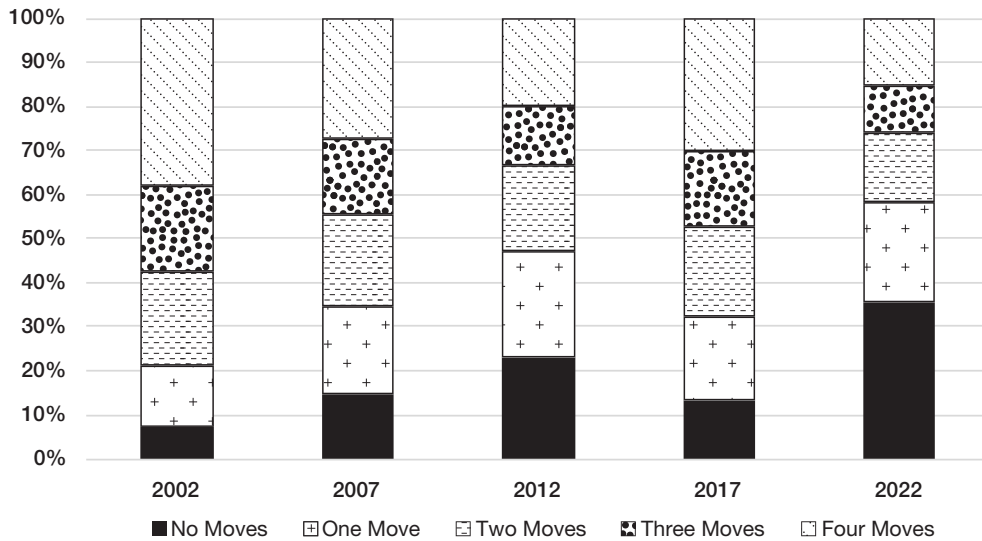
The authors examine evidence related to residential mobility for voucher-assisted households, focusing on those households that move between census tracts (exhibit 6).<sup>4</sup> In 2002, during their tenure in the program, 7 percent of households never moved, 14 percent moved once, and the remaining share moved twice or more. By 2022, 36 percent of participants did not move, 23 percent moved one time, and the remaining share moved two or more times. This overall decrease in mobility could be partly related to the aging of program participants, reflecting a population less likely to undertake moves. This decrease could also be related to overall changes in rental housing market conditions. In earlier periods, when rental market vacancy rates were higher, households moved more frequently. In more recent times, as markets have become tighter, mobility has declined. This relationship between vacancy and mobility rates suggests that the availability of alternative units may influence residential mobility behavior.

---

<sup>4</sup> In this case, residential mobility is defined as a move between census tracts because households are not only changing addresses in these moves but also potentially changing the characteristics of their surrounding neighborhoods.

**Exhibit 6**

Inter-Tract Moves by Households in the Housing Choice Voucher Program, 2002–22



Source: HUD Longitudinal Household Data 1995–2022

**What Share of Assisted Households Move Between Programs Over Time?**

One of the unique features of the longitudinal dataset is the ability to examine transitions between programs. Under some circumstances, assisted households may electively transition between programs. Under other circumstances, transitions may be related to program activities, including public housing transformation and adoption of Moving to Work agreements. Finally, a household may participate in one program, leave assisted housing, then return to a different assisted housing program. Given the unique data available, the authors examine the frequency of program transitions and chains of transition over time (exhibit 7).

A relatively small percentage of households that participate in HUD rental assistance shift from one program to another. One out of seven households (14 percent) that have participated in any of the HUD rental assistance programs shift from one program to another. Slightly higher, one in five households in the HCV program shift between programs during their participation histories. However, the HCV program tends to attract households from other programs on second or third program shifts. Among households shifting from public housing, 62 percent move to the HCV program, as do 60 percent of transfers from Section 8 project-based housing. These high levels suggest that the flexibility and choice offered by the HCV program is valued among assisted households that transition into the program.

## Exhibit 7

Households That Shifted From One Program to Another, 2000–22

Program	First Program Entered			Second Program Entered				Second Program		Third Program Entered				
	Initial (%)	Percent Shifted to a Second Program (%)	HCV (%)	Sec 8 (%)	Public Housing (%)	Misc (%)	Total (%)	Share of Transfers to Second Program (%)	Percent Shifted to a Third Program (%)	HCV (%)	Sec 8 (%)	Public Housing (%)	Misc (%)	Total (%)
Housing Choice Voucher	37	19		45	43	12	100	19	5		47	39	15	100
Section 8 Project-Based	31	12	60		29	10	100	33	11	66		23	12	100
Public Housing	26	11	62	34		4	100	37	15	67	26		7	100
Miscellaneous Multi-Family	6	14	51	36	13		100	11	14	47	33	20		100
Total	100	14						100	9					

HCV = Housing Choice Voucher.

Source: HUD Longitudinal Household Data 1995–2022

Looking at transitions, it is also noted that some structural barriers may make certain transitions less possible under normal circumstances. For instance, the length of HCV program waiting lists combined with housing authority preferences for households experiencing high levels of housing cost burden may mean that households already receiving assistance through another program like project-based Section 8 would have trouble rising to the top of the waiting list to be able to transition to the HCV program. Other programs have very different retention rates. Public housing has a 94-percent retention rate on reentry, but two in five households (41 percent) ultimately move to the HCV program when given the opportunity.

## Discussion and Conclusion

This article takes a novel look at more than 20 years of HUD administrative data to examine the dynamics of length of stay and participation episodes across HUD's assisted housing portfolio. In line with existing evidence, most households experience one episode of housing assistance and similar lengths of stay across assisted housing programs. Although some minor differences exist between programs, and based on the demographics of households served, the overall picture is one of relative stability and uniformity, at least in the aggregate.

Fairly marked yet consistent demographic changes are also observed regarding whom HUD's assisted housing portfolio serves. As programs grow older, the populations they serve do too, because some households remain in the program and age over time. In addition to the aging of assisted housing participants, HUD's suite of assisted housing programs increasingly serve racial and ethnic minority populations, and the share of households with children is declining. These results are consistent with other studies, especially the works of McClure (2018) on length of stay and Freeman (2005) on program participation. Although this update does not reveal major differences between programs across the length of stay and participation episode metrics, some interesting evidence regarding transitions between programs is seen.

Given the unique nature of the administrative data, transitions between programs were examined across all participation episodes. In terms of transition pathways, the HCV program receives a large share of households making program transitions, and those households tend to then stay in the program. One explanation for this stability is that the HCV program is large and affords public housing authority administrators with more flexibility regarding tenant placement, particularly compared with other alternatives. Part of it could also be explained by transformations and loss of housing stock in other programs such as public housing, where relocation vouchers have frequently been used as an option for temporary or permanent relocation from public housing and project-based units facing rehabilitation or demolition. The relatively high rates of inter-program mobility call for further investigation. The finding regarding the prevalence of the HCV program as a net receiver of participants from other programs is based on aggregate evidence. Better understanding of what is happening at the public housing authority level and in tenants' decisionmaking is warranted, as is understanding pathways into other programs.

Thinking more broadly, the continued demographic shifts observed in program participation complicates the relative stability in the data. The increase in older adults that these programs serve certainly corresponds with broader demographic shifts in the population and older adults' growing

demand for housing supports. At the same time, recent evidence, particularly that stemming from observed trends during the COVID-19 pandemic, provides an important reminder of the precarity many working-aged adults and accompanying children face. Consequently, the shift in the demographics of participants should not be interpreted as diminished demand on the part of households with children for assisted housing, but rather as a reminder of the scarcity of these resources in many places.

The evidence regarding participation spells and lengths of stay is also instructive for broader policy debates regarding the nature and vehicle through which housing assistance are delivered. Cash-based rental support programs, largely initiated because of the COVID-19 pandemic and the proliferation of local cash-based demonstration programs in the wake of the pandemic, open the possibility to think about how such approaches might complement HUD's existing approaches to housing assistance. Given this article's observations that a large share of assisted households use program resources once for a relatively short period of time has important implications for the design of these future HUD programs, some of which might use periodic flexible means-tested assistance to shunt some of the unmet demand for existing programs.

## Authors

Andrew J. Greenlee is Professor of Urban and Regional Planning in the Department of Urban and Regional Planning at the University of Illinois at Urbana-Champaign. [agreen4@illinois.edu](mailto:agreen4@illinois.edu). Kirk McClure is Professor Emeritus with the Urban Planning Program at the University of Kansas. [mcclure@ku.edu](mailto:mcclure@ku.edu).

## References

- Abbott, Andrew, and Angela Tsay. 2000. "Sequence Analysis and Optimal Matching Methods in Sociology," *Sociological Methods & Research* 29 (1): 3–33. <https://doi.org/10.1177/0049124100029001001>.
- Ambrose, Brent W. 2005. "A Hazard Rate Analysis of Leavers and Stayers in Assisted Housing Programs," *Cityscape* 8 (2): 69–93.
- Basolo, Victoria, and Mai Thi Nguyen. 2009. "Immigrants' Housing Search and Neighborhood Conditions: A Comparative Analysis of Housing Choice Voucher Holders," *Cityscape* 11 (3): 99–126.
- . 2005. "Does Mobility Matter? The Neighborhood Conditions of Housing Voucher Holders by Race and Ethnicity," *Housing Policy Debate* 16 (3–4): 297–324. <https://doi.org/10.1080/10511482.2005.9521546>.
- Basolo, Victoria, and Anaid Yerena. 2017. "Residential Mobility of Low-Income, Subsidized Households: A Synthesis of Explanatory Frameworks," *Housing Studies* 32 (6): 841–862. <https://doi.org/10.1080/02673037.2016.1240762>.

Campbell, Colin, and Shomon Shamsuddin. 2023. Episodic or Persistent? Household Exposure to Housing Cost Burden. Working paper. Tallahassee, FL: Association of Collegiate Schools of Planning.

Climaco, Carissa G., Christopher N. Rodger, Judith D. Feins, and Ken Lam. 2008. "Portability Moves in the Housing Choice Voucher Program, 1998–2005," *Cityscape* 10 (1): 5–40. <https://www.jstor.org/stable/20868641>.

Feins, Judith D., and Rhiannon Patterson. 2005. "Geographic Mobility in the Housing Choice Voucher Program: A Study of Families Entering the Program, 1995–2002," *Cityscape* 8 (2): 21–47.

Freeman, Lance. 2005. "Does Housing Assistance Lead to Dependency? Evidence From HUD Administrative Data," *Cityscape* 8 (2): 115–133.

Goering, John, Ali Kamely, and Todd Richardson. 1997. "Recent Research on Racial Segregation and Poverty Concentration in Public Housing in the United States," *Urban Affairs Review* 32 (5): 723–745. <https://doi.org/10.1177/107808749703200506>.

Greenlee, Andrew J. 2011. "A Different Lens: Administrative Perspectives on Portability in Illinois' Housing Choice Voucher Program," *Housing Policy Debate* 21 (3): 377–403. <https://doi.org/10.1080/10511482.2011.591409>.

Hungerford, Thomas L. 1996. "The Dynamics of Housing Assistance Spells," *Journal of Urban Economics* 39: 193–208.

Husock, Howard. 2017. "How Housing Assistance Leads to Long-Term Dependence—and How to Fix It." Heritage Foundation. <https://www.heritage.org/2017-index-culture-and-opportunity/how-housing-assistance-leads-long-term-dependence-and-how-fix-it>.

Lee, Kwan O., Richard Smith, and George Galster. 2017a. "Neighborhood Trajectories of Low-Income U.S. Households: An Application of Sequence Analysis," *Journal of Urban Affairs* 39 (3): 335–357. <https://doi.org/10.1080/07352166.2016.1251154>.

———. 2017b. "Subsidized Housing and Residential Trajectories: An Application of Matched Sequence Analysis," *Housing Policy Debate* 27 (6): 843–874. <https://doi.org/10.1080/10511482.2017.1316757>.

Magnusson Turner, Lena, and Lina Hedman. 2014. "Linking Integration and Housing Career: A Longitudinal Analysis of Immigrant Groups in Sweden," *Housing Studies* 29 (2): 270–290. <https://doi.org/10.1080/02673037.2014.851177>.

McClure, Kirk. 2018. "Length of Stay in Assisted Housing," *Cityscape* 20 (1): 11–38. <https://www.jstor.org/stable/26381219>.

———. 2013. "Which Metropolitan Areas Work Best for Poverty Deconcentration With Housing Choice Vouchers?" *Cityscape* 15 (3): 209–236.

———. 2008. "Deconcentrating Poverty With Housing Programs," *Journal of the American Planning Association* 74 (1): 90–99. <https://doi.org/10.1080/01944360701730165>.



McClure, Kirk, Alex F. Schwartz, and Lydia B. Taghavi. 2015. "Housing Choice Voucher Location Patterns a Decade Later," *Housing Policy Debate* 25 (2): 215–233. <https://doi.org/10.1080/10511482.2014.921223>.

Rosenbaum, Emily, and Laura E. Harris. 2001. "Residential Mobility and Opportunities: Early Impacts of the Moving to Opportunity Demonstration Program in Chicago," *Housing Policy Debate* 12 (2): 321–346. <https://doi.org/10.1080/10511482.2001.9521408>.

Sampson, Robert J. 2008. "Moving to Inequality: Neighborhood Effects and Experiments Meet Social Structure," *American Journal of Sociology* 114 (1): 189–231. <https://doi.org/10.1086/589843>.

Sampson, Robert J., Jeffrey D. Morenoff, and Thomas Gannon-Rowley. 2002. "Assessing "Neighborhood Effects": Social Processes and New Directions in Research," *Annual Review of Sociology* 28 (1): 443–478. <https://doi.org/10.1146/annurev.soc.28.110601.141114>.

Sharkey, Patrick, and Jacob W. Faber. 2014. "Where, When, Why, and for Whom Do Residential Contexts Matter? Moving Away from the Dichotomous Understanding of Neighborhood Effects," *Annual Review of Sociology* 40 (1): 559–579. <https://doi.org/10.1146/annurev-soc-071913-043350>.

U.S. Department of Housing and Urban Development (HUD). n.d.a. "A Picture of Subsidized Households General Description of the Data and Bibliography." <https://www.huduser.gov/portal/datasets/assths/statedata98/descript.html>.

———. n.d.b. "Family Report." <https://www.hud.gov/sites/documents/50058.PDF>

Varady, David P., and Carole C. Walker. 2003. "Housing Vouchers and Residential Mobility," *Journal of Planning Literature* 18 (1): 3–33. <https://journals.sagepub.com/doi/10.1177/0885412203254333>.

Walter, Rebecca J., and Ruoniu Wang. 2016. "Searching for Affordability and Opportunity: A Framework for the Housing Choice Voucher Program," *Housing Policy Debate* 26 (4–5): 670–691. <https://doi.org/10.1080/10511482.2016.1163276>.

---

# Location Patterns of Housing Choice Voucher Households Between 2010 and 2020

Gretchen Armstrong

Alexander Din

Mariya Shcheglovitova

Rae Winegardner

U.S. Department of Housing and Urban Development

*The views expressed in this article are those of the authors and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. Government.*

---

## Abstract

*The Housing Choice Voucher (HCV) program has sought to enable neighborhood choice for low-income assisted renter households in the United States, replacing previous policies focused on fixed-site housing. Since the launch of the program 50 years ago, researchers have shown interest in measuring the effects of the HCV program on the spatial deconcentration of poverty and voucher households' access to new neighborhoods and higher opportunity areas, typically defined as neighborhoods with lower poverty rates. The authors find that during the study period (2010–20), demographics of households served by the HCV program changed from families with children representing the most common voucher household structure to a majority of households headed by elderly or disabled individuals. Nationally, the share of housing units below fair market rent guidelines declined this decade. The share of HCV households living in neighborhoods with a high density of voucher holders increased, and more than 40 percent of HCV households remained in high-poverty neighborhoods. Changes affecting the HCV program are expected to continue. This article highlights the need for further research to evaluate the effect of policy changes on HCV locational outcomes.*

## Introduction

For 50 years, the Housing Choice Voucher (HCV) program has helped millions of low-income households afford quality housing on the private rental market. Initially introduced in 1974 as the Section 8 certificate program, the goals of the HCV program are to provide low-income renter households with increased choice to live in areas of higher opportunity, promote racial and economic integration, and reduce the concentration of poverty (HUD, 1996). Assisted households must generally earn less than 50 percent of their area median income (AMI) to qualify for the program. In practice, however, most assisted households are far below the statutory requirement of “extremely low-income,” defined as 30 percent of AMI or the federal poverty rate, whichever is higher in the public housing authorities’ (PHAs’) market.

The HCV program is currently the largest rental subsidy managed by HUD, assisting approximately 2.3 million households in 2020. The program includes both tenant-based vouchers (TBV), which the assisted households use to seek rental housing themselves in the private rental market, and project-based vouchers (PBV), where PHAs allocate voucher funding to specific project-based units.

This article provides an update on HCV program trends in the demographics and spatial patterns of HCV households from 2010 to 2020 and recommends areas for future study. Specifically, the study team posed the following five questions.

- ***How have the demographics of HCV households changed?*** Key variables of interest in understanding the location patterns of HCV households are household structure (for instance, elderly, disabled, or families with children) and race and ethnicity. This description of HCV demographic trends helps set the context for the following research questions. Fewer families with children participate in the program, and a growing share of assisted households are elderly or disabled compared to 10 years ago.
- ***What share of affordable housing is consumed by HCV households?*** Housing affordability worsened during the study period, with homeowners affected by both increasing housing costs and high mortgage rates and renters facing ever-rising rents (HUD, 2023). Nationwide, the share of rental units offered at or below the HUD-defined Fair Market Rent (FMR) declined in the past decade. These challenging housing market conditions make it more difficult for the lower-income households who qualify for the HCV program to find housing that meets both rent limits and minimum housing quality standards. Moreover, although the effects of the COVID-19 pandemic fell just after the 2020 study period, the associated job losses and market changes exacerbated housing challenges for many assisted households, making this a pivotal time to identify new research goals for the best ways to support low-income households.
- ***To what extent do HCV households concentrate in a few neighborhoods, and to what extent do they disperse widely across all neighborhoods?*** HCV household density is an important metric because there have long been concerns that high concentrations of voucher holders might lead to increased neighborhood poverty or rent destabilization (Devine et al., 2003) and the clustering of HCV households is inconsistent with the program goal of deconcentration (McClure, Schwartz, and Taghavi, 2015). Previous studies have found that

Black- and Hispanic-headed HCV households were more likely to live in areas with a higher concentration of HCV households than White households (Devine et al., 2003; McClure, Schwartz, and Taghavi, 2015). The study team revisited this analysis and found a similar pattern of increasing concentration from 2010 to 2020 that disproportionately affected Black- and Hispanic-headed households.

- ***To what extent are HCV households located in low-poverty neighborhoods?*** As noted earlier, a goal of the HCV program is to enable increased neighborhood choice, with the hope that the program will help families move to higher opportunity areas. Although researchers have used many measures of neighborhood quality (Walter and Wang, 2016), poverty rates are widely used as a proxy measure (Chyn and Katz, 2021; Galvez, 2010; Lens, McClure, and Mast, 2019). Previous studies of HCV location patterns found that although approximately one in five HCV households lived in low-poverty neighborhoods (defined as a poverty rate of less than 10 percent), over 40 percent still lived in high-poverty areas (poverty rate greater than 20 percent). Moreover, Black and Hispanic households were less likely to be located in low-poverty areas and more likely to live in high-poverty areas (Devine et al., 2003; McClure, Schwartz, and Taghavi, 2015). The study team revisited this analysis of poverty change from 2010 to 2020 and did not find that these trends have meaningfully changed.
- ***What policy changes may affect where HCV households are located?*** HCV households can use their vouchers to pay for housing where the landlord agrees to rent under the program and the unit meets minimum quality standards; however, household choice is not the only factor impacting location outcomes. Some jurisdictions have source-of-income laws preventing landlords from discriminating against families for using a voucher as payment; others do not have laws in place. This article considers the potential effects of HUD regulation Small Area Fair Market Rent (SAFMR), which requires communities in specified markets to use more granular-level rent data to better reflect the variation in rental prices within the local market. Although the concept was piloted in five cities in 2012, broader implementation did not begin until 2018. Hence, it is too soon to determine the effects of this round of SAFMR designations within the study period of this article. Still, some initial analysis is presented, and this area is flagged as a key area for future research.

## Background

Research on the location outcomes for voucher households has shown that the HCV program has had modest success in helping individuals move to high-opportunity neighborhoods. Voucher households are often located in high-poverty areas similar to other low-income households (Metzger, 2014; Galvez, 2010; Basolo, 2013) and are disproportionately found in central cities and underrepresented in suburbs (McClure and Johnson, 2014).

Surveys of voucher households have indicated that many would prefer to live in neighborhoods that offer better schools, are safer, and have better housing conditions (Kleit, Kang, and Scally, 2016; Wang, 2018; Sanbonmatsu et al., 2011; Kaufman and Rosenbaum, 1992). However, the flexibility and choice associated with the voucher program involve tenants weighing a number of tradeoffs—including housing location, unit cost, and neighborhood opportunity (Lens, McClure,

and Mast, 2019; Thrope, 2018)—against the potential loss of existing social support networks and anticipated difficulty in creating social ties in their new neighborhoods due to racism, discrimination, or a general stigma projected on voucher holders (Greenbaum et al., 2008; Kurwa, 2015). Moreover, voucher holders often face barriers to entering high-opportunity neighborhoods, such as a lack of transportation or a lack of information about which landlords in these areas would be willing to accept vouchers (Bergman et al., 2019; Chetty et al., 2018; Ellen, Suher, and Torrats-Espinosa, 2019; Ellen, 2020; Seicshnaydre, 2016; Thrope, 2018).

Noting the extent to which landlord participation influences HCV voucher location patterns is also important. Landlords may avoid, legally or illegally, renting to HCV households due to prejudice or their perceptions of voucher holders' length of tenancy or ability to care for the property (Garboden et al., 2018). Voucher households may also face discrimination in the rental screening process, particularly in states and localities lacking source-of-income laws to prevent landlord discrimination based on the use of HCVs as payment (Thrope, 2018; Rosen, 2014; Ellen, O'Regan, and Harwood, 2022; Metzger, 2014).

Two previous reports on location patterns of HCV households are referenced in this article. The first report found that, in 2000, HCV households living in the 50 most populous Metropolitan Statistical Areas (MSAs) consumed a small share of both overall housing and affordable housing and that a majority were located in lower- or moderate-poverty neighborhoods. However, about two in five HCV households lived in neighborhoods with poverty levels over 20 percent, and Black and Hispanic program participants were more likely to live in high-poverty neighborhoods (Devine et al., 2003). The second report compared nationwide trends to the top 50 MSAs in 2000 and 2010 and found that although the HCV program continued to consume a small share of affordable rental housing, the share of households located in high-poverty areas and HCV density (for instance, the share of HCV households living in tracts in which voucher holders made up a larger percentage of renters) were increasing (McClure, Schwartz, and Taghavi, 2015). Both reports indicated that participant choice alone was not enough to achieve the program goal of spatial poverty deconcentration and suggested this goal must be addressed through broader interventions and support systems that aid participating tenants in finding housing.

In this third installment of HCV location reports, the study team revisits the analyses of HCV location patterns from 2010 to 2020. The team examines affordability of rental housing, HCV concentration, and the level of poverty in neighborhoods where HCV households live, and introduces the implementation of the use of SAFMRs, which may affect future location outcomes for households participating in the HCV program. In contrast to the prior reports, in which TBV represented the vast majority of HCV, the PBV portion of the program grew significantly during the study period from roughly 2 percent in 2010 to 10.5 percent in 2020. Because of this growth, this article at times focuses on different portions of the HCV program.

## Methods

The study team analyzed data on all households participating in the HCV program in 2010 and 2020 in all 50 states and the District of Columbia and in the 50 most populous MSAs.<sup>1</sup> Further, the team partitioned counties within the top 50 MSAs into urban counties containing the most populous principal city (Wilson et al., 2012), suburban counties (defined as all other central counties in the MSA), and outlying counties within the MSA. HUD administrative data were linked to 2010 and 2020 American Community Survey (ACS) 5-year estimates to describe poverty and housing trends, and 2010 census data were transformed to 2020 census geographies using population-weighted interpolation.

The following definitions and methods are related to the key areas of focus in this study:

**Affordability of Rental Units.** For the purpose of this article, an “affordable” unit is defined as one that met HCV program guidelines for a moderately priced dwelling, an amount known as the FMR.<sup>2</sup> The study team determined that a unit was affordable when offered at or below the applicable 2010 or 2020 HUD-determined FMR or SAFMR based on unit size and location. The team included as affordable all units in rent brackets fully below the given FMR/SAFMR. When an FMR/SAFMR value fell in the middle of a rent bracket, the team interpolated the share of units for that rent bracket in which the FMR/SAFMR fell as affordable (Mazzara and Knudsen, 2019). For example, if a rent bracket ranged from \$100 to \$200 and the FMR was \$160, the team would include 60 percent of the total number of units in that rent bracket. The universe of rental units was based on an ACS special tabulation of quality-certified housing units that accepted cash rent.

This method to determine the share of affordable units mimics those used in the two prior reports. It is important to note that the share affordable calculated with this method differs from the FMR rates and does not result in 40 percent of units because the calculations exclude utility information, which is included in FMR but was unavailable for this study. In addition, the results for one-, two-, and three-bedroom units were calculated separately, whereas the FMR rates were imputed from two-bedroom estimates. However, using a consistent methodology within and between these reports allows for comparisons of affordability across years.

**Tract-Level HCV Density.** Density was used to understand the proportion of HCV households living in more- versus less-dense tracts and the change in density from 2010 to 2020. As noted in the prior reports, HCV density was calculated as the ratio of all HCV households to all occupied housing units in a census tract and showed the share of voucher households living in higher versus lower HCV density categories. These results were further separated by voucher type, calculating the share of TBV and PBV households in each of the all-HCV density categories.

---

<sup>1</sup> The 50 most populous MSAs contain over one-half of the census tracts with households participating in the HCV program in 2020 (52.3 percent), and these tracts contain 59.9 percent of all HCV households.

<sup>2</sup> In 2020, the FMR was set at the 40th percentile of gross rents in the local housing market. In 2010, the FMR was set at the 50th percentile in 17 jurisdictions and the 40th percentile in all other areas. Applicable FMR standards set each year were used because they best represent the share of affordable units accessible to voucher holders. Beginning in 2018, some PHAs are required to use SAFMR; other PHAs may opt in to use SAFMR in all or part of their jurisdictions.

**Metropolitan Statistical Area-Level Spatial Concentration Index.** Similar to Metzger (2014), the Herfindahl-Hirschman Index (HHI) was used to measure the concentration of TBV households by census tract in each MSA. HHI is most commonly used to describe the market concentration of industries. However, in this context, HHI describes the extent to which TBV households are concentrated within specific census tracts or evenly distributed throughout an MSA's census tracts. Higher HHI values (closer to 1) indicate greater concentration, and lower HHI values (closer to 0) indicate lower concentration. The benefit of this analysis is that it distills concentration within each MSA into a single value and can be used to compare concentration over time. This analysis was limited to only the TBV portion of the HCV program because PHAs are responsible for leasing PBVs, many of which are former public housing sites, and the supposed choice of the HCV program to locate in many neighborhoods is focused on the TBV side of the program.

The HHI was calculated for the top 50 most populous MSAs by summing the squared share of TBV households by tract for each MSA for 2010 and 2020 timeframes. This concentration analysis was limited to TBV-only households (rather than all HCV households) based on HCV density analysis results that suggested large differences between TBV and PBV household density. The formula for the HHI is as follows:

$$HHI = \sum_{i=1}^N (tbv/TBV)^2$$

where  $N$  is the number of census tracts in the MSA,  $tbv$  is the number of TBV households in a particular census tract, and  $TBV$  is the number of all TBV households in the MSA.

**Neighborhood Poverty.** There is no absolute threshold above which poverty levels can be said to adversely affect the welfare of all voucher families. Nevertheless, the 40-percent level has been frequently cited as a threshold for extreme poverty (Devine et al., 2003). The study team defined poverty using U.S. Department of Agriculture Poverty Area Measures:<sup>3</sup> low poverty is defined as less than 10 percent, low-medium poverty is defined as 10 to 20 percent, high poverty is defined as 20 to 40 percent, and extreme poverty is 40 percent or more.

## Results

### HCV Demographic Changes

In 2020, there were nearly 2.3 million HCV households, an increase of 8.8 percent from 2010 to 2020 (exhibit 1). Most HCV households utilized TBVs that are not location-specific, while other HCV households utilized PBVs in which PHAs enter into a contract directly with a landlord, often for multiple units (for example, an apartment building), and PBVs are attached to those properties. Although Congress authorized the flexibility for PHAs to use PBVs in 1998, it was not until after 2010 that much of the growth of the PBV program occurred, including many conversions to PBV from other programs, such as public housing, through the Rental Assistance Demonstration

---

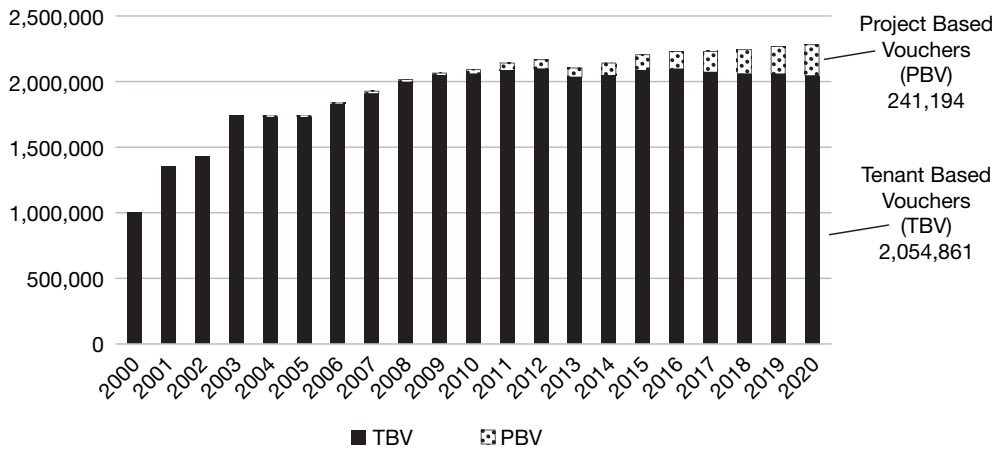
<sup>3</sup> For more information, please see <https://www.ers.usda.gov/data-products/poverty-area-measures/>.



(RAD; Mast and Hardiman, 2017).<sup>4</sup> In 2010, 98 percent of vouchers in HCV were TBVs and only 2 percent were PBVs; by 2020, the share of PBVs had climbed to 10.5 percent while the share of TBVs decreased to 89.5 percent. The total number of TBVs also declined between 2010 and 2020.

**Exhibit 1**

HCV Program Growth 2000–20



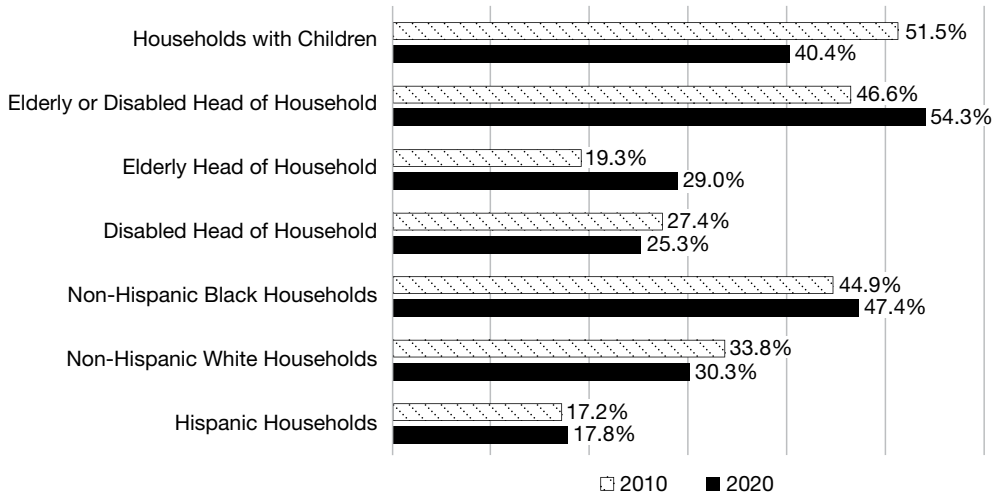
HCV = Housing Choice Voucher. PBV = project-based voucher. TBV = tenant-based voucher.  
 Source: HUD Administrative Tenant Data, with analysis by the authors

The demographics of HCV households have changed in the past few decades, with the share of families with children decreasing and elderly or disabled-headed households becoming the most common type of HCV household structure (exhibit 2). In 2000, more than 60 percent of HCV households were households with children (Devine et al., 2003). By 2010, households with children dropped to slightly more than one-half of HCV households, and by 2020, households with children (40.4 percent) no longer represented the majority of voucher households. Between 2010 and 2020, the number of elderly heads of households increased by nearly 10 percentage points while the number of disabled heads of households decreased slightly. Whether these changes are due to recent growth in set-aside vouchers targeted at specific populations (for instance, recipients of HUD-Veterans Affairs Supportive Housing vouchers are often single men without children) or from other factors is outside the scope of this article. In terms of race and ethnicity, Black heads of household continue to represent the highest—and growing—percentage of voucher households.

<sup>4</sup> The RAD program converts rental assistance from Public Housing, Section 8 Moderate Rehabilitation, Rental Supplement, or the Rental Assistance Programs into either PBVs or, in some cases, Section 8 Project-Based.

**Exhibit 2**

HCV Program Demographics in 2010 and 2020



HCV = Housing Choice Voucher.

Note: These categories are not mutually exclusive.

Source: HUD Administrative Tenant Data, with analysis by the authors

**The Changing Stock of Affordable Housing**

Voucher households occupied a small and relatively stable proportion of the housing market in 2010 and 2020. Nationally, HCV program participants represented approximately 2 percent of all occupied households and 6 percent of renter-occupied households in both 2010 and 2020 (exhibit 3). A similar pattern was observed in the top 50 MSAs and the urban and suburban areas within them, with a slightly lower share of HCVs in outlying areas as compared with total occupied units or total rental units in outlying areas.

### Exhibit 3

Total Occupied, Rental Units, and Percents Utilized by HCV in 2010 and 2020 for the Nation and Most Populous 50 MSAs by FMR

	Nationwide			Top 50 MSAs			Urban Counties of the Top 50 MSAs			Suburban Counties of the Top 50 MSAs			Outlying Counties of the Top 50 MSAs		
	2010	2020	% Change	2010	2020	% Change	2010	2020	% Change	2010	2020	% Change	2010	2020	% Change
Total Occupied Units	114.2	122.4	7.1%	60.4	65.7	8.8%	27.0	29.6	9.6%	28.7	31.0	8.0%	4.6	5.1	11.3%
Total Units with HCVs	2.1	2.3	8.7%	1.2	1.4	11.3%	0.64	0.72	12.5%	0.52	0.58	10.4%	0.06	0.06	8.3%
HCVs as a Percentage of Occupied Units	1.8%	1.8%		2.0%	2.1%		2.4%	2.4%		1.8%	1.9%		1.3%	1.2%	
Total Rental Units	32.4	36.2	11.6%	19.0	21.5	13.3%	9.9	11.2	13.3%	8.1	9.2	12.9%	0.97	1.1	16.1%
HCVs as a Percentage of Total Rental Units	6.4%	6.2%		6.4%	6.3%		6.4%	6.4%		6.4%	6.3%		5.9%	5.5%	

FMR = Fair Market Rent. HCV = Housing Choice Voucher. MSA = Metropolitan Statistical Area.

Notes: Numbers of units x 100,000. Data on efficiency units and those with four or more bedrooms were excluded because those data were not available for 2020.

Sources: HUD Administrative Tenant Data; 2010 and 2020 American Community Survey tabulation of quality-certified units that accept cash rent, with analysis by the authors

### Exhibit 4

Affordable Rental Units and Share of Housing Stock in 2010 and 2020 for the Nation and Most Populous 50 MSAs by FMR

	Nationwide			Top 50 MSAs			Urban Counties of the Top 50 MSAs			Suburban Counties of the Top 50 MSAs			Outlying Counties of the Top 50 MSAs		
	2010	2020	% Change	2010	2020	% Change	2010	2020	% Change	2010	2020	% Change	2010	2020	% Change
Total Occupied Units	114.2	122.4	7.1%	60.4	65.7	8.8%	27.0	29.6	9.6%	28.7	31.0	8.0%	4.6	5.1	11.3%
Total Rental Units that Accept Cash Rent	32.4	36.2	11.6%	19.0	21.5	13.3%	9.9	11.2	13.3%	8.1	9.2	12.9%	0.97	1.1	16.1%
Total Affordable Rental Units	20.1	21.3	5.7%	12.1	14.9	6.2%	6.1	6.6	7.7%	5.4	5.6	3.3%	0.66	0.76	15.5%
Affordable as a Share of Total Occupied Units	17.6%	17.4%	-0.2%	20.1%	19.7%	-0.5%	22.5%	22.2%	-0.3%	18.8%	18.0%	-0.8%	17.6%	17.4%	-0.2%
Affordable as a Share of Total Rental Market	62.0%	58.8%	-3.2%	64.0%	60.0%	-4.0%	61.5%	58.9%	-3.0%	66.5%	60.9%	-5.6%	68.4%	67.9%	-0.3%

MSA = Metropolitan Statistical Area. FMR = Fair Market Rent.

Notes: Numbers of units x 1,000,000. Data on efficiency units and those with four or more bedrooms were excluded because those data were not available for 2020.

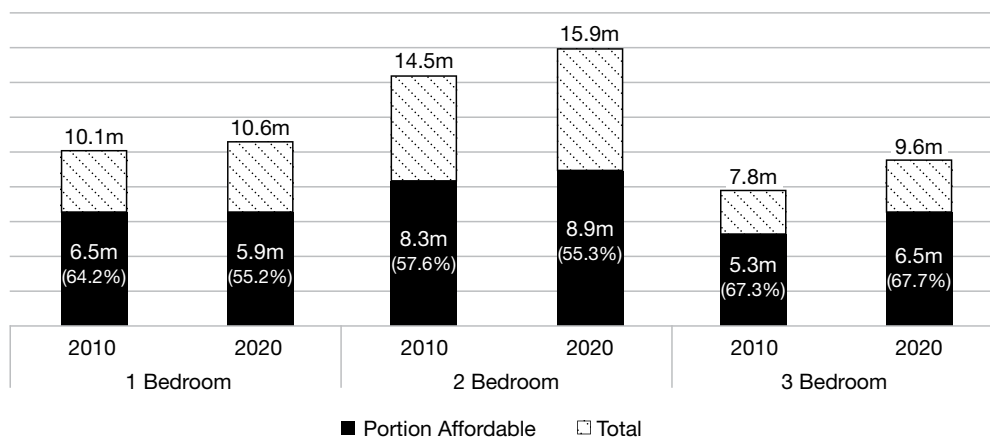
Source: 2010 and 2020 American Community Survey (ACS) data and ACS tabulation of quality-certified units that accept cash rent, with analysis by the authors

Both the total and number of affordable rental units increased from 2010 to 2020, with a 3.75 million unit increase nationwide, including an increase of 1.2 million units that would be considered affordable according to local FMRs (exhibit 4). The study team saw increases in all areas of the top 50 MSAs. It is worth noting, however, that although total rental units increased, the number of affordable units did not increase as dramatically, resulting in a lower share of affordable units. For example, the nationwide share of affordable units decreased by 3.2 percentage points, from 62 percent of units considered affordable in 2010 to 58.8 percent considered affordable in 2020. This difference was largest in suburban areas, where the share of affordable units decreased by 5.6 percentage points. The difference was smallest in outlying areas, where a similar share of affordable versus other units was added. The decreases in the affordable share of rental units were larger than affordable units as a share of all occupied housing reported in past reports.

The number and share of affordable units in 2010 and 2020 varied by unit size. The largest increase was observed in the overall number of two-bedroom apartments, from 14.5 million to 15.9 million. The number of affordable two-bedroom units increased slightly but less than the total number of two-bedroom units, and as a result, the share of affordable units decreased slightly. Although the overall number of one-bedroom units also increased between 2010 and 2020, the number of affordable units decreased by over 630,000 units, and the share of one-bedroom apartments considered to be affordable dropped from 64.2 percent in 2010 to 55.2 percent in 2020. The total and number of affordable three-bedroom apartments increased at a similar rate, with a relatively stable and larger share of affordable units (67 percent).

**Exhibit 5**

Total Rental and Affordable Units with Percent Affordable, 2010 and 2020



Notes: Units in millions. Data on efficiency units and those with four or more bedrooms were excluded because those data were not available for 2020. Source: Custom 2010 and 2020 American Community Survey tabulation of quality-certified housing units that accept cash rent, with analysis by the authors

**Density and Concentration of Voucher Households**

In 2020, most census tracts (82 percent) had at least one HCV household located within the tract—down slightly from 2010. This demonstrates that the HCV program supports participants’

ability to access a majority of U.S. neighborhoods. However, a trend toward an increasing share of voucher households living in HCV-dense areas was observed.<sup>5</sup> Moreover, Black and Hispanic households were more than twice as likely to live in areas of higher HCV density (greater than 10 percent of all units) than White households in 2020.

Between 2010 and 2020, the share of HCV households living in lower HCV density areas decreased, and the number of all voucher households living in higher HCV density census tracts increased. Such data continued the trend toward increased density observed from 2000 to 2010 (McClure, Schwartz, and Taghavi, 2015). As seen in the first three columns of exhibit 6, in 2010, more than one-half of all HCV households lived in census tracts with the two lowest-density categories, and only about one in five lived in the highest-density categories. In 2020, the share of HCV households in these lower-density areas had decreased to less than one-half, and roughly one in four households lived in areas represented in the two highest-density categories.

**Exhibit 6**

Share of HCV, TBV, and PBV Households by HCV Density in 2010 and 2020 and Percentage Point Change

	All HCV Households			TBV Households			PBV Households		
# Households	2,075,981	2,256,779	+180,798	2,033,139	2,019,024	-14,115	42,842	237,755	+194,913
HCV Density	2010 (%)	2020 (%)	Change	2010 (%)	2020 (%)	Change	2010 (%)	2020 (%)	Change
All Occ Units									
< 2% HCV	20.9	19.2	- 1.7	20.9	20.9	0.0	21.2	4.4	- 16.8
2-5% HCV	30.9	27.5	- 3.4	30.9	29.1	- 1.7	31.1	13.7	- 17.3
5-8% HCV	20.0	18.8	- 1.2	20.0	19.2	- 0.9	20.0	15.6	- 4.4
8-10% HCV	8.5	8.7	0.2	8.5	8.6	0.1	8.5	9.9	1.4
10-25% HCV	17.5	22.4	4.8	17.5	20.2	2.6	17.2	41.1	23.9
> 25% HCV	2.2	3.5	1.3	2.2	2.1	- 0.1	2.0	15.3	13.3

HCV = Housing Choice Voucher. TBV = tenant-based voucher. PBV = project-based voucher.  
 Source: HUD Administrative Tenant Data, with analysis by the authors

When density for TBV and PBV programs were analyzed separately, the overall change in density from 2010 to 2020 observed was largely driven by new voucher households added to the PBV program. In 2010, for all categories of voucher households, the share in each density category was relatively similar across HCV, TBV, and PBV programs. In 2020, the share of TBV households slightly shifted toward higher-density areas, but less so than for HCV as a whole.

In contrast, as the PBV program has grown over the last decade, PBV households were much more likely to live in high-density areas in 2020 than in 2010. Although still quite a small program compared to TBV, the number of PBV units increased by over 550 percent between 2010 and 2020 and continues to grow. In the PBV program, PHAs enter into contracts directly with landlords, often for units in the same structure or otherwise close together (for example, an apartment building); thus, adding these groups of PBVs has a greater impact on HCV density. Although the findings of this study showed that additional PBVs were added in all density categories, PHAs were much more likely to have situated PBVs in higher-density areas. PHAs may have chosen to do so for multiple reasons. For instance, some PBV properties may have been former public housing

<sup>5</sup> As noted in the methods section, HCV density represents the share of all occupied housing units represented by HCV households.

sites converted into privately owned low-income properties through the RAD conversion program. PHAs may also have chosen to create PBV properties to address specific community housing needs, such as specialty vouchers for homeless veterans, which may locate housing near needed supportive services. Additional research on how PHAs make decisions about where to situate PBV properties is warranted, but such analysis is outside the scope of this article.

Voucher household locations varied considerably by race and ethnicity, reflecting a pattern similar to the prior HCV location report (McClure, Schwartz, and Taghavi, 2015). Black and Hispanic households were about twice as likely to live in areas of higher HCV density (greater than 10 percent of all units) than White households in 2020 (exhibit 7). Further, it was discovered that the share of Black HCV households living in higher-density areas had increased from 2010 to 2020 by 6.3 percent. Although the share of White and Hispanic HCV households living in higher-density areas also increased, the magnitude of the increase was lower than for Black HCV households.

**Exhibit 7**

Change in the Percentage of HCV Households in Low-HCV-Dense versus High-HCV-Dense Tracts by Race and Ethnicity, 2010–20, and Percentage Point Change

HCV Density	All HCV Households			Non-Hispanic Black HCV Households			Non-Hispanic White HCV Households			Hispanic HCV Households		
	2010 (%)	2020 (%)	Change	2010 (%)	2020 (%)	Change	2010 (%)	2020 (%)	Change	2010 (%)	2020 (%)	Change
< 2% HCV	20.9	19.2	-1.7%	15.2	14.7	-0.4	30.5	27.9	-2.6	17.4	16.6	-0.8
2–5% HCV	30.9	27.5	-3.4%	28.2	24.8	-3.4	35.5	32.6	-2.9	28.7	26.3	-2.4
5–8% HCV	20.0	18.8	-1.2%	22.1	19.6	-2.4	17.5	17.6	0.1	19.5	18.5	-0.9
8–10% HCV	8.5	8.7	0.2%	10.0	9.7	-0.2	6.1	6.9	0.8	9.2	8.9	-0.3
10–25% HCV	17.5	22.4	4.8%	21.9	27.0	5.1	9.0	13.0	4.0	22.6	25.6	3.0
> 25% HCV	2.2	3.5	1.3%	2.7	4.1	1.4	1.3	1.9	0.6	2.6	4.1	1.5

HCV = Housing Choice Voucher.

Source: HUD Administrative Tenant Data, with analysis by the authors

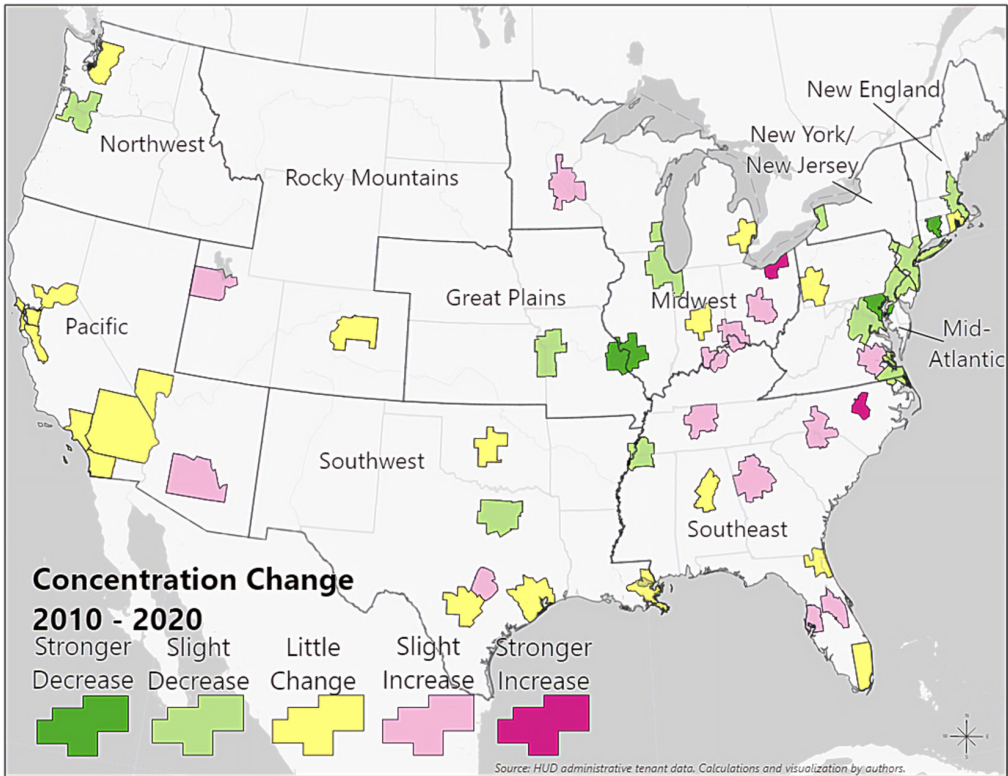
The HHI was used to understand the magnitude to which TBV households concentrated in a few neighborhoods in 2010 and 2020 for the top 50 MSAs. The value of this index is that it produces a single value representing TBV household concentration within an MSA, which then can be analyzed over time and across MSAs.<sup>6</sup>

Between 2010 and 2020, the HHI concentration of TBV households increased in most MSAs. Exhibit 8 maps the change between 2010 and 2020 in census tract TBV concentration overlaid with HUD regions. Changes in TBV concentration varied throughout the United States. The greatest decrease in MSA-wide TBV deconcentration was in the Baltimore-Columbia-Towson, MD MSA, which decreased from an HHI index of 0.0043 to 0.0036. MSAs with decreasing HHI concentrations were mostly located in HUD regions along the Eastern Seaboard, such as the Mid-Atlantic, New York/New Jersey, and New England. Metropolitan areas with increasing TBV concentration by census tracts were primarily located in HUD’s Midwest and Southeast regions. For example, the HHI concentration in the Raleigh-Cary, NC MSA increased from 0.0147 to 0.0209.

<sup>6</sup> Higher HHI values indicate greater HCV concentration, and lower HHI values indicate lower HCV concentration. For instance, scores closer to 1 represent higher concentration, and scores closer to 0 represent lower concentration.

**Exhibit 8**

TBV Concentration Index Change by 50 Most Populous Metropolitan Statistical Areas, 2010–20



TBV = tenant-based voucher.

Notes: Concentration indices were transformed into Z-scores for easier interpretation compared to raw HHI values. Z score values between  $-0.5$  and  $0.5$  are categorized as "Little Change." Values between  $-0.5$  and  $-1.5$  or  $0.5$  and  $1.5$  are categorized as "Slight Decrease" or "Slight Increase," respectively. Values less than  $-1.5$  or greater than  $1.5$  are categorized as "Stronger Decrease" or "Stronger Increase," respectively.

Source: HUD Administrative Tenant Data, with analysis by the authors

**Neighborhood Poverty**

This analysis of the HCV program and neighborhood poverty rates was limited to the TBV program because TBV-assisted households seek out housing in different neighborhoods in the private rental market, whereas PBV-assisted households are assigned a unit by a PHA and the program operates more similarly to a fixed-site program, such as public housing. Although the share of TBV households living in low-poverty areas improved, a substantial portion of voucher households have continued to be located in high-poverty areas, indicating that the program is still not fully meeting its key objective of spatial poverty deconcentration.

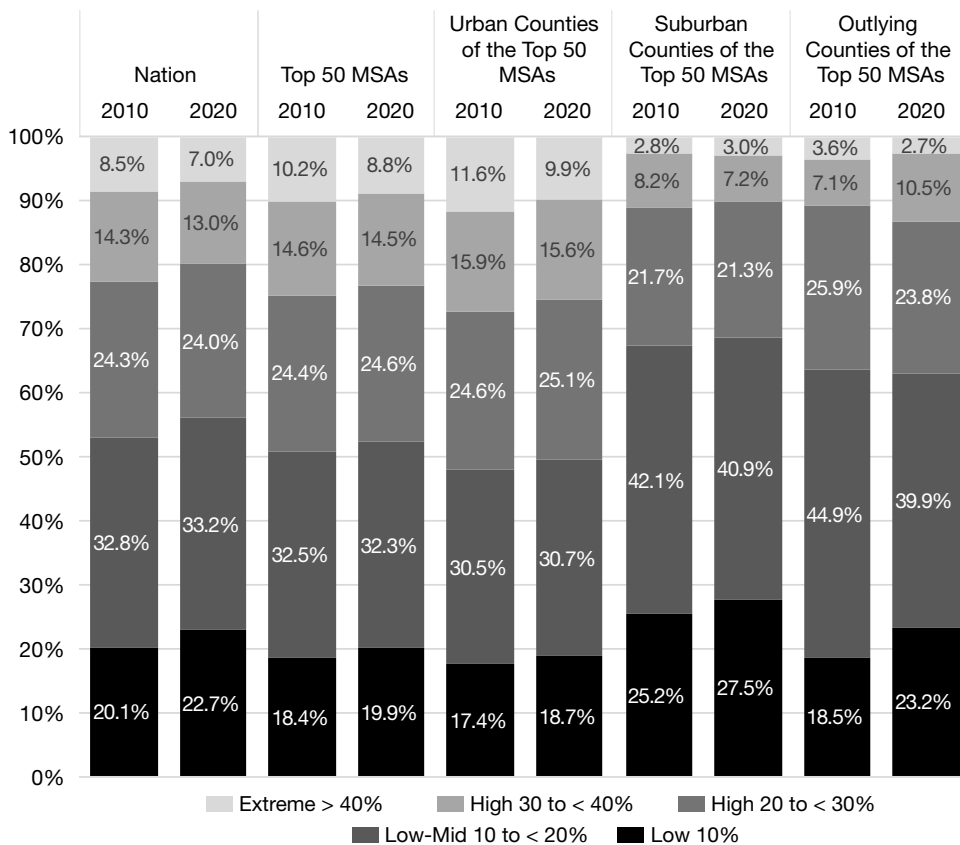
Between 2010 and 2020, the share of TBV households located in census tracts with low levels of poverty increased by nearly 3 percentage points to 22.7 percent, and the share of HCV households located in tracts with higher levels of poverty decreased slightly (exhibit 9). Within the top 50 MSAs, the study team also observed an increase in TBV households located in low-poverty census

tracts, although the magnitude of the increase was greater in suburban and outlying counties than in urban areas.

However, nationwide, 44 percent of TBV households still lived in high-poverty census tracts in 2020, including 7 percent living in areas of extreme poverty. TBV concentrations in high- and extreme-poverty census tracts were the most pronounced in urban counties, where approximately one-half of these households (50.6 percent) lived in census tracts with a 20-percent or greater poverty rate, including 9.9 percent in extreme-poverty census tracts. A much smaller share of TBV households in suburban and outlying counties lived in tracts with high or extreme poverty. The average poverty rates of census tracts with at least one TBV household were approximately 6 percentage points higher than census tracts with no TBV households in 2010 and 2020.

**Exhibit 9**

Share of TBV Households by Poverty Category



MSA = Metropolitan Statistical Area. TBV = tenant-based voucher.

Notes: Data exclude tenants participating in the project-based voucher program. The poverty rate is calculated as the proportion of the census tract population living below the poverty threshold. HCV household percentages for 2010 and 2020 are calculated as a proportion of the total population in the corresponding year's census tracts. 2020 Core-Based Statistical Areas are used to analyze 2010 and 2020 HCV data.

Source: HUD administrative data and American Community Survey 5-year estimates, with analysis by the authors



The share of TBV households located in low- versus high-poverty areas in 2020 has not changed substantially since 2000. The increase in TBV households living in low-poverty areas from 2010 to 2020 appears to have rebounded from the percentage point decrease from 22.0 percent to 20.6 percent observed by McClure, Schwartz, and Taghavi (2015) between 2000 and 2010.<sup>7</sup>

Households participating in the HCV program do not need to move to experience changes in neighborhood conditions because neighborhood conditions can and do change around TBV households over time. As shown in exhibit 10, about 31 percent of TBV households in 2020 lived in census tracts where the poverty rate was lower in the same year than it had been in 2010, which means that some of the change in households living in lower-poverty tracts might be related to this nationwide trend rather than due to households moving to lower-poverty areas. By comparison, 23 percent of households lived in tracts where the poverty rate had increased. Whether observed changes in the share of voucher households living in high- or low-poverty areas were the result of household moves, new admissions, or external poverty trends is outside the scope of this article. This analysis is a recommendation for continued research.

**Exhibit 10**

Change in Poverty in Census Tracts with TBV in 2020

	Nation (%)	Top 50 MSAs (%)	Urban Counties of the Top 50 MSAs (%)	Suburban Counties of the Top 50 MSAs (%)	Outlying Counties of the Top 50 MSAs (%)
Poverty Category Unchanged 2010 to 2020	46.4	46.0	41.3	51.0	54.0
Lower Poverty Category in 2020 than in 2010	30.6	31.4	34.6	28.0	25.3
Higher Poverty Category in 2020 than in 2010	23.1	22.6	24.1	21.0	20.7

MSA = Metropolitan Statistical Area. TBV = tenant-based voucher.

Note: The population-weighted interpolation function in the R package tidycensus was used to calculate 2010 poverty rates in 2020 census tracts.

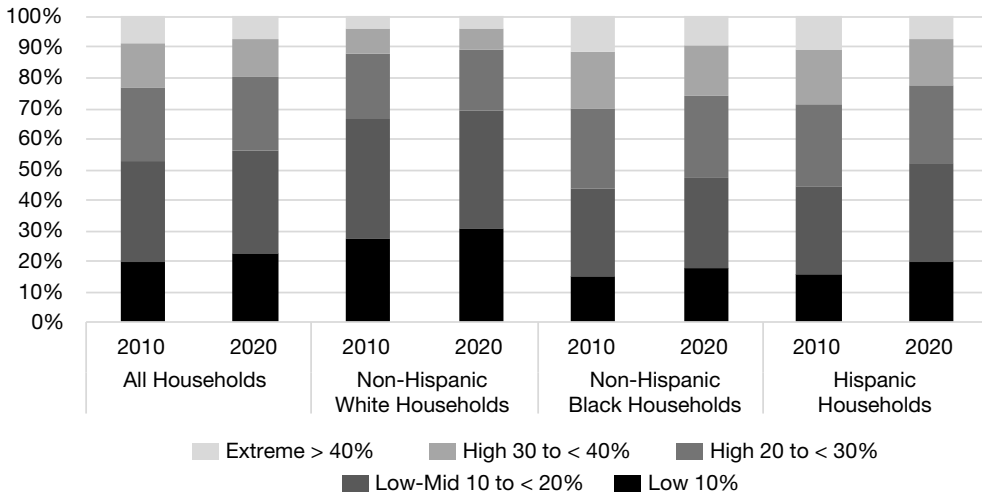
Source: HUD administrative data and American Community Survey 5-year estimates, with analysis by the authors

Similar to previous reports, the location patterns of voucher households varied by race and ethnicity (exhibit 11). A much higher proportion of White voucher households as compared to Black or Hispanic voucher households were located in low-poverty census tracts in 2020 (30.8 percent versus 18.1 and 19.6 percent, respectively). The share of White households in census tracts with poverty rates above 20 percent decreased between 2010 and 2020. Although the share of Black and Hispanic households living in high-poverty tracts also generally decreased, in 2020, Black and Hispanic TBV households were still much more likely than White TBV households to live in areas of high or extremely high poverty (52.3 and 47.8, respectively, versus 30.7 percent of White households).

<sup>7</sup> Although the McClure, Schwartz, and Taghavi study (2015) included all the HCV programs combined, the TBV program represented 98 to 100 percent of voucher households during their study period, making a comparison to the current change in TBV relatively comparable.

**Exhibit 11**

Distribution of TBV Households by Race and Ethnicity by Census Tract Poverty Rate in 2010 and 2020



Notes: Data exclude households participating in the project-based voucher program. The poverty rate is calculated as the proportion of the census tract population living below the poverty threshold. HCV household percentages for 2010 and 2020 are calculated as a proportion of the total in the corresponding year's census tracts.

Source: HUD administrative data and American Community Survey 5-year estimates, with analysis by the authors

**The Introduction of Small Area Fair Market Rents**

Although assessing the causes of any changes in HCV locational patterns is outside the scope of this article, this section briefly discusses one major program and policy innovation implemented by HUD: the use of SAFMRs. This policy tool calculates rent rates at the ZIP Code level rather than setting the FMR by MSA or, for New England areas, by town or city. Setting maximum rents based on more granular variations in the local market may help voucher households gain greater access to lower-poverty and higher-opportunity neighborhoods. More desirable neighborhoods tend to have higher rents, so setting a higher FMR in those areas may allow voucher households to access a larger portion of the rental market. It is worth noting that SAFMRs also set lower rental rates in lower-cost areas, which may reduce the number of units available in higher-poverty neighborhoods.

Nationwide use of SAFMR values would increase the number of units considered affordable for voucher holders by more than 1.4 million, or 5 percentage points (exhibit 12). The study team observed increases in all 50 top MSAs and urban, suburban, and outlying areas within them, with the largest increase in the affordable share observed in suburban areas.

## Exhibit 12

FMR and SAFMR-Affordable Rental Units as Percentage of All Rental Units

	Nation			Top 50 MSAs			Urban Counties of the Top 50 MSAs			Suburban Counties of the Top 50 MSAs			Outlying Counties of the Top 50 MSAs		
	2020 FMR	2020 SAFMR	Diff.	2020 FMR	2020 SAFMR	Diff.	2020 FMR	2020 SAFMR	Diff.	2020 FMR	2020 SAFMR	Diff.	2020 FMR	2020 SAFMR	Diff.
Total Affordable Rental Units	21.3	22.7	1.4	12.9	14.0	1.1	6.60	7.2	0.6	5.6	6.1	0.5	.77	.78	0.01
Affordable Units as a Percentage of Total Rental Market	58.8%	63.8%	+5.1%	60.0%	65.6%	+5.5%	58.4%	63.9%	+5.5%	60.9%	67.0%	+6.1	68.1%	69.3%	+1.2

Diff. = percentage point change. FMR = Fair Market Rent. MSA = Metropolitan Statistical Area. SAFMR = Small Area Fair Market Rent.

Notes: Units x 1,000,000. The universe of rental units and affordable units was calculated from the American Community Survey special tabulation of quality-certified housing units that accept cash rent. Rent data were available for one-, two-, and three-bedroom units. A rental unit was determined to be affordable when it was offered below the applicable 2010 or 2020 SAFMR. Because HUD only calculates SAFMR for metropolitan counties, national data on total units and affordable units according to SAFMR are based on this slightly smaller dataset. Units below SAFMR were not calculated for 2010 because SAFMR data were available from 2014 onward.

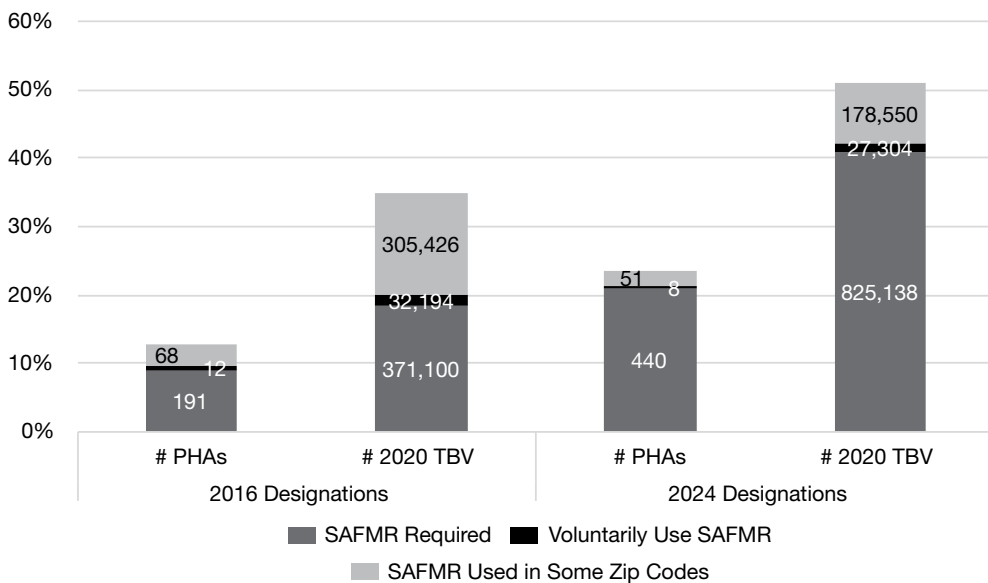
Source: 2010 and 2020 American Community Survey (ACS) data and ACS tabulation of quality-certified units that accept cash rent, with analysis by the authors

Although the use of SAFMR is not required nationwide, a growing share of voucher households live in areas that require the use of SAFMR. Beginning in 2018, HUD required PHAs administering vouchers in 24 areas to use SAFMRs to set maximum housing payments for tenant-based vouchers.<sup>8</sup> In 2023 (after the study period of this analysis), HUD designated an additional 41 areas in which PHAs will be required to use SAFMRs starting in 2025.<sup>9</sup>

To provide a sense of the scope of SAFMR use, nearly 10 percent of PHAs were administering vouchers in areas required to use SAFMR in 2020, and this number more than doubled with the second round of designated areas (exhibit 13). In terms of the number of vouchers, the first round of required SAFMR areas represented just under 20 percent of TBVs; the second round of designated areas increased the share to over 40 percent, as measured by 2020 data. Among the top 50 MSAs, 70 percent must use SAFMRs in at least some portions of their MSAs.

**Exhibit 13**

Use of SAFMR by PHAs as Measured by 2020 TBV



PHA = public housing authority. SAFMR = Small Area Fair Market Rent. TBV = tenant-based voucher.  
 Notes: Bars represent the percentage of PHAs and TBVs in SAFMR areas. The authors added actual counts to the bars to provide additional context. Data include TBV households only because PHAs are not required to use SAFMR for PBVs. For more information about the applicability of SAFMRs to PBVs, please see the notice from Public and Indian Housing on Guidance on Recent Changes in Fair Market Rent Payment Standard, and Rent Reasonableness Requirements in the Housing Choice Voucher Program: <https://www.hud.gov/sites/dfiles/PIH/documents/PIH-2018-01.pdf>.  
 Source: Analysis of HUD Administrative Data, with analysis by the authors

<sup>8</sup> These areas were designated based on the number of vouchers (>2500), the difference between SAFMR and FMR in the area (>20 percent more than 110 percent of the FMR), the number of voucher holders as a ratio of all renters (>1.55), and the designation as a “concentrated low-income area” (defined as either having a poverty rate of >25 percent or an area in which >50 percent of the population earns incomes lower than 60 percent of the area median income). HUD does not require PHAs to use SAFMR for project-based vouchers.

<sup>9</sup> A full list of designated communities is provided in Appendix 1.

Some PHAs have voluntarily used SAFMRs for some or all ZIP Codes in their jurisdictions. Quantifying the total number of households receiving vouchers from PHAs that are voluntarily using SAFMRs is difficult because PHA jurisdictions overlap and do not align neatly with other geographic divisions (Tauber, Ellen, and O'Regan, 2024), and because data on the total number of TBVs associated with a PHA may represent an overcount if SAFMRs are only used in some ZIP Codes. Further, some PHAs that initially used SAFMRs voluntarily are included in the areas required to use SAFMRs starting in 2025. Nevertheless, SAFMRs may have been used to calculate the maximum rents for up to 35 percent of vouchers in 2020 and up to 50 percent of vouchers going forward.

The first attempts to assess the impact of SAFMR were based on a HUD demonstration project launched in 2012, in which HUD randomly selected five PHAs to implement SAFMR.<sup>10</sup> The results of some early studies showed that HCV households in SAFMR PHAs were more likely to live in higher-opportunity areas (Dastrup et al., 2018; Seicshnaydre, 2016). Households with children who decided to move to a new area were 11 percent more likely to live in higher-opportunity areas (Dastrup, Finkel, and Ellen, 2019). Less positively, households headed by elderly or disabled individuals did not show much change in neighborhood opportunity (Dastrup et al., 2018). Most higher-opportunity ZIP Codes are in predominantly White areas (McClure and Schwartz, 2019), and although the use of SAFMRs marginally improved the location outcomes for Black and Hispanic voucher holders, these improvements were not enough to overcome persistent disparities in neighborhood poverty rates by race and ethnicity (Reina, 2019). Reina, Acolin, and Bostic (2019) found mixed results, ranging from marked improvements in one city to a declining neighborhood in another. Additional research is warranted to determine the extent to which the implementation of SAFMRs is helping to foster HCV program goals, including whether the HCV program as a whole should move away from FMRs to SAFMRs.

## **Discussion and Conclusion**

HUD and other stakeholders, policymakers, and researchers should revisit locational outcome data to inform future policy development and research as the HCV program continues to evolve. This article presented a descriptive analysis of HCV location patterns in 2010 and 2020, which has generated key questions to be addressed in future research.

Progress toward program goals, such as the spatial deconcentration of poverty and access to new, lower-poverty neighborhoods, remains unclear because overall patterns in poverty and density have not meaningfully improved. Between 2010 and 2020, the number of TBV households living in low-poverty census tracts increased slightly, although this increase may have been related to national trends in neighborhood poverty rates rather than a sign of households moving into lower-poverty areas. Over 40 percent of TBV households, and an even higher share of Black and Hispanic HCV households, still lived in high-poverty areas. Voucher households continued to be present in over 80 percent of census tracts, although the total share of census tracts where HCV households lived decreased slightly from 2010 to 2020. Meanwhile, the share of TBV households living in

---

<sup>10</sup> 77 FR 69651.

HCV-dense areas did not change substantially, and Black and Hispanic households continued to be more likely to live in areas with higher densities of other voucher holders.

The HCV program is based on the premise that households would have the choice to use vouchers to leverage the private rental housing market to lease housing that meets program guidelines—a challenge directly linked to the availability of affordable housing in the private rental market. In 2024, Harvard University's Joint Center for Housing Studies (2024) ranked rental housing affordability at an all-time low, with one-half of all renter households qualifying as cost-burdened (paying more than 30 percent of their income on housing). Lower-income households, like those supported by the HCV program, struggled even more, with nearly three out of four households facing cost burdens. In addition, the analysis presented in this article found that the share of housing considered to be affordable for voucher holders has declined, especially for those seeking one-bedroom apartments. Such findings further emphasize the need for housing counseling and search support to help connect HCV households with housing.

These observations suggest the need for new policy interventions to continue making progress toward HCV program goals. HUD is pursuing several new evaluations, such as the Community Choice Demonstration,<sup>11</sup> Housing Mobility-Related Services,<sup>12</sup> and the Landlord Incentives Cohort.<sup>13</sup> Broadly, these demonstrations build on previous findings that participant choice alone is not enough to move more assisted households to higher-opportunity areas and are intended to evaluate interventions and supports for overcoming housing barriers faced by low-income renter households. These demonstrations focus on determining cost-effective services that PHAs can provide to help voucher holders access—and remain in—better neighborhoods. Future research might also include how HUD can support households using HCVs in lower-poverty areas, what structural factors continue to impede household choice, especially for Black and Hispanic households, and the extent to which the HCV program can address lingering challenges for households that were brought on by the COVID-19 pandemic.

The demographic analysis supports the need for additional research on the changing population served by the HCV program because the number of households with children has declined and the number of households led by elderly or disabled individuals has increased. Hence, future research should investigate the cause of HCV household demographic change and how to best serve the changing population of low-income assisted renter households.

In addition, the team's findings suggest taking a more local approach to analyze MSA-specific concentration patterns. Although the descriptive HCV density analysis did not show large changes, this national-level finding may have obscured variation present in specific areas. For example, the HHI showed that some HUD regions, including the Southeast or Midwest, have multiple MSAs with increasing HCV concentration. Further research could use more sophisticated spatial measures of concentration and dispersion of HCV households. This additional research would be particularly timely as the program's demographics change and rental housing markets continue to tighten.

---

<sup>11</sup> [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/communitychoicedemo](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/communitychoicedemo)

<sup>12</sup> [https://www.hud.gov/program\\_offices/spm/gmomgmt/grantsinfo/fundingopps/fy23\\_housingmobility](https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy23_housingmobility)

<sup>13</sup> [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/ph/mtw/expansion](https://www.hud.gov/program_offices/public_indian_housing/programs/ph/mtw/expansion)

Finally, future research should evaluate the impact of SAFMRs and the extent to which this system of calculating maximum rents has allowed HCV families to move to different areas. This research would be particularly useful following HUD's expansion of areas required to use SAFMRs.

Looking toward the future, HUD anticipates new findings about effective interventions to support HCV households. Should a future study on HCV household location patterns be pursued in the next decade, it should build from the demonstrations of the 2020s, investigate the differences between the TBV and PBV programs, and evaluate the effects of major changes to programs and laws during the 2020 decade.

## Appendix A

### Supplemental Tables

#### Exhibit 14

50 Largest MSAs by 2020 Population (1 of 2)

Rank	Name	2020 Population
1	New York-Newark-Jersey City, NY-NJ-PA	19,261,570
2	Los Angeles-Long Beach-Anaheim, CA	13,211,027
3	Chicago-Naperville-Elgin, IL-IN-WI	9,478,801
4	Dallas-Fort Worth-Arlington, TX	7,451,858
5	Houston-The Woodlands-Sugar Land, TX	6,979,613
6	Washington-Arlington-Alexandria, DC-VA-MD-WV	6,250,309
7	Miami-Fort Lauderdale-Pompano Beach, FL	6,129,858
8	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	6,092,403
9	Atlanta-Sandy Springs-Alpharetta, GA	5,947,008
10	Phoenix-Mesa-Chandler, AZ	4,860,338
11	Boston-Cambridge-Newton, MA-NH	4,854,808
12	San Francisco-Oakland-Berkeley, CA	4,709,220
13	Riverside-San Bernardino-Ontario, CA	4,600,396
14	Detroit-Warren-Dearborn, MI	4,317,384
15	Seattle-Tacoma-Bellevue, WA	3,928,498
16	Minneapolis-St. Paul-Bloomington, MN-WI	3,605,450
17	San Diego-Chula Vista-Carlsbad, CA	3,323,970
18	Tampa-St. Petersburg-Clearwater, FL	3,152,928
19	Denver-Aurora-Lakewood, CO	2,928,437
20	St. Louis, MO-IL	2,806,349
21	Baltimore-Columbia-Towson, MD	2,800,427
22	Charlotte-Concord-Gastonia, NC-SC	2,595,027
23	Orlando-Kissimmee-Sanford, FL	2,560,260
24	San Antonio-New Braunfels, TX	2,510,211
25	Portland-Vancouver-Hillsboro, OR-WA	2,472,774
26	Sacramento-Roseville-Folsom, CA	2,338,866
27	Pittsburgh, PA	2,324,447

**Exhibit 14**

50 Largest MSAs by 2020 Population (2 of 2)

Rank	Name	2020 Population
28	Las Vegas-Henderson-Paradise, NV	2,228,866
29	Cincinnati, OH-KY-IN	2,214,265
30	Austin-Round Rock-Georgetown, TX	2,173,804
31	Kansas City, MO-KS	2,144,129
32	Columbus, OH	2,101,543
33	Cleveland-Elyria, OH	2,053,137
34	Indianapolis-Carmel-Anderson, IN	2,050,933
35	San Jose-Sunnyvale-Santa Clara, CA	1,985,926
36	Nashville-Davidson--Murfreesboro--Franklin, TN	1,904,186
37	Virginia Beach-Norfolk-Newport News, VA-NC	1,768,956
38	Providence-Warwick, RI-MA	1,621,099
39	Milwaukee-Waukesha, WI	1,576,525
40	Jacksonville, FL	1,533,796
41	Oklahoma City, OK	1,397,040
42	Raleigh-Cary, NC	1,362,997
43	Memphis, TN-MS-AR	1,343,150
44	Richmond, VA	1,282,067
45	New Orleans-Metairie, LA	1,271,651
46	Louisville/Jefferson County, KY-IN	1,262,287
47	Salt Lake City, UT	1,215,955
48	Hartford-East Hartford-Middletown, CT	1,205,842
49	Buffalo-Cheektowaga, NY	1,129,018
50	Birmingham-Hoover, AL	1,088,170

MSA = Metropolitan Statistical Area.

Source: American Community Survey 5-year estimates, with analysis by the authors



**Exhibit 15**

**Areas HUD Requires to Use SAFMRs**

2016 Designees	2023 Designees
1. Atlanta-Sandy Springs-Roswell, GA HUD Metropolitan FMR Area (HMFA)	1. Akron, OH MSA
2. Bergen-Passaic, NJ HMFA. (Part of the New York-Newark-Jersey City, NY-NJ-PA Metro Area)	2. Augusta-Richmond County, GA-SC HUD Metro FMR Area
3. Monmouth-Ocean, NJ HMFA. (Part of the New York-Newark-Jersey City, NY-NJ-PA Metro Area)	3. Beaumont-Port Arthur, TX MSA
4. Charlotte-Concord-Gastonia, NC-SC HMFA	4. Birmingham-Hoover, AL HUD Metro FMR Area
5. Chicago-Joliet-Naperville, IL HMFA. (Part of the Chicago-Naperville-Elgin, IL-IN-WI Metro Area)	5. Buffalo-Cheektowaga-Niagara Falls, NY MSA
6. Gary, IN HMFA. (Part of the Chicago-Naperville-Elgin, IL-IN-WI Metro Area)	6. Charleston-North Charleston, SC MSA
7. Colorado Springs, CO HMFA	7. Chattanooga, TN-GA MSA
8. Dallas, TX HMFA	8. Cincinnati, OH-KY-IN HUD Metro FMR Area
9. Fort Lauderdale, FL HMFA. (Part of the Miami-Fort Lauderdale-Pompano Beach, FL Metro Area)	9. Cleveland-Elyria, OH MSA
10. West Palm Beach-Boca Raton, FL HMFA. (Part of the Miami-Fort Lauderdale-Pompano Beach, FL Metro Area)	10. Columbus, OH HUD Metro FMR Area
11. Fort Worth-Arlington, TX HMFA	11. Dayton-Kettering, OH MSA
12. Hartford-West Hartford-East Hartford, CT HMFA	12. Des Moines-West Des Moines, IA HUD Metro FMR Area
13. Jackson, MS HMFA	13. Detroit-Warren-Livonia, MI HUD Metro FMR Area
14. Jacksonville, FL HMFA	14. Fort Wayne, IN MSA
15. North Port-Sarasota-Bradenton, FL MSA	15. Greensboro-High Point, NC HUD Metro FMR Area
16. Palm Bay-Melbourne-Titusville, FL MSA	16. Harrisburg-Carlisle, PA MSA
17. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA	17. Indianapolis-Carmel, IN HUD Metro FMR Area
18. Pittsburgh, PA HMFA	18. Jersey City, NJ HUD Metro FMR Area
19. Sacramento--Roseville--Arden-Arcade, CA HMFA	19. Kansas City, MO-KS HUD Metro FMR Area
20. San Antonio-New Braunfels, TX HMFA	20. Knoxville, TN HUD Metro FMR Area
21. San Diego-Carlsbad, CA MSA	21. Los Angeles-Long Beach-Glendale, CA HUD Metro FMR Area
22. Tampa-St. Petersburg-Clearwater, FL MSA	22. Louisville, KY-IN HUD Metro FMR Area
23. Urban Honolulu, HI MSA	23. Memphis, TN-MS-AR HUD Metro FMR Area
24. Washington-Arlington-Alexandria, DC-VA-MD HMFA	24. Miami-Miami Beach-Kendall, FL HUD Metro FMR Area
	25. Mobile, AL HUD Metro FMR Area
	26. Montgomery, AL MSA
	27. Nashville-Davidson--Murfreesboro--Franklin, TN HUD Metro FMR Area
	28. Oklahoma City, OK HUD Metro FMR Area
	29. Omaha-Council Bluffs, NE-IA HUD Metro FMR Area
	30. Orlando-Kissimmee-Sanford, FL MSA
	31. Oxnard-Thousand Oaks-Ventura, CA MSA
	32. Phoenix-Mesa-Scottsdale, AZ MSA
	33. Raleigh, NC MSA
	34. San Jose-Sunnyvale-Santa Clara, CA HUD Metro FMR Area
	35. Seattle-Bellevue, WA HUD Metro FMR Area
	36. St. Louis, MO-IL HUD Metro FMR Area
	37. Tucson, AZ MSA
	38. Tulsa, OK HUD Metro FMR Area
	39. Virginia Beach-Norfolk-Newport News, VA-NC HUD Metro FMR Area
	40. Wichita, KS HUD Metro FMR Area
	41. Winston-Salem, NC HUD Metro FMR Area

SAFMR = Small Area Fair Market Rent.  
Source: 81 FR 80567, 88 FR 73352

## Acknowledgments

Analyses were conducted using SAS Enterprise Guide 8.3 (SAS Institute Inc, Cary, North Carolina), R Statistical Software (v4.3.0; R Core Team 2023), and ArcGIS Pro 3.0 (ESRI, Redlands, California).

## Authors

Gretchen Armstrong, Alexander Din, Mariya Shcheglovitova, and Rae Winegardner are social science analysts in the Office of Policy Development and Research at HUD.

## References

- Basolo, Victoria. 2013. "Examining Mobility Outcomes in the Housing Choice Voucher Program: Neighborhood Poverty, Employment, and Public School Quality," *Cityscape* 15 (2): 135–153. <https://www.huduser.gov/portal/periodicals/cityscpe/vol15num2/ch10.pdf>.
- Bergman, Peter, Raj Chetty, Stefanie DeLuca, Nathaniel Hendren, Lawrence F. Katz, and Christopher Palmer. 2019. *Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice*. Working paper 26164. Cambridge, MA: National Bureau of Economic Research. <https://www.nber.org/papers/w26164>.
- Chyn, Eric, and Lawrence F. Katz. 2021. "Neighborhoods Matter: Assessing the Evidence for Place Effects," *Journal of Economic Perspectives* 35 (4): 197–222. <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.35.4.197>.
- Chetty, Raj, John N. Friedman, Nathan Hendren, Maggie R. Jones, and Sonya R. Porter. 2018. *The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility*. Working paper 25147. Cambridge, MA: National Bureau of Economic Research. [https://www.nber.org/system/files/working\\_papers/w25147/w25147.pdf](https://www.nber.org/system/files/working_papers/w25147/w25147.pdf).
- Dastrup, Samuel, Meryl Finkel, Kimberly Burnett, and Tanya de Sousa. 2018. *Small Area Fair Market Rent Demonstration Evaluation: Final Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/publications/Small-Area-FMR-Evaluation-Final-Report.html>.
- Dastrup, Samuel, Meryl Finkel, and Ingrid Gould Ellen. 2019. "The Effects of Small Area Fair Market Rents on the Neighborhood Choices of Families with Children," *Cityscape* 21 (3): 19–48. <https://www.huduser.gov/portal/periodicals/cityscpe/vol21num3/ch1.pdf>.
- Devine, Deborah J., Robert W. Gray, Lester Rubin, and Lydia B. Taghavi. 2003. *Housing Choice Voucher Location Patterns: Implications for Participant and Neighborhood Welfare*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. [https://www.huduser.gov/portal/Publications/pdf/Location\\_Paper.pdf](https://www.huduser.gov/portal/Publications/pdf/Location_Paper.pdf).

Ellen, Ingrid Gould. 2020. "What Do We Know About Housing Choice Vouchers?" *Regional Science and Urban Economics* 80: 103380. <https://doi.org/10.1016/j.regsciurbeco.2018.07.003>.

Ellen, Ingrid Gould, Katherine M. O'Regan, and Katherine W.H. Harwood. 2022. "Advancing Choice in the Housing Choice Voucher Program: Source of Income Protections and Locational Outcomes," *Housing Policy Debate* 33 (4): 941–962.

Ellen, Ingrid Gould, Michael Suher, and Gerard Torrats-Espinosa. 2019. "Neighbors and Networks: The Role of Social Interactions on the Residential Choices of Housing Choice Voucher Holders," *Journal of Housing Economics* 43: 56–71.

Galvez, Martha. 2010. *What Do We Know About Housing Choice Voucher Program Location Outcomes? A Review of Recent Literature*. Washington, DC: The Urban Institute.

Garboden, Philip, Eva Rosen, Meredith Greif, Stefanie DeLuca, and Kathryn Edin. 2018. *Urban Landlords and the Housing Choice Voucher Program: A Research Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/publications/UrbanLandlords.html>.

Greenbaum, Susan, Wendy Hathaway, Cheryl R. Rodriguez, Ashley Spalding, and Beverly G. Ward. 2008. "Deconcentration and Social Capital: Contradictions of a Poverty Alleviation Policy," *Journal of Poverty* 12 (2): 201–228.

Joint Center for Housing Studies of Harvard University. 2024. *America's Rental Housing 2024*. Cambridge, MA: Harvard University. [https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard\\_JCHS\\_Americas\\_Rental\\_Housing\\_2024.pdf](https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_Americas_Rental_Housing_2024.pdf).

Kaufman, Julie E., and James E. Rosenbaum. 1992. "The Education and Employment of Low-Income Black Youth in White Suburbs," *Educational Evaluation and Policy Analysis* 14 (3).

Kleit, Rachel Garshick, Seungbeom Kang, and Corianne Payton Scally. 2016. "Why Do Housing Mobility Programs Fail in Moving Households to Better Neighborhoods?" *Housing Policy Debate* 26 (1): 188–209.

Kurwa, Rahim. 2015. "Deconcentration Without Integration: Examining the Social Outcomes of Housing Choice Voucher Movement in Los Angeles County," *City & Community* 14 (4): 364–391.

Lens, Michael, Kirk McClure, and Brent Mast. 2019. "Does Jobs Proximity Matter in the Housing Choice Voucher Program?" *Cityscape* 21 (1): 143–162.

Mast, Brent, and David Hardiman. 2017. "Project-Based Vouchers," *Cityscape* 19 (2): 301–322. <https://www.huduser.gov/portal/periodicals/cityscpe/vol19num2/ch21.pdf>.

Mazzara, Alicia, and Brian Knudsen. 2019. *Where Families With Children Use Housing Vouchers: A Comparative Look at the 50 Largest Metropolitan Areas*. Washington, DC: Poverty and Race Research Action Council, Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/atoms/files/1-3-19hous.pdf>.

- McClure, Kirk, and Bonnie Johnson. 2014. "Housing Programs Fail to Deliver on Neighborhood Quality, Reexamined," *Housing Policy Debate* 25 (3): 463–496.
- McClure, Kirk, Alex F. Schwartz, and Lydia B. Taghavi. 2015. "Housing Choice Voucher Location Patterns a Decade Later," *Housing Policy Debate* 25 (2): 215–233.
- McClure, Kirk, and Alex Schwartz. 2019. "Small Area Fair Market Rents, Race, and Neighborhood Opportunity," *Cityscape* 21 (3): 49–70.
- Metzger, Molly W. 2014. "The Reconcentration of Poverty: Patterns of Housing Voucher Use, 2000 to 2008." *Housing Policy Debate* 24 (3): 544–567.
- Reina, Vincent J. 2019. "Do Small Area Fair Market Rents Reduce Racial Disparities in the Voucher Program?" *Housing Policy Debate* 29 (5): 820–834.
- Reina, Vincent, Arthur Acolin, and Raphael W. Bostic. 2019. "Section 8 Vouchers and Rent Limits: Do Small Area Fair Market Rent Limits Increase Access to Opportunity Neighborhoods? An Early Evaluation," *Housing Policy Debate* 29 (1): 44–61.
- Rosen, Eva. 2014. "Rigging the Rules of the Game: How Landlords Geographically Sort Low-Income Renters," *City and Community* 13 (4): 310–340.
- Sanbonmatsu, Lisa, Lawrence F. Katz, Jens Ludwig, Lisa A. Gennetian, Greg J. Duncan, Ronald C. Kessler, Emma Adam, Thomas W. McDade, and Stacy Tessler Lindau. 2011. *Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. [https://www.huduser.gov/publications/pdf/mtofhd\\_fullreport\\_v2.pdf](https://www.huduser.gov/publications/pdf/mtofhd_fullreport_v2.pdf).
- Seicshnaydre, Stacy. 2016. "Missed Opportunity: Furthering Fair Housing in the Housing Choice Voucher Program," *Law and Contemporary Problems* 49: 173–197. <https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=4797&context=lcp>.
- Tauber, Kristen, Ingrid Gould Ellen, and Katherine O'Regan. 2024. "Whom Do We Serve? Refining Public Housing Agency Service Areas," *Cityscape* 26 (1): 395–400. <https://www.huduser.gov/portal/periodicals/cityscape/vol26num1/ch21.pdf>.
- Thrope, Deborah. 2018. "Achieving Housing Choice and Mobility in the Voucher Program: Recommendations for the Administration," *Journal of Affordable Housing & Community Development Law* 27 (1): 145–160.
- U.S. Department of Housing and Urban Development (HUD). 2023. *National Comprehensive Housing Market Analysis*. Washington, DC: HUD, Office Policy Development and Research. <https://www.huduser.gov/portal/publications/pdf/National-CHMA-23.pdf>.
- . 1996. *Expanding Housing Choices for HUD Assisted Families: First Biennial Report to Congress, Moving to Opportunity for Fair Housing Demonstration*. Washington, DC: HUD, Office of Policy Development and Research. [https://permanent.fdlp.gov/lps18355/HUD\\_7157.pdf](https://permanent.fdlp.gov/lps18355/HUD_7157.pdf).

Walter, Rebecca J., and Ruoniu Wang. 2016 “Searching for Affordability and Opportunity: A Framework for the Housing Choice Voucher Program,” *Housing Policy Debate* 26 (4–5): 670–691.

Wang, Ruoniu. 2018. “Tracking ‘Choice’ in the Housing Choice Voucher Program: The Relationship Between Neighborhood Preference and Locational Outcome,” *Urban Affairs Review* 54 (2): 302–331.

Wilson, Steven G., David A. Plane, Paul J. Mackun, Thomas R. Fischetti, and Justyna Goworowska (with Darryl T. Cohen, Marc J. Perry, and Geoffrey W. Hatchard). 2012. “Patterns of Metropolitan and Micropolitan Population Change: 2000 to 2010.” Washington, DC: U.S. Census Bureau. <https://www.census.gov/content/dam/Census/library/publications/2012/dec/c2010sr-01.pdf>.

---

# Section 8 in the Courts: How Civil Rights Litigation Helped to Shape the Housing Choice Voucher Program

Philip Tegeler

Sam Reece

Poverty & Race Research Action Council

---

## Abstract

*From its inception as the Section 8 Existing Housing program, the Housing Choice Voucher program has been informed by civil rights litigation under the 14th Amendment and the Fair Housing Act, challenging policies and practices that perpetuate racial and economic segregation or have the effect of discriminating on the basis of race or disability. Those cases have arguably influenced almost every aspect of the voucher program and, in some cases, have led directly to policy reform. This article attempts to trace the impacts of civil rights litigation and advocacy on voucher portability, housing mobility, geographic limitations on voucher administration, residency preferences, Section 8 allocation and admissions policies, payment standards, and rules governing housing for persons with disabilities. The article concludes with a look toward the possible future of Section 8 in the courts.*

## Introduction

Almost from the beginning, the Housing Choice Voucher (HCV) program has been molded by civil rights litigation. The role of the new Section 8 certificate program in the settlement of the *Gautreaux v. HUD* public housing desegregation case established the program's role as a civil rights remedy in many similar cases and helped to set the regional aspirations of the program. Later cases helped to highlight problems in the program's design that were driving racial and economic segregation and limiting families' choices—and those cases often helped spur key policy reforms. This article will trace a 50-year dialogue between the courts, Congress, and the U.S. Department of Housing and Urban Development (HUD) on the application of the Fair Housing Act's nondiscrimination and affirmatively furthering fair housing provisions to the voucher program, grounded in a broader story of HUD's history in the courts (Hashimoto, 1997; PRRAC, 2023; Roisman, 1999).

First, this article will look at the impacts of the public housing desegregation cases on the evolution of the regional scope of the Section 8 certificate voucher programs,<sup>1</sup> followed by a closer look at cases involving geographic restrictions on voucher use, residency preferences, voucher allocation and admissions policies, payment standards, enhanced vouchers, and discrimination against persons with disabilities.<sup>2</sup>

Finally, this article will look to the potential for future civil rights litigation to further shape the voucher program and the ways that a reinstated Affirmatively Furthering Fair Housing rule, which includes public housing agencies (PHAs)<sup>3</sup> for the first time, may influence future voucher policy without the need for litigation.

One additional note: although this narrative naturally focuses on the research and insights of the civil rights and legal services lawyers who designed and prosecuted these cases, none of that progress could have occurred without their clients, who have repeatedly challenged injustice, often at personal cost and fear of retaliation.

## **The Public Housing Desegregation Cases, Portability, Housing Mobility, and Moving to Opportunity (MTO)**

HUD was barely 1 year old when plaintiff Dorothy Gautreaux and her lawyer Alex Polikoff filed *Gautreaux v. Chicago Housing Authority*, along with its companion case against HUD, *Gautreaux v. Housing Assistance Administration* (Hill, 2022.),<sup>4</sup> during the 1966 “Chicago Freedom Movement.” Following the theory of *Brown v. Board of Education*, the cases alleged unlawful segregation in public housing in violation of the 14th and 5th Amendments to the Constitution. Although the case involved public housing segregation, it highlighted the need for a broader approach to assisted housing that did not inexorably lead to the concentration of low-income families in segregated neighborhoods. The Gautreaux case was followed by the Fair Housing Act in 1968, with its powerful directive to “affirmatively further” the act’s integrative goals (42 USC §3608). A year later, plaintiffs in Philadelphia filed *Shannon v. HUD*, which challenged HUD’s lack of public housing siting standards under the new act. That decision led to regulations creating site and neighborhood

---

<sup>1</sup> The Section 8 certificate program (also known as the Section 8 Existing Housing program) was the primary form of tenant-based assistance until it was merged with the newer Section 8 voucher program in 1998 in the Quality Housing and Work Responsibility Act (HUD, 1998a; the voucher program was an innovation in the 1980s that allowed tenants to pay more than 30 percent of their income for rent). Since 1998, the merged program has been known as the Housing Choice Voucher program. For convenience, these programs are referred to as “vouchers” or the “voucher program” in this article.

<sup>2</sup> This article focuses on civil rights and fair housing cases and will not address a long line of procedural due process cases that have extended a range of protections to HUD tenants, including notice requirements, pre-termination hearings, and other procedural protections. See e.g., *Escalera v. New York City Housing Authority* [1970], *Pickett v. Housing Authority of Cook County* [2017]).

<sup>3</sup> Although most PHAs are organized as “public housing authorities” under state law, HUD uses the term more broadly to refer to public housing agencies—“any State, county, municipality, or other governmental entity or public body (or agency or instrumentality thereof)” or “any other public or private nonprofit entity” operating a voucher program as of 1998 (42 USC 1437a(b)(6)).

<sup>4</sup> For a full procedural history of the Gautreaux case, see the University of Michigan’s extremely helpful Civil Rights Litigation Clearinghouse, which contains court records for many of the cases discussed in this article. (Hill, 2022; see also Civil Rights Litigation Clearinghouse, <https://clearinghouse.net/>; Polikoff, 2006.) Note that *Gautreaux v. Housing Assistance Administration* was re-captioned *Gautreaux v. HUD* following a reorganization of HUD shortly after the filing of the lawsuit. (See Congress.gov, 1965). Eventually, the *Gautreaux v. CHA* and *Gautreaux v. HUD* cases were merged (Hill, 2022).



standards for new public housing developments, Section 8 new construction, and, eventually, project-based vouchers (Vernarelli, 1986).

The Gautreaux case and HUD's response to *Shannon v. HUD* evolved alongside the development of the Section 8 certificate program. Efforts to find a more flexible alternative to traditional public housing began in pilot form with the Experimental Housing Allowance Program (EHAP) in Section 504 of the Housing and Urban Development Act of 1970, which gave housing subsidies directly to tenants (Frieden, 1980). Four years later, in part due to the success of the EHAP program, Congress authorized Section 8 of the Housing and Community Development Act of 1974, with a general statement of purpose that included addressing the “concentration of persons of lower income in central cities,” “the reduction of the isolation of income groups within communities and geographical areas,” and “the spatial deconcentration of housing opportunities for persons of lower income” (42 USC §5301). The bill provided funding for Section 8 “existing housing certificates” (certificates) to be used by tenants in the private market, along with project-based Section 8 new construction and rehabilitation programs based on the same monthly subsidy model.

For the first 15 years of the Section 8 program, certificates were required to be used only within the “area of operation” of the public housing authority (PHA) to which they were allocated. However, the Gautreaux case placed early pressure on that restriction with its proposal in 1973 for a regional housing mobility program, which allocated portable and project-based certificates to Chicago public housing residents. The certificates were intended for use in less segregated neighborhoods, including in the Chicago suburbs, outside the jurisdiction of the Chicago Housing Authority. That approach was consistent with—and partly indebted to—the Experimental Housing Allowance program, which had not been tied to a PHA's area of operation. However, HUD objected to a regional remedy in the Chicago case, and the U.S. District Court agreed, rejecting the plaintiffs' proposal in 1973.

Fortunately for the plaintiffs on appeal, in 1974 the Court of Appeals disagreed and approved a regional remedy in the Gautreaux case. The Court of Appeals distinguished the earlier 1974 Supreme Court decision in *Milliken v. Bradley* (the Detroit schools case), which held that the federal court did not have the authority to impose a remedy on jurisdictions that had not been found responsible for the original constitutional violation. Two years later, the U.S. Supreme Court also distinguished the *Milliken* case and affirmed the legality of a court-ordered regional housing mobility program using the new Section 8 certificate program, and the Gautreaux housing mobility program launched. Between 1976 and 1998, 7,100 families participated in the Gautreaux mobility program through the Section 8 program, moving to nonsegregated neighborhoods in both Chicago and its suburbs (Hill, 2022; Polikoff, 2006).

The Gautreaux litigation was followed by a steady march of similar cases demanding both public housing desegregation and Section 8 regional housing mobility programs as part of their court-ordered remedies. Cases such as *NAACP-Boston Chapter v. HUD*, *Walker v. HUD*, and *Thompson v. HUD* further defined the methods and policies of housing mobility as key elements of the voucher program (exhibit 1).

**Exhibit 1**

Public Housing Desegregation Remedies Including Section 8 Regional Housing Mobility Programs

Case	City	Date Filed	Date of Remedial Orders
<i>Gautreaux v. HUD</i>	Chicago	1966	1976
<i>Hale v. HUD</i>	Memphis	1973	1985
<i>Jaimes v. Toledo MHA</i>	Toledo	1974	1989
<i>NAACP, Boston Chapter v. Kemp</i>	Boston	1978	1989
<i>Hutchins v. Cincinnati MHA</i>	Cincinnati	1979	1984
<i>Young v. Pierce</i>	East Texas	1980	1995
<i>Walker v. HUD</i>	Dallas	1985	1987
<i>Sanders v. HUD</i>	Pittsburgh	1988	1994
<i>Comer v. Kemp</i>	Buffalo	1989	1996
<i>Hawkins v. Cisneros</i>	Omaha	1990	1994
<i>Christian Community Action v. Cisneros</i>	New Haven	1991	1995
<i>Hollman v. Cisneros</i>	Minneapolis	1992	1995
<i>Thompson v. HUD</i>	Baltimore	1995	2005

Source: Data by the authors

The *Gautreaux* case and its progeny appear to have increased pressure on HUD to ease geographic restrictions in the Section 8 programs overall. Beginning in 1977, President Jimmy Carter’s new HUD Secretary, Patricia Harris, established a “*Gautreaux Task Force*,” charged with “analyz[ing] HUD housing policies in the light of the *Gautreaux* litigation,” followed by an “Assisted Housing Mobility Task Force” in 1978 “to make specific recommendations to promote mobility and deconcentration in the Section 8 Existing and other assisted housing programs” (Vernarelli, 1986). The task force succeeded in generating a formal policy statement in January 1979 (following a 1978 Government Accountability Office (GAO) report criticizing HUD for failing to implement the deconcentration goals of the 1974 act). However, it was not until 1984 that HUD first proposed a pilot “portability” program designed to allow Section 8 certificates to be transferable from one PHA to another. Several reports on interjurisdictional housing programs were also released during that time (e.g., Metropolitan Action Institute, 1982). Congress took up portability in a 1985 housing bill and held related hearings in 1985 and 1986 on “Discrimination in Federally Assisted Housing Programs,” which included key testimony from the National Committee Against Discrimination in Housing addressing Section 8 concentration and regional mobility (United States Congress, House Committee on Banking, Finance, and Urban Affairs, Subcommittee on Housing and Community Development, 1986a, 1986b). Congress finally authorized the portability of certificates within metropolitan areas in 1987 (Congress.gov, 1988) and statewide portability in 1989 (1990). Litigation and threatened litigation following widespread noncompliance with the new portability requirements led to the issuance of HUD notices to PHAs in 1990 and 1991 (Tegeler, 1994), and Congress later expanded the statute to permit nationwide portability of certificates and vouchers in 1998 (Congress.gov, 1999). Although the system of portability implemented by HUD has given families valuable flexibility to cross jurisdictional lines, it is far from a seamless process, as evident in the discussion that follows, and creates its own set of bureaucratic barriers to housing choice (Miller, 2024).

Also, during the 1990s, impressive outcomes for families participating in the Gautreaux regional housing mobility program were documented by Professor James Rosenbaum and colleagues at Northwestern (see Rubinowitz and Rosenbaum, 2000; see also Duncan and Zuberi, 2006). Their research results, along with the powerful indictment of government-sponsored segregation in Massey and Denton's (1993) *American Apartheid*, helped to inspire President Clinton's new HUD Secretary Henry Cisneros to bring in Elizabeth Julian, a former plaintiffs' lawyer (in the *Walker* and *Young* cases) to facilitate settlement of the remaining public housing desegregation cases, using their potential to shape HUD policy. Each of those consent decrees included a Section 8 regional housing mobility remedy in addition to targeted public housing redevelopment. Later in the Clinton Administration, HUD also released a new PHA "report card," the Section 8 Management Assessment rule (HUD, 1998b), which included a "deconcentration bonus" for PHAs making progress on voucher mobility.

The Gautreaux research also inspired HUD and Congress in the Clinton Administration to fund the Moving to Opportunity (MTO) demonstration, which sought to test the results of the Gautreaux results in a randomized controlled study designed to eliminate the potential self-selection bias of a program consisting only of volunteers. Although the initial results of the MTO demonstration showed primarily health and mental health benefits for families, later MTO research by Raj Chetty and colleagues showed dramatic outcomes in the next generation for children who grew up in low-poverty neighborhoods (Chetty et al., 2020, 2019, 2016). Those research results helped persuade a later Congress to fund the \$50 million Community Choice Demonstration in 2019–2020, which now involves ten PHAs across eight metro areas and, more recently, a \$25 million mobility services grants program for an additional seven PHAs.

The spirit of the Gautreaux and Shannon cases was also present during the Obama Administration's development of the Rental Assistance Demonstration (RAD), HUD's most recent public housing redevelopment program. Court-ordered remedies in cases such as *Walker v. HUD* often combined in-place improvements to public housing and public housing neighborhoods along with a Section 8 mobility program designed to give public housing families choices outside segregated neighborhoods. The combination of redevelopment and mobility is reflected in the RAD program's "choice mobility" requirement, a key element of the program that permits any resident in a RAD redevelopment to exchange their unit for a portable voucher (HUD, 2023b). This provision was included in the RAD program's design through several legislative iterations, meaning, for the first time, that public housing residents in these developments are not required to accept racial and economic segregation as a condition of continued federal housing assistance.

### **Direct Challenges to Geographic Restrictions in the Voucher Program That Limit Family Choice: Comer, Giddins, and Hanover Cases**

Although the Section 8 certificate and voucher programs were intended to expand choice for families, the programs have been bedeviled by PHA jurisdictional boundaries imposed by state law, which have been interpreted to prohibit public housing authorities from administering vouchers outside their "area of operation." In practice, this interpretation makes moving across jurisdictional boundaries complicated and time-consuming for families. The state laws were likely intended to regulate the location of public housing development—laws adopted in the mid-20th century,

before the existence of a portable voucher-style program. Even after the advent of the portability of vouchers in the late 1980s, limits on PHA jurisdiction have imposed numerous administrative barriers in the path of Section 8 families.

The *Comer v. Kemp* case was filed in 1989 by Michael Hanley and Ellen Yacknin at the Greater Upstate Law Project (now Empire Legal Services) and a team of lawyers from the Buffalo Neighborhood Legal Services Program. *Comer* was a public housing desegregation case, but it also challenged how Buffalo-area PHAs administered the voucher program. The complaint alleged, in part, that the City of Buffalo, in its administration of Section 8 certificates and vouchers, was restricting the right of families to move outside the city. Plaintiffs successfully pointed out that the City of Buffalo was not a public housing authority subject to New York State's restrictive area-of-operation laws and thus faced no barrier to administering vouchers throughout Erie County.

Similarly, the *Giddins v. HUD* case, filed in 1991 by Jerrold Levy at Westchester-Putnam Legal Services, challenged the concentration of locally and county-administered vouchers in one segregated corner of Westchester County (notably, the same southwest area of Yonkers that was at issue in the landmark *United States v. Yonkers* public housing and school desegregation litigation in the 1980s). The settlement in the *Giddins* case, approved by HUD, released the Yonkers Housing Authority from its state-law-imposed jurisdictional restrictions and created a countywide housing mobility program that is still in operation today.

In Massachusetts, the 1994 case of *Williams v. Hanover Housing Authority et al.* took a different approach to PHA geographic limitations, finding that under HUD's then-applicable definition of PHA jurisdiction (the area within which the PHA was not "legally barred" from entering into contracts), no state law barrier existed to local PHAs administering vouchers anywhere in the state. The next year, HUD adopted a more restrictive definition of PHA jurisdiction ("[t]he area in which the HA has authority under State and local law to administer the program") to clarify application of the jurisdictional requirement following the advent of portability (HUD, 1995; Konkoly, 2008). Notwithstanding the new definition, the Massachusetts ruling remains in place to this day, and other PHAs that had received prior approval from HUD for more expansive definitions of jurisdiction were permitted to continue operating where they were "not legally barred" (HUD, 1995).

The fair housing impacts of limited PHA jurisdiction under state law are still confounding HUD and limiting housing opportunities for families with vouchers. Most recently, in 2020, the Open Communities Alliance filed a HUD fair housing complaint against the State of Connecticut, claiming that the state's 1949 "area of operation" law, arguably designed originally to keep public housing out of the suburbs, was now limiting families' choices in the Housing Choice Voucher program and perpetuating segregation in violation of the Fair Housing Act.

### **Residency Preferences That Exclude Families From Opportunity: The *Comer* and *Langlois* Cases and the HUD Residency Preference Rule**

It has long been clear that admissions preferences for existing residents of a community can have a discriminatory effect, where, for example, the eligible resident population of a town is disproportionately White in comparison with the demographics of the eligible population in the

regional housing market. But HUD did not formally restrict residency preferences in the voucher program until October 1999, in a regulation that effectively bars such preferences when they have a discriminatory effect:

“Any PHA residency preferences must be included in the statement of PHA policies that govern eligibility, selection, and admission to the program, which is included in the PHA annual plan (or support documents) pursuant to Part 903 of this title. Such policies must specify that the use of a residency preference will not have the purpose or effect of delaying or otherwise denying admission to the program based on race, color, ethnic origin, gender, religion, disability, or age of any member of an applicant family.”

—24 C.F.R. § 982.207(b)(1)(iii). *See also* §§ (b)(1)(i, ii, iv, v).

That carefully worded provision was responsive to increasing criticism of discriminatory PHA residency preferences, exemplified by two highly publicized cases in New York and Massachusetts. In New York, in addition to attacking Buffalo’s restrictions on the use of vouchers outside the city, the *Comer v. Kemp* complaint also challenged the Section 8 residency preference employed by a consortium of suburban towns that forced African American residents of Buffalo to the back of the line. The Second Circuit’s 1994 decision affirming standing and class certification for the plaintiffs in *Comer* set the stage for a 1996 consent order that included all Buffalo applicants in the residency preference, thus eliminating the discriminatory effect (Gehl, 2020).

Two years after the *Comer* orders were entered, Judith Liben and colleagues at Massachusetts Law Reform Institute filed *Langlois v. Abington Housing Authority*, challenging local residency preferences in predominantly White suburbs of Boston. The *Langlois* case was preceded by an internal HUD reasonable cause finding (signed by HUD lawyers Harry Carey and Sara Pratt) in a challenge to a residency preference in another, virtually all-White suburb of Boston. The U.S. District Court in the *Langlois* case promptly issued a temporary injunction, followed by wider injunctive relief in December 1998. The case was appealed to the First Circuit, and while on appeal, on May 14, 1999, HUD introduced 24 CFR § 982.207 as an interim rule—but without any language on residency preferences. On October 4, 1999, *Langlois* was argued in the First Circuit, and two weeks later, on October 21, 1999, HUD promulgated a final rule that included the language above, effectively restricting discriminatory residency preferences. The following spring, on March 27, 2000, the First Circuit affirmed the preliminary injunction granted to the *Langlois* plaintiffs by the District Court.

## **Reforms to Improve Fairness in Section 8 Allocation and Application Policies**

The challenges to discriminatory residency preferences in the *Comer* and *Langlois* cases were closely related to policies that governed how vouchers were distributed to PHAs within regions and how families accessed those vouchers.

Civil rights investigations in Massachusetts in the early 1990s sought to understand why Black homeless families in Boston had to wait longer to obtain vouchers than White homeless families in the suburbs and discovered a variety of HUD practices that had the effect of disproportionately allocating vouchers to PHAs in predominantly White communities. Although no litigation on

those allocation issues was recorded, a HUD complaint and threats of litigation from legal services advocates led to a change in the Section 8 allocation process, embodied in a March 3, 1995 Federal Register notice, prioritizing unmet housing need in the annual distribution of vouchers and rewarding PHAs that eliminate discriminatory residency preferences (Sard, 1995).

Even with the elimination of residency preferences and fairer voucher allocation processes, other local exclusionary application and waitlist practices continued to have a discriminatory effect on persons with disabilities, persons with limited English proficiency, and persons of color. For example, many PHAs in the 1990s were still using waitlists organized by first-come, first-served priority, which can have a significant discriminatory impact on applicants who are not immediately aware of application openings or unable to respond quickly when applications open. Further exacerbating the exclusionary impact of this practice, many PHAs had a limited number of dates when applications were accepted, limited locations, limited ability to apply by mail or online, and limited or nonexistent affirmative marketing efforts. Advocacy from civil rights and legal services advocates eventually led to HUD guidance strongly recommending random selection, lottery-style waitlist management, affirmative marketing, and elimination of exclusionary practices (HUD, 2012). As a result, in some parts of the country, exclusionary application and waitlist practices in the voucher program have been largely eliminated.

### **Small Area Fair Market Rents to Expand Housing Choice: *ICP v. HUD* (and *Open Communities Alliance v. Carson*)**

The setting of rent caps or “payment standards” for the Section 8 program using a single regional average has been criticized by fair housing advocates for decades (e.g., Tegeler, Hanley, and Liben, 1995) because of the way segregated regional housing markets and exclusionary zoning interact to set payment standards far below the average rents in lower-poverty, less segregated neighborhoods and communities, essentially steering families to more segregated areas. Despite this consensus view, not until 2007 did civil rights advocates bring the issue to court in *Inclusive Communities Project (ICP) v. HUD*. The lawsuit relied on the Fair Housing Act and the Section 8 statute, arguing that the current Fair Market Rent (FMR) system discriminated against families who wished to move to less segregated areas of Dallas and its suburbs.

The *ICP v. HUD* case finally settled in June 2010 with HUD’s announcement of the Small Area FMR demonstration a few weeks earlier, setting rents based on ZIP Code in the Dallas region and five other metro areas as part of the HUD Small Area FMR demonstration study (HUD, 2010). The study aimed to test whether ZIP Code-based payment standards would be feasible—and without adverse impacts—in anticipation of extending Small Area FMRs on a wider, national basis. The settlement in *ICP v. HUD* and the subsequent demonstration study led directly to the final 2016 Small Area FMR rule (HUD, 2016), which identified 24 metropolitan areas where the new payment standards would be in effect, eventually opening up new housing options for hundreds of thousands of families with vouchers.

Not only did civil rights litigation help to establish the Small Area FMR rule but it later saved the rule after its suspension by Secretary Ben Carson in 2017 (*Open Communities Alliance v. Carson*). Although the *Open Communities Alliance* case was based primarily on the Administrative

Procedure Act, the complaint and the federal court's preliminary injunction were suffused with the Fair Housing Act implications of the regulation's suspension, and the fair housing impacts on the individual named plaintiffs played an important role in the decision. Shortly after the court's preliminary injunction order in late December 2017, the U.S. Department of Justice declined to appeal, and HUD issued a detailed notice implementing the regulation in 24 metropolitan areas beginning on April 1, 2018. This important civil rights rule was further expanded in 2023 to 41 additional mandatory metropolitan areas, and many other PHAs have voluntarily adopted Small Area FMRs through the exception payment standard process (HUD, 2024b).

### **Conversion of Subsidized Housing and the Right to Remain: Establishing the Contours of the Section 8 Enhanced Voucher**

HUD's enhanced voucher program was initially adopted in 1990 to protect tenants in formerly HUD-subsidized Section 8 properties (also known as project-based rental assistance properties) where the owner has decided to opt out of the HUD subsidy program. The enhanced voucher is designed to allow existing tenants to stay in their units—even as the rent increases—exceeding the allowable payment standards for housing choice vouchers.

After the enhanced voucher statute was enacted, a series of cases filed in New York; Washington, DC; California; and Minnesota further broadened the statute to guarantee the right to remain in a unit. The statutory language at issue in those cases, which is codified at 42 U.S.C. § 1437f(t)(1)(b), reads, “The assisted family may elect to remain in the same project in which the family was residing on the date of the eligibility event for the project.”

Starting with *Jeanty v. Shore Terrace Realty* (2004) and then *Estevez v. Cosmopolitan Associates* (2005), courts interpreted that language to require that as long as units remained rental units, absent good cause for eviction, the landlord had to accept the enhanced vouchers. Those cases were routinely cited as this interpretation spread across the country. *Feemster v. BSA Limited Partnership* (2008) extended that interpretation to the D.C. Circuit and made clear that local law should govern whether good cause had been established.

In 1999, *215 Alliance v. Cuomo* challenged HUD's refusal to continue increasing enhanced voucher payments *after* the initial rent increase. The *215 Alliance* decision held that payment standards for enhanced vouchers were required to increase as rents increased for as long as the enhanced vouchers were in place. Congress subsequently clarified the statute to conform to this view in a 2000 appropriations bill. *Barrientos v. 1801–1825 Morton LLC* (2010) continued this line, holding that raising rents was not a good cause for termination under the statute, and *Riverside Park Community v. Springs* (2015) demonstrated how those interpretations can lead to multigenerational use of the right to remain in the unit.

### **Securing Housing Rights for People With Disabilities**

The 1991 *Olmstead v. L.C.* decision, broadly requiring deinstitutionalization of persons with disabilities, had a series of significant impacts on HUD (Korman, 2007). First, HUD promulgated 24 C.F.R. § 982.207(b)(3), which barred PHAs from giving preference to persons with a *specific*

disability in voucher allocation, although PHAs could, generally, give preference to individuals with disabilities. The rule generally prevented PHAs from granting project-based vouchers to institutions offering residential services to persons with specific disabilities. However, the need for project-based vouchers allocated to those residential services resulted in a complicated and uncertain waiver process. The problems of the waiver process led to HUD supplementation of the rule in 2005, allowing such allocations under 24 C.F.R. § 983.231(d). Second, Congress created the Section 811 program, which includes some project-based rental assistance funding consistent with *Olmstead*, allowing projects to give preference to individuals with a specific disability with HUD's approval when project-based units do not exceed 25 percent of all units in a development. Third, Congress created the Mainstream Voucher program, which was designed to provide families with independent housing options in the community outside of disability-targeted developments. The Mainstream Voucher program is administered identically to the Section 8 voucher program, but mainstream vouchers are available only to non-elderly disabled families.

HUD's standard voucher program was also influenced by evolving court interpretations of the "reasonable accommodation" provision of regulations implementing Section 504 of the Rehabilitation Act of 1973 and the Fair Housing Amendments Act of 1988. Those changes are reflected in guidance documents on exception payment standards, extended search times, and other voucher program flexibilities to meet the needs of families with disabilities (HUD, 2020a, 2020b, 2024a).

However, families with disabilities have also seen courts reject the acceptance of vouchers as an accommodation. In *Salute v. Stratford Greens Garden Apartments*, plaintiffs sought to require a landlord to accept their housing voucher as a reasonable accommodation under the Fair Housing Amendments Act of 1998. The Second Circuit observed that requiring acceptance of vouchers was not reasonable, in part because of the purported "burdens" of the program, as evidenced by Congress's repeal of the "take one, take all" provision, which had required landlords who accepted any housing choice voucher to also accept additional tenants seeking to use a voucher.<sup>5</sup> More important, the court found that the accommodation was not reasonable because it was unrelated to the plaintiff's disability, reasoning that "impecunious people with disabilities stand on the same footing as everyone else." Thus, the court held that the accommodation sought by the plaintiffs was not "necessary" to afford disabled persons "equal opportunity" to use and enjoy a dwelling. This issue remains contested, however, with a continuing split among the circuit courts (National Housing Law Project, 2023).

In-person, first-come, first-served application practices—policies that severely disadvantage persons with mobility impairments—were the subject of widely publicized HUD disability discrimination

---

<sup>5</sup> The *Salute* case may, in fact, have been one of the factors leading to the repeal of the so-called take one, take all requirement. The District Court in the *Salute* case found that an exception should be read into the provision that would allow landlords to not participate if they accepted vouchers solely from tenants who started as market tenants but then began using their vouchers during their tenancy. The District Court reasoned that those landlords were engaged in kindness to vulnerable tenants who would otherwise lose housing and that requiring the landlords to "take all" would incentivize them to instead evict those vulnerable tenants for fear of being required to accept other voucher-using tenants. Accordingly, the court "grafted" an exception to the statute for such situations. Following the District Court's decision, Congress repealed the take one, take all provision, and the Second Circuit suggested that the repeal was a sign that Congress would rather repeal the entire provision than take the risk that a higher court would overturn the District Court's exception.



complaints against the Fall River (MA) housing authority in 1997–1998, part of the advocacy that led to HUD’s guidance on application and waitlist management in 2012 (previously discussed).

Litigation has also worked to enforce requirements in the Housing and Community Development Act of 1992 that HUD promulgate rules allowing voucher applicants to name a representative to aid them in obtaining a voucher, in communications regarding their tenancy, or in disputes that may arise. HUD did not implement this requirement for many years but did so following the filing of *Maxwell v. HUD*, which led to the creation of the HUD-92006 form to allow voucher holders to name their representatives.

### **The Future of Section 8 in the Courts**

The Housing Choice Voucher program has benefited from the 50-year interplay between civil rights litigation and policymaking. Nonetheless, even with all the advances previously described, the voucher program is still a work in progress, with program structures and local PHA administrative issues that continue to perpetuate segregation and limit family choices. Some of those issues may be addressed in the future by litigation, some through HUD fair housing complaints, and others through improved HUD accountability measures. Even if litigation is not contemplated, the strong precedents permitting civil rights injunctive claims against HUD through the Administrative Procedure Act (e.g., *Open Communities Alliance v. Carson*) and against PHAs through the Fair Housing Act and 42 USC § 1983 provide a valuable backdrop for reform.

One continuing challenge to family choice is related to the large number of PHAs that administer the voucher program—more than 2,200 PHAs nationwide (Sard and Thrope, 2016). Having so many PHAs administering vouchers can sometimes mean multiple PHAs operating in the same housing region, limited by antiquated state law PHA jurisdictional restrictions, facing widely varying voucher payment standards, and a slow bureaucratic process for families who seek to move (“port”) from one PHA’s area of operation to another, sometimes even including re-screening for program eligibility at the new PHA. This bureaucratic complexity and delay can limit family choices and place barriers in the path of families seeking less segregated housing opportunities. Some potential, politically difficult, long-term policy fixes are available for those problems—through the state law expansion of PHA “areas of operation,” a federal statute overriding (preempting) those state law jurisdictional restrictions, or consolidation of PHAs within regions (Sard and Thrope, 2016). Congress could also steer more voucher funds to PHAs with regionwide jurisdiction and adopt financial incentives to encourage PHA consolidation or the adoption of interagency cooperation agreements. A revival of the original direct cash assistance approach to tenant-based assistance could also address the interjurisdictional barriers to housing choice (Joice, O’Regan, and Ellen, 2024). In the meantime, HUD could use its regulatory authority to eliminate portability as a bureaucratic obstacle for families by making vouchers freely transferable without PHA involvement. But, as in prior areas where civil rights laws have met tension with HUD policy, more litigation may need to occur before HUD or Congress takes action.

Relatedly, HUD has made significant progress in expanding mandatory Small Area Fair Market Rents (HUD, 2024), and many PHAs have also adopted exception payment standards in higher-cost neighborhoods based on the Small Area FMRs—to the point where it is estimated that more

than 45 percent of voucher tenants now live in areas where payment standards are adjusted to neighborhood rents. As this trend continues, and as HUD data on voucher concentration become more publicly available, legal questions will inevitably be asked about PHAs that do not adopt some version of Small Area FMRs.

The interplay between expanding source-of-income discrimination protections (Knudsen, 2022) and HCV rules and procedures may also present new opportunities for civil rights litigation. For example, the pending case of *Louis v. Saferent* in Massachusetts deals with whether a credit-based rental admission algorithm that has a disparate impact on Black applicants violates the Fair Housing Act as applied to voucher tenants (whose individual credit is only marginally relevant given the existence of the subsidy); this case could have vast implications on the prospective utility of vouchers especially in jurisdictions with source-of-income discrimination protections.

Looking beyond traditional civil rights litigation and the HUD fair housing complaint process, the next phase of fair housing reform in the voucher program might happen largely through new HUD accountability processes—what Johnson (2012) has called “equality directives.” Chief among them is the anticipated final Affirmatively Furthering Fair Housing rule, which would apply directly to PHAs, and will force some serious introspection at agencies that have not yet examined the discriminatory effects of their HCV policies in the context of their local housing markets (PRRAC and NHLP, 2021). Although the prior Obama Administration’s Affirmatively Furthering Fair Housing (AFFH) rule did not include direct enforcement provisions (Julian, 2018), the new rule may enable advocates to challenge inadequate plans (HUD, 2023a).

Similarly, the long-delayed updating of the Section Eight Management Assessment Program rule (SEMAP) may include an assessment of progress on reducing the proportion of families in high-poverty areas (and increases in access to low-poverty areas) as mandatory indicators in HUD’s annual report card for PHAs, which would bring a new level of civil rights accountability at PHAs for the families they serve.

It is hard to predict the future course of civil rights advocacy at HUD in light of emerging judicial attacks on the administrative state and on race-conscious policies. However, the Fair Housing Act continues to be a powerful mandate both inside and outside HUD. Thus, the constructive dialogue between civil rights advocates and policymakers described in this article should continue to “bend” the long arc of housing voucher policy toward justice.

## Acknowledgments

The authors are grateful for comments and suggestions from Barbara Sard, Henry Korman, Mary Ann Russ, Judith Liben, Elizabeth Julian, Eric Dunn, Jack Cann, James Grow, Laura Ramos, and Judith Goldiner. Mr. Tegeler was involved in several of the cases mentioned in this article.

## Authors

Philip Tegeler is the executive director of the Poverty & Race Research Action Council (PRRAC), a civil rights policy organization based in Washington, DC. Sam Reece is a law and policy intern at PRRAC, J.D. Georgetown University Law Center, 2024.

## References

- “Appropriations, 2000—Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies,” Public Law 106–74 § 538 (1999).
- Chetty, Raj, John N. Friedman, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. 2020. *The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility*. NBER Working Paper No. 25147. Cambridge, MA: National Bureau of Economic Research.
- . 2019. “Long-Term Effects of Children’s Neighborhood Environs,” *The NBER Digest*, January: 1–6.
- Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. “The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment.” *American Economic Review* 106 (4): 855–902.
- “Quality Housing and Work Responsibility Act of 1998,” Veterans Affairs and HUD Appropriations Act of 1998, Title V Pub. L. No. 105-276 (1998). <https://www.congress.gov/89/statute/STATUTE-79/STATUTE-79-Pg667.pdf>.
- Congress.gov. 1990. “S.566—Cranston-Gonzalez National Affordable Housing Act.” <https://www.congress.gov/bill/101st-congress/senate-bill/566>.
- Congress.gov. 1988. “S.825—Housing and Community Development Act of 1987.” <https://www.congress.gov/bill/100th-congress/senate-bill/825>.
- Congress.gov. 1966. “Department of Housing and Urban Development Act,” Pub. L. No. 89-174. (1965). *Discrimination in Federally Assisted Housing Programs Part II, before the House Committee on Banking, Finance, and Urban Affairs*, 476-477 (Glenda C. Sloan, Chairwoman, Housing Task for of the Leadership Conference on Civil Rights; Martin Sloane, Executive Vice President, National Committee Against Discrimination in Housing; Representative Steve Bartlett) (1986).
- Duncan, Greg J., and Anita Zuberi. 2006. “Mobility Lessons from Gautreaux and Moving to Opportunity,” *Northwestern Journal of Law and Social Policy* 1 (1): 110. <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1007&context=njls>.
- Frieden, Bernard. 1980. “Housing Allowances: An Experiment that Worked,” *National Affairs* 58. [https://www.nationalaffairs.com/public\\_interest/detail/housing-allowances-an-experiment-that-worked](https://www.nationalaffairs.com/public_interest/detail/housing-allowances-an-experiment-that-worked).

Gehl, Scott W. 2020. *The Legacy of Buffalo's Landmark Housing Desegregation Case, Comer v. Kemp*. Washington, DC: Poverty & Race Research Action Council. <https://www.prrac.org/pdf/buffalo-comer-history-2020.pdf>.

Government Accountability Office (GAO). 1978. *Deconcentration of Lower Income Persons through Section 8 Housing Assistance Program*. Washington, DC: GAO.

Hashimoto, Erica J. 1997. *Compelling Responsibility: A Summary of Litigation Establishing the Federal Government's Liability for Racially Segregated Housing Patterns*. Washington, DC: Poverty & Race Research Action Council. [https://www.prrac.org/pdf/Compelling\\_Responsibility.pdf](https://www.prrac.org/pdf/Compelling_Responsibility.pdf).

Hill, Justin. 2022. "Case: *Gautreaux v. Chicago Housing Authority*," Civil Rights Litigation Clearinghouse. <https://clearinghouse.net/case/11085/>.

Johnson, Olatunde C.A. 2012. "Beyond the Private Attorney General: Equality Directives in American Law," *New York University Law Review* 87: 1339–1413. <https://www.nyulawreview.org/wp-content/uploads/2018/08/NYULawReview-87-5-Johnson.pdf>.

Joice, Paul, Katherine O'Regan, and Ingrid Gould Ellen. 2024. "Direct Rental Assistance: Returning to the Roots of Housing Allowances," *Cityscape* 26 (2): 275–292.

Julian, Elizabeth. 2018. "The Duty to Affirmatively Further Fair Housing: A Legal as Well as Policy Imperative." In *A Shared Future: Fostering Communities of Inclusion in an Era of Inequality*, edited by Christopher Herbert, Jonathan Spader, Jennifer Molinsky, and Shannon Rieger. Cambridge, MA: Joint Center for Housing Studies of Harvard University. [https://www.jchs.harvard.edu/sites/default/files/A%20Shared%20Future\\_Final\\_102918.pdf](https://www.jchs.harvard.edu/sites/default/files/A%20Shared%20Future_Final_102918.pdf).

Knudsen, Brian. 2022. *Expanded Protections for Families with Housing Choice Vouchers*. Policy brief. Washington, DC: Poverty & Race Research Action Council. <https://www.prrac.org/expanded-protections-for-families-with-housing-choice-vouchers-september-2022/>.

Konkoly, Antonia M. 2008. "Portability Rights of Housing Choice Voucher Participants: An Overview," *Housing Law Bulletin* 38: 170–174. [https://www.prrac.org/pdf/Portability\\_Rights\\_of\\_Housing\\_Choice\\_Voucher\\_Participants\\_-\\_NHLF.pdf](https://www.prrac.org/pdf/Portability_Rights_of_Housing_Choice_Voucher_Participants_-_NHLF.pdf).

Korman, Henry. 2007. "Clash of the Integrationists: The Mismatch of Civil Rights Imperatives in Supportive Housing for People with Disabilities," *St. Louis University Public Law Review* 26 (1). <https://scholarship.law.slu.edu/plr/vol26/iss1/4/>.

Massey, Douglas, and Nancy Denton. 1993. *American Apartheid*. Cambridge, MA: Harvard University Press.

Metropolitan Action Institute. 1982. *More Places to Live: A Study of Interjurisdictional Housing Mobility Programs*. New York: Metropolitan Action Institute.

Miller, Greg. 2024. "Porting to Opportunity: An Analysis of Portability in the Housing Choice Voucher Program," *Cityscape* 26 (2): 163–178.

National Housing Law Project. 2023. “Brief of Amicus Curiae National Housing Law Project in Support of Petitioner Klossner v. IADU Table Mound MHP, LLC.” U.S. Supreme Court (2023).

“National Standards for the Condition of HUD Housing,” <https://www.ecfr.gov/current/title-24/subtitle-A/part-5/subpart-G>.

Polikoff, Alexander. 2006. *Waiting for Gautreaux*. Evanston, IL: Northwestern University Press.

Poverty & Race Research Action Council (PRRAC). 2023. *50 Years of “The People v. HUD”: A HUD 50th Anniversary Timeline of Significant Civil Rights Lawsuits and HUD Fair Housing Advances*. Washington, DC: PRRAC. <https://www.prrac.org/pdf/HUD50th-CivilRightsTimeline.pdf>.

PRRAC and National Housing Law Project (NHLP). 2021. *Public Housing Authorities and the New California AFFH Law: How to Spot Key Fair Housing Issues and Set Goals*. Washington, DC: PRRAC and NHLP. <https://www.nhlp.org/wp-content/uploads/AFFH-Guide-for-PHAs.pdf>.

National Archives. 1998. “Quality Housing and Work Responsibility Act of 1998; Notice of Status Implementation,” Veterans Affairs and HUD Appropriations Act of 1998, Title V Pub. L. No. 105-276 (1998). <https://www.federalregister.gov/documents/2001/04/06/01-8525/quality-housing-and-work-responsibility-act-of-1998-notice-of-status-of-implementation>.

Roisman, Florence. 1999. “Long Overdue: Desegregation Litigation and Next Steps To End Discrimination and Segregation in the Public Housing and Section 8 Existing Housing Programs,” *Cityscape* 4 (3): 171–196.

Rubinowitz, Leonard S., and James E. Rosenbaum. 2000. *Crossing the Class and Color Lines*. Chicago: University of Chicago Press.

Sard, Barbara. 1995. “Creating a Nondiscriminatory Section 8 Allocation System,” *Poverty & Race* 4 (4): 11–12, 14. <http://www.prrac.org/newsletters/julaug1995.pdf>.

Sard, Barbara, and Deborah Thrope, *Consolidating Rental Assistance Administration Would Increase Efficiency and Expand Opportunity*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/atoms/files/4-11-16housing.pdf>.

Tegeler, Philip. 1994. “Housing Segregation and Local Discretion,” *Journal of Law & Policy* 3 (1): 209–236. <https://brooklynworks.brooklaw.edu/cgi/viewcontent.cgi?article=1482&context=jlj>.

Tegeler, Philip, Michael Hanley, and Judith Liben. 1995. “Transforming Section 8: Using Federal Housing Subsidies to Promote Individual Housing Choice and Desegregation,” *Harvard Civil Rights-Civil Liberties Law Review* 30 (45): 1–486.

United States Congress, House Committee on Banking, Finance, and Urban Affairs, Subcommittee on Housing and Community Development. 1986a. *Discrimination in Federally Assisted Housing Programs: Hearings Before the House Subcommittee on Housing and Community Development of the Committee on Banking, Finance, and Urban Affairs, House of Representatives, Ninety-ninth Congress, First and Second Sessions, Part 1*. Washington, DC: U.S. Government Printing Office (GPO): 66–67.

———. 1986b. *Discrimination in Federally Assisted Housing Programs: Hearings Before the House Subcommittee on Housing and Community Development of the Committee on Banking, Finance, and Urban Affairs, House of Representatives, Ninety-ninth Congress, Second Session, Part 2*. Washington, DC: U.S. Government Printing Office: 476–477.

———. 1999. “Appropriations, 2000 – Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies,” Pub. L. 106-74 § 538 (1999). Washington, DC.

U.S. Department of Housing and Urban Development (HUD). 2024a. “Reasonable Accommodations under the Fair Housing Act.” <https://www.hud.gov/sites/dfiles/FHEO/documents/huddojstatement.pdf>.

HUD. 2024. “Small Area FMR” (dashboard). <https://app.powerbigov.us/view?r=eyJrIjojNWI3Nzc5NTctNGE4ZC00Zjk4LWlzYjktZDYzZWVjOWUzZGY2IiwidCI6IjYxNTUyYzYzZDk4ZDk4LWVzdiMij9>.

———. 2023a. “Affirmatively Furthering Fair Housing,” 88 Fed. Reg. 27 (proposed Feb. 9, 2023) (to be codified at 24 CFR, pts 5, 91, 92, 93, 570, 574, 576, 903, 9830). <https://www.govinfo.gov/content/pkg/FR-2023-02-09/pdf/2023-00625.pdf>.

———. 2023b. *RAD Choice Mobility Guidebook: Effective Implementation of Residents’ Choice-Mobility Rights in RAD Conversions: A Best Practices Guide for PHAs and Owners*. [https://www.hud.gov/sites/dfiles/Housing/documents/RAD\\_ChoiceMobilityGuidebook-052223.pdf](https://www.hud.gov/sites/dfiles/Housing/documents/RAD_ChoiceMobilityGuidebook-052223.pdf).

———. 2020a. *Housing Choice Voucher Program Guidebook: Housing Search and Leasing*. [https://www.hud.gov/sites/dfiles/PIH/documents/HCV\\_Guidebook\\_Housing\\_Search\\_and\\_Leasing\\_November%202020.pdf](https://www.hud.gov/sites/dfiles/PIH/documents/HCV_Guidebook_Housing_Search_and_Leasing_November%202020.pdf).

———. 2020b. *Housing Choice Voucher Program Guidebook: Payment Standards*. [https://www.hud.gov/sites/dfiles/PIH/documents/HCV\\_Guidebook\\_Payment\\_Standards\\_November\\_2020.pdf](https://www.hud.gov/sites/dfiles/PIH/documents/HCV_Guidebook_Payment_Standards_November_2020.pdf).

———. 2016. “Establishing a More Effective Fair Market Rent System; Using Small Area Fair Market Rents in the Housing Choice Voucher Program Instead of the Current 50th Percentile FMRs,” 81 FR 80567. <https://www.federalregister.gov/documents/2016/11/16/2016-27114/establishing-a-more-effective-fair-market-rent-system-using-small-area-fair-market-rents-in-the>.

———. 2012. *Waiting List Administration*. Notice PIH-2012-34 (HA). <https://www.hud.gov/sites/documents/12-34PIHN.PDF>.

———. 2010. “Section 8 Housing Choice Voucher Program-Demonstration Project of Small Area Fair Market Rents in Certain Metropolitan Areas for Fiscal Year 2011.” <https://casetext.com/federal-register/section-8-housing-choice-voucher-program-demonstration-project-of-small-area-fair-market-rents-in-certain-metropolitan-areas-for-fiscal-year>.

———. 1998a. “Quality Housing and Work Responsibility Act of 1998; Notice of Status Implementation.” 66 FR 18287. <https://www.federalregister.gov/documents/2001/04/06/01-8525/quality-housing-and-work-responsibility-act-of-1998-notice-of-status-of-implementation>.

———. 1998b. “Section 8 Rental Voucher and Certificate Programs and Establishment Section 8 Management Assessment Program (SEMAP).” 75 Fed. Reg. 27808 (May. 18, 2010).

[https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/semap](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/semap).

———. 1995. “Section 8 Certificate and Voucher Programs Conforming Rule.” 60 FR 34660.

<https://www.federalregister.gov/documents/1995/07/03/95-15906/section-8-certificate-and-voucher-programs-conforming-rule>.

———. “Notice 91-19, Portability of Section 8 Certificates and Housing Vouchers Within the Same State, or the Same or a Contiguous Metropolitan Statistical Area.”

———. 1990. “Notice H 90-43, Portability of Section 8 Certificates and Housing Vouchers Within the Same, or a Contiguous, Metropolitan Statistical Area” [replaced by HUD Notice 91- 19 (Mar. 4, 1991)].

Vernarelli, Michael J. 1986. “Where Should HUD Locate Assisted Housing? The Evolution of Fair Housing Policy.” In *Housing Desegregation and Federal Policy*, edited by John M. Goering. Chapel Hill, NC: University of North Carolina Press.

## Cases

215 *Alliance v. Cuomo*, 61 F.Supp.2d 879 (D. Minn. 1999).

*Barrientos v. 1801-1825 Morton LLC*, 583 F.3d 1197 (9th Cir. 2009).

*Brown v. Board of Ed. of Topeka*, 347 U.S. 583 (1954).

*Christian Community Action v. Cisneros*, No. 3: 91CV000296 (D. Conn. 1995).

*Clark v. Alexander*, 85 F.3d 146 (4th Cir. 1996).

*Comer v. Cisneros*, 37 F.3d 774 2nd Cir. (N.Y. 1994).

*Estevez v. Cosmopolitan Associates, LLC*, 2005 WL 31614146 (E.D.N.Y. November 28, 2005).

*Evans v. UDR, Inc.*, 644 F.Supp.2d 675 (E.D. N.C. 2009).

*The Fortune Society, Inc. v. Sandcastle Towers Hsg. Dev. Fund. Corp.*, 388 F.Supp.3d 145, 178 (E.D. N.Y. 2019).

*Gaston v. Lake Shore Towers*, 2019 WL 950185 (N.D. Ohio 2019).

See, e.g., *Gautreaux v. Chicago Housing Auth.*, Case Number 66 C 1459 (E.D. Ill. 2019).

*Giddens v. HUD*, No. 91 Civ. 7181 (S.D.N.Y., filed Oct. 24, 1991).

*Hale v. HUD*, 1985 WL 11179 (W.D. Tenn., Aug. 23, 1985).

*Hawkins v. HUD*, 8:90-cv-00055 (D. Neb. 2005).

*Hollman v. Cisneros*, 4:92-cv-000712 (D. Minn. 2004).

*Hutchins v. Cincinnati Metropolitan Housing Auth.*, C.A. No. C-1-79-131 (S.D. Ohio, 1984).

- Inclusive Communities Project v. HUD*, Settlement Agreement, 3:07-cv-000945 (N.D. T.X.) (2010), <https://static1.squarespace.com/static/61af25763e561d7c6ac7f6be/t/61c8f7fbf7b55e33b0862e89/1640560636398/3+Signed%2BSettlement%2BAgreement%2Band%2BLetter.pdf>.
- Jaimes v. Toledo MHA*, 715 F. Supp. 835 (N.D. Ohio 1989).
- Jeanty v. Shore Terrace Realty Association*, 2004 WL 1794496 (S.D.N.Y. Aug. 19, 2004).
- Langlois v. Abington Housing Authority*, 207 F.3d 43 (1st Cir. 2000).
- Louis v. Saferent Solutions, LLC.*, 2023 WL 4766192 (D. Mass., July 26, 2023).
- Maxwell v. HUD* (W.D. Tx., complaint filed September 8, 2008).
- Milliken v. Bradley*, 418 U.S. 717 (1974).
- NAACP, Boston Chapter v. Kemp*, 721 F.Supp.361 (D. Mass. 1989).
- Nickell v. Metropolitan*, 2018 WL 2392849 (E.D. Tenn., May 7, 2018).
- Olmstead v. L.C.*, 527 U.S. 581 (1999).
- Open Communities Alliance v. Carson*, 286 F.Supp.3d 148 (D.D.C., 2017).
- Open Communities Alliance v. Conn.*, Housing Discrimination Complaint (filed August 30, 2020) <https://www.prrac.org/pdf/oca-hud-complaint.pdf>.
- Riverside Park Cmty. LLC v. Springs*, 2015 WL 10017344 (N.Y. Civ. Ct. February 5, 2015).
- Salute v. Stratford Greens Garden Apts.*, 136 F.3d 293 at 295 (2d Cir. 1998).
- Sanders v. HUD*, 872 F.Supp.216 (W.D. Penn. 1994).
- Shannon v. HUD*, 577 F.2d 854 (3rd Cir. 1978).
- Simmons v. T.M. Assocs. Mgmt., Inc.*, 297 F.Supp.3d 600 (W.D. Va. 2018).
- Talley v. Lane*, 13 F.3d 1031, 1034 (7th Cir. 1994).
- Thompson v. HUD*, 404 F.3d 821 (4th Cir. 2005).
- U.S. v. Yonkers*, 96 F.3d 600 (2nd Cir. 1996).
- Walker v. HUD*, 402 F.3d 532 (5th Cir. 2005).
- Williams v. Hanover Housing Auth.*, 871 F.Supp. 527 at 529 (D. Mass. 1994).
- Young v. Pierce*, 822 F.2d 1368 (5th Cir. 1987).



# Landlords and Housing Vouchers: 50 Years of Feedback

Philip M.E. Garboden  
The University of Chicago

Eva Rosen  
Georgetown University

Isaiah Fleming-Klink  
University College London

---

## Abstract

*The Housing Choice Voucher (HCV) program relies on the willing participation of landlords to succeed. Since the program's earliest days, policymakers have been concerned with understanding how landlords think about and respond to the program's complex bundle of costs and benefits. The literature on landlord participation in the HCV program in the 1970s and early 1980s was designed to assess the feasibility of a voucher program for housing. These reports typically used attitudinal survey data from landlords, providing the earliest information on how landlords viewed a housing voucher program. More recently, trends in voucher success rates, search durations, and discrimination reignited interest in the topic, leading to a series of studies that wrestled with the question of landlord nonparticipation. Across those accounts, landlord frustrations are more about how the rules are administered than the actual rules. These themes highlight the importance of understanding what landlords think about the program so that policymakers can develop more effective strategies to improve it. This article concludes by encouraging practitioners and researchers to focus attention on implementation and administrative capacity within public housing authorities, which can improve landlord experience while not jeopardizing tenant outcomes.*

## 50 Years of Feedback: Landlord Opinions on Housing Vouchers

It is hardly controversial to claim that the Housing Choice Voucher (HCV) program, originally Section 8, relies on the willing participation of landlords to succeed. The program simply cannot house more families than there are available units whose owners are willing to accept vouchers. Moreover, if the program is to have any benefits to recipients in terms of choice, its participants need access to a set of housing units that is heterogeneous with respect to unit and neighborhood characteristics.

To achieve those goals most efficiently, it has become clear that the voucher program cannot rely solely on the guaranteed rents that the program affords to landlords, nor can it effectively mandate landlord participation by *fiat*. Guaranteed rent is indeed an enormous incentive to landlords in markets with few reliable alternatives, but it is insufficient in areas where renters have low nonpayment rates (Garboden et al., 2018a). Although mandates against so-called source of income discrimination have been shown to improve tenant options, such laws are easily circumvented, prove difficult to enforce, do little to increase supply, and may be increasingly preempted by state law (Ellen, O'Regan, and Harwood, 2023; Faber and Mercier, 2022; Freeman, 2012; Freeman and Li, 2013; Greene, Ramakrishnan, and Morales-Burnett, 2020).

As such, those individuals tasked with designing and administering the HCV program have, since its earliest days, been concerned with how landlords might respond to the program's complex bundle of costs and benefits (Drury et al., 1978; Kanouse, 1980). Most recently, those concerns have led the U.S. Department of Housing and Urban Development (HUD) and a number of public housing authorities (PHAs) to test a variety of programmatic changes designed to make the program more attractive to landlords. The authors of this article take a step back and provide a review of studies during the past 50 years that attempted to assess landlords' perspectives on the voucher program—either through direct attitudinal data or by examining their responses to the program's features. What do they like about the program? What do they dislike? How do they form these opinions? Has anything changed during a half-century of vouchers? Most important, what reforms might be most effective to increase the number of landlords willing to participate?

Robustly identifying trends in landlord response is challenged by changes in methodology and relatively sparse literature over this time period. The earliest information on landlords and the voucher program was fairly positive compared with contemporary accounts, although many of the most salient contemporary issues were nevertheless extant. The voucher literature focused on landlords was remarkably sparse during the first three decades of the HCV program. The problem of landlord participation reemerged more recently as a public and academic concern due to a series of studies that highlighted low success rates, high levels of voucher discrimination, and the concentration of vouchers in high-poverty communities. Recent literature has highlighted a number of barriers to landlord participation and emphasized the importance of focusing on how programmatic elements are implemented as at least equally important as those elements. For example, landlord resistance to inspection is exacerbated by processes that they view as time-consuming, inefficient, and unpredictable. The recent Moving to Work (MTW) Expansion—Landlord Incentives Cohort study and multiple local initiatives suggest an enthusiasm by diverse stakeholders to identify best practices around landlord recruitment and retention. However, most of those efforts are too nascent to have produced strong evidence. This article concludes by encouraging practitioners and researchers to focus attention on implementation and administrative capacity within PHAs, which can improve landlords' experiences while not jeopardizing tenant outcomes.

## **50 Years of Landlord Research**

Broadly speaking, the literature on landlord participation in the HCV program has occurred in two clusters. The first occurred in the late 1970s and early 1980s and was designed to assess

the feasibility of a voucher program for housing. Those reports typically used attitudinal survey data from landlords, often hypothetical, which contemporary methodologists would consider a highly imprecise measurement strategy. Nevertheless, they provide the earliest information on how landlords may view a housing voucher program. With the exception of a handful of studies, the literature fell largely silent on the question of landlords and the HCV program for much of the 1990s and early 2000s. However, concerning trends in success rates, search durations, and discrimination reignited interest in the topic, leading to a series of studies that wrestled with the question of landlord nonparticipation. This renewed interest was also bolstered by increasing concerns that vouchers were not fulfilling the potential of choice or poverty deconcentration and neighborhood attainment, but were instead reproducing existing patterns of inequality by way of so-called voucher submarkets—market segments in which landlords actively pursue voucher tenants (Kennedy and Finkel, 1994: 69; Rosen, 2020).

### **Designing the Voucher Program: Early Investigations into Landlord Response**

The earliest research on landlords and housing vouchers occurred during the rollout of the voucher program and was based on either the Experimental Housing Allowance Program (EHAP),<sup>1</sup> which ran from 1970 until roughly 1980, or the Section 8 Existing Housing Program, established by the Housing and Community Development Act of 1974. Across these programs and demonstrations, a variety of designs were tested, none of which aligns precisely with the contemporary HCV program.

These studies were primarily quantitative in nature and designed to estimate the effect of a voucher-style housing program on recipient outcomes, rents, housing quality, and housing supply across a wide range of metropolitan areas. Therefore, nearly all the findings are landlord mediated insofar as they were implicitly (or explicitly) affected by the degree of landlord enthusiasm for the voucher program. Only a couple of studies looked at landlords directly in an attempt to better understand the group of individuals on whom the new program would depend. For the sake of parsimony, this review is limited to the studies that attempted to solicit landlords' opinions regarding participation.

The first study of housing allowances surveying landlords occurred as part of EHAP in St. Joseph County, Indiana, which includes the city of South Bend. The survey data were entirely prospective because they were collected before program recruitment in 1975 (Kanouse, 1980). Despite annual surveying of landlords to collect data on rents and housing quality, the authors could not locate any follow-up analysis of landlord attitudes. It is also important to note that the demonstration implemented in South Bend was much more flexible than the current voucher program. It had minimum quality standards but provided cash directly to tenants and, thus, was far closer to cash assistance than the heavily structured HCV program currently in effect. Therefore, the vast majority of landlords were positively or neutrally disposed to the idea of the housing allowance program (although most had not heard of the program until approached by survey researchers, and most landlords believed that their tenants would not participate, likely due to their income).

Excepting those who were ideologically opposed to social programs of any kind, the landlords generally believed that housing allowance payments would simply help their existing tenants afford

---

<sup>1</sup> Many EHAP reports are available at <https://www.huduser.gov/portal/EHAP.html>.

housing, with little downside to landlords serving low-income populations. Findings showed that landlords were particularly positive about the effect of the housing on tenant well-being. Nevertheless, 35 percent of knowledgeable landlords had at least some reservations. Negative assessments fell into one of two categories: either they were critical of the people who would receive aid—which Kanouse (1980) ascribed to a conservative anti-welfare ideology—or they feared the program would be abused or wasteful.

A few years later, the *Nationwide Evaluation of the Existing Housing Program*—in which payments were made directly to landlords, a rent ceiling was instituted, quality inspections were more routinized, and landlord participation was voluntary—would also consider landlord participation directly via a survey of roughly 700 participating landlords (Drury et al., 1978). First and foremost, the study found that most participating landlords had small portfolios consisting primarily of single-family properties, and one-third were owner-occupants. As in the South Bend study, the vast majority of landlords (90 percent) believed that voucher tenants were the same or better than comparable market tenants, and 42 percent noted that the “social objectives” of the program were a motivation for participation. An even larger percentage (57 percent) stated that the guaranteed rent was their primary motivation for participation, a program component that was not relevant to the South Bend study. However, an important finding was that more landlords believed that voucher tenants were less profitable than market tenants (23 percent) than believed the opposite (16 percent), although most viewed the two options as equally profitable (61 percent). Negative aspects of the program included interactions with the PHA (17 percent), paperwork (12 percent), rent ceilings (11 percent), and tenant characteristics (12 percent). Unfortunately, by sampling only participating landlords, this study struggled to explain nonparticipation because only landlords who perceived the tradeoffs favorably were included in the data collection.

Extrapolating too far from such attitudinal data would be reckless, but those early reports suggest that landlords held a generally positive opinion of the early voucher programs—both prospectively and in terms of their experience. They had concerns that would show up again in later research, but their opinions on most program components were neutral or positive. Perhaps because of those early positive reports, interest in landlord responses to the HCV program would fade during subsequent decades until administrative data began to suggest troubling trends in success rates, resident choice, and discrimination.

### **Increasing Awareness of Challenges with Voucher Use, Choice, and Mobility**

The most straightforward measure of landlord enthusiasm is the percentage of families issued vouchers who are able to use them successfully within a reasonable period of time. All else being equal, the more landlords are willing to accept voucher tenants in a metropolitan area, the more likely families are to secure housing. National tracking of success rates over time has never been conducted, but a series of studies dating back to the 1980s suggest that success rates have declined in recent decades (Ellen, O’Regan, and Stochak, 2021; Finkel and Buron, 2001; Kennedy and Finkel, 1994; Leger and Kennedy, 1990). In the most recent study, Ellen, O’Regan, and Stochak (2021) used existing administrative data from PHAs and found that the national success rate in 2019 was 61 percent. This rate was less than that found by the previous three studies, all commissioned by HUD and drawing from original data collected directly from sampled large

metropolitan PHAs: 69 percent in 2000, 81 percent in 1993, and 68 percent between 1985 and 1987 (Finkel and Buron, 2001; Kennedy and Finkel, 1994; Leger and Kennedy, 1990).

Although success rates provide a binary measure of success, landlord enthusiasm for participation should also correlate with the amount of time families need to search for housing: the less enthusiastic landlords are, the longer it will take a family to find a landlord willing to rent to them. More enthusiastic landlords will market directly to voucher holders and be less likely to reject their applications. The two most recent studies also measured the median or average search times of successful voucher holders (Ellen, O'Regan, and Stochak, 2021). In 2019, the median search time was 60 days. In 2000, the median search time was 69 days (83 on average). In both 1993 and 1985 through 1987, the average search time was not measured (Ellen, O'Regan, and Stochak, 2021; Finkel and Buron, 2001).

Several of these studies also examined success rates across market contexts. Most dramatic were the differences in market tightness. In all four studies, success rates were lower (and search durations longer) in tight, high-rent housing markets. Inadequate rent ceilings in places with rapidly increasing rents may have caused some of that difference (McMillen and Singh, 2023), but the more straightforward explanation is that tight rental markets simply afford landlords more choice in tenants, thus raising the probability that a market tenant will be more profitable than a voucher tenant for any given landlord. PHA policies and practices, local laws, and housing characteristics all appear to affect success rates. Higher payment standards relative to Fair Market Rent, source of income discrimination protections, landlord outreach, and housing quality all positively affect the success rates for PHAs' voucher holders (Finkel and Buron, 2001).

The 1993 study makes an explicit link between success rates and the role of landlords: "One of the important issues to emerge from this study is the role of landlord acceptance of Section 8 in enrollee success" (Kennedy and Finkel, 1994: 69). Their interviews with landlords illustrate how the best predictor of voucher acceptance is whether the unit was previously offered to a voucher holder. For those units not already in the program, landlords cited several reasons for nonparticipation, such as their views that "unit rents are too high,' 'Section 8 tenants would not maintain units,' 'Section 8 tenants would not fit in,' and the owner 'didn't like Section 8/ government programs.'"

Most recently, researchers have begun to use audit studies to examine discrimination against voucher households. Both Cunningham et al. (2018) and Moore (2018) find discrimination against voucher holders in search of housing in the private rental market—meaning that landlords ignore or reject inquiries from voucher holders at higher rates than market tenants even when the two pools are experimentally manipulated to be otherwise identical. Cunningham and colleagues (2018), in the first large-scale pilot study in five cities of whether landlords treat voucher holders differently than nonvoucher-holding renters, draw from a three-stage audit testing methodology to show significant denial rates against voucher holders. Based on an email audit design of outreach to more than 6,000 landlords across 14 metropolitan sites, Moore (2018) similarly finds that landlords are less likely to respond to voucher holders at all—and even less likely to respond positively—compared with other renters.

These studies paint a detailed picture of denial rates, showing that they are higher in lower-poverty areas and that landlords who say they accept vouchers generally treat voucher holders similarly to nonvoucher holders on the phone but are more likely to treat them differently in person, for example by missing appointments (Cunningham et al., 2018). Moore (2018) focuses more attention on the potential effects of race, finding that although White voucher holders are more likely to receive a positive response, they are no more likely to receive a response overall.

Finally, Cunningham et al. (2018) draw attention to the specific role that landlords play in denying or discriminating against voucher holders. Although most landlords who did not accept vouchers did not explain their decision, those who did mention concerns with implementing the program believed that voucher holders are more likely to have “risky or illicit behaviors,” and had had past challenges with voucher-holder tenants. In response to this phenomenon, Cunningham et al. recommend further research aimed at understanding landlord perceptions of the program.

The research also shows that tenant race factors into landlord decisions in complicated ways. Additional audit research suggests that landlord bias against recipients of Section 8 housing vouchers may be stronger than racial bias—although it also finds that Black and Latino mothers are the only racial groups landlords penalized for being single mothers (Faber and Mercier, 2022), in line with ethnographic work highlighting this intersectionality (Rosen, Garboden, and Cossyleon, 2021).

In addition to troubling findings related to success rates and discrimination, growing literature also indicates the failure of vouchers to help low-income families relocate to communities with low rates of violent crime, well-funded schools, and other desirable amenities (Briggs, Popkin, and Goering, 2010; DeLuca, Garboden, and Rosenblatt, 2013; Pendall, 2000). It is clear from our review of the early voucher research that these goals were not consensus objectives for program designers, who appeared more concerned with improving the quality of the low-end housing stock than promoting economic or racial desegregation. Nonetheless, the implied benefit of vouchers has always been that they would allow families to identify housing that better aligns with their heterogeneous set of preferences.

This work is summarized elsewhere in this issue, but it has consistently found that voucher recipients’ neighborhood attainment is nearly identical to that of similar unsubsidized tenants (Basolo, 2013; McClure, 2013; McClure, Schwartz, and Taghavi, 2015; Owens, 2017). Voucher households not surprisingly outperform public housing residents in terms of tract poverty rates but remain overrepresented in high-poverty neighborhoods, particularly those renting in racially segregated urban metropolitan areas. Many explanations have been proposed for these patterns, ranging from information gaps to personal preferences to the need to locate near social, familial, and organizational resources. But many studies have also implicated the role of landlords whose differential enthusiasm for voucher tenants reproduces patterns of spatial inequality (Boyd, 2008; DeLuca, 2019; DeLuca, Garboden, and Rosenblatt, 2013; DeLuca, Garboden, and Rosenblatt, 2012; Rosen, 2014; Rosen, 2020; Sharkey, 2012).

## **Recent Work With Landlords: Understanding Nonparticipation**

Given these concerning trends, recent research has addressed the question of landlord participation directly, primarily through in-depth qualitative interviewing (Garboden et al., 2018a; 2018b; Greenlee, 2014; Greif, 2022; Rosen, 2020, 2014; Varady, Jaroscak, and Kleinhans, 2017; Zuberi, 2019). It is important to note that most of these studies differ from prior survey research not only in the type of data collected but also in their analytic approach. Rather than asking landlords to answer hypothetical questions about the program or to articulate their potential for participation (or nonparticipation), these contemporary studies collected qualitative narrative accounts of landlord experiences with the HCV program, their reactions to those experiences, and the process by which they made participation decisions. Thus, they minimize the problems associated with posing speculative questions to respondents that have few material stakes and, instead, elicit retrospective accounts of actual experiences with (or decisions about) the voucher program.

These studies spoke with landlords, property managers, and other intermediaries in Baltimore, Maryland, Cleveland, Ohio, Dallas, Texas (Garboden et al., 2018a, 2018b), Washington, D.C. (Rosen, Garboden, and Cossyleon, 2021), the Baltimore suburbs (Cossyleon, Garboden, and DeLuca, 2020), Cleveland (Greif, 2022, 2018), Cincinnati, Ohio (Varady et al., 2013; 2017), a so-called mid-sized urban area in Pennsylvania (Zuberi, 2019), and housing authorities throughout Illinois (Greenlee, 2014). Summarizing all the nuances of these reports is well beyond the limited space in this review, but they show remarkable consistency on many key issues related to nonparticipation.

First and foremost, the literature generally agrees that landlord enthusiasm for participation is inversely proportional to nonsubsidized tenants' ability to pay a profitable rent reliably within their submarket. As Garboden and colleagues (2018a) describe, this "counterfactual tenant" can be thought of as the tenant a landlord expects to house were they not to accept a household with a voucher. If the counterfactual tenant is able to pay the asking rent of the listed property and has a consistent source of income, the benefits of the voucher program fade away, leaving only the added hassles of participation. Described as far back as the 1970s, the improvement in rent collection for voucher tenants is an exceptionally positive aspect of the program (Drury et al., 1978). Although some landlords do express an earnest social motivation for participation (Greenlee, 2014), the profitability of their investments motivates the majority. Thus, they have no reason to accept or pursue a voucher household if the expected nonpayment rate of a market tenant is low.

Landlords are constantly weighing the inherent tradeoffs of voucher participation. On the one hand, voucher households are more likely to be stably housed, and nonpayment is minimized due to the direct payment from the PHA. On the other, participating in the program means abiding by a host of rules, regulations, and procedures that can have negative effects on landlord expenses.

Landlords have many comments on these rules, regulations, and procedures, but it is important to emphasize that many of their expressed frustrations operated at the meso level of PHA implementation and interaction. For example, landlords perceive inspections as inherently burdensome, but PHA procedures and staff competency can mitigate or exacerbate the burdens they create. When landlords express frustrations about the voucher program, it is often about an experience during which they felt rules were not implemented fairly and efficiently rather than the actual rules.

Certainly, most people have experienced the frustrations of interacting with customer service at a large business or a government bureaucracy, but landlord interactions are particularly touchy because they fundamentally believe that they contribute to the success of the voucher program via participation (and indeed, they do). They expect to be treated as partners in the endeavor. When PHAs cannot or will not provide the type of support they need, landlords often feel that the PHA has not held up their end of the deal (Garboden et al., 2018a, 2018b; Greenlee, 2014; Varady et al., 2017; Grief, 2022). Of course, this finding should not be viewed as a criticism of PHA staff—many of whom are extremely overburdened—but of a system that provides inadequate resources for implementation, thus increasing the administrative burden. Moreover, unless the PHA employs a landlord liaison, caseworkers trained in serving low-income households, not rental property owners, answer most of landlord queries.

Landlords' focus on PHA interactions and implementation does not mean that they do not also have programmatic issues with the HCV program. As several studies pointed out, inspections and contractual paperwork play a major role in landlord concerns (Garboden et al., 2018a, 2018b; Greenlee, 2014; Zuberi, 2019). Most landlords believed that providing safe and sanitary housing was a basic business goal, but disagreed that voucher inspections provided an accurate picture of housing quality, noting that the process allowed for inspections that were overly particular about issues that did not affect tenant well-being and did not always catch the most important quality features that affect tenants.

Similarly, several studies specifically highlighted the delays an extended three-party contractual process creates (Garboden et al., 2018a, 2018b; Greenlee, 2014; Varady et al., 2017). Particularly in hot rental markets, renting to a voucher tenant often delays the move-in date significantly, as PHAs must process paperwork, conduct an inspection, and implement rent reasonableness. All these factors directly delay the beginning of a voucher household's tenancy, resulting in potential lost rent for the landlords and an extended period of inadequate housing for the tenant.

Finally, it is important to note that a minority of landlords expressed negative opinions of voucher tenants compared with others who might occupy their units (Varady et al., 2017; Zuberi, 2019). Landlords were upset when inspections identified "housekeeping" issues that they were required to fix, but generally, landlords felt that voucher tenants were relatively similar to market tenants in terms of behavior, upkeep, and communication. Here again, it is essential to keep in mind the counterfactual tenant to whom the landlord was comparing their voucher tenants. In areas where poor women of color dominate the tenant applicant pool, landlords held similar negative stereotypes about voucher and nonvoucher tenants alike and, indeed, were attracted to the guaranteed rent as a way to address these preconceived assumptions (Rosen, Garboden, and Cossyleon, 2021). In contrast, those who owned properties in higher-income communities were more likely to speak negatively about voucher tenants, given that their alternatives were less likely to be poor Black and Latina women. In other words, landlord perspectives on tenant behavior depend heavily on the myriad intersectional differences between (and thus, stigma about) voucher tenants and the counterfactual, which is substantially more pronounced in low-poverty communities than in high-poverty communities (Faber and Mercier, 2022; Rosen, Garboden, and Cossyleon, 2021).



## **The Opposite of a Problem Is a Problem: Concerns Related to Voucher Submarkets and Predatory Inclusion**

The research has been primarily concerned with landlord nonparticipation, especially in more advantaged rental markets. However, several studies have also highlighted the deleterious flipside of this problem. Just as landlord nonparticipation keeps low-income families from achieving diverse housing outcomes, overly enthusiastic participation has the potential to steer low-income families into a small subset of the housing market where vouchers are most profitable to landlords. This group of landlords and their properties—referred to as “voucher submarkets”—may come with negative consequences for tenants, particularly when it comes to neighborhood attainment.

Inquiries into voucher submarkets date back to the 1990s, as the *Section 8 Rental Voucher and Rental Certificate Utilization Study* documents (Kennedy and Finkel, 1994). In particular, this report found that voucher households typically limit their search to a “Section 8 submarket,” defined as “a segment of the market that is quite familiar with Section 8, and generally rents to Section 8 enrollees” (Kennedy and Finkel, 1994: 69). The report examined a number of important questions pertaining to tenant search tactics and success rates. For example, it showed that tenants generally found units in these submarkets with landlords familiar with and predisposed to rent through the program by using PHA listings and getting references from family and friends, although newspapers were less effective (Kennedy and Finkel, 1994). The report concluded that “the possibility of a Section 8 submarket is particularly important to consider and explore further, particularly the characteristics of these submarkets and their consequences for tenants.” It did not engage much, though, with the question of who these voucher landlords were, their locations, and how these two factors might be related to participation incentives and tenant outcomes.

Given that the benefits of a reliable rent collection are much more salient in some submarkets, landlords serving primarily low-income tenants retain a particularly strong incentive to recruit voucher holders. In these submarkets, many landlords prefer to rent to voucher holders and become “voucher specialists,” orienting their business models specifically toward catering to voucher holders (Garboden et al., 2018a; Rosen, 2020, 2014). Some quantitative work shows that landlords may be able to charge more for voucher units on average in high-poverty communities than for similar units rented to market tenants (Desmond and Perkins, 2016).

One way to address this issue is through payment standards and Fair Market Rent. In places where the payment-standard adjusted rent ceiling is calculated at the metropolitan level, the inevitable problem is that a high portion of the rental housing in some neighborhoods will qualify for the program, whereas other neighborhoods will contain none at all. Given the basic assumption that few landlords will significantly lower rents to accept voucher holders, this pattern alone encourages a concentration of voucher holders irrespective of landlord opinions. HUD attempted to address this problem via creating Small Area Fair Market Rents, which create calibrated rent ceilings for each ZIP Code. Research suggests this program has some modest impacts on voucher concentration (Aliprantis, Martin, and Phillips, 2022; Collinson and Ganong, 2018; Dastrup, Finkel, and Gould, 2019; Reina, Acolin, and Bostic, 2019).

However, given the challenges associated with rent collection, rent ceilings appear to be only part of the story. The relative desirability of vouchers within certain submarkets can result in tactics of predatory inclusion. Landlords may rely on a number of techniques with which they try to recruit voucher holders, such as cash bonuses or free furniture. Many landlords waive the security deposit for a voucher tenant, a practice that is enormously beneficial to a voucher holder (who will, by definition, have difficulty coming up with a month's rent) but may also be so much of an incentive as to be somewhat coercive. Similarly, when landlords offer transportation assistance to tenants as they are searching, it can be tremendously helpful. On the other hand, it can allow the landlord to unduly influence the bounds of the tenants' search, keeping them in the units and neighborhoods in which landlords find them to be most profitable (Rosen, 2020, 2014). Landlords may also seek to hold on to voucher tenants and reduce voucher turnover by leveraging accumulated unpaid tenant portions to threaten tenants with eviction suits that would result in voucher loss. The result is to constrict voucher holder choices to a subset of units that are in neighborhoods most profitable to landlords (Rosen, 2020, 2014).

Continuing the study of voucher “submarkets” is important because it offers a window into the circumstances of an urban geography wherein landlords participate when few regulations, controls, or incentives are designed to promote participation from any particular type of landlord or neighborhood.

### **Moving Forward: Incentives and Burden Reduction**

Research on landlord orientations to the voucher program suggests that landlords have been frustrated with various aspects of the voucher program from its inception, but that those frustrations have increased in salience over time. Importantly, where such reservations are most impactful on tenant outcomes—in properties that would be eligible to rent through the program if the landlord were willing—the few studies that did not limit their sample to participating landlords have found that many nonparticipating landlords have some direct experience with the voucher program. Either they offer some, but not all, units in their portfolio to voucher families, employ managers who have also worked with voucher properties, or had previous negative experiences with the program that discourage participation (Finkel and Buron, 2001; Garboden et al., 2018a). Although we might have assumed that nonparticipating landlords abstain due to misinformation or unfamiliarity with the program, eligible but nonparticipating landlords seem to have some experience with the program.

However, whether landlords had previously participated or not, it is clear that a sizable group of them could be motivated to participate, given the right set of incentives. Research makes clear that the simplest rubric for understanding landlords' motivation is to consider the tenant to whom that landlord would rent if not a voucher tenant. This basic logic creates two opposing trends. In more affluent neighborhoods, landlords may find little incentive to accept vouchers because of higher market rents and reliable nonsubsidized tenants. Conversely, in disadvantaged submarkets, landlords may view vouchers more favorably, leading to the emergence of so-called “voucher specialists” (Garboden et al., 2018a; Rosen, 2014). Together, these forces operate to narrow voucher holders' choices—pulling them into some submarkets and preventing them from entering others.

A review of the literature shows that many landlord complaints about the voucher program since its inception are related to policies and procedures that create an administrative burden for landlords. Although the administrative burden is usually conceived of in the literature as something social service recipients experience (Herd and Moynihan, 2019), the voucher program involves a three-party contract between PHA, landlord, and tenant (Barnes, 2021). The role of administrative burden to landlords—as a private market extension of the state—is also important to consider. Perhaps the clearest example of this issue is the period between when a landlord accepts a voucher tenant and when that tenant can move into the unit. For unsubsidized units, this period is negligible. For voucher tenants, landlords must submit a Request of Tenancy Approval, the unit must be inspected, and a rent reasonableness determination must be implemented. If the unit fails, a reinspection must occur, and if the rent is deemed unreasonable, the landlord must either lower the rent or instigate an appeal.

We are not arguing that any of these steps are unnecessary, but that inefficiencies and inconsistencies create harmful delays that benefit neither tenants nor landlords. In a world of unlimited resources, these requirements could delay tenancy by only a couple of days, but the reality is that such delays can last weeks, particularly for landlords new to the voucher program.

The way PHAs administer the program also matters. Indeed, research shows that when landlords own properties in multiple PHA jurisdictions, they express explicit preferences for the one that performs the same functions most efficiently (Cunningham et al., 2018; Garboden, 2018a, 2018b). As other research shows, burdens that fall on landlords also increase burdens for tenants as they struggle to redeem their vouchers on the market (Barnes, 2021)—in turn increasing administrative costs to PHAs as they struggle to house clients.

Luckily, a number of policy approaches are meant to increase the voucher tenant's attractiveness and profitability relative to a market tenant in more advantaged neighborhoods while reducing the voucher premium in more disadvantaged neighborhoods. HUD is experimenting with many of these incentives today as part of the MTW "Landlords Incentive Cohort," which requires 29 PHAs to select one or more programmatic innovations designed to increase landlord participation.<sup>2</sup> This menu of innovations builds on promising but largely unevaluated initiatives by PHAs throughout the country, including (1) adjustments to payment standards; (2) vacancy loss to cover vacancies between voucher tenants prior to move-in; (3) establishment of a fund for damage claims in the event that tenant damages to a unit exceed the security deposit; and (4) adjustments to inspection schedules, such as prequalification, a reduction in inspection frequency, or waving initial inspections for newly constructed units or buildings with a proven track record (HUD, 2022). PHAs, both in the MTW expansion cohort and elsewhere, have experimented with other approaches to landlord recruitment, such as offering signing bonuses, hiring landlord liaisons, or linking tenants with housing navigators who can advocate to landlords on their behalf (DeLuca, Katz, and Oppenheimer, 2023; Marr, 2005; Rosenblatt and Cossyleon, 2018).

Each of these innovations is designed to make the program more appealing to landlords without eliminating any of the important protections. Although getting rid of *any* programmatic elements that might make participation less attractive to landlords may be tempting, caution is necessary

---

<sup>2</sup> More information on the specific incentives and participating PHAs can be found at [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/ph/mtw/expansion/landlordincentivescohort](https://www.hud.gov/program_offices/public_indian_housing/programs/ph/mtw/expansion/landlordincentivescohort).

before jettisoning aspects of the program designed to mitigate the challenges inherently associated with vouchers (Steuerle and Twombly, 2002). In fact, the original designers of the voucher program were acutely aware of two factors that could undermine its feasibility: moral hazard allowing for rampant price inflation of subsidized units and a lack of tenant market power resulting in unsafe and unsanitary conditions. To address these issues, HUD implemented programmatic features to keep these issues in check, including payment standards, rent reasonableness procedures, inspections, and more recent efforts at Small Area Fair Market Rents. These features may be unpopular with landlords but serve key functions in the program. Little evidence exists that such concerns have become irrelevant in the last 50 years.

If housing vouchers are to remain the dominant approach to housing subsidies to tenants in the United States, then such programmatic elements are necessary even if they present a tradeoff in terms of landlord participation. Critically, much of the recent research the authors reviewed suggests that landlords are more frustrated by *how* these guardrails are administered than they are that the guardrails exist. Few landlords desire inspections, but none desire inspections that are hard to schedule, capricious, and apparently inconsistent. All landlords desire higher rents, but they get particularly frustrated when the processes of rent setting are not communicated candidly and clearly. All landlords have issues with tenants, but they throw up their hands when they cannot reach someone who can answer their questions or when they are required to communicate only with caseworkers who know a lot about their clients but nothing about rental property ownership.

In other words, programmatic elements could, and should, be implemented in ways that take advantage of existing technologies to decrease burden and provide basic customer service to landlords. In this and many other ways, the lack of administrative capacity of PHAs reduces their ability to implement these safeguards in an efficient manner that aligns with landlord business needs.

Given this imperative, future research should carefully examine not only the rules and regulations of housing vouchers that deter landlords, but also the manner in which they are implemented and the barriers that PHAs face in implementing a program effectively and efficiently. Much of the current energy around landlord incentives is focused on programmatic reforms, regulatory waivers, or additional incentives. These changes are likely to positively shape landlord participation at the margins, but their effect will be limited if PHA capacity remains inadequate. We should not lose sight of the budgetary constraints that undergird PHA performance and, thus, the lack of landlord participation. Improving performance across thousands of PHAs is far from simple: it involves new resources, monitoring, and quality control. However, if the insights from 50 years of research with landlords are to be believed, paying more attention to PHA administration could have significant dividends for landlord participation and, by extension, tenant outcomes.

## Author

Philip M.E. Garboden is an associate professor in the Crown Family School of Social Work, Policy, and Practice at The University of Chicago. Eva Rosen is an associate professor in the McCourt School of Public Policy at Georgetown University. Isaiah Fleming-Klink is a 2021 Marshall Scholar in the Bartlett School of Planning at University College London.

## References

- Aliprantis, Dionissi, Hal Martin, and David Phillips. 2022. "Landlords and Access to Opportunity," *Journal of Urban Economics* 129: 103420.
- Barnes, Carolyn Y. 2021. "'It Takes a While to Get Used to': The Costs of Redeeming Public Benefits," *Journal of Public Administration Research and Theory* 31 (2): 295–310.
- Basolo, Victoria. 2013. "Examining Mobility Outcomes in the Housing Choice Voucher Program: Neighborhood Poverty, Employment, and Public School Quality," *Cityscape* 15 (2): 135–153.
- Boyd, Melody. 2008. "The Role of Social Networks in Making Housing Choices: The Experience of the Gautreaux Two Residential Mobility Program," *Cityscape* 10 (1): 41–63.
- Briggs, Xavier De Souza, Susan J. Popkin, and John Goering. 2010. *Moving to Opportunity: The Story of an American Experiment to Fight Ghetto Poverty*. Cary, NC: Oxford University Press.
- Collinson, R., and Ganong, P. 2018. How Do Changes in Housing Voucher Design Affect Rent and Neighborhood Quality? *American Economic Journal: Economic Policy* 10 (2): 62–89.
- Cossyleon, Jennifer E., Philip M.E. Garboden, and Stefanie DeLuca. 2020. *Recruiting Opportunity Landlords: Lessons from Landlords in Maryland*. Washington, DC: Poverty & Race Research Action Council.
- Cunningham, Mary K., Martha Galvez, Claudia L. Aranda, Robert Santos, Douglas Wissaker, Alyse Oneto, Rob Pitingolo, and James Crawford. 2018. *A Pilot Study of Landlord Acceptance of Housing Choice Vouchers*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
- Dastrup, Samuel, Meryl Finkel, and Ingrid Gould Ellen. 2019. "The Effects of Small Area Fair Market Rents on the Neighborhood Choices of Families With Children," *Cityscape* 21 (3): 19–48.
- DeLuca, Stefanie. 2019. "Why Don't More Voucher Holders Escape Poor Neighborhoods?" In *The Dream Revisited*, edited by Ingrid Gould Ellen and Justin Steil. New York: Columbia University Press: 303–306.
- DeLuca, Stefanie, Philip M.E. Garboden, and Peter Rosenblatt. 2013. "Segregating Shelter: How Housing Policies Shape the Residential Locations of Low-Income Minority Families," *The Annals of the American Academy of Political and Social Science* 647 (1): 268–299. DOI: 10.1177/0002716213479310.
- . 2012. "Why Don't Vouchers Do a Better Job of Deconcentrating Poverty? Insights from Fieldwork with Poor Families," *Poverty & Race* 21 (5): 1–2, 9–11. [https://ecommons.luc.edu/cgi/viewcontent.cgi?article=1006&context=soc\\_facpubs](https://ecommons.luc.edu/cgi/viewcontent.cgi?article=1006&context=soc_facpubs).
- DeLuca, Stefanie, Lawrence F. Katz, and Sarah C. Oppenheimer. 2023. "'When Someone Cares About You, It's Priceless': Reducing Administrative Burdens and Boosting Housing Search

Confidence to Increase Opportunity Moves for Voucher Holders,” *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 179–211.

Desmond, Matthew, and Kristin L. Perkins. 2016. “Are Landlords Overcharging Housing Voucher Holders?” *City & Community* 15 (2): 137–162. <https://doi.org/10.1111/cico.12180>.

Drury, Margaret, Olson Lee, Michael Springer, and Lorene Yap. 1978. *Lower Income Housing Assistance Program (Section 8): Nationwide Evaluation of the Existing Housing Program*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Ellen, Ingrid Gould, Katherine M. O’Regan, and Katharine W.H. Harwood. 2023. “Advancing Choice in the Housing Choice Voucher Program: Source of Income Protections and Locational Outcomes,” *Housing Policy Debate* 33 (4): 941–962. <https://doi.org/10.1080/10511482.2022.2089196>.

Ellen, Ingrid Gould, Katherine O’Regan, and Sarah Stochak. 2021. *Using HUD Administrative Data to Estimate Success Rates and Search Durations for New Voucher Recipients*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Faber, Jacob William, and Marie-Dumesle Mercier. 2022. “Multidimensional Discrimination in the Online Rental Housing Market: Implications for Families with Young Children,” *Housing Policy Debate*, January 24. <https://doi.org/10.1080/10511482.2021.2010118>.

Finkel, Meryl, and Larry Buron. 2001. *Study on Section 8 Voucher Success Rates: Quantitative Study of Success Rates in Metropolitan Areas*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/Publications/pdf/sec8success.pdf>.

Freeman, Lance. 2012. “The Impact of Source of Income Laws on Voucher Utilization,” *Housing Policy Debate* 22 (2): 297–318.

Freeman, Lance, and Yunjing Li. 2013. “Do Source of Income Anti-Discrimination Laws Facilitate Access to Less Disadvantaged Neighborhoods?” *Housing Studies* 29 (1): 88–107. <https://doi.org/10.1080/02673037.2013.824559>.

Garboden, Philip M.E., Eva Rosen, Stefanie DeLuca, and Kathryn Edin. 2018a. “Taking Stock: What Drives Landlord Participation in the Housing Choice Voucher Program,” *Housing Policy Debate* 28 (6): 979–1003.

Garboden, Philip M.E., Eva Rosen, Meredith Greif, Stefanie DeLuca, and Kathryn Edin. 2018b. *Urban Landlords and the Housing Choice Voucher Program: A Research Report*. Washington, DC: U.S. Department of Housing and Urban Development.

Greene, Solomon, Kriti Ramakrishnan, and Jorge Morales-Burnett. 2020. *State Preemption of Local Housing Protections*. Washington, DC: Urban Institute.

Greenlee, Andrew J. 2014. "More Than Meets the Market? Landlord Agency in the Illinois Housing Choice Voucher Program," *Housing Policy Debate* 24 (3): 500–524. <https://doi.org/10.1080/10511482.2014.913649>.

Greif, Meredith. 2022. *Collateral Damages: Landlords and the Urban Housing Crisis*. New York: Russell Sage Foundation.

———. 2018. "Regulating Landlords: Unintended Consequences for Poor Tenants," *City & Community* 17 (3): 658–674.

Herd, Pamela, and Donald P. Moynihan. 2019. *Administrative Burden: Policymaking by Other Means*. New York: Russell Sage Foundation.

Kanouse, David E. 1980. *Landlord Knowledge and Evaluation of Housing Allowances, St. Joseph County, Indiana, 1975: Housing Assistance Supply Experiment*. Santa Monica, CA: Rand Corporation; U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Kennedy, Stephen D., and Meryl Finkel. 1994. *Section 8 Rental Voucher and Rental Certificate Utilization Study: Final Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Leger, Mireille L., and Stephen D. Kennedy. 1990. *Final Comprehensive Report of the Freestanding Housing Voucher Demonstration Volume I*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Marr, Matthew D. 2005. "Mitigating Apprehension about Section 8 Vouchers: The Positive Role of Housing Specialists in Search and Placement," *Housing Policy Debate* 16 (1): 85–111.

McClure, Kirk. 2013. "Which Metropolitan Areas Work Best for Poverty Deconcentration With Housing Choice Vouchers?" *Cityscape* 15 (3): 209–236.

McClure, Kirk, Alex F. Schwartz, and Lydia B. Taghavi. 2015. "Housing Choice Voucher Location Patterns a Decade Later," *Housing Policy Debate* 25 (2): 215–233. <https://doi.org/10.1080/10511482.2014.921223>.

McMillen, Daniel, and Ruchi Singh. 2023. *Alternative Methods for Calculating Fair Market Rents (FMRs) in Rental Markets with Rapidly Rising Rents*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Moore, M. Kathleen. 2018. *'I don't do vouchers': Experimental evidence of discrimination against housing voucher recipients across fourteen metro areas*. Unpublished working paper.

Owens, Ann. 2017. "How Do People-Based Housing Policies Affect People (and Place)?" *Housing Policy Debate* 27 (2): 266–281. <https://doi.org/10.1080/10511482.2016.1169208>.

Pendall, Rolf. 2000. "Why Voucher and Certificate Users Live in Distressed Neighborhoods," *Housing Policy Debate* 11 (4): 881–910. <https://doi.org/10.1080/10511482.2000.9521391>.

Reina, Vincent, Arthur Acolin, and Raphael W. Bostic. 2019. "Section 8 Vouchers and Rent Limits: Do Small Area Fair Market Rent Limits Increase Access to Opportunity Neighborhoods? An Early Evaluation," *Housing Policy Debate* 29 (1): 44–61. <https://doi.org/10.1080/10511482.2018.1476897>.

Rosen, Eva. 2020. *The Voucher Promise: "Section 8" and the Fate of an American Neighborhood*. Princeton, NJ: Princeton University Press.

———. 2014. "Rigging the Rules of the Game: How Landlords Geographically Sort Low-Income Renters," *City & Community* 13 (4): 310–340.

Rosen, Eva, Philip M.E. Garboden, and Jennifer E. Cossyleon. 2021. "Racial Discrimination in Housing: How Landlords Use Algorithms and Home Visits to Screen Tenants," *American Sociological Review* 86 (5): 787–822.

Rosenblatt, Peter, and Jennifer E. Cossyleon. 2018. "Pushing the Boundaries: Searching for Housing in the Most Segregated Metropolis in America," *City & Community* 17 (1): 87–108. <https://doi.org/10.1111/cico.12288>.

Sharkey, Patrick. 2012. "Residential Mobility and the Reproduction of Unequal Neighborhoods," *Cityscape* 14 (3): 9–32.

Steuerle, C. Eugene, and Eric C. Twombly. 2002. "Vouchers." In *The Tools of Government: A Guide to the New Governance*, edited by L. M. Salamon. New York: Oxford University Press: 445–465.

U.S. Department of Housing and Urban Development (HUD). 2022. *PHAs Recommended to Receive Designation Under Landlord Incentives Cohort of the Moving to Work (MTW) Expansion*. Washington, DC: HUD. <https://www.hud.gov/sites/dfiles/PIH/documents/LandlordIncentivesCohortSelecteesJanuary2022.pdf>.

Varady, David P., Joseph Jaroscak, and Reinout Kleinhans. 2017. "How to Attract More Landlords to the Housing Choice Voucher Program: A Case Study of Landlord Outreach Efforts," *Urban Research & Practice* 10 (2): 143–155. <https://doi.org/10.1080/17535069.2016.1175741>.

Varady, David P., Xinhao Wang, Dugan Murphy, and Andrew Stahlke. 2013. "How Housing Professionals Perceive Effects of the Housing Choice Voucher Program on Suburban Communities," *Cityscape* 15 (3): 105–130.

Zuberi, Anita. 2019. "The Other Side of the Story: Exploring the Experiences of Landlords in Order to Improve Housing Opportunity for Low-Income Households." Working paper. New York: New York University, Furman Center.



# Increasing Residential Opportunity for Housing Choice Voucher Holders: The Importance of Supportive Staff for Families and Landlords

Stefanie DeLuca  
Jacqueline Groccia  
Johns Hopkins University

---

## Abstract

*Despite the potential of the Housing Choice Voucher program to provide residential choice for low-income households, many voucher tenants reside in moderate- to high-poverty, racially segregated neighborhoods. This article uses research on the Baltimore Housing Mobility Program (BHMP) and the Seattle area Creating Moves to Opportunity (CMTO) program to highlight factors that facilitate successful moves to high-opportunity areas. Findings reveal that dedicated staff play a crucial role in administering resources, providing emotional support, and reducing administrative burdens for families, simultaneously removing barriers and increasing confidence about housing searches. Although financial assistance and information are necessary for facilitating residential choice and improving neighborhood quality in mobility programs, they are insufficient without high-quality staff who effectively communicate and support families and landlords. The findings contribute to understanding how to effectively leverage the housing voucher program for neighborhood opportunity and provide evidence that investments in staff who deliver customized services for families and landlords are crucial for the success of housing mobility initiatives.*

## Introduction

All parents hope to achieve the “package deal”—desirable housing near schools that will support their children’s learning, in communities where they can cultivate friendships with a diverse group of neighbors. However, few low-income and non-White families can easily achieve this dream (DeLuca, Darrah-Okike, and Nerenberg, forthcoming; Lareau and Goyette, 2014; Rhodes and Warkentien, 2017). In theory, the Housing Choice Voucher (HCV) program can provide housing assistance for more than 2 million low-income households to help find their “package

deal.” Despite the program’s vast potential for expanding residential choice and improving access to higher-opportunity areas (HUD, 2001), voucher tenants primarily reside in moderate- to high-poverty, racially segregated neighborhoods in low-performing school districts (Devine et al., 2003; Galvez, 2011, 2010; Horn, Ellen, and Schwartz, 2014; McClure, 2008; Owens, 2012). This condition is particularly true for non-White voucher tenants, who are less likely to reside in low-poverty neighborhoods than their White counterparts (Galvez, 2011; 2010; McClure, 2008; Owens, 2012). Myriad factors can help explain why it is difficult for voucher households to achieve higher-opportunity moves through the HCV program, including the limited supply of rental housing in such areas, programmatic barriers and burdens, landlord practices, and competing demands on households’ time that preclude families from conducting the longer housing searches required to move to higher-opportunity areas (DeLuca, 2019; DeLuca, Garboden, and Rosenblatt, 2013; Edin, DeLuca, and Owens, 2012; McCabe, 2023; Pendall, 2000; Rosen, 2014; Varady and Walker, 2003).

Inspired by the groundbreaking Chicago Gautreaux assisted housing mobility program, a number of housing mobility programs have been implemented and studied during the past 25 years, allowing researchers and policymakers to test which improvements to the voucher program can best help voucher tenants lease up in their desired neighborhoods and potentially reduce racial and economic inequality. Rather than review the findings of these programs, which has been done elsewhere (Briggs and Turner, 2006; Cunningham et al., 2010; McClure, 2010, 2008; Rosenbaum and DeLuca, 2014), this article focuses on those from the Baltimore Housing Mobility Program (BHMP) and the Seattle area Creating Moves to Opportunity (CMTO) program. From these mobility efforts, the authors learned that although the additional financial assistance and information that participants receive in these programs are necessary for increasing housing search success, the key ingredient in both programs is the dedicated staff who administer these resources in ways that remove crucial barriers to housing search success and increase the participants’ feelings of optimism and confidence about their prospects for new housing and communities. For families and landlords, good “customer service,” not only extra funds and time, wins the day. This support allows families to overcome administrative burdens and other difficult aspects of housing searches, and it assuages landlords’ concerns about uncertain tenant and rental payment prospects.

## Literature Review

To understand how the BHMP and CMTO programs directly address the challenges families face when using housing choice vouchers, it is important to briefly review what is known about existing barriers to residential mobility among voucher holders, including landlords’ willingness to accept voucher tenants.

### Barriers to Residential Choice for Voucher Recipients

Despite the promise of housing vouchers for expanding residential choice and opportunity, vouchers can be difficult to use (Rosen, 2020). Voucher success rates vary across public housing authorities (PHAs); in 2019, the estimated national voucher success rate was 61 percent, although, in some large cities it dipped below 50 percent (Ellen, O’Regan, and Stochak, 2021).

Successful lease-up rates are, on average, lower in housing markets that have lower vacancy rates, greater variation in rent prices across neighborhoods, and an older housing stock (Ellen, O'Regan, and Stochak, 2024). In addition, Black and Hispanic voucher holders are less likely to lease up than other voucher recipients in the same housing markets (Ellen, O'Regan, and Stochak, 2024). Across all U.S. metropolitan areas, most voucher-holder families reside in areas with higher proportions of non-White residents, and one-third of them reside in high-poverty neighborhoods (Mazzara and Knudsen, 2019). Although voucher households are less likely to live in mildly or severely distressed neighborhoods compared with non-assisted poor households, voucher households disproportionately live in these areas relative to the general renter household population (Pendall, 2000).

Many factors—some market-based and some specific to the voucher program—limit voucher holders' access to rental housing in low-poverty neighborhoods and constrain their residential choices more broadly. Nationally, there is a shortage of affordable housing, which affects all low-income renter households and disproportionately affects extremely low-income renters of color (Aurand et al., 2021). Zoning and land use regulations shape the affordable housing supply, disproportionately impacting low-income, non-White renters while benefiting homeowners, perpetuating patterns of social and racial stratification (Lens, 2022). In addition, conventional HUD metro-area fair market rent (FMR) calculations for housing voucher subsidy amounts result in more available housing units in lower-income neighborhoods, but fewer units in wealthier neighborhoods fall within payment standards (Rosen, 2020; Schwartz, 2010; Wood, 2014). In some housing markets, voucher recipients face challenges in finding suitable units that meet housing quality inspection standards, further limiting the available supply of housing for voucher households (Rosen, 2014).

The Housing Choice Voucher (HCV) program has additional programmatic features and administrative burdens that hinder voucher recipients' ability to rent housing, particularly in resource-rich neighborhoods. Typically, families have 60–120 days to secure housing (CBPP, 2021). Housing search extensions are not guaranteed, and the time crunch makes some families feel rushed and desperate when the clock starts ticking—especially if they have already experienced one or more rejections from landlords based on credit or other background factors (DeLuca, Garboden, and Rosenblatt, 2013; DeLuca and Sauer, 2024; Garboden and DeLuca, 2013). Some jurisdictions request housing search logs to demonstrate that voucher recipients are taking the housing search seriously in order to grant extensions (McCabe, 2023), and some apartment complexes have their own wait lists. Under these time constraints, families can feel pressured to settle for lower-quality housing or less desirable neighborhoods due to fear of losing the voucher if it goes unused within the specified time window (DeLuca, Garboden, and Rosenblatt, 2013; DeLuca, Wood, and Rosenblatt, 2019; Edin, DeLuca, and Owens, 2012). Given the learning costs and stress experienced by program participants, some voucher recipients remain confused about how the program works, even after informational briefings. For example, some families report confusion about the neighborhoods where they can lease up or assume that landlords in particular neighborhoods can reject voucher holders (Barnes, 2021; Graves, 2016; Marr, 2005). Families who use “the list” of available rental units that PHAs sometimes provide or the [affordablehousing.com](http://affordablehousing.com) (formerly [gosection8.com](http://gosection8.com)) website find that these sources of information are frequently incomplete,

outdated, and show properties primarily concentrated in high-poverty neighborhoods (DeLuca, Garboden, and Rosenblatt, 2013; Gayles and Mathema, 2015; Hess et al., 2023; McCabe, 2023; Rosen, 2014).

Other policy features of the voucher program also shape where tenants lease up. As a result of resource and time constraints faced by staff at many PHAs, agencies face tradeoffs when trying to meet performance standards set by HUD through the Section Eight Management Assessment Program (SEMAP). PHA performance is evaluated largely on administrative metrics such as rent payment calculations, accurate income verification, voucher utilization rate, and waitlist management.<sup>1</sup> Although SEMAP does consider the deconcentration of poverty and housing mobility in its evaluations, these metrics make up a much smaller percentage of overall performance points. Operating with limited resources, PHAs can struggle to assist families in leasing up, particularly with moves to low-poverty neighborhoods, because these searches are more difficult and time consuming. Families who want to exercise broader residential choices, especially households originating in PHAs with a low supply of housing in high-opportunity areas, can request to “port-out” their voucher to transfer to another PHA’s jurisdiction. However, the portability process varies by jurisdiction and is not consistently reliable or streamlined, partly due to the limited resources provided for administering the portability of vouchers (Greenlee, 2011).

In addition, landlord screening practices can circumscribe where low-income, subsidized tenants can secure housing. Although source of income (SOI) protection legislation exists in some areas to protect voucher tenants, some landlords have developed strategies to circumvent these protections (Pashup et al., 2005). Screening practices typically include credit and criminal background checks, income requirements, and residential histories (Garboden, Rosen, Greif, et al., 2018). Landlords can legally use credit scores as a screening tool for prospective tenants, which discriminately impacts low-income Black and Hispanic renters who have higher rates of poor or no credit (CFPB, 2015; Reosti, 2021; Rosen, Garboden, and Cossyleon, 2021). Whereas small landlords in low-income neighborhoods may be more likely to accept tenants with low credit scores or poor rental histories, landlords and large property management companies in low-poverty neighborhoods often have higher income and credit requirements, which can be challenging to meet (McCabe, 2023; Rosen, 2014; Rosen, Garboden, and Cossyleon, 2021). Although outright discrimination by race in the housing market is less prevalent today than it used to be, non-White seekers are shown fewer units on average; when compounded with voucher discrimination and credit checks, this could exacerbate racial inequality in housing and neighborhood location (Cunningham et al., 2018; Santos et al., 2016; Turner et al., 2013).

## Landlord Practices and Precarity

Landlord practices and financial stability also affect the ability of voucher holders to move to high-opportunity neighborhoods. Previous research suggests that PHAs face barriers to recruiting landlords because landlords’ willingness to accept voucher tenants depends on their own financial circumstances and motivations, their perceptions of tenants, and any former experience working

---

<sup>1</sup> *Section 8 Management Assessment Program (SEMAP): Indicators, HUD Verification Methods, and Ratings. 2018. Code of Federal Regulations. Vol. Title 24, Volume 4.* <https://www.govinfo.gov/content/pkg/CFR-2018-title24-vol4/xml/CFR-2018-title24-vol4-part985.xml>.

with PHAs (Cunningham et al., 2018; Garboden, Rosen, Greif, et al., 2018). Although landlords sometimes hold negative attitudes toward voucher recipients or preconceived beliefs about prospective tenants based on their race, number of children, or source of income (Garboden, Rosen, Greif, et al., 2018; Rosen, 2020; Rosen, Garboden, and Cossyleon, 2021), landlords and property owners also commonly struggle to make ends meet or profit from their rental portfolios (Greif, 2022). Local policies, like water bill ordinances that shift financial responsibility from tenants to landlords, can push landlords into debt, and significant financial losses can occur when tenants fail to pay their bills or adhere to noise, property maintenance, or nuisance ordinances (Greif, 2022; Rosen and Garboden, 2020). Such costs can be particularly consequential for small, financially precarious landlords, leading some to opt out of renting altogether (Greif, 2022; Rosen and Garboden, 2020). Furthermore, some landlords end up over-leveraged as a result, falling behind on unit repairs, losing revenue to vacancy and turnover, or making speculative investment decisions (Garboden, 2021; Greif, 2022).

Landlords commonly mention the challenges of the lease-up process for voucher tenants and of working with local housing authorities, even if they have never leased to a voucher holder tenant (Garboden, Rosen, Greif, et al., 2018; Greenlee, 2014; Greif, 2022). Landlord attitudes toward the housing voucher program are shaped in part by their perceptions of the program's housing quality standards and unit inspection processes (Garboden, Rosen, Greif, et al., 2018; Greenlee, 2014; Greif, 2022). Unit standards and inspections, although designed to protect voucher tenants, are often seen as burdensome by landlords, primarily due to the perceived inconsistency of inspection standards and schedules and the length of time it takes to complete inspections, which can result in longer unit vacancies and potential loss of rental income (Cossyleon, Garboden, and DeLuca, 2020; Greenlee, 2014; Greif, 2022). For some landlords, the cost of making necessary repairs to ensure that units pass inspection is not economically viable (Garboden, 2021; Greif, 2022). This combination of perceived financial burdens, bureaucratic delays, and prejudice toward prospective voucher tenants contributes to the reluctance of some landlords to participate in the housing voucher program (Garboden, Rosen, Greif, et al., 2018; Greif, 2022; Rosen, 2014).

The guarantees of voucher payments are attractive for landlords in low-income areas who have consistently had trouble with market tenants paying rent (Rosen, 2014). However, for landlords who can reasonably expect to secure consistently paying market tenants, the guarantees of the voucher program may not outweigh the real or perceived burdens of working with the housing authority and voucher tenants (Cossyleon, Garboden, and DeLuca, 2020). FMRs are typically calculated at the 40th percentile rent of a standard quality unit within a given metropolitan area or county, and they determine payment standards for the voucher program.<sup>2</sup> FMR calculations can disincentivize landlords in higher-income neighborhoods because they can reasonably expect a market tenant to pay a higher rent than they would receive through the voucher program's payment standards. However, in low-income neighborhoods, FMR calculations may allow landlords to receive and negotiate higher rent payments through the voucher program than they could expect from market tenants in that area (Rosen, 2014). These policy features can contribute to the concentration of voucher-holder tenants in lower-income areas.

---

<sup>2</sup> *Fair Market Rents for Existing Housing: Methodology*. 2016. Code of Federal Regulations. Vol. Title 24. <https://www.law.cornell.edu/cfr/text/24/888.113>.

## Background On Mobility Programs

Starting in 1976, Chicago's Gautreaux program, developed in response to a class action desegregation lawsuit, provided housing vouchers and significant housing support services to Black low-income public housing residents, facilitating residential moves to predominantly White, middle- and upper-income suburbs. In doing so, the program created a natural experiment that shed light on the long-term benefits of moving to opportunity-rich neighborhoods and showed that, with additional resources, the voucher program could expand housing opportunities and create durable change in neighborhood quality and long-term gains in children's earnings and employment (Chyn, Collinson, and Sandler, 2022; DeLuca et al., 2010; Keels et al., 2005; Rubinowitz and Rosenbaum, 2000). Following the success of Gautreaux, the federal Moving to Opportunity (MTO) demonstration was developed as a more rigorous experimental test of the efficacy of housing mobility. MTO tested the impacts of providing families with vouchers to move from distressed public housing developments to low-poverty neighborhoods in five cities (Comey, Popkin, and Franks, 2012; Goering, Feins, and Richardson, 2002). Findings from MTO demonstrated sustained improvements in housing quality, reported feelings of safety, long-term mental and physical health benefits for women and female children, and reductions in medical spending among families that moved to low-poverty neighborhoods (Comey, Popkin, and Franks, 2012; Sanbonmatsu et al., 2011; Pollack et al., 2019; Pollack, Bozzi, et al., 2023). Long-term MTO research showed gains in economic mobility for children who moved at young ages (Chetty et al., 2018). Given the demonstrated benefits of mobility programs and increasing interest in expanding them, it is imperative to understand how best to implement housing mobility services. This article will focus on two recent mobility programs, the Baltimore Housing Mobility Program (BHMP) and the Creating Moves to Opportunity (CMTO) program, which underscore the importance of supportive services for families and landlords in facilitating residential choice.

### The Baltimore Housing Mobility Program

Maryland's Baltimore Housing Mobility Program (BHMP) was launched in 2003. It was developed as part of a settlement remedy in response to *Thompson v. HUD*, a public housing desegregation case filed in 1995 (Engdahl, 2009).<sup>3</sup> The BHMP assists current and former families residing in public housing—and families on the waiting list for public housing or housing vouchers—in moving to private market housing in low-poverty, nonsegregated neighborhoods in the Baltimore metropolitan area (DeLuca and Rosenblatt, 2017; Engdahl, 2009). For the first year of lease up, these housing vouchers were only eligible to be used for units in neighborhoods with less than 30 percent non-White residents, less than 10 percent of residents living in poverty, and where less than 5 percent of all housing units being public housing or HUD-assisted complexes (DeLuca and Rosenblatt, 2017; Engdahl, 2009; Rhodes, Young, and Darrah-Okike, 2023).<sup>4</sup> Administered by a nonprofit organization, the Baltimore Regional Housing Partnership, the BHMP provides an array of services to assist tenants in leasing up in low-poverty neighborhoods, including pre- and

---

<sup>3</sup> After the final case settlement in 2012, these criteria were broadened to include families residing in highly segregated neighborhoods in Baltimore City, in which Black residents comprise 75 percent or more of the population (see [brhp.org](https://brhp.org)).

<sup>4</sup> After the final case settlement, the requirement for a 1-year lease in eligible neighborhoods was extended to 2 years. In addition, in 2015, the BHMP revised the neighborhood criteria to broaden the eligibility by including community housing, census, and school data.

post-move counseling, as well as landlord outreach and relationship building. Through counseling, the program provides families with a range of services, including financial literacy workshops, landlord-tenant mediation, one-on-one meetings, neighborhood tours, and workshops relating to educational and employment opportunities in their new neighborhoods.<sup>5</sup> The BHMP has helped more than 5,900 families search for and find housing in higher-opportunity neighborhoods across the central Maryland region.

Families participating in the BHMP have moved from very disadvantaged and segregated neighborhoods to low-poverty and more racially integrated neighborhoods in high-performing school districts with fewer poor students and more qualified teachers (DeLuca, Rhodes, and Garboden, 2016; DeLuca and Rosenblatt, 2017). Most families remained in lower-poverty neighborhoods, even after subsequent moves. Previous research has shown that up to 10 years after their initial move, BHMP participants' neighborhoods had a mean poverty rate of 10.4 percent compared with 30.3 percent in their baseline neighborhoods (DeLuca and Rosenblatt, 2017). Recent research has also shown health benefits to children who moved with the BHMP, including significant reductions in the odds of asthma exacerbation after moving (Pollack et al., 2023). Findings from in-depth interviews with a stratified random sample of BHMP families suggest that, although financial assistance and housing search services were important features of the program, the emotional support and respect families received from BHMP counselors also contributed to their successful experiences (DeLuca and Rosenblatt, 2017). These results, along with other findings on the importance of landlord recruitment, helped inform the CMTO program.

## **Creating Moves to Opportunity**

The Creating Moves to Opportunity (CMTO) program was an experimental housing mobility intervention implemented by the Seattle and King County Housing Authorities (SHA and KCHA) in 2018 to reduce barriers for housing voucher recipients to move to high-opportunity areas (see Bergman et al., 2024, and Bigelow, 2021, for more details on CMTO). The program was informed by existing evidence on previous housing mobility programs, such as the BHMP, and insights from PHA staff nationwide (Bigelow, 2021). CMTO provided a bundle of services to new voucher recipients in the treatment group, including customized housing search assistance, landlord engagement, and short-term financial assistance to facilitate moves to high-opportunity areas. Although the CMTO program provided incentives and additional support for treatment group families to lease up in high-opportunity areas, all families participating in CMTO received a housing voucher and could decide to use them in any neighborhood, making it distinct from programs like MTO and the BHMP. High-opportunity areas were identified as census tracts with historical rates of upward mobility in Seattle and King County, as identified in the Opportunity Atlas.<sup>6</sup> Families were eligible to participate if they had at least one child under the age of 15.

Staff from a local nonprofit organization administered housing search resources, including informational sessions, one-on-one meetings, landlord outreach, and financial assistance for moving costs. CMTO was very successful in helping families move to higher-opportunity areas:

---

<sup>5</sup> For additional information on the program, see <https://brhp.org/>.

<sup>6</sup> The Opportunity Atlas is a publicly available tool ([opportunityatlas.org](https://opportunityatlas.org)) that uses anonymized tax and Census data to provide estimates of adult economic outcomes based on where individuals grow up (see Chetty et al., 2018).

53 percent of the families in the treatment group successfully leased up in high-opportunity neighborhoods, compared with 15 percent in the control group (Bergman et al., 2024). Three years after the initial lease up, most families remained in high-opportunity neighborhoods (Bergman et al., 2024).<sup>7</sup>

## The Importance of Navigators

### Family-Facing Services

Previous research has shown that households attempting to use housing vouchers face competing demands on their time, making the longer search processes required for moves into high-opportunity neighborhoods more challenging. Working parents commonly juggle multiple jobs while attending school and lack access to adequate childcare or transportation, making it difficult to conduct housing searches within the prescribed time limits, let alone in unfamiliar or distant high-opportunity neighborhoods (DeLuca, Garboden, and Rosenblatt, 2013; DeLuca, Wood, and Rosenblatt, 2019; Edin, DeLuca, and Owens, 2012). For some voucher holders, this complicated housing search may be their first time trying to secure independent housing in the private rental market, and some families—despite desiring moves to low-poverty areas with high-performing school districts—may not be familiar with high-opportunity neighborhoods, meaning they may not consider these areas an option (DeLuca, Garboden, and Rosenblatt, 2013). Frequent denials due to credit or income also consume time on the voucher clock, making communicating with landlords burdensome and emotionally difficult.

In the context of these challenges, families struggle to use their vouchers to secure any housing at all—let alone, for example, housing in high-performing school districts. However, the BHMP and CMTO programs show that does not have to be the case. Both programs achieved housing search success for low-income renters, many of whom were non-White, through dedicated staff who delivered services with effective communication, reduced administrative burdens, built relationships with landlords, and administered supplemental financial assistance to help voucher families lease up in high-opportunity neighborhoods. Staff in the BHMP (usually called “counselors”) and CMTO (called “navigators”) addressed many of the psychological costs of housing searches in higher-opportunity areas by providing consistent, high-quality communication throughout the search and lease-up process and by supporting families to learn the skills necessary for longer searches. Specifically, CMTO navigators tailored the degree of support and communication they provided to voucher families based on each family’s needs and preferences (Bergman et al., 2024; DeLuca, Katz, and Oppenheimer, 2023). Although some families needed more emotional support and coaching throughout the housing search, especially those who had experienced negative or demoralizing interactions with social service agencies in the past, others preferred to receive lighter-touch help, like unit recommendations, to efficiently target their independent searches. Nikki, a Black mother from King County, Washington, shared her initial excitement about her housing prospects with CMTO: “I didn’t think [my voucher] was real until I really met with somebody from [CMTO], and they looked in my soul and said, ‘Hey, you got this.’”

---

<sup>7</sup> Conditional on leasing up and continuing to hold a voucher as of 2022, in 2019, 63.5 percent of treatment families lived in an opportunity area. In 2022, 58.6 percent of treatment families lived in opportunity areas (Bergman et al., 2024).



She had needed sustained help during a housing search that took longer than she had hoped, and Nikki experienced several rejections because of her credit score. She said she “felt defeated,” but her CMTO navigator stayed the course and said, “Don’t lose hope’...and when I signed my lease, and I told [CMTO navigator], ‘Oh, I got the place,’ she is like, ‘Oh, my god, I’m so happy, I know you have been like going crazy.’ I said, ‘I have, but you stuck with me in all my craziness.’ They were a big support system for real.”

The ability of navigators to personalize their services and tailor their support to each family’s needs bolstered the families’ confidence and agency in their housing searches; program staff were there when families needed their support, but they also allowed families to control their housing searches. As a result, families felt included and respected throughout the process (DeLuca, Katz, and Oppenheimer, 2023). The BHMP also tailored pre-move counseling to each family’s needs; some families had longer pre-move preparation timelines to repair their credit scores, work on their budgeting and savings, and become “voucher-ready” (Engdahl, 2009). In doing so, BHMP counselors helped relieve families’ fears or doubts during the housing search, particularly when navigating moves to unfamiliar neighborhoods (Darrah and DeLuca, 2014; Engdahl, 2009). As a result, BHMP and CMTO program staff helped increase families’ confidence and optimism about their searches in opportunity neighborhoods. As Lisa, a mother who moved through the BHMP, recounted, the program made her excited about getting the house she wanted: “When [the program] came along and gave the opportunity and everything, I’m like, ‘I’m going to take this...I’m going to get that house. That is my house.’ ...[The program staff] gave me a realtor to help me and everything.” In addition, some BHMP services continued 21 months post-lease up to assist with families’ transitions to new neighborhoods, which included post-move visits, ensuring that children were enrolled in their new schools, resolving challenges with landlords, employment counseling, and specialized second-move counseling for families seeking to move with their voucher after their initial lease term ended (DeLuca and Rosenblatt, 2017; Engdahl, 2009).

Through customized one-on-one support, housing mobility staff reduced the learning and compliance costs that families typically face in the voucher program. Counselors and navigators helped prepare families and create realistic timelines and plans by beginning services prior to voucher issuance (DeLuca, Katz, and Oppenheimer, 2023; Engdahl, 2009). At times, they provided transportation assistance to tour units and neighborhoods, which facilitated easier access to unfamiliar neighborhoods for families without access to reliable transportation. Many of the parents interviewed in Baltimore expressed how important the neighborhood tours and transportation were for their housing searches (DeLuca and Rosenblatt, 2017). For BHMP participants, several additional in-depth group workshops also helped parents expect more from their prospective moves and learn about the quality of school amenities in these different neighborhoods (Engdahl, 2009). In CMTO, navigators met one-on-one with families to introduce opportunity neighborhoods, demonstrate what amenities they offer, and discuss how they fit with families’ preferences and plans (Bergman et al., 2024; DeLuca, Katz, and Oppenheimer, 2023). In doing so, both programs directly enabled families to collaborate with program staff and drive their housing searches. They also encouraged families to find housing in desired neighborhoods with quality schools rather than settling for any available unit.

Another factor undergirding housing search success was the credit and rental history assistance offered by both programs through tools such as pre-move credit counseling (e.g., credit checks, tips for improving credit scores), putting together rental resumes, and assistance with addressing past evictions. These supports helped families become aware of and reduce possible barriers to leasing up, particularly in opportunity neighborhoods where landlords may have higher thresholds (DeLuca, Katz, and Oppenheimer, 2023; Engdahl, 2009). Freckles, a mother who moved her family with the support of the BHMP, shared, “You have to do your research first...I signed to the workshops and stuff. It was [a] real good opportunity. They’d say, ‘Okay, we can help you...help you with your credit.’ They taught me so much stuff. My score increased ‘cause I had some things on my credit that didn’t belong. My score’s [now] like 600–700 [range]. And I’ve been maintaining it.”

In both programs, participants reported increased confidence in approaching landlords and submitting rental applications. Lakeisha, a Black mother in Seattle, described how her CMTO navigators helped her land her new apartment by brokering some of the conversation with the landlord. “I could call her for anything...like, I did the searching for the place on the Craigslist, and then I came out to see the lady [who owned the place], and then [my CMTO navigator] put [in a] vouch into [the landlord], Well, this is the CMTO, oh, giving her a chance an opportunity, this is her.’ She helped me represent myself to the landlord, and they agreed. So it was really nice. And then [the] CMTO, they paid my move-in deposit, my application fee, so it was a real—just like a big blessing when I first got this.” Through this personalized support, staff helped families overcome some of the psychological costs associated with the voucher program, in which repeated or past denials for credit, source of income, or perceived racial discrimination can be mentally taxing and demoralizing, and approaching landlords can be intimidating (DeLuca, Katz, and Oppenheimer, 2023; DeLuca and Sauer, 2024).

Program staff also streamlined paperwork throughout the housing search and lease-up process by assisting with rental applications, unit inspections, and lease signing. They also communicated with landlords about the guarantees of the respective programs, which reduced “bandwidth tax” and administrative burdens for voucher holders. Both programs also provided specific, up-to-date unit referrals in opportunity neighborhoods with landlords willing to participate in the voucher program. Receiving recommendations vetted by program staff streamlined a typically overwhelming housing search for families without concentrating voucher recipients in particular neighborhoods. This streamlining was particularly helpful for families juggling work, childcare, and education, families who had never searched for their own housing before, and families who were mostly unfamiliar with the voucher program and opportunity neighborhoods. By offering short-term financial assistance, both programs also alleviated the up-front costs and barriers to securing housing, especially for units in opportunity neighborhoods, which typically required higher security deposits.

### **Landlord-Facing Services**

Communication and customer service also matter to landlords, whose willingness to accept voucher tenants is vital to the program. BHMP and CMTO staff engaged directly and deeply with prospective landlords in opportunity areas, conducting significant outreach and building personal connections and relationships one landlord or property manager at a time. Both programs

engaged with landlords by marketing the programs locally and educating landlords on the voucher program and the benefits of the mobility services, creating a network of participating landlords. These connections helped bridge gaps in communication for tenants, landlords, and PHAs and streamlined the cumbersome processes of housing inspections and paperwork typically associated with the HCV program. Similar to family-facing services, effective communication, administrative relief, and financial assistance fostered landlord participation.

Consistent, automatically paid rent is the most obvious benefit of the voucher program for landlords. Failure to collect rent is commonly cited as a main challenge to landlords, particularly landlords in low-income areas with more rent-burdened households (Rosen, 2014; Greif, 2022). Beyond the program's consistent payment of rent, it goes a long way when mobility program staff reach out personally to landlords and communicate information about steady payments, higher rent payments than traditional FMRs would allow, and the benefits of having long-term, quality tenants who are already screened by the PHAs and therefore are prepared for private market renting through workshops and meetings (Cossyleon, Garboden, and DeLuca, 2020). Through phone calls and individual meetings with landlords, staff in both programs helped increase the salience of the voucher benefits and the program resources while dispelling common fears or stereotypes about voucher tenants. As Wendy, a White mother in Seattle, explained, the CMTO program staff helped landlords see voucher holders in a new light: "And I think it's really changed a lot of landlords' minds too because they have gotten more educated, I think, that we're not bad people just because we need help, we are just, we need help, so everybody needs help."

The BHMP staff also explained that landlords could screen potential tenants and apply their standard lease agreement, even if those tenants participated in the BHMP (Engdahl, 2009). In addition, program staff highlighted that voucher holders risk losing their vouchers if they violate the program rules and noted that cases of property damage among program tenants were rare (Cossyleon, Garboden, and DeLuca, 2020). Staff also clarified that although the program does not advocate for tenants if tenants violate their lease agreement, program staff can serve as a mediator if issues arise (Engdahl, 2009). Creating rapport and clear messaging in this way prevented landlords from operating based on false assumptions about how local programs work.

Across both programs, landlords expressed that accessible communication and streamlined paperwork, inspections, and rental payments improved their experiences and desire to accept tenants in the future (Bergman et al., 2024; Cossyleon, Garboden, and DeLuca, 2020). In the BHMP, the program had a dedicated Landlord Relations Specialist who acted as the primary contact for all landlords participating in the program, which reduced any bureaucratic obstacles of not knowing who to reach out to or how quickly they would respond (Cossyleon, Garboden, and DeLuca, 2020). CMTO's housing navigators played a similar role by performing landlord outreach, being easy to contact, serving as a mediator between landlords and the housing authority, and at times responding to property or landlord-specific changes in vacancies, rental amounts, and preferred payment methods (Bergman et al., 2024). Housing navigators in the CMTO program also provided expedited unit inspections and paperwork processes, and the BHMP only required unit inspections every 2 years rather than annually to reduce the burden on landlords (Bergman et al., 2024; Cossyleon, Garboden, and DeLuca, 2020). BHMP staff ensured that units requiring

reinspection were done quickly so tenants could move in without unnecessary delays following repairs (Cossyleon, Garboden, and DeLuca, 2020). Interviews with a subset of participating landlords in the CMTO program shed light on the importance of one-on-one personalized connections with navigators, who reduced administrative burdens and customized their services to specific landlord or property management needs (Bergman et al., 2024; Bigelow, 2021).

Similar to the family-facing services, the financial assistance provided to landlords helped support their participation. For some tenants, CMTO used the financial assistance to increase security deposits in the face of spotty credit or eviction records; a nonprofit organization in Baltimore provided security deposit assistance for BHMP families. CMTO navigators also shared with landlords that they were entitled to damage guarantee funds should repairs be necessary upon ending a lease.

## Conclusion

In recent years, average rents in professionally managed buildings have increased approximately 24 percent, and the supply of affordable units has steadily declined (JCHS, 2024). As such, the number of cost-burdened renters has reached a 20-year high, with large metropolitan areas having higher increases in rates of cost-burdened renters due to higher rents on average (JCHS, 2024). Unquestionably, more housing vouchers are needed, and although recent legislative proposals such as The Choice in Affordable Housing Act of 2021 and the Family Stability and Opportunity Vouchers Act of 2023 are promising, much work remains to be done. In addition to providing stable housing and other benefits for families, housing vouchers can also be a powerful tool for increasing upward mobility and decreasing neighborhood inequality. Decades of research has shown that neighborhoods matter for children, and, thanks to programs like BHMP and CMTO, there is now evidence for how to use vouchers to help expand families' residential choices with additional mobility assistance. Encouragingly, Congress has funded a significant expansion of housing mobility programs through the Community Choice Demonstration (CCD), which provides and tests mobility services across eight new study sites. As recently as November 2023, HUD has also awarded funds for seven more PHAs to provide housing mobility services for their voucher households (HUD, 2023b). In addition, in 2022, HUD published a strategic plan for improving SEMAP, which included strengthening PHAs' incentives for expanding housing options for voucher holders (HUD, 2023a).

As support for mobility programs increases, it is important to emphasize what it takes for these programs to truly provide housing and neighborhood opportunities. Certainly, more SOI protection and enforcement are needed, and small-area fair market rent policies (which allow voucher holders to afford higher rent in more affluent communities) show promise for increasing the neighborhood quality of voucher households (Collinson and Ganong, 2018).<sup>8</sup> However, as argued in this article, the successful housing and neighborhood outcomes of participants from the BHMP and CMTO programs demonstrate that—in addition to financial supplements and administrative streamlining—investments in high-quality staff who deliver services through effective communication, customized support, and streamlined administration of program resources to families and landlords go a long

---

<sup>8</sup> Recently, in 2022, HUD announced a new policy that will allow up-to-date private rent data to be used in calculating FMRs. This policy aims to reflect local housing costs amid recent rises in market rents (Mazzara and Gartland, 2022).

way in facilitating residential choice and increasing neighborhood quality and long-term stability in higher-opportunity areas. Nonetheless, providing counseling and navigator services comes with added costs (Bergman et al., 2024; Rinzler et al., 2015), and the programs are still learning how best to hire staff and whether to keep mobility support services in-house. However, the cost of mobility services is offset by the long-term gains in children's income and improved health (Bergman et al., 2024; Pollack et al., 2023; Rinzler et al., 2015). The scalability of such programs and additional lessons on what makes navigators work well across different PHAs and cities will become clearer following HUD's CCD, which builds on findings from the BHMP and CMTO (Lubell et al., 2023). This demonstration will provide insights on whether expanded mobility programs can be similarly successful across cities with different PHAs and HCV program administration, housing market conditions, and implementation of mobility services (Lubell et al., 2023). In addition, the CCD will test different treatment arms of comprehensive mobility-related services and selected mobility-related services to find effective yet cost-efficient service bundles. Although there is much to learn from the CCD about scaling and site-specific implementation, the demonstrated potential benefits of housing mobility for families and children are significant, as are the dignifying and empowering housing searches families experience when they are given real choices about where to live and the resources to execute those choices.<sup>9</sup>

The resources and relationships that mobility staff cultivate improve outcomes for voucher holders because of the support families receive on their end of the housing search and because the programs support landlords. The number of housing vouchers can be increased, but the programs need to ensure that enough property owners are available to provide rental housing for the program. However, this point often goes underappreciated (Garboden, Rosen, DeLuca, et al., 2018; Greif and DeLuca, 2021). For example, although eviction moratoria implemented during the COVID-19 pandemic may have been an important policy tool to keep families housed, these programs may also have had unintended consequences for landlords, who may have become more hesitant to rent to low-income households or to provide affordable housing more generally due to the fears of financial losses.<sup>10</sup> Findings from emergency rental assistance programs during the COVID-19 pandemic demonstrate the emergent challenges of getting landlords to participate in such programs (Reina et al., 2021). As a result, housing policies and programs designed to support and facilitate landlord participation will become even more necessary in the future.

Findings from the successful BHMP and CMTO programs demonstrate that providing information and financial incentives is insufficient to significantly improve HCV households' neighborhood outcomes (Bergman et al., 2024; Schwartz, 2017). Rather, families and landlords need additional customized support from program staff to reduce administrative burdens, overcome uncertainty, and feel optimistic about their housing and tenant prospects; such communication and brokering is a necessary ingredient to overcome the barriers of the voucher program (see also Marr, 2005 for

---

<sup>9</sup> It is also important to recognize the importance of place-based revitalization strategies in supporting choice for families by improving the conditions of their current communities. At this time, however, evidence is still limited on successful place-based policy recommendations (Rosenblatt and DeLuca, 2017).

<sup>10</sup> The extent to which eviction moratoria may have affected landlords' willingness to rent to low-income tenants remains to be seen. However, Reosti et al. (2023) report that small landlords had cash flow problems during the pandemic, and Greif (2022) shows that in the face of financial losses, some small landlords eventually forfeit or sell their properties, which in turn can reduce the availability of affordable housing supply. Thus, this issue is an important area for continued research.

similar conclusions in Los Angeles) and those of the private rental market (Edin, DeLuca, and Owens, 2012).<sup>11</sup> Although the authors examined the benefits of providing personal assistance or high-touch services for the residential outcomes of participants in housing mobility interventions, these lessons extend beyond housing policy and add to a growing literature showing that “high-touch” personalized assistance and service delivery can also increase program take-up and efficacy for interventions aimed at transitions to postsecondary education, educational attainment, labor market success, and economic self-sufficiency (Gallego, Oreopoulos, and Spencer, 2023; Katz et al., 2022).

## Acknowledgments

The authors are grateful to the Annie E. Casey Foundation, Bill & Melinda Gates Foundation, Chan-Zuckerberg Initiative, Furman Institute Center for Real Estate and Urban Policy, Johns Hopkins Krieger School of Arts and Sciences, MacArthur Foundation, Overdeck Foundation, Surgo Foundation, United States Department of Housing and Urban Development, William T. Grant Foundation, Harvard University, and National Science Foundation (SES-1124004) for supporting the fieldwork and analysis that made this article possible. They also thank the dozens of collaborators, interviewers, coders, and research assistants (all cited in relevant papers listed) who helped create this body of research. They also thank the partners who implemented the programs discussed in this article, including the Seattle and King County Housing Authorities, the Baltimore Regional Housing Partnership, and Metropolitan Baltimore Quadel, and the hundreds of families and landlords who were generous enough to participate in our research and teach us. Additionally, the authors thank the anonymous reviewers, Kendall Dorland, Geoffrey Mason, and Sydney Sauer, for their feedback on earlier drafts.

## Authors

Stefanie DeLuca is the James S. Coleman Professor of Sociology and Social Policy at Johns Hopkins University. Jacqueline Groccia is a doctoral student in sociology at Johns Hopkins University.

## References

Aiken, Claudia, Ingrid Gould Ellen, and Vincent Reina. 2023. “Administrative Burdens in Emergency Rental Assistance Programs,” *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 100–121. <https://doi.org/10.7758/RSF.2023.9.5.05>.

Aurand, Andrew, Dan Emmanuel, Daniel Threet, Ikra Rafi, and Diane Yentel. 2021. *The Gap: A Shortage of Affordable Homes*. Washington, DC: National Low Income Housing Coalition.

---

<sup>11</sup> A growing literature also points to the hurdles created by administrative burdens—including learning, compliance, and psychological costs—for program or policy uptake, successful implementation, and facilitating equitable access (Aiken, Ellen, and Reina, 2023; Herd et al., 2023).

- Barnes, Carolyn Y. 2021. "It Takes a While to Get Used To": The Costs of Redeeming Public Benefits," *Journal of Public Administration Research and Theory* 31 (2): 295–310. <https://doi.org/10.1093/jopart/muaa042>.
- Bergman, Peter, Raj Chetty, Stefanie DeLuca, Nathaniel Hendren, Lawrence F. Katz, and Christopher Palmer. 2024. "Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice," *American Economic Review* 114 (5): 1–58. <https://doi.org/10.3386/w26164>.
- Bigelow, Jonathan. 2021. *Implementing Creating Moves to Opportunity*. MDRC. <https://www.mdrc.org/publication/implementing-creating-moves-opportunity>.
- Briggs, Xavier de Souza, and Margery Austin Turner. 2006. "Assisted Housing Mobility and the Success of Low-Income Minority Families: Lessons for Policy, Practice, and Future Research," *Northwestern Journal of Law and Social Policy* 1 (1): 25–61. <https://doi.org/10.1037/e685592011-001>.
- Center on Budget and Policy Priorities (CBPP). 2021. *Policy Basics: The Housing Choice Voucher Program*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/sites/default/files/atoms/files/PolicyBasics-housing-1-25-13vouch.pdf>.
- Chetty, Raj, John Friedman, Nathaniel Hendren, Maggie Jones, and Sonya Porter. 2018. *The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility*. NBER Working Paper No. 25147. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w25147>.
- Chyn, Eric, Robert Collinson, and Danielle Sandler. 2022. *The Long-Run Effects of Residential Racial Desegregation Programs: Evidence from Gautreaux*. Working paper.
- Collinson, Robert and Peter Ganong. 2018. "How Do Changes in Housing Voucher Design Affect Rent and Neighborhood Quality?" *American Economic Journal: Economic Policy* 10 (2): 62–89. <https://doi.org/10.1257/pol.20150176>.
- Comey, Jennifer, Susan J. Popkin, and Kaitlin Franks. 2012. "MTO: A Successful Housing Intervention," *Cityscape* 14: 87–108.
- Consumer Financial Protection Bureau (CFPB). 2015. *Data Point: Credit Invisibles*. Consumer Financial Protection Bureau.
- Cossyleon, Jennifer E., Philip M.E. Garboden, and Stefanie DeLuca. 2020. *Recruiting Opportunity Landlords: Lessons from Landlords in Maryland*. Poverty & Race Research Action Council (PRRAC).
- Cunningham, Mary, Martha Galvez, Claudia L. Aranda, Rob Santos, Doug Wissoker, Alyse Oneto, Rob Pitingolo, and James Crawford. 2018. *A Pilot Study of Landlord Acceptance of Housing Choice Vouchers*. Washington, DC: U.S. Department of Housing and Urban Development.
- Cunningham, Mary, Molly Scott, Chris Narducci, Sam Hall, Alexandra Stanczyk, Jennifer O'Neil, and Martha Galvez. 2010. *Improving Neighborhood Location Outcomes in the Housing Choice Voucher Program: A Scan of Mobility Assistance Programs*. What Works Collaborative.

Darrah, Jennifer, and Stefanie DeLuca. 2014. "Living Here Has Changed My Whole Perspective': How Escaping Inner-City Poverty Shapes Neighborhood and Housing Choice," *Journal of Policy Analysis and Management* 33 (2): 350–84. <https://doi.org/10.1002/pam.21758>.

DeLuca, Stefanie. 2019. "Residential Mobility and Neighborhood Change in Chicago," *Housing Policy Debate* 29 (1): 213–16. <https://doi.org/10.1080/10511482.2018.1524447>.

DeLuca, Stefanie, Jennifer Darrah-Okike, and Kiara Nerenberg. Forthcoming. "I Just Had to Go With It Once I Got There.' Inequality, Housing, and School Re-Optimization," *City & Community*.

DeLuca, Stefanie, Greg J. Duncan, Micere Keels, and Ruby M. Mendenhall. 2010. "Gautreaux Mothers and Their Children: An Update," *Housing Policy Debate* 20 (1): 7–25. <https://doi.org/10.1080/10511481003599829>.

DeLuca, Stefanie, Philip M.E. Garboden, and Peter Rosenblatt. 2013. "Segregating Shelter: How Housing Policies Shape the Residential Locations of Low-Income Minority Families," *The ANNALS of the American Academy of Political and Social Science* 647 (1): 268–99. <https://doi.org/10.1177/0002716213479310>.

DeLuca, Stefanie, Lawrence F. Katz, and Sarah C. Oppenheimer. 2023. "When Someone Cares About You, It's Priceless': Reducing Administrative Burdens and Boosting Housing Search Confidence to Increase Opportunity Moves for Voucher Holders," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 179–211. <https://doi.org/10.7758/RSF.2023.9.5.08>.

DeLuca, Stefanie, Anna Rhodes, and Philip M.E. Garboden. 2016. *How Housing Policy Can Boost Educational Opportunity*. Abell Foundation.

DeLuca, Stefanie, and Peter Rosenblatt. 2017. "Walking Away From The Wire: Housing Mobility and Neighborhood Opportunity in Baltimore," *Housing Policy Debate* 27 (4): 519–46. <https://doi.org/10.1080/10511482.2017.1282884>.

DeLuca, Stefanie, and Sydney Sauer. 2024. How Commensuration Leads to Stratification: An Analysis of Low-Income Renters' Credit Scoring Experiences. Working paper.

DeLuca, Stefanie, Holly Wood, and Peter Rosenblatt. 2019. "Why Poor Families Move (And Where They Go): Reactive Mobility and Residential Decisions," *City & Community* 18 (2): 556–93. <https://doi.org/10.1111/cico.12386>.

Devine, Deborah J., Robert W. Gray, Lester Rubin, and Lydia B. Taghavi. 2003. *Housing Choice Voucher Location Patterns: Implications For Participant And Neighborhood Welfare*. U.S. Department of Housing and Urban Development.

Edin, Kathryn, Stefanie DeLuca, and Ann Owens. 2012. "Constrained Compliance: Solving the Puzzle of MTO's Lease-Up Rates and Why Mobility Matters," *Cityscape* 14 (2): 181–94.

Ellen, Ingrid Gould, Katherine O'Regan, and Sarah Stochak. 2024. "Race, Space, and Take Up: Explaining Housing Voucher Lease-up Rates," *Journal of Housing Economics* 63 (March): 101980. <https://doi.org/10.1016/j.jhe.2023.101980>.



———. 2021. *Using HUD Administrative Data to Estimate Success Rates and Search Durations for New Voucher Recipients*. Washington, DC: U.S. Department of Housing and Urban Development.

Engdahl, Lora. 2009. *New Homes, New Neighborhoods, New Schools: A Progress Report on the Baltimore Housing Mobility Program*. Poverty and Race Research Action Council and The Baltimore Regional Housing Campaign.

Gallego, Francisco, Philip Oreopoulos, and Noah Spencer. 2023. The Importance of a Helping Hand in Education and in Life. NBER Working Paper No. 31706. Cambridge, MA: National Bureau of Economic Research.

Galvez, Martha M. 2011. “Defining ‘Choice’ in the Housing Choice Voucher Program: The Role of Market Constraints and Household Preferences in Location Outcomes.” Ph.D. diss., New York: New York University.

———. 2010. *What Do We Know About Housing Choice Voucher Program Location Outcomes? A Review of Recent Literature*. What Works Collaborative. <https://www.proquest.com/docview/879440027/abstract/71DE3772A78F43E3PQ/1>.

Garboden, Philip M.E. 2021. “Amateur Real Estate Investing,” *Journal of Urban Affairs* 45 (6): 1081–1100. <https://doi.org/10.1080/07352166.2021.1904781>.

Garboden, Philip M.E., and Stefanie DeLuca. 2013. “‘I Came Straight Here’: How Poor Families Search for Housing.” Presented at the Annual Meeting of the Association for Public Policy Analysis and Management, Washington, DC.

Garboden, Philip M.E., Eva Rosen, Stefanie DeLuca, and Kathryn Edin. 2018. “Taking Stock: What Drives Landlord Participation in the Housing Choice Voucher Program,” *Housing Policy Debate* 28 (6): 979–1003. <https://doi.org/10.1080/10511482.2018.1502202>.

Garboden, Philip M.E., Eva Rosen, Meredith Greif, Stefanie DeLuca, and Kathryn Edin. 2018. *Urban Landlords and the Housing Choice Voucher Program—A Research Report*. U.S. Department of Housing and Urban Development.

Gayles, Ebony, and Silva Mathema. 2015. *Constraining Choice: The Role of Online Apartment Listing Services in the Housing Choice Voucher Program*. Poverty & Race Research Action Council (PRRAC).

Goering, John, Judith D. Feins, and Todd M. Richardson. 2002. “A Cross-Site Analysis of Initial Moving to Opportunity Demonstration Results,” *Journal of Housing Research* 13 (1): 1–30.

Graves, Erin. 2016. “Rooms for Improvement: A Qualitative Metasynthesis of the Housing Choice Voucher Program,” *Housing Policy Debate* 26 (2): 346–61. <https://doi.org/10.1080/10511482.2015.1072573>.

Greenlee, Andrew J. 2014. “More Than Meets the Market? Landlord Agency in the Illinois Housing Choice Voucher Program,” *Housing Policy Debate* 24 (3): 500–524. <https://doi.org/10.1080/10511482.2014.913649>.

———. 2011. “A Different Lens: Administrative Perspectives on Portability in Illinois’ Housing Choice Voucher Program,” *Housing Policy Debate* 21 (3): 377–403. <https://doi.org/10.1080/10511482.2011.591409>.

Greif, Meredith J. 2022. *Collateral Damages: Landlords and the Urban Housing Crisis*. The American Sociological Association Rose Series in Sociology. New York, NY: Russell Sage Foundation.

Greif, Meredith J., and Stefanie DeLuca. 2021. “Renters and Landlords Alike Need More Federal Assistance to Survive the Pandemic.” *The Baltimore Sun*, February 3. <https://www.baltimoresun.com/2021/02/03/renters-and-landlords-alike-need-more-federal-assistance-to-survive-the-pandemic-commentary/>.

Herd, Pamela, Hilary Hoynes, Jamila Michener, and Donald Moynihan. 2023. “Introduction: Administrative Burden as a Mechanism of Inequality in Policy Implementation,” *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 1–30. <https://doi.org/10.7758/RSF.2023.9.5.01>.

Hess, Chris, Rebecca J. Walter, Ian Kennedy, Arthur Acolin, Alex Ramiller, and Kyle Crowder. 2023. “Segmented Information, Segregated Outcomes: Housing Affordability and Neighborhood Representation on a Voucher-Focused Online Housing Platform and Three Mainstream Alternatives,” *Housing Policy Debate* 33 (6): 1511–35. <https://doi.org/10.1080/10511482.2022.2133548>.

Horn, Keren Mertens, Ingrid Gould Ellen, and Amy Ellen Schwartz. 2014. “Do Housing Choice Voucher Holders Live Near Good Schools?” *Journal of Housing Economics* 23 (March): 28–40. <https://doi.org/10.1016/j.jhe.2013.11.005>.

Joint Center for Housing Studies (JCHS). 2024. *America’s Rental Housing 2024*. Cambridge, MA: Harvard University.

Katz, Lawrence F., Jonathan Roth, Richard Hendra, and Kelsey Schaberg. 2022. “Why Do Sectoral Employment Programs Work? Lessons from WorkAdvance,” *Journal of Labor Economics* 40 (S1): S249–91. <https://doi.org/10.1086/717932>.

Keels, Micere, Greg J. Duncan, Stefanie DeLuca, Ruby Mendenhall, and James Rosenbaum. 2005. “Fifteen Years Later: Can Residential Mobility Programs Provide a Long-Term Escape from Neighborhood Segregation, Crime, and Poverty?” *Demography* 42 (1): 51–73.

Lareau, Annette, and Kimberly Goyette. 2014. *Choosing Homes, Choosing Schools*. New York, NY: Russell Sage Foundation.

Lens, Michael C. 2022. “Zoning, Land Use, and the Reproduction of Urban Inequality,” *Annual Review of Sociology* 48 (1): 421–39. <https://doi.org/10.1146/annurev-soc-030420-122027>.

Lubell, Jeffrey, Daniel Gubits, Debi McInnis, Lianne Fisman, Laura Paulen, and Diane Levy. 2023. *Research Design, Data Collection, and Analysis Plan (RDDCAP): Evaluation of the Community Choice Demonstration*. Washington DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Marr, Matthew D. 2005. "Mitigating Apprehension about Section 8 Vouchers: The Positive Role of Housing Specialists in Search and Placement," *Housing Policy Debate* 16 (1): 85–111. <https://doi.org/10.1080/10511482.2005.9521535>.

Mazzara, Alicia, and Erik Gartland. 2022. "New HUD 'Fair Market Rent' Policy Can Help Local Agencies Reduce Homelessness and Expand Housing Choice." Washington, DC: Center on Budget and Policy Priorities.

Mazzara, Alicia, and Brian Knudsen. 2019. *Where Families With Children Use Housing Vouchers: A Comparative Look at the 50 Largest Metropolitan Areas*. Washington, DC: Center on Budget and Policy Priorities.

McCabe, Brian J. 2023. "Ready to Rent: Administrative Decisions and Poverty Governance in the Housing Choice Voucher Program," *American Sociological Review* 88 (1): 86–113. <https://doi.org/10.1177/00031224221131798>.

McClure, Kirk. 2010. "The Prospects for Guiding Housing Choice Voucher Households to High-Opportunity Neighborhoods," *Cityscape* 12 (3): 101–22.

———. 2008. "Deconcentrating Poverty With Housing Programs," *Journal of the American Planning Association* 74 (1): 90–99. <https://doi.org/10.1080/01944360701730165>.

Owens, Ann. 2012. "Neighborhoods on the Rise: A Typology of Neighborhoods Experiencing Socioeconomic Ascent," *City & Community* 11 (4): 345–69. <https://doi.org/10.1111/j.1540-6040.2012.01412.x>.

Pashup, Jennifer, Kathryn Edin, Greg J. Duncan, and Karen Burke. 2005. "Participation in a Residential Mobility Program from the Client's Perspective: Findings from Gautreaux Two," *Housing Policy Debate* 16 (3–4): 361–92. <https://doi.org/10.1080/10511482.2005.9521550>.

Pendall, Rolf. 2000. "Why Voucher and Certificate Users Live in Distressed Neighborhoods," *Housing Policy Debate* 11 (4): 881–910. <https://doi.org/10.1080/10511482.2000.9521391>.

Pollack, Craig Evan, Amanda L. Blackford, Shawn Du, Stefanie DeLuca, Rachel L. J. Thornton, and Bradley Herring. 2019. "Association of Receipt of a Housing Voucher With Subsequent Hospital Utilization and Spending," *JAMA* 322 (21): 2115–24. <https://doi.org/10.1001/jama.2019.17432>.

Pollack, Craig Evan, Debra G. Bozzi, Amanda L. Blackford, Stefanie DeLuca, Rachel L.J. Thornton, and Bradley Herring. 2023. "Using the Moving to Opportunity Experiment to Investigate the Long-Term Impact of Neighborhoods on Healthcare Use by Specific Clinical Conditions and Type of Service," *Housing Policy Debate* 33 (1): 269–89. <https://doi.org/10.1080/10511482.2021.1951804>.

Pollack, Craig Evan, Laken C. Roberts, Roger D. Peng, Pete Cimboric, David Judy, Susan Balcer-Whaley, Torie Grant, et al. 2023. "Association of a Housing Mobility Program With Childhood Asthma Symptoms and Exacerbations," *JAMA* 329 (19): 1671. <https://doi.org/10.1001/jama.2023.6488>.

Reina, Vincent, Claudia Aiken, Julia Verbrugge, Ingrid Gould Ellen, Tyler Hauptert, Andrew Aurand, and Rebecca Yae. 2021. *COVID-19 Emergency Rental Assistance: Analysis of a National Survey of Programs*. National Low Income Housing Coalition, The Housing Initiative at Penn, NYU Furman Center.

Reosti, Anna. 2021. "The Costs of Seeking Shelter for Renters With Discrediting Background Records," *City & Community* 20 (3): 235–59.

Reosti, Anna, Chris Hess, Courtney Allen, and Kyle Crowder. 2023. 'Mom-and-Pop' Landlords and Regulatory Backlash: A Seattle Case Study. SocArXiv (November 17). <https://osf.io/preprints/socarxiv/x7pq8>.

Rhodes, Anna, and Siri Warkentien. 2017. "Unwrapping the Suburban 'Package Deal': Race, Class, and School Access," *American Educational Research Association* 54 (1): 168S-189S.

Rhodes, Anna, Allison Young, and Jennifer Darrah-Okike. 2023. "I Thought This Was a Ghost Neighborhood': How Youth Respond to Neighborhood Change," *Social Problems* (April): 1–16. <https://doi.org/10.1093/socpro/spad015>.

Rinzler, Dan, Philip Tegeler, Mary Cunningham, and Craig Pollack. 2015. Leveraging the Power of Place: Using Pay for Success to Support Housing Mobility. Working paper 2015–04. Community Development Investment Center, San Francisco, CA: Federal Reserve Bank of San Francisco.

Rosen, Eva. 2020. *The Voucher Promise: "Section 8" Housing and the Fate of an American Neighborhood*. Princeton Oxford: Princeton University Press.

———. 2014. "Rigging the Rules of the Game: How Landlords Geographically Sort Low-Income Renters," *City & Community* 13 (4): 310–40. <https://doi.org/10.1111/cico.12087>.

Rosen, Eva, Philip M.E. Garboden, and Jennifer E. Cossyleon. 2021. "Racial Discrimination in Housing: How Landlords Use Algorithms and Home Visits to Screen Tenants," *American Sociological Review* 86 (5): 787–822. <https://doi.org/10.1177/00031224211029618>.

Rosen, Eva, and Philip M.E. Garboden. 2020. "Landlord Paternalism: Housing the Poor with a Velvet Glove," *Social Problems* 0: 1–22.

Rosenbaum, James E., and Stefanie DeLuca. 2014. Does Changing Neighborhoods Change Lives? The Chicago Gautreaux Housing Program and Recent Mobility Programs. Working paper WP-09-01. Northwestern University, Institute for Policy Research. <https://www.ipr.northwestern.edu/documents/working-papers/2009/IPR-WP-09-01.pdf>.

Rosenblatt, Peter, and Stefanie DeLuca. 2017. "What Happened in Sandtown-Winchester? Understanding the Impacts of a Comprehensive Community Initiative," *Urban Affairs Review* 53 (3): 463–94. <https://doi.org/10.1177/1078087415617852>.

Rubinowitz, Leonard S., and James E. Rosenbaum. 2000. *Crossing the Class and Color Lines: From Public Housing to White Suburbia*. Chicago: University of Chicago Press.

Sanbonmatsu, Lisa, Jens Ludwig, Lawrence F. Katz, Lisa A. Gennetian, Greg J. Duncan, Ronald C. Kessler, Emma Adam, Thomas W. McDade, and Stacy Tessler Lindau. 2011. *Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation*. Washington, DC: U.S. Department of Housing and Urban Development.

Santos, Robert, Margery Austin Turner, Laudan Aron, and Brent Howell. 2016. *Future Directions for Research on Discrimination Against Families with Children in Rental Housing Markets*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.ssrn.com/abstract=3055326>.

Schwartz, Alex F. 2017. "Future Prospects for Public Housing in the United States: Lessons From the Rental Assistance Demonstration Program," *Housing Policy Debate* 27 (5): 789–806. <https://doi.org/10.1080/10511482.2017.1287113>.

———. 2010. *Housing Policy in the United States*, 2nd ed. New York, NY: Routledge.

Turner, Margery Austin, Rob Santos, Diane K. Levy, Doug Wissoker, Claudia Aranda, and Rob Pitingolo. 2013. *Housing Discrimination Against Racial and Ethnic Minorities 2012*. Washington, DC: U.S. Department of Housing and Urban Development.

U.S. Department of Housing and Urban Development (HUD). 2023a. *HUD Could Improve Its Process for Evaluating the Performance of Public Housing Agencies' Housing Choice Voucher Programs*. 2023. Washington, DC: U.S. Department of Housing and Urban Development, HUD's Section Eight Management Assessment Program.

———. 2023b. "HUD Awards \$25 Million to Public Housing Agencies to Expand More Housing Choices for Families." Press release. Washington, DC: U.S. Department of Housing and Urban Development. [https://www.hud.gov/press/press\\_releases\\_media\\_advisories/HUD\\_No\\_23\\_263](https://www.hud.gov/press/press_releases_media_advisories/HUD_No_23_263).

———. 2001. "Chapter 2: Expanding Housing Opportunities and Mobility." In *Voucher Program Guidebook: Housing Choice*, edited by Quadel Consulting Corporation. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.nhlp.org/wp-content/uploads/HUD-Housing-Choice-Voucher-Guidebook-7420.10G-Apr.-2001-5.pdf>.

Varady, David P., and Carole C. Walker. 2003. "Housing Vouchers and Residential Mobility," *Journal of Planning Literature* 18 (1): 17–30. <https://doi.org/10.1177/0885412203254333>.

Wood, Holly. 2014. "When Only a House Makes a Home: How Home Selection Matters in the Residential Mobility Decisions of Lower-Income, Inner-City African American Families," *Social Service Review* 88 (2): 264–94. <https://doi.org/10.1086/676407>.



# Discrimination Against Voucher Holders and the Laws to Prevent It: Reviewing the Evidence on Source of Income Discrimination

**Martha Galvez**

NYU Furman Center Housing Solutions Lab

**Brian Knudsen**

U.S. Department of Housing and Urban Development

*The views expressed in this article are those of the authors and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. Government.*

---

## Abstract

*Landlord discrimination against housing choice voucher holders, commonly referred to as source of income (SOI) discrimination, can undermine the benefits that vouchers offer low-income households—many of whom wait years for vouchers. Evidence of SOI discrimination grew during the past 2 decades, as the number of states and localities that passed ordinances to prevent discrimination also grew. More than one-half of all voucher households are in jurisdictions that these laws cover. This article assesses the current evidence on SOI discrimination and the effectiveness of state and local antidiscrimination laws intended to improve landlord takeup of vouchers. The authors then provide recommendations for research to document and describe voucher discrimination, understand effective enforcement of SOI protections, and identify ways to influence landlord decisions. Future research should continue to document the extent of voucher discrimination in jurisdictions without SOI laws, and evolving discriminatory practices where SOI protections are in place. To test and scale innovative enforcement and approaches to influencing landlord behavior, more research and experimentation reflecting different market contexts are also needed to understand why landlords reject vouchers.*

## Introduction

The Housing Choice Voucher (HCV) program is the nation's largest rental assistance program, serving about 2.3 million low-income households annually through more than 2,400 public housing authorities (PHAs). Voucher holders search for housing on the private market, and landlords play a pivotal role in the program's success. A persistent question of interest to researchers and policymakers is how voucher holders' experiences searching for housing—and especially their encounters with landlords—contribute to where they live, how long it takes for them to find housing, and their ability to sign leases with their vouchers. During the past 2 decades, evidence of landlord discrimination against voucher holders grew—as did the number of state and local laws intended to prevent discrimination. A body of work has also emerged examining the effect of source of income (SOI) antidiscrimination laws on voucher holders' housing search outcomes.

To identify priorities for future research, this article assesses the research related to landlord discrimination against HCV holders and the effectiveness of SOI laws.<sup>1</sup> The first section briefly describes some of the benefits and challenges of voucher use. The second section summarizes the evidence on landlord discrimination and the effectiveness of SOI laws. The article concludes with recommendations for future research on landlord discrimination and enforcement of existing laws, highlighting different research priorities for places with and without SOI protections in place.

## The Benefits and Challenges of Voucher Use

A well-established body of evidence has emerged since the mid-1990s documenting the benefits of HCV use to low-income people. A full literature review is beyond the scope of this article, but the research finds that vouchers help low-income people improve their housing stability, including reduced risk of homelessness, lower rent burdens, less frequent moves, and less crowded housing (Ellen, 2020; Gubits et al., 2016; Mills et al., 2006).<sup>2</sup> Research on programs like the Moving to Opportunity experiment, which couple vouchers with supports to help families move from high-poverty areas to lower-poverty, opportunity-rich neighborhoods, have also found improved long-term health, educational, and economic outcomes for adults and young children (Chetty, Hendren, and Katz, 2016; Ellen, 2020).

However, the challenges that voucher holders face finding housing, particularly in lower-poverty, opportunity-rich neighborhoods, are also well documented. Relatively few families use their vouchers to rent units in low-poverty neighborhoods (Devine et al., 2003; McClure, Schwartz, and Taghavi, 2015; Pendall, 2000). Many voucher holders—often after spending years on PHA waiting lists—are unable to find housing with their vouchers (Acosta and Gartland, 2021; Ellen, O'Regan,

---

<sup>1</sup> This article builds on discussions from a February 2023 convening, Future Directions for Source of Income Discrimination Research, co-hosted by the NYU Furman Center, the Poverty & Race Research Action Council, and the Urban Institute. More than 50 housing researchers, policymakers, advocates, and practitioners gathered to assess the current body of evidence on SOI discrimination, identify knowledge gaps, and consider new research questions (Galvez et al., 2023; Teles et al., 2023).

<sup>2</sup> Ellen (2020) reviews much of the extant literature on the benefits of vouchers. See Gubits et al. (2016) for findings on voucher assistance and improvements for families experiencing homelessness in housing stability, health, family stability, food security, and educational stability.



and Stochak, 2024; Finkel and Buron, 2001). An early U.S. Department of Housing and Urban Development (HUD) study on voucher program success rates (calculated as the share of voucher recipients who successfully sign leases within the search times PHAs allow) found that about 69 percent of a sample of 2,600 voucher holders from 48 PHAs were able to use their vouchers in 2000 (Finkel and Buron, 2001). A more recent and comprehensive analysis of HUD administrative data found that success rates declined to about 60 percent by 2019, using data from 85,000 voucher holders at 433 PHAs (Ellen, O'Regan, and Stochak, 2024).

## **Understanding HCV Location Outcomes and Success Rates**

Researchers have explored various explanations for low success rates and the consistent concentration of voucher households in higher-poverty areas (Ellen, 2020). For example, search times are longer and success rates are lower in tighter housing markets with lower vacancy rates (Ellen, O'Regan, and Stochak, 2024; Finkel and Buron, 2001). Research suggests that landlords in more desirable, higher-rent areas have more demand from unsubsidized tenants and that they avoid vouchers, whereas landlords with units in lower-rent areas and weaker housing markets may specialize in voucher holders and actively recruit voucher applicants (Besbris et al., 2022; Garboden et al., 2018; Rosen, 2020). By contrast, more precise, neighborhood-level approaches to setting local voucher payment standards (Small Area Fair Market Rents, or SAFMRs) can lead to more voucher households living in lower-poverty, higher-rent neighborhoods compared with having rent payments set at the metropolitan area level (Aliprantis, Martin, and Phillips, 2019; Collinson and Ganong, 2018; Dastrup, Finkel, and Ellen, 2019; Reina, Acolin, and Bostic, 2019).<sup>3</sup>

Qualitative research has focused on the housing search process, including the household preferences and constraints that may influence voucher holders' housing options and decisions. These studies conclude that voucher holders do not have strong preferences to remain in higher-poverty, low-opportunity areas with their vouchers but instead face a number of barriers to finding housing and moving to low-poverty areas (Bergman et al., 2023; DeLuca, 2014; Galvez, 2010; Graves, 2016). Voucher holders may have limited access to information about housing and neighborhood options, limited financial resources or transportation to support searches, and face time pressures when searching for housing with vouchers (DeLuca, Garboden, and Rosenblatt, 2013; Graves, 2016; Pendall et al., 2014). Voucher holders often balance multiple household needs and priorities when searching for housing in the context of long voucher waiting lists and short search windows. As a result, they may focus on unit characteristics over location and opt for readily available units instead of risking longer and possibly unsuccessful searches (DeLuca, Garboden, and Rosenblatt, 2013; Rosenblatt and DeLuca, 2012).

## **What Do We Know About Landlord Discrimination Against Voucher Holders?**

In addition to market and household-level factors that can affect move outcomes, researchers and practitioners frequently note that many landlords simply refuse to rent to voucher applicants

---

<sup>3</sup> In October 2023, HUD expanded the number of metropolitan areas required to adopt SAFMRs from 24 to 65, which will cover approximately 45 percent of all voucher holders nationally (Greene and McCabe, 2023).

(Graves, 2016). Voucher holders are not a protected class under the federal Fair Housing Act, and although the number of jurisdictions with SOI protections has expanded, landlords in most places can still legally refuse to accept vouchers. However, voucher holders tend to be disproportionately Black or Latino, and housing advocates, researchers, and practitioners often note that landlords who refuse to accept vouchers may use voucher status as a proxy for race or other characteristics that are protected from discrimination under the Fair Housing Act—such as disability or having children in the household. Voucher holders have reported both racial discrimination during their encounters with landlords and discrimination based on using vouchers (Galvez, 2010; Graves, 2016; Uprety and Scott, 2018).

A review of early research on voucher discrimination found 16 testing studies conducted between 2000 and 2017 that measured how commonly landlords refused vouchers (Cunningham et al., 2018). All found evidence that landlords routinely denied housing to voucher holders—even though most of the studies were conducted in areas with SOI protections. However, these studies spanned nearly 2 decades, tended to have small samples, and varied widely in their market contexts, rigor, methodology, and research goals.<sup>4</sup> Only three of the studies used in-person paired testing—which is considered the most rigorous approach to measuring housing discrimination.<sup>5</sup> In most cases, the early studies did not test representative samples of the voucher-affordable rental housing stock or strictly incorporate local voucher program requirements like PHA payment or occupancy standards to select units or assign background profiles to testers. As a result, this body of evidence left questions unanswered about the scale of discrimination, whether discrimination varied by neighborhood type, or whether existing studies had accurately targeted voucher-affordable units.

In 2018, the results of a HUD-sponsored study of voucher discrimination were released, providing more comprehensive evidence of landlord discrimination in five large metropolitan areas (Cunningham et al., 2018). The Civil Rights Act of 1968 identifies HUD as the lead agency responsible for studying and documenting housing discrimination, and since 1977, the agency has sponsored national or multisite studies rigorously measuring racial and ethnic discrimination—expanding in the 2010s to studies of discrimination against families with children, people with disabilities, same-sex couples, transgender individuals, and voucher holders (Turner and James, 2015).<sup>6</sup>

---

<sup>4</sup> See chapter 2 of Cunningham et al. (2018) for a discussion of studies measuring SOI discrimination in Austin, Texas; Boston, Massachusetts; Chicago, Illinois; Cuyahoga County, Ohio; central Indiana; Montgomery County, Maryland; New Orleans, Louisiana; New York City; Newton, Massachusetts; Seattle, Washington; and Washington, D.C. between 2000 and 2017.

<sup>5</sup> Paired or “audit” housing discrimination testing involves assigning two testers to interact with a housing provider, each with comparable identities and qualifications aside from the characteristic of interest for research—in this case, relying on a voucher to pay a portion of the rent. Each tester contacts a housing provider to ask about a housing unit and documents detailed information about their interactions with the landlord on topics including the availability of a unit, alternative units offered, cost, any financing options, requirements and characteristics of available units, and the application process. With an adequate sample size, it is possible to compare testers’ experiences with landlords and the information provided to identify differential treatment based on the key characteristics of interest (Oh and Yinger, 2015).

<sup>6</sup> For more information about the evolution of housing discrimination research, see the *Cityscape* Housing Discrimination Today symposium articles and HUD’s Housing Discrimination Research online repository of housing discrimination studies (HUD, n.d., 2015).

Designed as a pilot to measure the extent and nature of discrimination and to explore different testing methodologies that HUD might employ in the future, the study conducted more than 4,000 phone and in-person tests with landlords in five metropolitan areas.<sup>7</sup> Whereas only 15 percent of landlords in Washington, D.C. rejected vouchers, 78 percent of landlords in Fort Worth, Texas, did.<sup>8</sup> In every city but Washington, D.C., discrimination was more common in low-poverty neighborhoods (for example, 85 percent of landlords in low-poverty Fort Worth neighborhoods and 82 percent in low-poverty Philadelphia, Pennsylvania, neighborhoods rejected vouchers). Landlords were more likely to accept vouchers in places with SOI protections in place (Washington, D.C.; Newark, New Jersey; and Philadelphia, Pennsylvania) compared with the markets without protections (Los Angeles, California; and Fort Worth, Texas)—although discrimination was still common. Landlord refusal, particularly in places without SOI laws, was explicit and came early in the search process when testers called landlords to ask about advertised units and whether vouchers were accepted. In other cases, landlords who said they accepted vouchers later “ghosted” voucher applicants at scheduled appointments to view units.

Other studies measuring voucher discrimination have followed, using large or multicity samples of rental advertisements scraped from online listing services for e-mail correspondence with landlords or analyzing the language in advertisements. These studies similarly found that landlords commonly denied voucher tenants outright or were less likely to respond to inquiries from voucher holders compared with nonvoucher holders (Aliprantis, Martin, and Phillips, 2019; Hangen and O’Brien, 2022; Moore, 2018; Phillips, 2017). Aliprantis, Martin, and Phillips (2019) found that landlords in higher-cost neighborhoods continued to reject vouchers even when higher payments were offered.<sup>9</sup>

Finally, a coalition of New York City advocates that helps voucher holders find housing analyzed information from landlord interactions with a combination of voucher holders actively searching for housing and with testers (Unlock NYC et al., 2022). They found that ghosting has become more common over time and that landlords applied minimum credit score or income requirements to exclude voucher holders and avoid compliance with New York’s SOI laws (Unlock NYC et al., 2022).

## **Landlord Perceptions of Voucher Holders and the Housing Choice Voucher Program**

Some insights have emerged in recent years about how landlords perceive voucher holders and PHAs, and about landlords’ complex and varied motivations for accepting or refusing vouchers. Using data from interviews with 127 landlords in Baltimore, Maryland; Cleveland, Ohio; and

---

<sup>7</sup> The study conducted an initial round of phone calls to landlords of voucher-affordable units to ask whether they would accept vouchers. Matched-pair phone tests and in-person tests were then conducted with landlords who stated they accepted vouchers to determine if landlords treated voucher holders differently from their nonvoucher-holder counterparts with similar household and background characteristics.

<sup>8</sup> An additional 15 percent of landlords in Washington, D.C., and 10 percent in Philadelphia said that they were unsure of their voucher policy or would only accept vouchers under certain conditions—responses that may reflect indirect discrimination (Cunningham et al., 2018).

<sup>9</sup> However, Aliprantis, Martin, and Phillips (2019) also found that neighborhood-level rent payments in Washington, D.C., did result in more voucher holders moving to lower-poverty, higher-rent areas in the year after the adoption of higher-rent payment standards.

Dallas, Texas—cities without SOI protections at the time—Garboden et al. (2018) described three sets of factors that motivated landlord decisionmaking: financial considerations, including how the voucher payment compares with what they might otherwise receive for units; personal biases toward, or past experiences with, voucher holders; and, particularly for landlords who refuse vouchers, previous negative experience with PHAs and the voucher administrative processes.<sup>10</sup> In Baltimore, Rosen (2020) found that landlords targeted voucher holders for units that were more challenging to rent or in undesirable neighborhoods and that they avoided voucher holders for units and neighborhoods with more demand.

Concerns about administrative burdens for landlords, particularly the physical inspection required of all voucher-subsidized units to ensure they meet HUD's minimum housing quality standards, are common in the literature (Cunningham, 2018; Garboden et al., 2018; HUD, 2019; Zuberi, 2019). Landlords generally described inspections and experiences with PHAs as burdensome, slow, and unpredictable. They also expressed frustrations with a perceived lack of transparency regarding program rules and with PHAs not advocating for landlords when tenant conflicts happened. HUD and others have identified some examples of PHA efforts to improve voucher administration and relationships with landlords, but little is known about how widely PHAs are experimenting with these efforts or the effectiveness of specific reforms.<sup>11</sup>

Although research is clear that racial discrimination in housing persists (Turner et al., 2013), the extant research has yet to disentangle the role of race in voucher discrimination fully. Garboden et al. (2018) found that landlords were racially diverse, and whereas some had negative stereotypes about voucher holders, others felt a kinship with their voucher tenants. In the Garboden et al. (2018) study, refusal to participate in the HCV program was more often attributed to specific past experiences than to assumptions about voucher tenants. Moore (2018) and Phillips' (2017) e-mail correspondence testing found no differences by voucher holders' race in the likelihood that landlords responded to e-mail inquiries about available housing. However, a few early studies from New Orleans, Chicago, and Cuyahoga County did find evidence that landlords were more likely to respond positively to White voucher holders than to Black voucher holders (Cunningham et al., 2018).

## Overview of Source of Income Antidiscrimination Laws

A growing number of states and localities have passed ordinances—usually as part of broader fair housing laws—that bar landlords from turning away rental applicants based on SOI (Greene et al., 2020).<sup>12</sup> Where these protections are in place, landlords cannot reject voucher holder applicants solely based on their use of vouchers. However, they can continue to employ other

---

<sup>10</sup> Maryland passed a law prohibiting SOI discrimination in 2020. See PRRAC (2023a) for details.

<sup>11</sup> See HUD (2019: 7) and Galvez and Oppenheimer (2020) for examples of potential voucher program administrative reforms and PHA efforts to engage landlords.

<sup>12</sup> State and local SOI ordinances typically protect renters from discrimination based on a range of income sources other than wages and salaries, such as alimony and disability insurance benefits. In some cases, these laws may explicitly exclude housing vouchers from the income sources that are protected from discrimination. In others, courts have ruled that vouchers do not meet the definition of income or are not covered because they are not explicitly specified (Greene et al., 2020). This article refers to SOI laws that include protections for voucher holders.

lawful screening criteria applied to other applicants, such as credit scores, rental history, or criminal background requirements.

The Commonwealth of Massachusetts adopted the first law prohibiting discrimination based on SOI in 1971 (Greene et al., 2020; Urban Institute, 2021). A handful of other states and localities also passed laws in the 1970s and 1980s, but the increased pace of implementation in recent years coincides with the growing evidence base and public awareness about SOI discrimination and landlord rejection of vouchers. Research showing discrimination, landlord behavior, or voucher holders' experiences searching for housing can, in some cases, inspire legal protections and enforcement activity. For example, the text of the city of Los Angeles' ordinance summarized findings from the 2018 HUD study showing high voucher denial rates (Cunningham et al., 2018).<sup>13</sup> In Austin, Texas, an audit study of voucher-eligible units helped motivate a local SOI law, whereas in Portland, Oregon, investigative reporting on voucher location outcomes helped propel a state-level SOI law (Galvez et al., 2020).<sup>14</sup>

An analysis of all SOI laws effective as of September 2022 estimated that more than 57 percent of voucher households (1.3 million) are in the 16 states, the District of Columbia, 21 counties, and 85 local jurisdictions these ordinances cover (Knudsen, 2022). The share of voucher families that SOI laws cover has increased over time, from roughly 34 to more than 57 percent—largely because of the recent passing of seven new state laws between 2018 and 2022, including New York and California, which have the nation's largest voucher programs (Bell, Sard, and Koepnick, 2018; Greene et al., 2020; Knudsen, 2022).<sup>15</sup> Voucher households in jurisdictions with SOI laws are more likely to be headed by a Hispanic or Latino person, less likely to be headed by a Black person, less likely to have children, and more likely to be headed by a person aged 62 or older than voucher households in locations without ordinances (Greene et al., 2020).

SOI laws vary widely in their features, with about 70 percent of laws explicitly protecting voucher holders instead of including broader protections (Greene et al., 2020). Greene et al. (2020) code laws according to certain enforcement mechanisms, such as civil damages, criminal penalties, or whether they incorporate incentives for landlords, and found that SOI laws have gotten “stronger” over time.<sup>16</sup> For example, a case study of Oregon's 2013 SOI law found that lawmakers directly addressed local landlord concerns about the HCV program by including a damage mitigation fund and language requiring PHAs to conform to timely inspections and rental payments (Galvez et al., 2020). Incorporating these components was instrumental in gaining landlord support for the state-level SOI law. However, it is unclear how commonly lawmakers tailor state or local laws in response to landlord concerns.

---

<sup>13</sup> Los Angeles Municipal Code. Protecting Affordable Housing Opportunities for Persons Using Rental Assistance or Other Sources of Income as Payment, Chapter IV, Section 1, Article 5.6.1. [https://clkrep.lacity.org/online/docs/2018/18-0462\\_ord\\_draft\\_06-06-2019.pdf](https://clkrep.lacity.org/online/docs/2018/18-0462_ord_draft_06-06-2019.pdf).

<sup>14</sup> A subsequently passed state law preempted the SOI law passed in Austin (Galvez et al., 2020).

<sup>15</sup> State laws were passed (or protections of voucher holders were added to existing laws) in California (2019), Colorado (2021), Illinois (2022), Maryland (2020), New York (2019), Rhode Island (2021), and Virginia (2020).

<sup>16</sup> Greene et al. (2020) distinguish laws by their incorporation of “enforcement features” (language regarding who can bring complaints and types of available relief), “exception features” (language defining loopholes and specific exceptions), and “incentive features” (intended to encourage landlord participation in the voucher program).

## How Effective Are Source of Income Laws?

As laws have become more common, questions persist as to their effect on voucher program outcomes. Overall, the extant research suggests that SOI laws result in modestly improved outcomes for voucher holders, measured by PHA-level voucher utilization rates, the characteristics of the neighborhoods where voucher holders live, and voucher program success rates. Some research suggests that improvements in neighborhood quality lag several years after laws are passed.

In two early studies using the same sample of jurisdictions, Freeman (2012) and Freeman and Li (2014) looked at the effects of the passage of SOI laws in 16 jurisdictions where 48 housing authorities operated. Using a difference-in-difference analysis, Freeman (2012) found that voucher utilization rates increased between 7 and 12 percentage points after the adoption of SOI laws compared with adjacent jurisdictions without SOI laws. However, voucher utilization rates are an agency-level performance measure, capturing the share of PHAs' total authorized housing assistance that households were using in a given month or year—and are not a direct measure of voucher holders' success finding housing. Freeman (2012) noted that housing authorities could potentially achieve higher utilization rates by carefully managing how they issue new vouchers, with consideration to typical turnover and success rates. Freeman and Li (2014) later looked at voucher holders' neighborhood locations as a more direct reflection of housing search outcomes and found that the adoption of SOI laws led to modest reductions in neighborhood poverty rates and in the share of neighborhood residents who are people of color relative to comparison PHAs in jurisdictions without SOI protections.

Ellen, O'Regan, and Harwood (2022) compared the origin and destination neighborhoods of existing voucher households that moved before and after the enactment of SOI protections. Applying difference-in-difference regressions to HUD administrative data, they found that voucher movers experienced more upwardly mobile moves (greater reductions in census tract poverty) after the adoption of SOI laws than movers in similar jurisdictions that did not adopt laws. These effects became statistically significant 3 years after the passage of the laws. As they noted, this approach allowed them to capture individual household gains from the laws by showing the locational effects for a fixed set of families. They also found that voucher holders who started in the highest poverty tracts experienced larger improvements in tract poverty rate after the SOI law enactment.

Teles and Su (2022) used a panel event study design and similarly found that shares of voucher-assisted households with children moving into low-poverty neighborhoods increased after the enactment of SOI laws. In their analysis, it took about 5 years for this effect to be statistically significant. The improvements were larger for Black families compared with White or Latino families. Teles and Su (2022) found no evidence that “stronger” laws using Greene et al.'s (2020) classification system were more effective than “weaker” laws at achieving better location outcomes. Teles and Su (2022) suggest that more attention should be paid to how SOI laws are implemented and enforced and how enforcement may change over time.

Finally, Ellen, O'Regan, and Stochak's (2024) descriptive work on success rates shows suggestive evidence that SOI laws are associated with higher success rates, particularly for Black and Latino voucher holders. Using HUD administrative data, they found that success rates were modestly

higher in states with SOI protections, with the benefits more pronounced for Black and Latino voucher holders.

## **Priorities for Future Research to Measure and Understand Voucher Discrimination**

The existing evidence on the incidence and nature of SOI discrimination varies based on local context, particularly whether SOI protections are already in place. Voucher discrimination is common and explicit in jurisdictions without SOI laws and persists—if less overtly—where legal protections are in place. Where SOI protections exist, discriminatory tactics appear to be evolving, as previous research on other forms of housing discrimination predicts (Turner et al., 2013; Yinger and Oh, 2015). However, research has barely addressed how SOI discrimination is changing or whether SOI protections are less effective because landlords find ways to work around them (Stewart et al., 2023).

Evidence is also clear that in-person paired testing is a powerful tool to document nuanced discrimination measures in various contexts. However, this type of testing is expensive and methodologically challenging, and many jurisdictions lack the capacity to field large-scale efforts. As a result, in-person paired testing tends to be reserved for larger cities and includes small samples. However, e-mail correspondence studies or phone audits with landlords of voucher-affordable units can also be carefully executed along with larger samples of tests to capture straightforward measures of voucher acceptance that offer compelling evidence to inform policy and practice.

Future research needs also vary by local context. In jurisdictions without SOI protections, discrimination is likely more explicit, and research should prioritize testing that produces local or regional voucher denial rates using rigorous but relatively lighter-touch methods. Samples of rental advertisements for voucher-affordable units can be carefully selected for e-mail correspondence studies or “one-sided” phone studies that involve a single tester asking landlords if they accept vouchers. These studies can be designed to measure how responses or denials vary by neighborhood poverty rate, school quality, housing characteristics, voucher payment standards, or voucher holder characteristics. A national phone or correspondence study could test representative samples of voucher-affordable units in multiple housing markets that lack SOI protections to assess whether high denial rates like those found in Los Angeles or Fort Worth extend to other metropolitan areas.<sup>17</sup> The results could help motivate new state and local SOI protections and programs that engage landlords or support voucher holders’ housing searches. In-person or paired testing for research purposes, alternatively, is likely best reserved for places with SOI protections already in place and more detailed information is needed for enforcement or to capture more nuanced forms or patterns of discrimination.

---

<sup>17</sup> Cunningham et al. (2018) similarly recommended phone tests in a large sample of housing markets followed by in-person paired tests in a subset of places where discrimination appears to be more nuanced and would benefit from detailed measures of differential treatment.

Beyond testing, other approaches offer opportunities to gather timely information about the incidence of discrimination in a variety of contexts to inform both research and practice. For example, HUD, researchers, or individual PHAs can use HCV program administrative data to analyze voucher locations and housing search outcomes to identify entry points for research. Analysis of local location patterns (also discussed in the following section as useful for enforcement) can identify neighborhoods where voucher holders are underrepresented and testing or other research would be useful to understand landlords' behavior. HCV program success rates can similarly help identify jurisdictions to prioritize for testing and qualitative research with landlords and program participants to understand what drives voucher holders' housing search challenges. Success rates can also help identify jurisdictions where subgroups of voucher holders—Black or Latino households, families who have members with disabilities, or young children—have lower success rates or longer searches and may differentially experience discrimination.

Finally, more research is needed to understand how discrimination plays out among different types of landlords and in different market environments. For example, larger property owners or management companies may have more capacity to work with PHAs and navigate delays from inspection or other administrative processes. They may also have more capacity to steer voucher holders to certain properties or neighborhoods. Smaller “mom and pop” property holders may be unaware of antidiscrimination laws, unfamiliar with how vouchers work, and less able to meet housing quality standards or navigate PHA bureaucracies. Landlords in weaker markets or more distressed neighborhoods are likely more inclined to work with PHAs, whereas landlords in stronger markets or more expensive neighborhoods may need more incentives to consider voucher tenants. Interventions to mitigate discrimination in places with and without SOI laws—whether through landlord education or more effective enforcement—would benefit from a better understanding of how different landlords perceive and respond to vouchers in different market contexts and the interventions needed to maximize landlord participation. Collecting self-reported information directly from voucher holders about their exchanges with landlords, brokers, and property managers as they search for housing using phone app- or survey-based approaches should be tested as a way to capture detailed information about landlord discrimination in real time to inform programmatic responses or more rigorous testing.

### **What Do We Need to Know About Enforcing Source of Income Protections?**

The evidence that SOI laws help improve voucher program outcomes—particularly locational outcomes and for Black and Latino voucher holders—is growing and increasingly compelling. However, positive effects emerge years after laws are passed, and the absence of meaningful enforcement in many jurisdictions may limit their effectiveness. Greene et al. (2020) noted that laws may be ineffective without meaningful enforcement. Ellen, O'Regan, and Stochak (2024) posited that SOI discrimination laws coupled with enforcement could help boost lease-up rates and reduce racial disparities in voucher program outcomes.

In practice, very little is known about enforcing SOI laws. Housing discrimination enforcement—including for source of income—is largely complaint driven, relying on individual reports of perceived discrimination to spur investigations and later litigation if evidence of discrimination is found. Identifying landlords violating the law is left to people navigating challenging housing



searches, often under intense pressure to find housing before their vouchers expire. Reporting perceived discrimination is unlikely to improve an individual voucher holder's immediate housing prospects, and ghosting or indirect discriminatory practices may leave some voucher holders unsure if what they experience is, in fact, SOI discrimination. No comprehensive data have been gathered on the frequency of voucher discrimination complaints across jurisdictions, enforcement actions, or documenting the scale of testing or other resources dedicated to SOI enforcement in a given jurisdiction.<sup>18</sup>

How state or local agencies may be experimenting with new enforcement approaches is also unclear. In-person paired testing in response to discrimination allegations has been a fair housing enforcement approach of choice since the 1950s (Yinger and Oh, 2015). However, housing searches, tenant application and selection processes, and data collection tools have all changed dramatically over time. E-mail correspondence testing, scraping and analyzing online advertisements for available housing, collecting data from voucher holders' real-time housing searches, or the creative use of local voucher program data could all help capture information about discriminatory patterns and practices. HUD administrative data combined with local property-level information might also be used to identify where voucher holders are underrepresented, given the availability of voucher-affordable rental housing, providing an entry point for audit testing. At least one jurisdiction—New York State—is actively adopting this approach.<sup>19</sup>

More research is needed to identify and rigorously test these types of enforcement innovations. Reliable data on enforcement activity—for example, through a survey or scan of state and local agencies and resources dedicated to enforcement in the 16 states and the District of Columbia with SOI laws in place as of 2023—could be a useful starting point. Data on enforcement practices could help refine analyses of the effectiveness of laws and highlight new research questions.

Finally, more research is needed to explore whether better education or messaging about the HCV program and SOI protections might improve landlord compliance with laws and increase voucher program participation. Garboden et al. (2018) found that landlords—even those actively renting to voucher holders—commonly misunderstood PHA practices, and it seems likely that some may also misunderstand their requirements under state or local laws. The Office of the New York State Attorney General reports similar insights from their work with landlords and is exploring ways to change discriminatory behavior by changing how it communicates with the public about vouchers, SOI laws, and enforcement (Meltzer, 2023). Improved messaging and education about public housing authority practices, HCV participants, the goals of the HCV program, and SOI laws could help both retain landlords already renting to voucher holders and attract new landlords who have not yet considered voucher applicants. A recent experiment in Pittsburgh, Pennsylvania, found that landlords who received information about the importance of housing stability and access to high-

---

<sup>18</sup> One exception is the National Fair Housing Alliance's annual Fair Housing Trends report, which compiles data on discrimination complaints from federal agencies and a subset of nonprofit fair housing or legal aid organizations and includes some limited information about SOI complaints. The report documented 2,395 SOI complaints filed in 2022 (Augustine et al., 2023).

<sup>19</sup> For more information, see Melzer (2023) and materials from the 9th National Conference on Housing Mobility (PRRAC, 2023b). The Office of the New York State Attorney General identified high-opportunity neighborhoods and used local property data to identify landlords in those neighborhoods. It then enlisted a partner to conduct targeted in-person paired testing of landlords in opportunity areas.

opportunity neighborhoods were significantly more likely to say they would accept vouchers than a control group that did not receive the “asset-based” messaging (Ortiz, Felon, and Yousef, 2024). More research is needed to test how different messaging and outreach approaches might affect voucher acceptance and voucher holders’ search outcomes.

## Conclusion

Improving HCV program outcomes requires ongoing investment in research at the local and national levels to understand where, why, and how landlords refuse vouchers. These efforts are vital to refine the various carrots and sticks needed to minimize discrimination and increase landlord participation. Existing research suggests that SOI laws improve voucher holder outcomes and sheds light on how discrimination manifests in places with and without SOI protections. The research also highlights that landlord motivations for accepting or rejecting vouchers vary widely in different market contexts and that SOI protections alone are not enough to eliminate discrimination and ensure voucher holders have access to a wide range of housing options. Future research should build on this work by continuing to document the extent of discrimination in jurisdictions without SOI laws and evolving discriminatory practices where SOI protections are in place. Additional research and experimentation by enforcement agencies are also needed to test and scale innovative approaches to identifying landlords who violate SOI laws, and to changing landlord behavior through messaging and education.

## Acknowledgments

The authors thank the participants and co-organizers of the 2023 Future Directions for Source of Income Discrimination Research convening for their insights and tireless commitment to pursuing housing equity. We also thank Claudia Aiken, Kathy O’Regan, Daniel Teles, Mary Cunningham, Solomon Greene, and two anonymous reviewers for their thoughtful feedback on early drafts of this article. Their input greatly improved our work.

## Authors

Martha Galvez is the executive director of the Housing Solutions Lab at the NYU Furman Center. Brian Knudsen is a social science analyst in the Office of Policy Development and Research at the U.S. Department of Housing and Urban Development

## References

Acosta, Sonya, and Erik Gartland. 2021. *Families Wait Years for Housing Vouchers Due to Inadequate Funding: Expanding Program Would Reduce Hardship, Improve Equity*. Washington, DC: Center on Budget and Policy Priorities.

Aliprantis, Dionissi, Hal Martin, and David Phillips. 2019. Can Landlords Be Paid to Stop Avoiding Voucher Tenants? Working paper 19-02. Cleveland, OH: Federal Reserve Bank of Cleveland. <https://doi.org/10.26509/frbc-wp-201902>.

Augustine, Lindsay, Nikitra Bailey, Sherrill Frost Brown, Scott Chang, Lisa Rice, and Morgan Williams. 2023. *2023 Fair Housing Trends Report: Advancing a Blueprint for Equity*. Washington, DC: National Fair Housing Alliance.

Bell, Alison, Barbara Sard, and Becky Koepnick. 2018. *Prohibiting Discrimination Against Renters Using Housing Vouchers Improves Results*. Washington, DC: Center on Budget and Policy Priorities.

Bergman, Peter, Raj Chetty, Stefanie DeLuca, Nathaniel Hendren, Lawrence F. Katz, and Christopher Palmer. 2023. "Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice," *American Economic Review*.

Besbris, Max, John Kuk, Ann Owens, and Ariela Schachter. 2022. "Predatory Inclusion in the Market for Rental Housing: A Multicity Empirical Test," *Socius* 8.

Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment," *American Economic Review* 106 (4): 855–902.

Collinson, Robert, and Peter Ganong. 2018. "How Do Changes in Housing Voucher Design Affect Rent and Neighborhood Quality?" *American Economic Journal: Economic Policy* 10 (2): 62–89.

Cunningham, Mary, Martha Galvez, Claudia L. Aranda, Rob Santos, Doug Wissoker, Alyse Oneto, Rob Pitingolo, and James Crawford. 2018. *A Pilot Study of Landlord Acceptance of Housing Choice Vouchers*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Dastrup, Samuel, Meryl Finkel, and Ingrid Gould Ellen. 2019. "The Effects of Small Area Fair Market Rents on the Neighborhood Choices of Families with Children," *Cityscape* 21 (3): 19–48.

DeLuca, Stefanie. 2014. *Why Don't More Voucher Holders Escape Poor Neighborhoods?* New York: NYU Furman Center. <https://furmancenter.org/research/iri/essay/why-dont-more-voucher-holders-escape-poor-neighborhoods>.

DeLuca, Stefanie, Philip Garboden, and Peter Rosenblatt. 2013. "Segregating Shelter: How Housing Policies Shape the Residential Locations of Low Income Minority Families," *The Annals of the American Academy of Political and Social Science* 647 (1): 268–299.

Devine, Deborah J., Robert W. Gray, Lester Rubin, and Lydia B. Tahiti. 2003. *Housing Choice Voucher Location Patterns: Implications for Participant and Neighborhood Welfare*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Ellen, Ingrid Gould. 2020. "What Do We Know About Housing Choice Vouchers?" *Regional Science and Urban Economics* 80: 1–5.

- Ellen, Ingrid Gould, Katherine M. O'Regan, and Katharine W.H. Harwood. 2022. "Advancing Choice in the Housing Choice Voucher Program: Source of Income Protections and Locational Outcomes," *Housing Policy Debate* 33 (4): 941–962.
- Ellen, Ingrid Gould, Katherine M. O'Regan, and Sarah Strochak. 2024. "Race, Space, and Take up: Explaining Housing Voucher Lease Up Rates," *Journal of Housing Economics* 63: 1–4.
- Finkel, Meryl, and Larry Buron. 2001. *Study on Section 8 Voucher Success Rates: Volume I Quantitative Study of Success Rates in Metropolitan Areas*. Washington, DC: Abt Associates.
- Freeman, Lance. 2012. "The Impact of Source of Income Laws on Voucher Utilization," *Housing Policy Debate* 22 (2): 297–319.
- Freeman, Lance, and Yunjing Li. 2014. "Do Source of Income Anti-Discrimination Laws Facilitate Access to Less Disadvantaged Neighborhoods?" *Housing Studies* 29 (1): 88–107.
- Galvez, Martha. 2010. *What Do We Know About Housing Choice Voucher Program Location Outcomes?* Washington DC: Urban Institute.
- Galvez, Martha, Solomon Greene, Alyse D. Oneto, and Patrick Spauster. 2020. *Protecting Housing Choice Voucher Holders from Discrimination: Lessons from Oregon and Texas*. Washington DC: Urban Institute.
- Galvez, Martha, and Sarah Oppenheimer. 2020. "Taking Mobility to Scale Through the Housing Choice Voucher Program." Washington DC: Urban Institute. <https://www.urban.org/sites/default/files/publication/103026/taking-neighborhood-mobility-to-scale.pdf>
- Galvez, Martha, Elizabeth Lochhead, Philip Tegeler, Mary Cunningham, and Daniel Teles. 2023. "Summary Report and Recommendations from the 2023 Source of Income Discrimination Research Convening." <https://www.prrac.org/wp-content/uploads/2023/08/SOID-2023-research-convening-final-report-and-recommendations.pdf>.
- Garboden, Philip, Eva Rosen, Meredith Greif, Stefanie DeLuca, and Kathryn Edin. 2018. *Urban Landlords and the Housing Choice Voucher Program: A Research Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.
- Graves, Erin. 2016. "Rooms for Improvement: A Qualitative Metasynthesis of the Housing Choice Voucher Program," *Housing Policy Debate* 26 (2): 346–361.
- Greene, Solomon, and Brian J. McCabe. 2023. *Expanding Small Area Fair Market Rents to Increase Housing Opportunities*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/pdredge/pdr-edge-fm-asst-sec-103123.html>.
- Greene, Solomon, Patrick Spauster, Martha Galvez, and Daniel Teles. 2020. *State and Local Voucher Protection Laws: Introducing a New Legal Dataset*. Washington, DC: Urban Institute.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia D Solari, Scott R Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. *Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Hangen, Forrest, and Daniel T. O'Brien. 2022. "The Choice to Discriminate: How Source of Income Discrimination Constrains Opportunity for Housing Choice Voucher Holders," *Urban Affairs Review* 59 (5): 1601–1625.

Knudsen, Brian. 2022. "Expanded Protections for Families with Housing Choice Vouchers." Poverty & Race Research Action Council. <https://www.prrac.org/pdf/soi-voucher-data-brief.pdf>.

McClure, Kirk, Alex F. Schwartz, and Lydia B. Taghavi. 2015. "Housing Choice Voucher Location Patterns a Decade Later," *Housing Policy Debate* 25 (2): 215–233.

Meltzer, Brent. 2023. "Innovations in Housing Mobility Practice." Paper presented at the 9th National Conference on Housing Mobility, September 20, Washington, DC. [https://www.prrac.org/wp-content/uploads/2023/10/9HMC\\_Panel-2-Slides.pdf](https://www.prrac.org/wp-content/uploads/2023/10/9HMC_Panel-2-Slides.pdf).

Mills, Gregory, Daniel Gubits, Larry Orr, David Long, Judie Feins, Bulbul Kaul, Michelle Wood, Amy Jones and Associates, Cloudburst Consulting, and the QED Group. 2006. *The Effects of Housing Vouchers on Welfare Families*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Moore, M. Kathleen. 2018. "I Don't Do Vouchers': Experimental Evidence of Discrimination Against Housing Voucher Recipients Across Fourteen Metro Areas." Working paper.

Ortiz, Selena E., Andrew Fenelon, and Chavehpour Yousef. 2024. "Exposing Pittsburgh Landlords to Asset-Framing Narratives: An Experiment to Increase Housing Voucher Participation," *Health Affairs* 43 (2): 287–296.

Pendall, Rolf. 2000. "Why Voucher and Certificate Users Live in Distressed Neighborhoods," *Housing Policy Debate* 11 (4): 881–909.

Pendall, Rolf, Casey Dawkins, Evelyn Blumenberg, Christopher Hayes, Arthur George, Zach McDade, Jae Sik Jeon, Eli Knaap, Gregory Pierce, and Michael Smart. 2014. *Driving to Opportunity: Understanding the Links Among Transportation Access, Residential Outcomes, and Economic Opportunity for Housing Voucher Recipients*. Washington, DC: Urban Institute.

Phillips, David C. 2017. "Landlords Avoid Tenants Who Pay with Vouchers," *Economics Letters* 151 (February): 48–52.

Poverty & Race Research Action Council (PRRAC). 2023a. *Expanding Choice: Practical Strategies for Building a Successful Housing Mobility Program, Appendix B: State, Local, and Federal Laws Barring Source-of-Income Discrimination*. Washington, DC: PRRAC.

———. 2023b. 9th National Conference on Housing Mobility, September 20, Washington, DC. <https://www.prrac.org/9th-national-conference-on-housing-mobility-september-20-2023/>.

Reina, Vincent, Arthur Acolin, and Raphael W. Bostic. 2019. "Section 8 Vouchers and Rent Limits: Do Small Area Fair Market Rent Limits Increase Access to Opportunity Neighborhoods? An Early Evaluation," *Housing Policy Debate* 29 (1): 44–61.

Rosen, Eva. 2020. *The Voucher Promise: "Section 8" and the Fate of an American Neighborhood*. Princeton, NJ: Princeton University Press.

Rosenblatt, Peter, and Stefanie DeLuca. 2012. "We Don't Live Outside, We Live in Here: Neighborhoods and Residential Mobility Decisions Among Low-income Families," *City and Community* 11 (3): 254–284.

Stewart, Remy, Chris Hess, Ian Kennedy, and Kyle Crowder. 2023. "Move-In Fees as a Residential Sorting Mechanism Within Online Rental Markets," *Cityscape* 25 (1): 239–252.

Teles, Daniel, Katherine O'Regan, and Sophie House. 2023. "Landscape of SOI Protections." PowerPoint presentation. <https://www.prrac.org/wp-content/uploads/2023/08/SOI-Research-Convening-Presentations.pdf>.

Teles, Daniel, and Yipeng Su. 2022. *Source of Income Protections and Access to Low Poverty Neighborhoods*. Washington, DC: Urban Institute.

Turner, Margery Austin, and Judson James. 2015. "Discrimination as an Object of Measurement," *Cityscape* 17 (3): 3–13.

Turner, Margery Austin, Rob Santos, Diane K. Levy, Dough Wissoker, Claudia Aranda, and Rob Pitingolo. 2013. *Housing Discrimination Against Racial and Ethnic Minorities 2012*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Unlock NYC, Neighbors Together, Anti-Eviction Mapping Project, and Housing Data Coalition. 2022. *An Illusion of Choice: How Source of Income Discrimination and Voucher Policies Perpetuate Housing Inequality*. New York: Unlock NYC.

Uprety, Aastha, and Kate Scott. 2018. "In the District, Source of Income Discrimination Is Race Discrimination Too." Equal Rights Center. <https://equalrightscenter.org/source-of-income-and-race-discrimination-dc/>.

Urban Institute. 2021. "State and Local Voucher Protection Laws." <https://datacatalog.urban.org/dataset/state-and-local-voucher-protection-laws/resource/94516519-47e7-4bdf-96e6-a009907c22df>.

U.S. Department of Housing and Urban Development (HUD). n.d. "Housing Discrimination Research." Office of Policy Development and Research. <https://www.huduser.gov/portal/publications/housingdiscriminationreports.html>.

———. 2019. “Landlords and Vouchers,” *Evidence Matters*, Winter. <https://www.huduser.gov/portal/periodicals/em/winter19/index.html>.

———. 2015. “Symposium: Housing Discrimination Today,” *Cityscape* 17 (3): 1–157.

Yinger, John, and Sun Jung Oh. 2015. “What Have We Learned From Paired Testing in Housing Markets?” *Cityscape* 17 (3): 15–60.

Zuberi, Anita. 2019. *The Other Side of the Story: Exploring the Experiences of Landlords in order to Improve Housing Opportunity for Low-Income Households*. New York: New York University, Furman Center. [https://www.law.nyu.edu/sites/default/files/Furman%20Center%20Colloquium%20Paper%202019\\_Zuberi.pdf](https://www.law.nyu.edu/sites/default/files/Furman%20Center%20Colloquium%20Paper%202019_Zuberi.pdf).





# Porting to Opportunity: An Analysis of Portability in the Housing Choice Voucher Program

Greg Miller  
Aidy

---

## Abstract

*The U.S. Department of Housing and Urban Development (HUD) has been interested in improving the housing choice and outcomes of housing choice voucher (HCV) tenants, with a focus on getting tenants into neighborhoods of higher opportunity. The HCV program is HUD's largest rental assistance program, serving more than 2 million families annually across the United States. Tenants are not confined to living within the jurisdiction of their public housing agency (PHA) and can move anywhere in the country through a process called porting. Little is known about the characteristics and neighborhood outcomes of portability moves. This article tracks porting moves using HUD's internal administrative data and finds that 9.9 percent of HCV tenants will port, one-third of portability moves are greater than 250 miles, and 63 percent of porting moves are to different metropolitan areas. By matching tenant moves with tract-level data from the 2015–2019 American Community Survey (ACS) data, this article identifies changes in neighborhood characteristics for porting households. Porting, on average, results in a move to a neighborhood of higher opportunity as measured through education rates, income inequality, median household income, and poverty rates. Even when compared with HCV families that move but remain within their PHA's jurisdiction, porting moves tend to be to neighborhoods of higher opportunity.*

## Introduction

The Housing Choice Voucher (HCV) program is HUD's largest rental assistance program, serving more than 2 million families annually throughout the United States. HCVs reduce tenant payments to an affordable standard in private-market rentals, with tenants finding units to live in on their own. The U.S. Department of Housing and Urban Development (HUD) has been interested in improving housing choice and outcomes for HCV tenants. This interest started with the Gautreaux litigation of 1966 (Polikoff, 2007) and has increased recently with new studies demonstrating the success of the Moving to Opportunity demonstration, which empirically confirmed the benefits of

living in high-opportunity areas, including increased income, better education for children, and improved safety and mental and physical health for parents (Chetty, Hendren, and Katz, 2015; Briggs, Popkin, and Goering, 2010). HUD has several policy interventions to further enhance housing choices for voucher holders and promote access to high-opportunity neighborhoods, such as Small Area Fair Market Rents (HUD, 2023b), the Community Choice Demonstration (HUD, n.d.), and, recently, Housing Mobility-Related Services funding (HUD, 2023a).

Mobility is central to the design of the HCV program. As opposed to public housing, HCVs enable greater flexibility when housing needs change, create opportunities for households to follow jobs, and allow families to locate near high-performing schools. The mobility of HCVs exists both within and across jurisdictions. Tenants can move their subsidy anywhere in the United States, even if the move requires switching which PHA administers the voucher, a process known as porting. All tenants are eligible to port, but non-resident HCV applicants—tenants who did not live within the PHA bounds at the time of applying—cannot port for 12 months unless approved by the PHA. Portability is explicitly allowed by federal statute. Section 8(r) of the United States Housing Act of 1937 provides that HCV participants may choose a unit that meets program requirements anywhere in the United States, as long as a PHA administering the tenant-based program has jurisdiction over the area in which the unit is located.

Porting tenants leave their current PHA (“sending PHA” or “initial PHA”) to another PHA (“receiving PHA”) as part of a move-in location. When a tenant ports, the receiving PHA can choose to “bill” or “absorb” the tenant’s payments. If the PHA bills, then the sending PHA will be responsible for paying the PHA portion of the tenant’s rent, even though the tenant no longer resides within the PHA’s bounds. The receiving PHA will receive a portion of the administrative fee because it will still be responsible for administering the voucher within its jurisdiction. If the receiving PHA chooses to absorb, it will be responsible for the monthly housing assistance payment and administration; the voucher then counts toward its utilization, a metric used by HUD to determine PHA funding. McCabe and Moore (2021) conducted a series of interviews with PHAs and found that receiving PHAs make the discretionary decision about whether to bill or absorb on the basis of pragmatic analysis, weighing the gains in funding from increased utilization rates to the increased cost from the voucher.

A sending PHA is required to permit an eligible porting tenant except for two rare exceptions. First, a PHA may deny the tenant due to insufficient funding, which occurs when (1) the receiving PHA does not absorb the voucher, (2) the move is to a higher-cost area, and (3) the PHA is unable to avoid termination of current participants during the calendar year to remain within its budgetary allocation. Second, a PHA participating in the initial set of MTW demonstrations can use its discretionary authority granted through the demonstration to deny porting tenants if approved through its MTW plan.

Tenants may be facing administrative barriers preventing them from porting. Receiving PHAs may also require porting tenants to undergo screening, so tenants are not guaranteed to be allowed to port and may not want to undergo the paperwork burden. Also, although porting information is given in a packet of information on move-in, tenants may not be fully aware of their ability to port.

A better understanding of portability use may help HUD and PHAs establish better policies and procedures, opening more opportunities for families.

This article fills a gap in the literature on the portability decisions of tenants. Climaco et al. (2008) is the only known analysis to extract tenant-level porting moves and analyze porting through an empirical lens using HUD administrative data. Their research provides a method to extract portability moves and finds that between 1998 and 2005, 8.9 percent of households with a voucher ported from one jurisdiction to another over the 7 years. The analysis finds higher rates of porting for Black households and households with children, and it finds that porting moves, on average, were to tracts with lower poverty rates.

This article focuses on the cohort of HCV tenants who entered the program in 2012 to analyze their movement and portability decisions over the past decade. By focusing on that cohort, one can track moves across the lifetime of the voucher and compare portability moves with moves within PHAs to help analyze whether portability moves are distinct moves to areas of opportunity.

## **Tracking Tenant Movement**

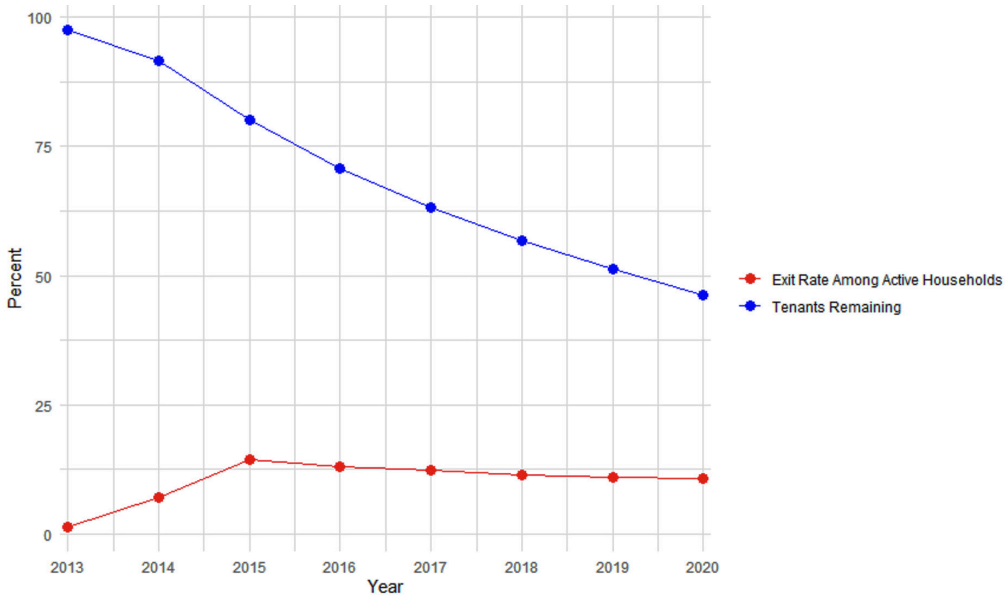
To track tenants who entered the HCV program in 2012, the author formed a database of households newly admitted in 2012, pulled data for each following year, and merged with household IDs from the 153,363 new admissions in 2012. Households will not always have entries for each year following 2012 either because the household exited the program or because of gaps in the administrative data. Appendix exhibit A-1 reports the demographics of the 2012 cohort.

Cleaning the data began with tracking exits. Although HUD administrative data contain an action flag for exits from the program, the flag may be unreliable. For instance, a tenant who ports may have an exit flag from the sending PHA when, in fact, they are receiving continued assistance from the receiving PHA. To get around that circumstance, this article defines an exit as a tenant with 3 consecutive years of missing data. The tenant is presumed to have left during the first year of missing data. This presumption is conservative because many tenants exiting assistance likely have entries indicating their exit from the program, and therefore they actually left the year before the presumed year; but for this article, such intricacies are tangential to the analysis of porting. Once an exit is recorded, the author ensures that all entries for that household are missing in all the years following to avoid capturing tenants who leave and then reenter the program.

Mobility of vouchers is most prominent in the first couple of years and then decreases over the lifetime of the voucher. Exhibit 1 reports the percentage of remaining tenants and the rate of exits among active households every year. More than one-half of the cohort had exited the program by 2020, which indicates a median tenure between 6 years (for a voucher recipient who joined in late 2012 and exited in early 2020) and 8 years (for a recipient who joined in early 2012 and exited in late 2020) for the 2012 cohort. This finding matches past findings that the average lifetime of a voucher is approximately 6 years (McClure, 2018). Meanwhile, the exit rate among active vouchers increases over the first 3 years and then remains relatively steady, although slowly declining, to about 12 percent of active households in the following 5 years.

**Exhibit 1**

Voucher Exit Rate by Year



Source: Calculations of HUD Administrative Data

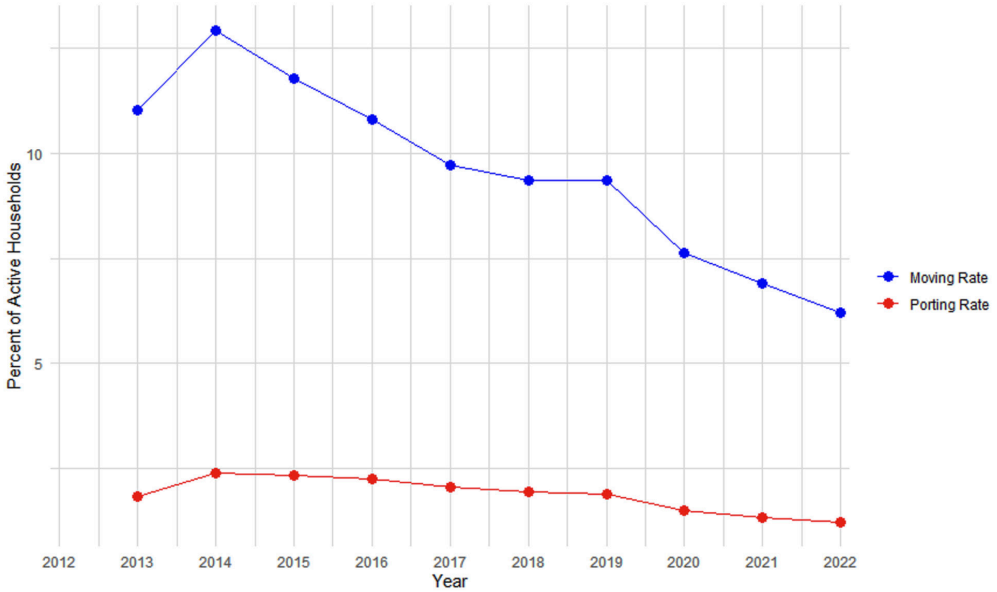
Once exited households are flagged and removed from the database for subsequent years, missing data between years of activity are filled by assuming the later year’s data. For instance, a household missing data in 2014 but with data in 2013 and 2015 would be filled with geographic information from 2015. Flags are created to track moves by changes in census tracts for each year. In this instance of missing data, if 2013 and 2015 data indicated different census tracts, the move would be flagged as occurring in 2014 (which assumes the 2015 census tract).

HUD’s administrative data contain a portability flag, but the flag is unreliable. The flag typically only signals for ported vouchers that are billed and do not capture absorbed vouchers. To get around this shortcoming, ports are flagged as tenants who report in one PHA one year and a different PHA the next year while also reporting a change in census tract. A few tenants switched PHAs but remained within the same tract, which may be because of administrative shuffling between PHAs and not an active porting decision from the tenant; 3,614 vouchers appear to undergo this type of shuffling. For instance, the Puerto Rico Department of Housing transferred 273 vouchers to the Puerto Rico Public Housing Administration as the housing administration was reorganized.

Exhibit 2 shows the rate of moves and ports among active households by year. Moves include all ports. Moves and porting peak in 2014, which is 1 to 2 years after receiving a voucher (in 2012). The rate of moves continues to decline the longer a household receives assistance, and portability begins to flatten at less than 1 percent of active households a decade into receiving assistance. Over the course of a decade, 38 percent of tenants move to different census tracts, and 9.9 percent of tenants port.

## Exhibit 2

### Rates of Moves and Ports Among Active Households, by Year



Source: Calculations of HUD Administrative Data

## The Landscape of Porting Moves

Portability moves occur across the country and across PHAs, although some PHAs experience more porting than others. Appendix exhibit A-2 shows the sending PHAs that had the greatest number of outgoing ports among the 2012 cohort. The Housing Authority of the City of Los Angeles had the most sent vouchers, with 466. The Housing Authority of New Orleans and the Chicago Housing Authority follow, with 294 and 238, respectively. Appendix exhibit A-3 lists the receiving PHAs with the most incoming ports. Southern Nevada Regional Housing Authority tops the list, with 308 received vouchers; the Housing Authority of the County of Los Angeles, the Chicago Housing Authority, and the Housing Authority of Cook County are also on the list. In Chicago and Los Angeles, both the county and city PHAs have high counts of porting, which indicates that networks of portability may exist, with common sending and receiving PHA pairs.

Exhibit 3 shows the top 10 PHA porting networks. County and city pairs are prominent among the highest counts of porting between PHAs. Porting from the Housing Authority of the City of Los Angeles to the Housing Authority of the County of Los Angeles is the most prominent porting network, with 148 ports over the observed period. Porting in the opposite direction also appears frequently, with 62 observed ports from the county to the city over the observed period.

**Exhibit 3**

Top 10 PHA Porting Networks

Sending PHA	Receiving PHA	Vouchers Sent by the Sending PHA to the Receiving PHA
Housing Authority of the City of Los Angeles	Housing Authority of the County of Los Angeles	148
Housing Authority of New Orleans	Housing Authority of Jefferson Parish	95
Chicago Housing Authority	Housing Authority of Cook County	81
Housing Authority of the County of Los Angeles	Housing Authority of the City of Los Angeles	62
Allegheny County Housing Authority	Housing Authority of the City of Pittsburgh	61
Pinellas County Housing Authority	Housing Authority of the City of St. Petersburg	53
Housing Authority of the City of Los Angeles	Southern Nevada Regional Housing Authority	50
PHA in and for the City of Minneapolis	Metropolitan Council (Minneapolis area)	50
Housing Authority of the City of Tulsa	Oklahoma Housing Finance Agency	47
Housing Authority of the City of Los Angeles	Housing Authority of the City of Glendale	46

*Source: Calculations of HUD Administrative Data*

Porting moves vary in distance. Exhibit 4 shows categorical breakdowns of distance of porting moves calculated by the distance between the center of the census tract before and after porting. Less than 10 percent of porting moves are moves within 5 miles, and 45.4 percent are moves less than 50 miles. Almost one-third of porting moves are long-distance moves greater than 250 miles.

**Exhibit 4**

Distances of Porting Moves

Distance Moved	Percent of Ports (%)
<5 miles	9.6
5–25 miles	25.7
25–50 miles	10.1
50–250 miles	22.5
>250 miles	32.2

*Source: Calculations of HUD Administrative Data*

Ports occur within and across metropolitan areas: 63 percent of porting moves are to different Metropolitan Statistical Areas (MSAs), and the other 37 percent remain within the metropolitan area. The Atlanta MSA tops the list of top (net) incoming ports (exhibit 5), with the Houston and Las Vegas MSAs following. The Orlando and Dallas MSAs also appear on the list. Many of those MSAs are fast-growing metropolitan areas, which may indicate that HUD-assisted tenants are using the mobility provided by vouchers to move to areas of economic activity.

**Exhibit 5**

MSAs With the Most Net Incoming Ports

Metropolitan Statistical Area	Net Receiving
Atlanta-Sandy Springs-Roswell, GA MSA	218
Houston-The Woodlands-Sugar Land, TX MSA	131
Las Vegas-Henderson-Paradise, NV MSA	127
Minneapolis-St. Paul-Bloomington, MN-WI MSA	98
Dallas-Fort Worth-Arlington, TX MSA	94
Orlando-Kissimmee-Sanford, FL MSA	85
Chicago-Naperville-Elgin, IL-IN-WI MSA	78
Portland-Vancouver-Hillsboro, OR-WA MSA	49
Washington-Arlington-Alexandria, DC-VA-MD-WV MSA	45
Indianapolis-Carmel-Anderson, IN MSA	38

Source: Calculations of HUD Administrative Data

**Porting Demographics**

The author established a logistic regression model to test the likelihood of porting on the basis of household characteristics; exhibit 6 reports the results. Households with children are 12.5 percent more likely to port, and households with a disabled member are 22 percent more likely to port. Black and Hispanic households are more likely to port, as are lower-income, younger, and larger households. Black households are 12.6 percent more likely to port compared with 7.1 percent of White households. The average age of the 2012 cohort is 34 years old, and the average age of those porting is 38.

**Exhibit 6**

Probability of Porting

Variable	Coefficient	P-Value
Age	- 0.0094	1.54e-36***
Child	0.1256	4.07e-05***
Black	0.5681	2.55e-29***
White	0.0268	0.5987
Hispanic	0.25	4.15e-21***
Female	0.2469	1.04e-26***
Number of Household Members	0.063	8.19e-14***
Member with Disability	0.2213	1.37e-26***
Income	- 3.00E-04	8.17e-73***

\*P-values: \*\*\*<0.001. \*\*<0.01. \*<0.05.

Source: Calculations of HUD Administrative Data

## Porting to Opportunity

Tenants may move for a variety of reasons, and to this point, HUD has not done a comprehensive survey or analysis to understand the causes of porting. The porting data can be linked to 5-year 2015–2019 American Community Survey (ACS) data to identify changes in neighborhood characteristics for porting households. To analyze neighborhood characteristics of porting moves, this article first reports changes in the characteristics of a porting household's census tract pre- and post-porting. Those results are then compared with the corresponding data for HUD-assisted tenants who move to a different census tract but remain within their current PHA's jurisdiction. In treating within-PHA moves as a comparison group, one can calculate differences between the neighborhood change between porting vouchers and the comparison group with tract- and year-level fixed effects. The data analysis in this article is not concerned with causal questions and is purely descriptive. This article measures areas of opportunity on a continuous scale as areas with less poverty, higher median family income, higher education rates, and less income inequality. The report introduces two distinct threshold calculations to determine the presence of high poverty and low poverty in census tracts. High-poverty census tracts are defined as those with a poverty rate exceeding 20 percent,<sup>1</sup> whereas low-poverty tracts are characterized by a poverty rate below 10 percent. This analysis uses the following as opportunity variables—median household income, poverty rate, high school completion, college education, income inequality (according to the Gini index<sup>2</sup>), and high/low poverty tracts. However, *opportunity* is not strictly defined, and future research may identify better determinants of economic opportunity.

### Portability Moves to Neighborhoods of Higher Opportunity

Porting moves tend to be to census tracts of higher opportunity. Exhibit 7 reports the pre- and post-porting tract differences for porting households. As shown, porting households, on average, port to areas with \$3,174 greater median household income, 1.6 percentage points less poverty, 0.73 percentage point greater high school education rate, 0.75 percentage point greater college education rate, and a decreased Gini index of 0.0094. The share of households living in a low-poverty neighborhood, defined as a poverty rate below 10 percent, rose from 17.4 percent before households ported to 21.7 percent after. Likewise, the share of households living in a high-poverty neighborhood fell from 49.4 percent to 44.7 percent. On average, porting households moved into census tracts with a 4.7-percentage-point decrease in households living in high poverty and a 4.4-percentage-point increase in households living in low poverty.

---

<sup>1</sup> This definition of *high-poverty census tracts* follows the calculations done in previous HUD reports, including *HUD Investments in Impoverished Areas for House Report 116-106* (2020). [https://www.huduser.gov/portal/sites/default/files/pdf/ HUD-Investments-in-Impoverished-Areas.pdf](https://www.huduser.gov/portal/sites/default/files/pdf/HUD-Investments-in-Impoverished-Areas.pdf).

<sup>2</sup> The Gini index is a statistical measure used to gauge the distribution of income across a population, aiming to represent income or wealth inequality in a nation. The value of the Gini index ranges from 0 to 1, where 0 signifies perfect equality (every individual has the same income) and 1 indicates perfect inequality (a single individual holds all the income, and everyone else has none). A lower Gini coefficient suggests a more equal distribution of income, whereas a higher Gini coefficient points to greater inequality.



### Exhibit 7

Porting Households Pre- and Post-Porting Neighborhood Characteristics

Neighborhood Characteristic	Post-Porting Tract	Pre-Porting Tract	Difference
<b>Household Income</b>	\$51,141.01	\$47,966.67	\$3,174.34***
<b>Poverty</b>	20.3921%	21.9838%	- 1.5916%***
<b>High School</b>	84.2385%	83.5002%	0.7383%***
<b>College</b>	23.9481%	23.1937%	0.7544%***
<b>Income Inequality (Gini)</b>	0.4342	0.4436	- 0.0094***
<b>High-Poverty Tract</b>	44.6625%	49.359%	- 4.6965%***

\*P-values: \*\*\*<0.001. \*\*<0.01. \*<0.05.

Source: Calculations of HUD Administrative Data

### Ports to Opportunity Are Relative to Originating Tract

Although, on average, ports occur to areas of higher opportunity, many porting moves occur to areas of lower opportunity. For example, porting moves that originate in high-opportunity neighborhoods mostly end up in lower-opportunity neighborhoods. Exhibit 8 provides an analysis of porting neighborhood outcomes based on the poverty-rate quartile of the originating census tract. The poverty rate is divided into quartiles, ranging from Q1 (lowest poverty rate) to Q4 (highest poverty rate). The exhibit shows the poverty rate in the originating census tract and in the census tract after the porting move for each quartile. For ports originating from Q1 neighborhoods (with the lowest poverty rates), the post-move poverty rate, on average, is almost 10 percentage points higher (17.96 percent in the post-move tract compared with 8.15 percent in the pre-move tract). Meanwhile, for those originating in Q4 neighborhoods, the post-move poverty rate is about 17 percentage points lower than the pre-move census tract poverty rate (22.79 versus 39.50 percent). On average, households living in tracts where the poverty rate is around 20 percent or higher tend to see improvements in neighborhood poverty when they port; those porting from lower-poverty tracts do not.

### Exhibit 8

Porting Neighborhood Outcomes by Originating Tract Poverty Rate Quartile

Originating Census Tract Poverty Quartile	Quartile Originating Poverty Rate (%)	Quartile Post-Move Poverty Rate (%)
<b>Q1 (lowest poverty)</b>	8.15	17.96
<b>Q2</b>	16.05	19.58
<b>Q3</b>	24.25	21.24
<b>Q4 (highest poverty)</b>	39.50	22.79

Source: Calculations of HUD Administrative Data

### Porting Households Move to Higher Opportunity Than Within-PHA Movers

Improved opportunity in neighborhood moves may be common to all HCV movers originating in higher-poverty tracts. To test that theory, the author created a comparison group with tenants that changed census tracts but remained within the same PHA, a nonportability move.

Exhibit 9 reports neighborhood characteristics of originating tracts for within-PHA movers and porters. As shown, porting households tend to originate from areas of higher opportunity with higher median household incomes, lower poverty rates, and higher education rates. Porting households are also less likely to be in high-poverty tracts and more likely to be in low-poverty tracts compared to within-PHA movers.

**Exhibit 9**

Originating Tracts for Porting and Within-PHA Moves			
Variable	Porting Moves	Within-PHA Moves	Difference
<b>Median Household Income</b>	\$47,964.64	\$45,702.9	\$2,252.241***
<b>Poverty Rate</b>	21.9883%	23.9638%	- 1.9806%***
<b>High School Graduation</b>	83.4995%	82.8974%	0.6125%***
<b>College Graduation</b>	23.1916%	22.6076%	0.5929%***
<b>Income Inequality</b>	0.4437	0.4479	- 0.0042***
<b>High Poverty Tracts</b>	49.3736%	55.3685%	- 6.0536%***
<b>Low Poverty Tracts</b>	17.3573%	15.3117%	2.0678%***

\*P-values: \*\*\*<0.001. \*\*<0.01. \*<0.05.  
 Source: Calculations of HUD Administrative Data

To control the imbalance in the originating census tract, the author employed tract-year fixed effects in regressions comparing changes in neighborhood characteristics. Exhibit 10 reports the change in neighborhood characteristics of households who moved between census tracts, divided into groups of those who ported PHAs and those who remained within their initial PHA. The first two columns show the difference in each neighborhood characteristic between the post-move and pre-move census tract. Porting and within-PHA moves are moves to higher opportunity by proxy of each opportunity variable.

The third column of exhibit 10 shows the difference in the changes in neighborhoods between within-PHA and porting moves. Porting moves are generally associated with moves to greater economic opportunity than within-PHA moves, when controlling for originating tract and year of move, with statistical significance on each opportunity variable.

**Exhibit 10**

Change in Neighborhood Characteristics Among Porting and Within-PHA Movers			
Change in Neighborhood Characteristics	Porting Movers	Within-PHA Movers	Difference
<b>Household Income</b>	\$3,174.336	\$896.0935	\$3,318.447***
<b>Poverty</b>	- 1.5964%	- 0.3961%	- 2.1285%***
<b>High School</b>	0.7407%	0.2554%	0.7306%***
<b>College</b>	0.7579%	0.1383%	0.7409%***
<b>Income Inequality (Gini)</b>	- 0.0095	- 0.0022	- 0.0089***
<b>High-Poverty Tracts</b>	- 4.712%	- 0.8145%	- 6.7556%***
<b>Low-Poverty Tracts</b>	4.3717%	0.9148%	3.9875%***

\*P-values: \*\*\*<0.001. \*\*<0.01. \*<0.05.  
 Source: Calculations of HUD Administrative Data

The households that port are statistically different in a couple of characteristics compared with households moving within PHAs, but none of the differences seem to be significant in scale. Exhibit 11 reports the demographics of porters and movers and their differences with tract-year fixed effects. Relative to households moving within PHAs, porting households are more likely to be Black and less likely to be White. Of less statistical significance, they are slightly younger and earn slightly less. Those imbalances are not strong enough to guide the porting to opportunity results.

**Exhibit 11**

Demographic Comparison of Porting and Within-PHA Movers

Demographic	Porting Mover	Within-PHA Mover	Difference
Age	37.8099	37.5599	0.3407*
Child	61.86%	61.74%	- 0.36%
Black	57.21%	55.00%	3.20%***
White	41.04%	42.93%	- 3.10%***
Hispanic	15.15%	17.48%	- 0.20%
Female	81.65%	80.58%	0.63%
Household Members	2.5328	2.5247	0.0102
Disability	29.37%	28.72%	0.01%
Household Income	\$861.8099	\$848.5297	- \$15.7944*

*P-values: \*\*\*<0.001. \*\*<0.01. \*<0.05.*

*Source: Calculations of HUD Administrative Data*

**Moving Comes With a Premium**

Areas of higher opportunity may demand higher rents. Among all tenants who port, their contract rent increases an average of \$112, or 17 percent, in the year after the porting move. That increase may be due to naturally rising rents over time as year-to-year increases are anticipated. To test that theory, the author compared rent increases for within-PHA movers with tract and year fixed effects.

Rent increases are also seen for tenants moving within PHAs. Those tenants see an \$87.21 increase in rent, for an average increase of 10 percent. In the year before moving, the rents of tenants who port and tenants who move within PHAs are not statistically significantly different, with average gross rents of \$956 and \$944, respectively. Both see nominal rent increases, but porting vouchers see, on average, a \$21.67 greater increase, as shown in exhibit 12. When looking at the average increase by rate, the contract rent for porting vouchers experiences an average 6.4-percent-greater increase compared with the contract rent for within-PHA movers. Increased rents translate to increased housing assistance payments. Porting moves increased monthly subsidy payments by \$98, and within-PHA moves increased payments by \$58. The average increase in assistance does not fully account for the average increase in contract rent. Therefore, on average, increased rents are absorbed by both the tenant and the government.

**Exhibit 12**

Rent Increases After Move			
	Porting Move	Within-PHA Move	Difference
<b>Rent Rate</b>	17.03%	10.04%	6.4%***
<b>Rent Difference</b>	\$112.07	\$87.21	\$21.67 ***
<b>Assistance Difference</b>	\$98.15	\$58.71	\$36.07 ***

*P-values: \*\*\*<0.001. \*\*<0.01. \*<0.05.  
Source: Calculations of HUD Administrative Data*

**Discussion**

The findings from the data analysis presented in this article shed light on the housing choices of HCV tenants and their use of portability to move to neighborhoods of higher opportunity. These insights provide valuable guidance for policymakers and housing practitioners in designing effective strategies to promote housing choice and mobility. Moving to opportunity has been a large focus in the housing policy sphere, with programs that must strike a balance between providing tenants with more neighborhood choice and allowing tenants to retain their preferences. This article finds that “porting to opportunity” is a trend already pursued by HUD tenants, with the greatest benefits accruing to those starting in higher-poverty areas. This section presents several policy implications that follow from this analysis that may improve outcomes for HCV tenants.

**Preapproval for Porting**

Policies regarding screening and admission of tenants may differ among PHAs, and receiving PHAs may conduct additional screenings (although they are not required to do so). If the receiving PHA screens, tenants cannot be certain that their porting requests will be approved, leading to limitations in their ability to search for and apply to jobs in areas beyond their PHAs jurisdiction for fear of being hired for a job but rejected by the potential receiving PHA. Encouraging PHAs to adopt policies that allow for streamlined screening—or no screening—of incoming porting households may be advantageous. HUD may consider department-wide action that allows for universal portability of vouchers through standardizing screening processes.

**Authorizing Larger Public Housing Agencies**

Larger PHAs may facilitate greater access to housing opportunities across a broader geographical area without the administrative hurdles associated with porting. States can be authorized to form larger PHAs, which may allow for the allocation of vouchers to be more effectively coordinated, enabling HCV tenants to explore a wider range of neighborhoods with higher levels of opportunity. Regionalization can reduce the concentration of housing choice vouchers and provide tenants with easier flexibility to move around metropolitan areas.

If PHAs do not want to regionalize, adjacent PHAs should be encouraged to form agreements to ease the porting process, which may include provisions to not rescreen

porting tenants. Statewide PHAs may also play a role by becoming the receiving PHA for porting tenants in their state.

### **Housing Mobility Services**

The finding that portability can create moves to higher opportunity aligns with the growing popularity of housing mobility services, which provide personalized support to tenants in making informed housing choices. Portability should be emphasized as an important tool for mobility. Housing mobility services can equip tenants with the necessary information, resources, and support networks to navigate the housing market and portability administrative barriers successfully, enabling them to make well-informed decisions about their housing choices. The analysis in this article also supports the targeting of mobility assistance to high-poverty census tracts, which are more likely to result in moves or ports to areas of higher opportunity.

Housing mobility services could benefit from cooperation and coordination among adjacent PHAs. Collaboration can involve sharing information, resources, and best practices, and it can help develop regional partnerships to enhance the effectiveness of mobility initiatives.

### **Nudges to Inform Tenants of Porting**

Regulations mandate that public housing authorities must clarify the workings of portability while prohibiting actions that dissuade families from using this option.<sup>3</sup> This information is typically provided to tenants as part of an initial packet containing a substantial amount of other information. To promote porting, HUD can implement targeted nudges department-wide and through PHAs. At the departmental level, HUD can create a user-friendly landing page explaining the right to port vouchers and the necessary steps. At the PHA level, informational flyers and webinars can serve as on-the-ground nudges, gently reminding tenants about the benefits of moving to higher-opportunity neighborhoods.

Even with those efforts, however, policymakers and housing practitioners should keep in mind that a household may choose to port for any number of reasons, including being closer to existing support networks, such as family. Higher-opportunity neighborhoods are not inherently better for households, nor should they be a scale for success in regulations aimed at supporting the porting process. The approaches outlined herein give tenants autonomy to make the right choices for their households while easing the process of porting.

The analysis presented here raises many questions for future research. Porting can be studied with a qualitative lens from the tenants' perspective to identify decision factors when porting and the burdens faced. The analysis in this article can be reconstructed with different definitions and understandings of neighborhood opportunity, including linking tenant movements to distances from higher-quality schools. Practitioners and researchers may also match the quantitative findings herein with the unique PHA relationships in their region, and the data can be parsed to certain

---

<sup>3</sup> 24 CFR 982.301(a)(2).

metropolitan areas to understand trends in certain regions. That information sharing should extend to Puerto Rico voucher tenants, who have high rates of porting to the contiguous United States. All these research findings and suggestions may better inform policy implementation.

## Conclusion

This article suggests that porting is a mechanism for tenants to move to neighborhoods of higher opportunity. In general, porting moves tend to be to neighborhoods of less poverty and inequality and greater household incomes and educational attainment. Those moves may lead to intergenerational benefits that generate higher economic opportunities for children in HUD-assisted households.

## Appendix

### Exhibit A-1

2012 Cohort Demographics	
Variable	Value
Age	42.32813
1: White, Non-Hispanic	39%
2: Black, Non-Hispanic	42%
3: Asian, Non-Hispanic	1%
4: Native, Non-Hispanic	1%
5: Pacific, Non-Hispanic	0.5%
6: Other, Non-Hispanic	1%
7: Hispanic (any race)	14%
Disabled	35%
Female	73%
Median Income	\$10,140

Source: Calculations of HUD Administrative Data

### Exhibit A-2

Sending PHAs With the Most Outgoing Ports	
Sending PHA	Sent
Housing Authority of the City of Los Angeles	466
Housing Authority of New Orleans	294
Chicago Housing Authority	238
Puerto Rico Dept of Housing	200
Housing Authority of the County of Los Angeles	185
Metropolitan Council (Minneapolis area)	134
NYS Housing Trust Fund Corporation	133
Arlington Housing Authority, TX	119
Housing Authority of the City of Tulsa	118
Georgia Residential Finance	117

Source: Calculations of HUD Administrative Data

### Exhibit A-3

#### Receiving PHAs With the Most Incoming Ports

Receiving PHA	Received
Southern Nevada Regional Housing Authority	308
Georgia Residential Finance	289
Housing Authority of the County of Los Angeles	266
Chicago Housing Authority	237
Housing Authority of the County of Cook	207
Metropolitan Council (Minneapolis area)	201
Houston Housing Authority	172
Housing Authority of the City of Los Angeles	171
PHA in and for the City of Minneapolis	154
NYS Housing Trust Fund Corporation	152

Source: Calculations of HUD Administrative Data

## Acknowledgments

This article would not have been possible without the inspiration and guidance from Jennifer Turnham, who originally introduced me to porting and helped me iterate this analysis every step of the way. I am also grateful for Alison Bell and Brian McCabe, who provided valuable feedback and edits on the document. I thank Veronica Garrison for helping me understand HUD's administrative data. Lastly, I thank Alex Din, who helped edit a few graphs for final versions of this paper after I left HUD.

## Author

Greg Miller is a former program analyst at HUD.

## References

- Briggs, Xavier N. de Souza, Susan J. Popkin, and John Goering. 2010. *Moving to Opportunity: The Story of an American Experiment to Fight Ghetto Poverty*. Oxford University Press.
- Chetty, Raj, John N. Friedman, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. 2018. *The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility*. Working Paper No. 25147. National Bureau of Economic Research, 2018.
- Climaco, Carissa G., Christopher N. Rodger, Judith D. Feins, and Ken Lam. 2008. "Portability Moves in the Housing Choice Voucher Program, 1998–2005," *Cityscape* 10 (1): 5–40.
- McCabe, Brian J., and M. Kathleen Moore. 2021. "Absorption Disruptions and Serial Billing: Managing Portability Practices in the Housing Choice Voucher Program," *Cityscape* 23 (1): 197–220.

McClure, Kirk. 2018. "Length of Stay in Assisted Housing," *Cityscape* 20 (1): 11–38. <http://www.jstor.org/stable/26381219>.

Polikoff, Alexander. 2007. *Waiting for Gautreaux: A Story of Segregation, Housing, and the Black Ghetto*. Evanston, IL: Northwestern University Press.

U.S. Department of Housing and Urban Development (HUD). n.d. Community Choice Demonstration. [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/communitychoicedemo](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/communitychoicedemo).

———. 2023a. "HUD Awards \$25 Million to Public Housing Agencies to Expand More Housing Choices for Families." Press release, November 27. Washington, DC: HUD. [https://www.hud.gov/press/press\\_releases\\_media\\_advisories/hud\\_no\\_23\\_263](https://www.hud.gov/press/press_releases_media_advisories/hud_no_23_263).

———. 2023b. "HUD Expands More Housing Choices to a Total of 800,000 Households with Rental Assistance." Press release, October 24. Washington, DC: HUD. [https://www.hud.gov/press/press\\_releases\\_media\\_advisories/hud\\_no\\_23\\_242](https://www.hud.gov/press/press_releases_media_advisories/hud_no_23_242).



# Special Purpose Voucher Programs for People With Disabilities: How They've Evolved, What We've Learned, and Where We're Headed

Lisa Sloane

Liz Stewart

Kevin Martone

Technical Assistance Collaborative

---

## Abstract

*From 1961 to 1992, both older adults and younger persons with disabilities were eligible for most federally funded “elderly” housing.<sup>1</sup> By the 1980s, these “mixed populations” occupancy policies had become controversial. In 1992, the U.S. Congress passed legislation that allowed public housing agencies (PHAs) and certain types of U.S. Department of Housing and Urban Development (HUD)-assisted properties to change their occupancy policies to limit the number of units in “elderly” housing that adults with disabilities aged 18 to 61 could occupy, or even to exclude this population altogether. To compensate for this loss of access to housing, in 1996, Congress began to appropriate Special Purpose Vouchers—Mainstream (MS) and Non-Elderly Disabled (NED) vouchers—specifically targeting adults with disabilities aged 18 to 61.*

*Implementing MS and NED vouchers demonstrates success while encountering challenges. Successes include the large number of PHAs administering these programs and the federal-level partnership that has evolved between HUD and the U.S. Department of Health and Human Services. Challenges include low utilization rates and the difficulty some PHAs find in developing or sustaining local partnerships. Applying lessons learned from formal research, technical assistance provided by the Technical Assistance Collaborative on HUD’s behalf, and Emergency Housing Voucher program implementation could help to address some of these programmatic challenges in the future.*

---

<sup>1</sup> Elderly households are households with a head 62 years of age or older. To be eligible for a Non-Elderly Disabled voucher, the household head must have a disability and be between the ages of 18 and 61. To be eligible for a Mainstream voucher, a household must include a person with a disability between the ages of 18 and 61.

## Introduction

Special Purpose Vouchers (SPVs) are a type of housing choice voucher (HCV) targeting rental assistance resources to specific populations (HUD, n.d.a.). HUD currently manages the following SPV vouchers:

- Mainstream (MS).
- Non-Elderly Disabled (NED).
- Emergency Housing Voucher (EHV) program.
- Family Unification Program (FUP).
- Foster Youth to Independence (FYI) initiative.
- Stability Voucher program.
- Tenant Protection Vouchers.
- Veterans Affairs Supportive Housing (HUD-VASH).
- Witness Relocation Program.

MS and NED vouchers target people with disabilities aged 18 to 61, also called nonelderly adults with disabilities. From 1961 to 1992, both older adults and nonelderly adults with disabilities were eligible for most federally funded “elderly” housing. By the 1980s, these “mixed populations” occupancy policies had become controversial. In 1992, the U.S. Congress passed legislation that allowed public housing agencies (PHAs) and certain properties to limit the number of younger adults with disabilities who could live in “elderly” housing or even to exclude this population altogether. In 1996, to compensate for this loss of access to housing, Congress began to appropriate MS and NED vouchers.

This article provides an overview of these two SPVs, including their historical purposes and the important roles these programs play in providing affordable housing for extremely low-income people with disabilities. Furthermore, this article explores the challenges in administering MS and NED vouchers, how PHAs and their local partners have addressed these challenges, and how “lessons learned” from these PHAs and other research can inform future implementation efforts.

## HUD’s Special Purpose Vouchers Targeting People With Disabilities: Overview and History

MS and NED vouchers specifically target households that include people with disabilities aged 18 to 61, also referred to as nonelderly disabled adults. Participants in other SPV programs, such as the EHV and HUD-VASH programs, likely also serve nonelderly adults with disabilities, but this status is not an eligibility requirement for those programs as it is for MS and NED vouchers.

As exhibit 1 illustrates, the primary difference between MS and NED is that NED vouchers require the head of household, co-head, or spouse to be a nonelderly person with a disability, whereas the MS family must include only a nonelderly person with a disability. This person can be but is not required to be the head, co-head, or spouse for MS vouchers.

**Exhibit 1**

**Overview Mainstream and Non-Elderly Disabled Vouchers**

Category	Mainstream Vouchers	Non-Elderly Disabled Vouchers
<b>Eligibility</b>	Eligible member can be any member of household	Eligible member must be head of household, co-head, or spouse
<b>Financial Reporting</b>	Separate financial reporting from regular housing choice vouchers	Non-Elderly Disabled voucher reporting is combined with regular housing choice vouchers
<b>Other Names Used for the Program</b>	<ul style="list-style-type: none"> <li>• Mainstream 5 Year</li> <li>• Mainstream 5</li> <li>• Section 811 Vouchers</li> <li>• MS5</li> </ul>	<ul style="list-style-type: none"> <li>• Non-Elderly Disabled Voucher program</li> <li>• Designated housing vouchers</li> <li>• Certain Developments vouchers</li> </ul>
<b>Total Vouchers Awarded</b>	71,217*	54,727*
<b>Number Administering Entities</b>	645**	397***
<b>Types of Administering Entities</b>	Primarily public housing agencies and some nonprofits	Public housing agencies

Sources: \*[https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/dashboard) (data are as of November 2023);

\*\*[https://www.hud.gov/sites/dfiles/PIH/documents/Mainstream\\_Allocations\\_by\\_PHA\\_and\\_Opportunity\\_8.15.23%20-%20FINAL-CLEAN.xlsx](https://www.hud.gov/sites/dfiles/PIH/documents/Mainstream_Allocations_by_PHA_and_Opportunity_8.15.23%20-%20FINAL-CLEAN.xlsx);

\*\*\*<https://www.hud.gov/sites/documents/ned-baseline-db.xlsx>;

HUD (n.d.b.) "Mainstream Vouchers—The Basics" <https://files.hudexchange.info/resources/documents/Mainstream-Vouchers-The-Basics.pdf>

Assisted households must meet all HCV eligibility requirements, including income, citizenship or immigration status, and mandatory screening exclusions. However, to be eligible for MS or NED vouchers, the applicant must also meet the 24 CFR Part 5 definition of disability:

1. Have a disability as defined in 42 U.S.C. 423.
2. Be determined, pursuant to HUD regulations, to have a physical, mental, or emotional impairment that (1) is expected to be of long-continued and indefinite duration; (2) substantially impedes his or her ability to live independently; and (3) is of such a nature that more suitable housing conditions could improve the ability to live independently.
3. Have a developmental disability as defined in 42 U.S.C. 6001.

Someone whose disability is based solely on drug or alcohol dependence is generally not considered disabled for purposes of NED or MS voucher eligibility.

PHAs must use the same administrative policies for MS vouchers as for regular HCVs. For example, a PHA must screen MS applicants the same way it screens all applicants to the HCV program.

## A Brief History of Housing for People With Disabilities: How MS and NED Came to Be

From 1961 to 1992, adults with disabilities under the age of 62 were eligible for what is today considered affordable “elderly housing” (PRA, 1993). This housing included both PHA-owned properties (primarily efficiency and one-bedroom units) and privately owned, federally subsidized or “HUD-assisted” properties.

In 1992, Congress enacted legislation that permitted PHAs and HUD-assisted housing developments to limit access for adults with disabilities under 62 years of age or, in some cases, to exclude them entirely.<sup>2</sup> A few years later, Congress amended the original Housing and Community Development Act to allow PHAs to admit “near elderly” families, defined as aged 50 to 61, to public housing before admitting disabled adults aged 18 to 49.<sup>3</sup>

This legislation was passed in reaction to a number of factors. PHAs and HUD-assisted properties were reporting rising numbers of disabled adults under the age of 62 applying to and moving into public housing. A 1992 U.S. Government Accountability Office (GAO) report estimated that 51 percent of all new admissions in the previous year had been nonelderly persons with disabilities (GAO, 1992). The increase in younger tenants may have been a result of deinstitutionalization and increased fair housing protections for people with disabilities due to the passage of the Federal Fair Housing Act Amendments of 1988 (Koyanagi, 2007). According to GAO, many PHAs reported that the younger tenants had poor housekeeping habits, disruptive visitors, alcohol abuse, and excessive noise. However, other reports indicated fewer problems (Goranson, 1998). Properties experienced real and perceived conflicts between younger and older tenants who often had different interests and lifestyles. These factors, combined with media hype surrounding some specific incidents, unfortunately resulted in a perfect storm and this exclusionary legislation (Mann, 2011).

Disability advocates lobbied to replace the housing lost through the 1992 legislation and expressed a desire for tenant-based assistance that would give disabled tenants more control over their housing choices (DRACH, n.d.). In 1995, Congress began appropriating tenant-based rental assistance funds to serve nonelderly disabled households. HUD awarded vouchers in various ways to address the issues the 1992 legislation created. For example, “Certain Developments” vouchers were awarded to PHAs in communities with HUD-assisted properties that had implemented elderly preferences or nonelderly limitations (DRACH, n.d.; HUD, n.d.h.). “Designated Housing” vouchers provided rental assistance for nonelderly disabled families who would have been eligible for public housing units if occupancy had not been restricted to elderly families through an approved

---

<sup>2</sup> H.R.5334 – *Housing and Community Development Act of 1992*. Title VI, 102nd Congress (enacted). <https://www.congress.gov/bill/102nd-congress/house-bill/5334>. As a result of this legislation, the following HUD multifamily programs are required to maintain *only up to 10 percent* of their units for nonelderly adults with disabilities: Section 8 new construction projects, Section 8 substantial rehabilitation projects, state housing agencies’ Section 8 projects, Section 8 new construction projects under the Section 515 rural housing program, and Section 8 housing assistance programs for the disposition of HUD-owned projects. The following HUD multifamily programs have *no set-aside requirement* for nonelderly adults with disabilities: Section 202 of the Housing Act of 1959, Section 221(d)3) of the National Housing Act, and Section 236 of the National Housing Act.

<sup>3</sup> *Housing Opportunity Program Extension Act*. Public Law 104–120—March 28, 1996. <https://www.congress.gov/104/plaws/publ120/PLAW-104publ120.pdf>.

Designated Housing Plan (DHP; HUD, n.d.c., 2005).<sup>4</sup> In 2011, HUD merged these named vouchers to become either NED or MS vouchers.

HUD made awards of NED and MS vouchers from 1996 to 2002, again in 2008 and 2010, and then not until 2017. HUD made MS awards through competitions in 2017 and 2019 and then awarded PHAs vouchers through noncompetitive notices in 2020 and 2022. As exhibit 2 shows, PHAs currently administer 71,256 MS and 54,967 NED vouchers.

## Exhibit 2

### Mainstream and Non-Elderly Disabled Voucher Utilization

Special Purpose Vouchers	Total Vouchers Awarded	Total Vouchers Leased*	Utilization Rate (%)
<b>Mainstream</b>	71,217	56,039	78.69
<b>Non-Elderly Disabled</b>	54,727	46,459	84.89

*\*Data are as of November 2023.*

Source: HUD (n.d.g.) "Housing Choice Voucher (HCV) Data Dashboard" [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/dashboard)

## The Role of Supports and Partnerships

The early NED and MS funding competitions required PHAs to only “assist program participants to gain access to supportive services available within the community, and to identify public or private funding sources for accessibility features, when participants request such assistance, but not require eligible applicants or participants to accept supportive services as a condition of participation or continued occupancy in the program.”<sup>5</sup> However, by 2001, PHAs and nonprofits awarded MS vouchers were also required to provide housing search assistance, higher rents to owners for the provision of accessible units and structural modifications for persons with disabilities, and technical assistance to owners for making reasonable accommodations or making units accessible to persons with disabilities.<sup>6</sup>

In early 2011, HUD funded nearly 950 NED Category 2 (NED2) vouchers (HUD, n.d.d.). Developed through a collaboration between HUD and the Centers for Medicare and Medicaid Services (CMS) Money Follows the Person (MFP) program, these NED2 vouchers supported the transition of nonelderly persons with disabilities residing in nursing homes or other healthcare institutions into the community.<sup>7</sup> PHAs were required to develop partnerships to facilitate such transitions and to make supportive services available.

<sup>4</sup> To implement these limitations, PHAs are required to submit a DHP designating public housing projects for elderly family only, disabled family only, or “mixed population” elderly and disabled family only occupancy. DHPs must be submitted to HUD for approval.

<sup>5</sup> NOFA for Rental Assistance for Persons With Disabilities, in Support of Designated Housing Allocation Plans. U.S. Department of Housing and Urban Development. 61 Fed. Reg. 211. <https://www.govinfo.gov/content/pkg/FR-1996-10-30/html/96-27839.htm>.

<sup>6</sup> Super Notice of Funding Availability (SuperNOFA) for HUD’s Housing, Community Development and Empowerment Programs and Section 8 Housing Voucher Assistance for Fiscal Year 2001. U.S. Department of Housing and Urban Development. 66 Fed. Reg. 38. <https://www.govinfo.gov/content/pkg/FR-2001-02-26/pdf/01-4310.pdf>.

<sup>7</sup> The MFP demonstration, first authorized by Congress as part of the 2005 Deficit Reduction Act and then extended by the 2010 Patient Protection and Affordable Care Act, is designed to shift Medicaid’s long-term care spending from institutional care to home- and community-based services.

The most recent MS vouchers (2017 to 2022) reflect a reinvigoration of this HUD-CMS collaboration. Although the early NED and MS vouchers were issued in response to the exclusionary legislation described previously, the 2017 and 2019 MS vouchers were awarded to PHAs interested in addressing federal policy priorities. The 2017 funding competition provided higher scores for PHAs that targeted funds to assist nonelderly persons with disabilities transitioning out of institutional or other segregated settings, at serious risk of institutionalization, homeless, or at risk of becoming homeless. The funding notice stated that targeting resources to these populations would “help further the goals of the Americans with Disabilities Act” (ADA; HUD, 2018). Higher scores were also awarded to PHAs that formalized partnerships with and leveraged resources from state Medicaid agencies and various U.S. Department of Health and Human Services (HHS) partner agencies or organizations. HUD stated that these partnerships would “assist PHAs to use these vouchers by providing referrals, assisting with a timely transition to a unit, and providing the opportunity to access any supportive services and supports” (HUD, 2018). The 2019 funding competition was structured similarly but also supported the goals of HUD’s Strategic Plan to Prevent and End Homelessness (HUD, n.d.i.).

### **MS and NED Vouchers are of Critical Importance to People with Disabilities**

MS and NED vouchers address three critical housing challenges facing people with disabilities: (1) the extremely low income of many people with disabilities living alone makes it nearly impossible for them to find affordable housing; (2) people with disabilities continue to be institutionalized despite integration mandates; and (3) the legislative changes to eligibility requirements for HUD-funded housing programs described previously significantly decreased people with disabilities’ access to affordable housing.

### **Millions of Extremely Low-Income People With Disabilities Have Worst Case Housing Needs**

Supplemental Security Income (SSI) is the federal income maintenance program that assists people with significant and long-term disabilities who have virtually no assets and—in most instances—no other sources of income. The Social Security Administration’s latest report on the SSI program found that 4.1 million people with disabilities aged 18 to 64 receive SSI (SSA, 2023).

In 2024, the national average monthly SSI payment of \$983 is only 17.5 percent of the national median income, nearly one-half of what HUD defines as extremely low income (Sloane, 2024).<sup>8</sup> *Priced Out*, a regularly updated report on the housing affordability crisis for people with disabilities, found that these 4.1 million people with disabilities whose sole source of income is SSI cannot afford an apartment in *any* housing market in the United States without additional financial support, such as an SPV (TAC, 2024). HUD defines households with “worst case housing needs” as those with incomes at or below 50 percent of Area Median Income with no government housing assistance and that pay more than one-half of their incomes toward rent, live in severely inadequate conditions, or both. HUD’s most recent *Worst Case Housing Needs* report found that, in 2021, 1.26 million (37.4 percent) of very low-income renter households that included people younger than 62 years of age

---

<sup>8</sup> HUD defines low-income as 80 percent of Area Median Income (AMI) and below, very low-income as 50 percent of AMI, and extremely low-income as 30 percent of AMI.

reporting at least one of the six disability measures in the American Housing Survey had worst case housing needs (Alvarez and Steffen, 2023). Of these 1.26 million households, 34.4 percent are not living with family or others. HUD's *Worst Case Housing Needs* data include only renters and do not reflect those who have already lost housing and are experiencing homelessness, are at risk of homelessness, live in segregated institutions, or are incarcerated because neither enough affordable housing nor sufficient access to rental assistance exists (Alvarez and Steffen, 2023).

### **People With Disabilities Desire and Have the Right to Live in the Community**

In the 1999 *Olmstead v. L.C.* decision, the U.S. Supreme Court found that unjustified segregation of persons with disabilities constitutes discrimination in violation of Title II of the ADA, which mandated that public entities must ensure that people with disabilities live in the most integrated settings possible (Martone, Arienti, and Lerch, 2019). Not only is it the law, but numerous studies have found that people with disabilities prefer living in integrated community-based settings and that they are more likely to have positive outcomes when they are able to choose where they live (Mathematica, n.d.; Keck, 1990; Oliver et al., 2020; Tanzman, 1993). It is also of note that during the height of the COVID-19 pandemic, people with disabilities living in institutional and congregate settings, such as nursing homes, were at higher risk of death than those in noncongregate settings (Chidambaram and Burns, 2024; Landes et al., 2020).

Despite state efforts to “rebalance” spending from institutions to community-based programs, many people with disabilities remain institutionalized. Approximately 1.4 million people with disabilities live in segregated institutional settings, such as psychiatric hospitals, nursing homes, and residential board and care facilities (Houtenville, Bach, and Paul, 2023). Many of them were homeless at admission and are institutionalized due to a lack of integrated affordable housing (Wadhera et al., 2019).

### **MS and NED Replace Affordable Housing Opportunities Lost to People With Disabilities**

Although the legislation passed in 1992 made clear that existing tenants could not be involuntarily displaced, housing opportunities were significantly diminished for people with disabilities on waiting lists and others seeking housing in the future. In 1996, the Technical Assistance Collaborative (TAC) estimated that people with disabilities would lose access to an estimated 273,000 units (O'Hara, Miller, and Collins, 2001). In 2001, using data from HUD and two federal studies, TAC and the Consortium for Constituents with Disabilities revised the estimate to be between 268,500 and 293,500, including 200,000 to 225,000 units of HUD-assisted housing (O'Hara, Miller, and Collins, 2001).

HUD's most current data indicate that 96 PHAs have active DHPs designating nearly 36,000 units as elderly only, and another 259 PHAs have DHPs that had previously reported more than 56,000 units as elderly only (HUD, n.d.e., 2021).

### **MS and NED Implementation Challenges**

Despite the great need for affordable housing for people with disabilities—including people living in institutions or at risk of institutionalization and those experiencing or at risk of homelessness—

as of November 30, 2023, MS utilization stood at 78.69 percent and NED voucher utilization at 84.89 percent. Vouchers are “underutilized” when a PHA has not leased all its vouchers or has not utilized all the resources provided. PHAs that do not lease up at least 80 percent of their MS vouchers risk HUD recapture and reallocation of funds (HUD, 2018).

MS voucher underutilization can be explained by large, fairly recent new tranches of MS awards. Before 2017, approximately 15,000 MS vouchers had been awarded. The remaining 56,000 vouchers were all awarded in the past 6 years. However, as described previously, no new NED vouchers have been awarded since 2010, yet utilization was just under 85 percent in November 2023. A few studies, and recent work directly with PHAs administering MS vouchers, provide some insight into voucher implementation challenges.

### **Studies Find Implementation Challenges**

A 2014 study of NED2 vouchers provides some insights into the challenges of using SPVs to support people with disabilities transition from nursing facilities and other institutions to the community (Lipson, Hoffman, and Kern, 2014). The study found that many PHAs initially reported receiving very few referrals to their programs and noted that many clients’ case managers did not have housing experience or expertise. The NED2 programs also cited difficulty identifying accessible units and units with rents within the required PHA payment standards. In addition, landlords were not willing to hold units while supportive services (for example, personal care attendants) were identified as needed for participants transitioning from nursing facility plans. Finally, the study found that many applicants had missing documentation, bad credit, or criminal backgrounds (Lipson, Hoffman, and Kern, 2014).

Housing discrimination is another challenge people with disabilities face when seeking rental housing. The 2023 *Fair Housing Trends Report* by the National Fair Housing Alliance found that more than 50 percent, or 17,500, of all discrimination complaints in 2022 were disability related, a consistent trend for the past 10 years (Augustine et al., 2023). HUD’s 2017 study on housing discrimination experienced by people with certain disabilities found that individuals with mental illness and intellectual or developmental disabilities were less likely to be told an advertised unit was available, less likely to be invited to contact the housing provider, and less likely to be invited to inspect the unit (Hammel et al., 2017). People with mental illness had higher rates of adverse treatment than individuals with intellectual and developmental disabilities.

### **Insights From Public Housing Agency Communities of Practice**

Since April 2021, TAC has provided technical assistance support in the form of communities of practice (CoPs) for PHAs administering MS vouchers. In 2021 and 2022, TAC facilitated three CoPs, with the goals of facilitating ongoing peer-to-peer learning among PHAs, improving voucher access for people with disabilities transitioning out of institutions or segregated settings, increasing MS voucher utilization, and improving coordination among PHAs and health and human service agencies and systems. Each of the three CoPs was marketed to a specific group of PHAs, which then self-selected and volunteered to participate. The three groups were (1) state housing agencies only, (2) PHAs in Connecticut, and (3) PHAs in Minnesota. Thirty-seven PHAs participated in total.



Through these CoPs, TAC identified some thematic challenges that PHAs face during implementation (HUD, n.d.b.). Some of these challenges are the same as those seen currently in almost any HCV or SPV program, given the strong rental markets across the country—but others are unique to, or intensified for, the very low-income young adult with disabilities target population.

**Application.** PHAs found that many eligible households that did not have case managers, advocates, or family members to assist them had a hard time submitting completed applications at all or in a timely manner. PHAs indicated that applicants for MS vouchers required a longer time to secure paperwork, such as income documentation.

Applicants for MS vouchers are selected from the PHAs' required single HCV waiting lists. Discussions with PHAs revealed that, in some cases, program startup had been delayed because the PHAs' HCV application did not request the disability or preference information necessary to identify eligible applicants already on waiting lists. These PHAs had to develop strategies to identify such applicants and expand the pool if needed. These sometimes costly or staff-intensive strategies might have involved sending letters to large groups of applicants on waiting lists, establishing new preferences in the PHA Administrative Plan, opening and closing the waiting list, and other activities. Furthermore, when the PHA did not have at least one local service or disability partner, identifying new eligible applicants for the waiting list was difficult.

**Housing Search.** Once issued vouchers, many households faced challenges in their housing searches. In competitive rental markets, some participants could not move quickly enough to secure units. Insufficient financial resources necessary to “close the deal,” such as application fees or security deposits, also hampered many participants. Applicants whose sole source income is SSI and who may have “worst case housing needs” will have difficulty saving enough for security deposits equal to a full month's rent. This challenge is even greater for individuals in nursing facilities and institutions, where the resident may receive less than \$100 per month. Even when funding for security and utility deposits and application fees was available through state or local programs, the funding agency often did not move quickly enough to allow people with disabilities to secure units before they were leased to someone else. Finally, property managers often screened out people with difficult tenancy histories, such as numerous evictions or criminal records.

**Unit Identification.** Individuals trying to lease up with MS vouchers faced challenges, such as lack of supply and fierce competition for any available rental housing stock, challenges similar to those faced by participants in other rental assistance programs—such as HCV, EHV, and state rental assistance programs. Other unit identification challenges were unique to the target population, such as the need for accessible units or one-bedroom units in locations near public transportation.

**Housing-Related and Other Supports.** Although early MS competitions required PHAs to support activities such as housing search, PHAs in the CoPs made it clear that they were perpetually understaffed and unable to provide individualized supports. Although some MS applicants had help from case managers, advocates, or family members (for instance, MFP participants generally had case managers or other housing supports), many did not. PHAs reported that people with disabilities without such assistance had a much harder time finding, securing, and leasing housing. Some PHAs had developed partnerships with local disability organizations—such as centers for

independent living, homeless providers, or other nonprofit agencies—and could ask these agencies to assist participants. Sometimes, these local relationships were not sustained.

## **What Works? Lessons Learned**

Both scholarly literature and technical assistance experience provide insights on implementation challenges as well as factors that contribute to success.

### **Lessons Learned from the Literature**

A study of NED2 voucher implementation conducted by the HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) found several implementation approaches and activities associated with successful voucher issuance and leasing (Lipson, Hoffman, and Kern, 2014). First, PHAs and partners with preexisting partnerships or strong lines of communication were able to issue and lease up more quickly. Second, states with a centralized implementation model—such as a single statewide coordinator or a small team of regional coordinators responsible for ensuring continual progress and accountable for identifying bottlenecks and barriers—had greater success. Third, states with dedicated housing coordinators at the state or local levels had greater success than those without.

Mathematica's 9-year study of the MFP program, which seeks to support transitions from nursing facilities to the community, also provides useful insights (Mathematica, n.d.). For example, a 2011 field report found that one of the biggest contributors to program success was MFP's ability to pay for one-time move-in costs, such as security and utility deposits, home furnishings, and home modifications (Lipson, Valenzano, and Williams, 2011).

### **Lessons Learned From the Public Housing Agency Communities of Practice**

The Mainstream CoPs had findings similar to those in the previous studies. Partnerships between housing and service providers can support effective outreach and referrals, housing searches, timely transitions to units, and ongoing access to supportive services and tenancy supports (HUD, 2023a). Sustaining these partnerships over time is also critical and requires a written memorandum of understanding or other protocol that includes updating partners with staff changes, onboarding new staff, and meeting regularly. Since the ASPE study was issued in 2014, rental housing markets have become more competitive, and new state and federal rental assistance programs have been established (for example, EHV), creating even more competition between voucher holders for units. PHAs and local partners have learned the importance of landlord incentives, such as those in exhibit 3, to secure units in competitive markets.

### Exhibit 3

#### Examples of Landlord Incentives

Financial Incentives	Nonfinancial Incentives
<ul style="list-style-type: none"> <li>• Lease signing bonuses</li> <li>• Extra security deposit</li> <li>• Holding and vacancy fees</li> <li>• Help with minor repairs</li> <li>• Risk mitigation funds (reimbursement for repairing damages)</li> </ul>	<ul style="list-style-type: none"> <li>• Staffing landlord liaison to respond to questions and tenancy issues</li> <li>• Quick inspection process to reduce turnover time</li> <li>• Quick and timely processing of checks</li> <li>• Offering tenancy education to clients</li> <li>• Proactive check-ins to prevent and resolve tenancy issues</li> <li>• Tenancy support to avoid eviction</li> <li>• Community recognition for landlords</li> </ul>

*Source: HUD (n.d.b.) "Mainstream Vouchers: Lessons Learned from Communities of Practice" <https://files.hudexchange.info/resources/documents/Mainstream-Vouchers-Lessons-Learned-from-Communities-of-Practice.pdf>*

PHAs participating in the CoPs also identified successful strategies for identifying units with accessible design features.

- MyHousingSearch.com is a portal for rental listings in an estimated 40 states and local communities. This website allows housing seekers to search for rental apartments statewide or in specific communities. The websites are free. Users can search specifically for accessible units that meet the rent limitations of their vouchers.
- Some states and communities have developed their own housing search tools, including Housing Navigator in Massachusetts and Housing Link in Minnesota.

Although the rules governing state PHAs are no different from those for any other PHA, the state agencies are better positioned than local PHAs for certain actions. For example, the CoPs found that MFP, which the state Medicaid agency administers, often worked more successfully with state PHAs than with local PHAs in the same state.

TAC also observed that different target populations may require different program designs or “tweaks.” For example, PHA programs targeting younger MFP participants with disabilities transitioning from nursing facilities and other institutions tended to be slower to lease up with vouchers but better at helping tenants retain housing because MFP participants have access to Medicaid-funded, long-term services and supports or other state resources, such as a State Mental Health Authority. In contrast, local homeless coordinated entry systems can provide faster applicant outreach and referral. However, many homeless systems do not (yet) have robust sources or partners to provide the long-term services and supports needed to help some participants sustain their tenancies.

### Lessons Learned From the Emergency Housing Voucher Program

EHV is a new SPV program. The program targets individuals and families who are experiencing homelessness, at risk of homelessness, fleeing or attempting to flee domestic violence or human trafficking, or were recently homeless or had a high risk of housing instability. Although disability is not an EHV eligibility requirement, HUD homeless data suggest that many persons in these eligibility categories do have disabilities or disabling conditions (HUD, 2023b).

Many of the lessons discussed previously have been applied in the EHV program. The EHV program—

- Provided PHAs with robust administrative funding, including financial incentives for meeting leasing milestones and a per voucher service fee that could be used to pay for housing search assistance, landlord incentives, tenants' security and utility deposits, furniture, and household goods as components of the program's success. PIH Notice 2023–23 recently amended EHV operating requirements to add pretenancy services and services that support families in fulfilling their obligations under the EHV program as an eligible use of service fees (HUD, 2023c).
- Required PHAs to develop a memorandum of understanding with their local homeless planning entity for applicant outreach and referral, and in some cases, housing search and other assistance.
- Requires PHAs to establish separate waiting lists for EHV referrals and applicants.
- Loosened the program's screening requirements to address the challenges described previously for MS applicants who have difficult tenancy or even criminal histories.

Based on the relatively speedy lease up of vouchers across the country, the EHV program has demonstrated some success, probably partly due to the EHV program designs. HUD is certainly betting on that as it applies many of these design features to stability vouchers (SVs), its newest SPV program.

## **Considerations for the Future**

Based on the lessons described above, the following recommendations can help agencies avoid implementation challenges and achieve full and efficient utilization of these critical resources.

### **Build “Lessons Learned” Into All Special Purpose Voucher Programs**

Like the MS and NED voucher programs, several other SPV programs also experience utilization challenges and would benefit from the types of flexibilities provided for the EHV and SV programs. The Biden Administration's fiscal year 2024 budget request includes language that would add flexibilities for MS and FUP vouchers:

HUD proposes to provide PHAs with certain flexibilities in the administration of Mainstream, FUP and FYI programs. These flexibilities would allow PHAs to adopt certain specialized policies for these programs, enabling them to create separate waiting lists, extend the time households may search for housing, apply reduced screening criteria, and accept direct referrals from supportive service agencies. HUD further proposes to provide statutory flexibilities for PHAs to allow FUP and FYI programs the flexibility to adopt a 90- to 120-day referral timeline. It is difficult for youths to find units for lease within the current 90-day timeframe, which increases the risk that such persons would experience homelessness. This extended referral timeline would allow more people more time to enter these programs (HUD, n.d.f.).

## **Continued HUD-HHS Collaboration Can Support SPV Utilization by People With Disabilities**

CMS has issued a series of guidance resources encouraging state Medicaid agencies to address health-related social needs by paying for housing and tenancy supports (CMS, 2023a, 2023b, 2021, 2014). Housing and tenancy supports include both pre-tenancy services, which assist individuals to prepare for and transition to housing, and tenancy-sustaining supports, which are provided once an individual is housed to help the person achieve and maintain housing stability. HUD and HHS recently announced a Housing and Services Partnership Accelerator (HSPA), which will support eight states and the District of Columbia in developing or expanding innovative housing-related supports and services for Medicaid-eligible people with disabilities and older adults experiencing or at risk of homelessness. HSPA will focus on helping states improve collaboration and coordination between organizations and systems that provide services and resources that help people find—and keep—stable housing in the community. HUD and HHS should continue to collaborate to provide guidance and support to PHAs to connect SPV participants, including MS and NED recipients, with these critical supports.

## **Harness State Housing Agencies' Superpowers**

Thirty states have state housing agencies that administer the HCV program.<sup>9</sup> Although the rules governing state housing agencies are no different from those for any other PHA, these agencies are better positioned than local PHAs for certain actions. Communication between state agencies is simpler than when communication has to be relayed through several layers of bureaucracy from a state Medicaid agency to a county health department and then to a local PHA. HUD may want to consider (1) providing incentives for every state to develop a state housing agency capable of administering the HCV program and (2) strategically leveraging state-level relationships in funding rounds. In addition, HUD should encourage HHS to harness local and regional strengths and work with state Medicaid, behavioral health, and disability agencies to identify successful models for county and local health, behavioral health, and disability entities' collaboration with local PHAs.

## **Provide Additional Guidance and Support to Encourage PHAs to Project-Based SPVs**

HCVs can be tenant-based, allowing tenants to choose the neighborhoods and rental apartments where they will use vouchers, or project-based, when the rental assistance is attached to a specific property or unit. As discussed previously, many people with disabilities prefer tenant-based rental assistance that allows them to express personal preferences. Unfortunately, for a number of years, much of the country has experienced increasingly tight rental markets, especially among affordable rental units. The freedom to choose is meaningless when little is available from which to choose. Project-based vouchers are a strategy to secure housing stock for very low-income renters and are especially helpful in securing housing opportunities in desirable gentrifying neighborhoods pushing out many renters. Therefore, now may be a good time to encourage PHAs to project-based SPVs to help house vulnerable populations more quickly in the short term.

---

<sup>9</sup> Reported by HUD Public and Indian Housing staff.

### **Support Identification of Accessible Housing for People With Physical Disabilities**

Federal fair housing laws require that new or substantially rehabilitated properties provide units that are accessible or have universal design elements, or both. New and rehabilitated units become available every year through each state's Low-Income Housing Tax Credit (LIHTC) program. Properties awarded LIHTC subsidies are required to accept HCVs, including MS and NED vouchers. Ensuring that PHAs and housing seekers are aware of these accessible housing opportunities can better ensure that participants requiring these design features can locate affordable apartments that have them.

### **Further Explore How Financial Incentives Can Address Implementation Challenges**

Both the literature review and the CoPs suggested that landlord incentives and applicant funds for security and utility deposits, application fees, and other one-time costs can improve SPV utilization. However, HUD reports that only about one-third of PHAs requested the MS extraordinary administrative fees and only slightly more than 50 percent of service fees have been expended in the EHV program (HUD, n.d.g.). Understanding these contradictions may be useful to future SPV program implementation.

### **Ensure Special Purpose Vouchers Continue to Target the Most Vulnerable Populations**

SPV implementation demonstrates balancing an accelerated rollout with a commitment to target the most vulnerable populations is challenging. The EHV experience confirms that lease up can occur more quickly with waivers to the current HCV regulations; funding for landlord incentives and other unfunded, critical activities; and effective partnerships between PHAs and supportive services agencies. The Housing and Services Resource Center, a collaboration between HUD and HHS, and the Homeless and Housing Resource Center in the Substance Abuse and Mental Health Services Administration can support these types of ongoing cross-agency, cross-sector collaborations.

## **Conclusion**

MS, NED, and other SPV programs serve very low-income and vulnerable populations that are at high risk of homelessness, institutionalization, and incarceration without rental assistance. Understanding and applying lessons learned about maximizing utilization of these limited resources is critical to addressing the federal priorities of community integration and ending homelessness.

## **Acknowledgments**

The authors wish to thank HUD staff Ashley Matthews, supervisor housing program specialist, and Emily Warren, senior housing program specialist, who have supported the Mainstream Voucher Community of Practice, as well as Sara Burke, technical assistance collaborative communications director, for her assistance with this article.

## Authors

Lisa Sloane is a director at the Technical Assistance Collaborative (TAC). Liz Stewart is a senior consultant at TAC. Kevin Martone is the executive director of TAC.

## References

Alvarez, Thyria A., and Barry L. Steffen. 2023. *Worst Case Housing Needs: 2023 Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Augustine, Lindsay, Nikitra Bailey, Sherrill Frost Brown, Scott Chang, Lisa Rice, and Morgan Williams. 2023. *2023 Fair Housing Trends Report: Advancing a Blueprint for Equity*. Washington, DC: National Fair Housing Alliance. <https://nationalfairhousing.org/wp-content/uploads/2023/08/2023-Trends-Report-Final.pdf>.

Centers for Medicare and Medicaid Services (CMS). 2023a. "Additional Guidance on Use of In Lieu of Services and Settings in Medicaid Managed Care." Department of Health & Human Services. <https://www.medicaid.gov/sites/default/files/2023-01/smd23001.pdf>.

———. 2023b. "Coverage of Services and Supports to Address Health-Related Social Needs in Medicaid and the Children's Health Insurance Program." CMCS Informational Bulletin. <https://www.medicaid.gov/sites/default/files/2023-11/cib11162023.pdf>.

———. 2021. "Opportunities in Medicaid and CHIP to Address Social Determinants of Health (SDOH)." State Health Official letter SHO# 21-001. <https://www.medicaid.gov/federal-policy-guidance/downloads/sho21001.pdf>.

———. 2014. "Opportunities in Medicaid and CHIP to Address Social Determinants of Health (SDOH)." Department of Health & Human Services. [https://www.medicaid.gov/sites/default/files/2022-01/sho21001\\_0.pdf](https://www.medicaid.gov/sites/default/files/2022-01/sho21001_0.pdf).

Chidambaram, Priya, and Alice Burns. 2024. "Few Nursing Facility Residents and Staff Have Received the Latest COVID-19 Vaccine." Kaiser Family Foundation. <https://www.kff.org/medicaid/issue-brief/few-nursing-facility-residents-and-staff-have-received-the-latest-covid-19-vaccine/>.

Disability Rights Action Coalition for Housing (DRACH). n.d. *From Warehouses to Our Houses: A Grassroots Guide for People with Disabilities and Our Advocates*. Chicago, IL: DRACH.

Goranson, Susan. 1998. *Recommendations of the Working Group on Integrating Elderly and Disabled People Who Dwell in Senior Housing*. Report 98-R-0124. Hartford, CT: Office of Labor Relations. <https://www.cga.ct.gov/PS98/rpt/olr/hm/98-R-0124.htm>.

Hammel, Joy, Janet Smith, Susan Scovill, Ron Campbell, and Rui Dunn. 2017. *Rental Housing Discrimination on the Basis of Mental Disabilities: Results of Pilot Testing—Study of Rental Housing Discrimination on the Basis of Mental Disabilities, Final Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Houtenville, A., S. Bach, and S. Paul. 2023. *Annual Report on People with Disabilities in America: 2023*. Durham, NH: University of New Hampshire, Institute on Disability. <https://disabilitycompendium.org/sites/default/files/user-uploads/Accessible-Annual%20Report%20---%202023%20---%20Accessible.pdf>.

Keck, Jonathan. 1990. "Responding to Consumer Housing Preferences: The Toledo Experience," *Psychosocial Rehabilitation Journal* 13 (4): 51–58.

Koyanagi, Chris. 2007. *Learning From History: Deinstitutionalization of People with Mental Illness As Precursor to Long Term Care Reform*. San Francisco, CA: Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured.

Landes, Scott D., Margaret A. Turk, Margaret K. Formica, Katherine E. McDonald, and J. Dalton Stevens. 2020. "COVID-19 Outcomes Among People with Intellectual and Developmental Disability Living in Residential Group Homes in New York State," *Disability and Health Journal* 13 (4): 100969. <https://pubmed.ncbi.nlm.nih.gov/32600948/>.

Lipson, Debra, Denise Hoffman, and Matthew Kern. 2014. *Non-Elderly Disabled Category 2 Housing Choice Voucher Program: An Implementation and Impact Analysis*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

Lipson, Debra, Christal Stone Valenzano, and Susan R. Williams. 2011. *What Determines Progress in State MFP Transition Programs? The National Evaluation of the Money Follows the Person (MFP) Demonstration Grant Program, Reports from the Field #8*. Washington, DC: Mathematica. <https://www.mathematica.org/publications/what-determines-progress-in-state-mfp-transition-programs>.

Mann, Jennifer. 2011. "Crime—and the Fear of Crime—Haunts Some Senior Public Housing," *The Patriot Ledger*, March 29.

Martone, Kevin, Francine Arienti, and Sherry Lerch. 2019. *Olmstead at 20: Using the Vision of Olmstead to Decriminalize Mental Illness*. Boston, MA: Technical Assistance Collaborative. <https://www.tacinc.org/resource/olmstead-at-20/>.

Mathematica. n.d. "Research and Evaluation of the Money Follows the Person (MFP) Demonstration Grants." <https://mathematica.org/projects/research-and-evaluation-of-the-money-follows-the-person-mfp-demonstration-grants>.

O'Hara, Ann, Emily Miller, and Maura Collins. 2001. "What's Wrong With This Picture? An Update on the Impact of Elderly Only Housing Policies on People with Disabilities," *Opening Doors Issue Brief*, September.



Oliver, Stacy, Emily Z. Gosden-Kaye, Dianne Winkler, and Jacinta M. Douglas. 2020. "The Outcomes of Individualized Housing for People with Disability and Complex Needs: A Scoping Review," *Disability and Rehabilitation* 44 (7): 1141–1155.

Policy Research Associates (PRA). 1993. "Creating Community: Integrating Elderly and Severely Mentally Ill Persons in Public Housing," *Policy Information Center Highlights* 4 (2). <https://aspe.hhs.gov/policy-information-center-highlights-vol-4-no-2>.

Sloane, Lisa. 2024. "Priced Out: The Affordable Housing Crisis for People with Disabilities in 2024," *Technical Assistance Collaborative blog*, January 10. <https://www.tacinc.org/blog/priced-out-the-affordable-housing-crisis-for-people-with-disabilities-in-2024/>.

Social Security Administration (SSA). 2023. *SSI Annual Statistical Report, 2022*. Washington, DC: Social Security Administration, Office of Retirement and Disability Policy, Office of Research, Evaluation, and Statistics. [https://www.ssa.gov/policy/docs/statcomps/ssi\\_asr/index.html](https://www.ssa.gov/policy/docs/statcomps/ssi_asr/index.html).

Tanzman, Beth. 1993. "An Overview of Surveys of Mental Health Consumers' Preferences for Housing and Support Services," *Hospital and Community Psychiatry* 44 (5): 450–455.

Technical Assistance Collaborative (TAC). 2024. *Priced Out: The Housing Crisis for People With Disabilities*. Boston, MA: TAC. <https://www.tacinc.org/resources/priced-out/>.

U.S. Department of Housing and Urban Development (HUD). n.d.a. "Special Purpose Vouchers Fact Sheet." <https://files.hudexchange.info/course-content/special-purpose-vouchers-working-collaboratively-to-achieve-community-goals-to-end-homelessness/Special-Purpose-Vouchers-Fact-Sheet.pdf>.

———. n.d.b. "Mainstream Vouchers: Lessons Learned from Communities of Practice." <https://files.hudexchange.info/resources/documents/Mainstream-Vouchers-Lessons-Learned-from-Communities-of-Practice.pdf>.

———. n.d.c. "Non-Elderly Disabled (NED) Vouchers." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/ned](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/ned).

———. n.d.d. "NED Category 2 FAQs." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/nedcat2faq](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/nedcat2faq).

———. n.d.e. "Designated Status Housing Report—Instructions." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/ph/dhp/designated](https://www.hud.gov/program_offices/public_indian_housing/programs/ph/dhp/designated).

———. n.d.f. "Tenant-Based Rental Assistance." Office of Public and Indian Housing. [https://www.hud.gov/sites/dfiles/CFO/documents/2024\\_CJ\\_Program\\_Template\\_-\\_TBRA.pdf](https://www.hud.gov/sites/dfiles/CFO/documents/2024_CJ_Program_Template_-_TBRA.pdf).

———. n.d.g. "Housing Choice Voucher (HCV) Data Dashboard." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/dashboard).

———. n.d.h. "Certain Developments Vouchers." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/pwd/certain](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/pwd/certain).

———. n.d.i. “FY 2014–2018 HUD Strategic Plan Executive Summary.” [https://www.hud.gov/program\\_offices/spm/strategicplan2014\\_2018](https://www.hud.gov/program_offices/spm/strategicplan2014_2018).

———. 2023a. “Mainstream Voucher Topic Guides.” <https://www.hudexchange.info/resource/6548/mainstream-voucher-topic-guides/>.

———. 2023b. *The 2023 Annual Homeless Assessment Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Community Planning and Development. <https://www.huduser.gov/portal/sites/default/files/pdf/2023-AHAR-Part-1.pdf>.

———. 2023c. “Notice PIH 2023-23 (HA): Emergency Housing Voucher (EHV): Expanded Use of the EHV Services Fee.” Office of Public and Indian Housing. <https://www.hud.gov/sites/dfiles/OA/images/2023-23pihn.pdf>.

———. 2021. “Notice PIH 2021-14 (HA): COVID-19 Statutory and Regulatory Waivers and Alternative Requirements for the Public Housing, Housing Choice Voucher (including Mainstream and Mod Rehab), Indian Housing Block Grant and Indian Community Development Block Grant programs, Suspension of Public Housing Assessment System and Section Eight Management Assessment Program, Revision 3.” Office of Public and Indian Housing. <https://archives.hud.gov/news/2021/PIH2021-14.pdf>.

———. 2018. *2017 Mainstream Voucher Program*. Office of Public and Indian Housing. <https://www.hud.gov/sites/dfiles/SPM/documents/FY17%20Mainstream%20Voucher%20Program%20NOFA.pdf>.

———. 2005. “Notice PIH 2005-2 (HA): Requirements for Designation of Public Housing Projects.” Office of Public and Indian Housing. [https://www.hud.gov/sites/documents/DOC\\_8096.PDF](https://www.hud.gov/sites/documents/DOC_8096.PDF).

U.S. Government Accountability Office (GAO). 1992. *Public Housing: Housing Persons With Mental Disabilities With the Elderly*. Washington, DC: GAO. <https://www.gao.gov/products/rced-92-81>.

Wadhwa, Rishi K., Eunhee Choi, Changyu Shen, Robert W. Yeh, and Karan E. Joynt Maddox. 2019. “Trends, Causes, and Outcomes of Hospitalizations for Homeless Individuals: A Retrospective Cohort Study,” *Medical Care* 57 (1): 21–27. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7131970/>.

# Using Tenant-Based Vouchers To Help People Leave Homelessness: Lessons from Los Angeles

Nichole Fiore  
Jill Khadduri  
Sam Dastrup  
Abt Global

---

## Abstract

*Public housing agencies (PHAs) in Los Angeles County have committed large shares of their housing choice vouchers (HCVs) to help people leave homelessness. This article is based on a study that measured the extent to which people experiencing homelessness at the time of voucher issuance succeeded in finding a landlord willing to lease a unit to them. The study found their rate of lease up was greater than the rate for people who were not experiencing homelessness at the time the voucher was issued. The Abt research team inferred that some of the reasons that people experiencing homelessness were able to use their vouchers included (a) voucher holders receiving help from case managers and (b) landlords receiving incentives provided by local government. However, more research is needed to understand better the role of case managers and landlord incentives, not just in Los Angeles but across the United States. The authors consider the choice made by Los Angeles PHAs to focus their HCV programs on addressing the homelessness crisis appropriate but recommend that the U.S. Congress return to making substantial additions to the pool of unrestricted HCVs available to PHAs. Expanding the HCV program will prevent the use of vouchers for people experiencing homelessness from eclipsing other program goals, such as increasing opportunities for children to leave poverty through exposure to well-resourced neighborhoods and reducing extreme rent burdens for all types of households.*

## Introduction

The 2021 appropriation of 70,000 Emergency Housing Vouchers (EHVs) targeted toward people experiencing homelessness can be seen as the culmination of a gradual shift in the focus of the Housing Choice Voucher (HCV) program toward addressing the homelessness crisis. High numbers of people experiencing homelessness are found across the United States, especially in

areas with high housing costs. The increasing emphasis on addressing homelessness is—to some extent—eclipsing an earlier focus on using vouchers to give families with children the opportunity to live in highly resourced neighborhoods and the program's basic purpose to keep households with low incomes from paying so much for rent that they cannot afford other basic necessities. The fact that these priorities compete is the tragic result of an inadequately funded HCV program.

Soon after the Housing and Community Development Act of 1974 embraced the voucher approach to providing housing assistance, it became clear that vouchers would not be an open enrollment program. Instead, the new voucher program would be constrained by annual appropriations that only modestly increased the number of households the program could serve each year. That result raised the issue of which households could be placed at the top of waitlists for housing assistance. In 1979, Congress established federal preferences for housing assistance that required households with severe rent burdens in their current housing or severely inadequate housing (including no housing) to be placed at the top of waiting lists for vouchers and other housing assistance programs.<sup>1</sup>

In the late 1990s, Congress replaced the federal preferences with stricter formal income targeting for households with extremely low incomes,<sup>2</sup> giving more discretion to local public housing agencies (PHAs) for waitlist preferences. Meanwhile, the growing crisis of homelessness led PHAs in places with high levels of homelessness to direct some of their housing vouchers toward helping people experiencing homelessness to become housed. Federal law and regulations define two types of preferences: (1) a general preference that places any household experiencing homelessness (or another type of household chosen by the PHA) at or near the top of a waitlist and (2) a limited preference that specifies the number of vouchers used for a certain purpose. As of the early 2000s, most PHAs were using limited preference rather than general preference for people experiencing homelessness (Dunton et al., 2014).

The widespread use of housing vouchers to help people leave homelessness has broader implications regarding who gets access to the limited pool of housing vouchers. People experiencing homelessness do not mirror the overall population of people living with poverty-level incomes. Instead, these populations are disproportionately Black and Native American and have high rates of disabilities. For example, national data analyzed in annual reports to Congress show that 39 percent of people staying in shelters at some point during 2021 identified as Black or African American, although only 21 percent of people living in poverty identified as Black. A similarly disproportionate share of people identifying as Native Americans experienced sheltered homelessness compared with the Native American share of the poverty population (Henry et al., 2023). These disparities reflect long histories of discrimination in employment and housing that have put people in marginalized communities at high risk of falling into homelessness (Shinn and Khadduri, 2020).

---

<sup>1</sup> Section 8(d)(1)(A) of the U.S. Housing Act of 1937, as amended in 1979 and 1983.

<sup>2</sup> For the Housing Choice Voucher program, 75 percent of newly admitted households were required to have incomes below 30 percent of area median income. In some sense, this income targeting was not needed, as the subsidy formula—rent minus 30 percent of the household's income—targeted the program to those with the largest gaps between rent and 30 percent of their income.

As vouchers began to be used for people experiencing homelessness, an open question was whether highly vulnerable households would succeed in using tenant-based housing assistance. Given that people experiencing homelessness could experience discrimination because of race; disabilities, such as mental illness; and the stigma associated with homelessness, would they get through the process of applying for a voucher and find landlords willing to rent to them?

For individuals, some evidence from research said the answer was yes—if they had case managers helping them through the process (Newman and Goldman, 2008; Rosenheck et al., 2003). For families, the answer also was yes, even in the Family Options study, which provided vouchers to families without case managers dedicated to helping them through the process. Nearly all study families provided with access to vouchers used the voucher to leave homelessness (Gubits et al., 2019).

Despite the growing evidence that individuals and families could use vouchers to leave homelessness, much skepticism remained about whether people experiencing homelessness could compete for private market housing, especially in housing markets with high rents and low vacancies. An Abt research team had the opportunity to address that skepticism in Los Angeles through a study funded by the Conrad N. Hilton Foundation. The U.S. Department of Housing and Urban Development (HUD) Office of Policy Development and Research supported the study by providing household-level data for the 19 PHAs in Los Angeles County. The study was among the first to use data that show each transaction for using a voucher to measure the rates at which households issued vouchers can use them to lease a housing unit. The study was the first to focus on households experiencing homelessness when the voucher was issued.<sup>3,4</sup>

The demographic characteristics of households who were issued vouchers to help leave homelessness reflected the disproportionate representation of people identifying as Black or African American among the population experiencing homelessness in Los Angeles. Abt also found that households experiencing homelessness when they were issued vouchers succeeded in using their vouchers at the same rate as households not experiencing homelessness—in fact, at slightly higher rates—and that this was the case regardless of racial identity. The Abt study team inferred that the relatively high success rates of households experiencing homelessness can be attributed in part to case managers helping with the process of finding and leasing housing units and to landlord incentives provided by Los Angeles County. Finally, Abt found that the cost of HCV rent subsidies for people using vouchers to leave homelessness was essentially the same as the cost of rent subsidies for households not experiencing homelessness at the time they received a voucher.

In the concluding section, the authors of this article make recommendations with broader implications for the future of the HCV program. PHAs should continue using the program as part of local efforts to end homelessness and use their preference systems to that end. Although widespread use of vouchers to address the homelessness crisis is essential, an overall expansion of the voucher

---

<sup>3</sup> The same research team is currently studying success rates for people experiencing homelessness who were issued vouchers by PHAs in Orange County, California.

<sup>4</sup> Sections of this article are based on a report created by Abt Associates for the Conrad N. Hilton Foundation (Khadduri et al., 2022). The analysis excludes households referred for housing choice vouchers that PHAs in Los Angeles have assigned those vouchers to particular buildings. This research only examines vouchers that are given to households to be used in any housing unit that meets program standards.

program is needed so that tenant-based housing assistance can still serve other purposes with high policy importance. Access to housing vouchers should not be a zero-sum game.

To support the continuing use of vouchers to help people leave homelessness, the authors recommend a closer examination of the role that case management plays in helping people experiencing homelessness use the vouchers that PHAs make available. So far, most of the evidence on that topic has been inferential. The authors also encourage research that examines the housing retention rates of people who successfully use a voucher to leave homelessness.

## **Matching People Experiencing Homelessness to a Tenant-Based Voucher in Los Angeles**

For more than a decade, local governmental agencies, homeless service and healthcare providers, community organizations, and philanthropic organizations have engaged in efforts to end homelessness across Los Angeles. The focus of this community-wide effort has been largely on people with high needs and chronic patterns of homelessness. In recent years, the 19 PHAs in the Los Angeles region have dedicated major portions of their housing voucher programs to helping people leave homelessness for permanent housing. PHAs work with homeless service providers, the Los Angeles County Department of Health Services (DHS) and the Department of Mental Health (DMH), and the U.S. Department of Veterans Affairs (VA) to match people experiencing homelessness with vouchers, help them become eligible for vouchers, and help them search for housing.

However, using vouchers in Los Angeles has been notoriously difficult. In addition to the overall high demand for rental housing manifested as low rental vacancy rates across the region, Los Angeles landlords strongly resist accepting households who use vouchers to pay part of the rent. To help overcome the problem of landlord refusal to rent to households with vouchers, in 2019, the city and county of Los Angeles and the state of California each passed legislation banning landlords from turning away renters simply because they want to use a housing voucher to help pay the rent.

Of the 19 PHAs in the Los Angeles region, the largest by far are the Housing Authority of the City of Los Angeles (HACLA) and the Los Angeles County Development Authority (LACDA), the latter serving parts of the county with cities without PHAs. As of the end of 2020, HACLA was administering nearly 51,000 vouchers, and LACDA was administering more than 25,000 vouchers. The Housing Authority of the City of Long Beach (HACLB) is the largest of the 17 other PHAs in Los Angeles County, administering approximately 7,500 vouchers as of 2020 (HUD, 2020).

A voucher becomes available for use by a new household when a participating household exits the HCV program (turnover vouchers) or when HUD provides new funding to support additional vouchers. The number of vouchers a PHA can distribute varies from year to year, depending on turnover and new special-purpose funding made available by Congress. During the period covered by this analysis, PHAs were making vouchers available to people experiencing homelessness by either turnover in their regular HCV programs or accepting allocations of HUD-Veterans Affairs Supportive Housing (VASH) vouchers.<sup>5</sup> The number of vouchers made available

---

<sup>5</sup> The period for this analysis preceded the Emergency Housing Voucher program, enacted in 2021.

through turnover is modest relative to the overall size of a PHA's voucher program. Nonetheless, the largest of the Los Angeles PHAs had thousands of vouchers potentially available to issue to households experiencing homelessness.

The largest PHAs in the Los Angeles region have strong set-asides and waitlist preferences for people experiencing homelessness. Their preference systems are major commitments to use tenant-based HCVs as part of community-wide efforts to address homelessness. They also have accepted large allocations of HUD-VASH vouchers.<sup>6</sup> HACLA has committed large numbers of vouchers to people experiencing homelessness through limited preferences, totaling more than 5,900 vouchers. LACDA has committed to using a percentage of vouchers that become available through turnover to people experiencing homelessness, growing from 35 percent in 2014 to 50 percent in 2017 and 100 percent by the end of the study period.<sup>7</sup>

HACLA and LACDA have developed close relationships with the Los Angeles Homeless Services Authority (LAHSA), a joint-powers authority of the city and county governments that also serves as the HUD-designated Continuum of Care for most of the Los Angeles region. LAHSA implements a coordinated entry system (CES) to match available housing and supportive services to people experiencing homelessness through contracts with homeless service providers responsible for defined geographic portions of Los Angeles County. Most PHAs with preferences for people experiencing homelessness rely on their partners to use the community's CES to ensure that the highest-need individuals are matched to the housing resource. PHAs also may have direct contracts with homeless service providers, county DHS and DMH, and VA that refer clients to PHAs to receive a voucher.

## **Demographic Characteristics of People Who Received Vouchers**

Between 2016 and 2020, more than two-thirds (71 percent) of new vouchers issued by the Los Angeles PHAs to people experiencing homelessness were for households consisting of one person. This finding is consistent with the share of people experiencing homelessness in Los Angeles as individuals rather than members of families (LAHSA, 2020). Many of those individuals had disabilities, consistent with the community's priority of serving people with chronic patterns of homelessness who have a disability.

Although only 9 percent of the population in the Los Angeles region identified as Black or African American, about 34 percent of people experiencing homelessness in the Los Angeles region identified as Black in the 2020 homeless point-in-time count, (LAHSA, 2020), an even greater disproportion than shown in national data on homelessness. More than one-half of households experiencing homelessness who were issued vouchers by Los Angeles PHAs between 2016 and 2020 were Black.

Thirty-six percent of the homeless population in the 2020 homeless point-in-time count identified as Hispanic or Latinx (LAHSA, 2020); however, only 23 percent of people experiencing

---

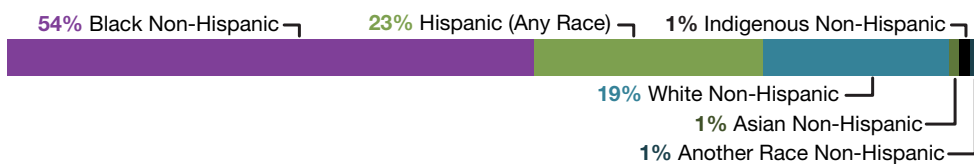
<sup>6</sup> VASH allocations are determined by a formula based on relative need and an expression of interest by PHAs.

<sup>7</sup> This approach does not fit well into HUD's definitions of general and limited preferences. When the commitment was 35 percent, it resembled a limited preference; at 100 percent, it resembled a general preference.

homelessness who received a voucher from the Los Angeles PHAs were Hispanic. Low participation in public programs among Hispanic households is related to several issues, including fears of exposing the undocumented status of family members, information about programs not reaching the community, a lack of cultural competence by public agencies, and language barriers (Chinchilla, 2019; Conroy and Heer, 2003). Hispanic households experiencing homelessness may also have a lower rate of referrals to PHAs because they are relatively young and, therefore, less likely to be assessed as having physical health needs that make them vulnerable.

**Exhibit 1**

Percentages of New Vouchers Issued for People Experiencing Homelessness, by Race and Ethnicity (2016–20)



*Note: Percentages may not add to 100 percent due to rounding.  
Source: HUD Administrative Data Extract of Voucher Issuances and Lease-Ups, 2016–20*

## The Success of People Experiencing Homelessness in Using Their Vouchers

The analysis of household-level administrative data shows that almost two-thirds of all households that received tenant-based vouchers from the Los Angeles County PHAs during 2016–20 succeeded in using them, meaning that they leased housing using a voucher within a year of receiving the voucher (see exhibit 2 note). For households experiencing homelessness, the success rate was 65 percent. For households not experiencing homelessness when they received a voucher, the success rate was 61 percent. Success rates for households trying to leave homelessness varied somewhat among PHAs in the Los Angeles region, with PHAs serving other parts of Los Angeles County somewhat higher than in the cities of Los Angeles and Long Beach (exhibit 2).<sup>8</sup>

<sup>8</sup> The data used for this analysis were captured from HUD-50058 forms, which PHAs use to collect information about households in the HCV program and transmit the resulting data to HUD. The data system records the individual administrative steps of the HCV program for each household, including voucher issuance and lease ups. Limited household characteristics are collected during the eligibility screening preceding voucher issuance. These characteristics include (1) homelessness status of the head of household; (2) date of the voucher issuance; (3) whether the head of household is disabled; (4) race/ethnicity of the head of household; and (5) number of members in a household. Items 3, 4, and 5 were used to estimate the characteristics of households that were referred to PHAs and issued vouchers. For households that successfully leased a housing unit with their voucher, additional data are available, once again including the homelessness status of the head of household. Because the homelessness status at the time of issuance was not consistently recorded by the 19 PHAs in the Los Angeles region, the Abt team needed to impute homelessness at issuance for some households. To overcome the limitation of not reliably observing homelessness status for 15 percent of the records, Abt used other information in the data to make a statistical best guess of the homelessness status for those households. To do so, they modeled a statistical relationship between information observed at issuance and whether households were reported as experiencing homelessness in the records for which they do have a reliable measure of homelessness. Abt then assumed this statistical relationship also describes the relationship between actual homelessness and the information observed at issuance for the records for which they do not have a reliable indicator of homelessness. Abt used this statistical relationship to make their best guess—that is, they assign an imputed value of whether these households were actually experiencing homelessness at issuance. For details of the models used to do this, see Khadduri et al., 2022.



**Exhibit 2**

Lease-Up Success Rates for New Households Issued Vouchers, by Homeless Status (2016–20)

PHA	Vouchers Issued to Homeless Households (#)	Lease-Up Rate for Homeless Households Issued Vouchers (%)	Lease-Up Rate for Other Households Issued Vouchers (%)
<b>All Los Angeles County PHAs</b>	11,771	65	61
<b>Housing Authority of the City of Los Angeles (HACLA)</b>	6,276	63	63
<b>Los Angeles County Development Authority (LACDA)</b>	4,235	67	51
<b>Housing Authority of the City of Long Beach (HACLB)</b>	1,087	62	59
<b>All LA County PHAs, Excluding HACLA, LACDA, and HACLB</b>	173	73	64

PHA = public housing agency.

Notes: The Abt research team found many additional lease ups by using a 365-day cutoff for measuring lease ups instead of the 180-day cutoff often used to measure success rates. "All Los Angeles County PHAs" include the Housing Authority of the City of Los Angeles, the Los Angeles Development Authority, the Housing Authority of the City of Long Beach, Glendale Housing Authority, Santa Monica Housing Authority, City of Pasadena Department of Housing, Inglewood Housing Authority, Burbank Housing Authority, Pomona Housing Authority, Baldwin Park Housing Authority, Compton Housing Authority, Norwalk Housing Authority, Hawthorne Department of Housing, Torrance Housing Authority, South Gate Housing Authority, Redondo Beach Housing Authority, Pico Rivera Housing Assistance Agency, Culver City Housing Authority, and Hawaiian Gardens Housing Division.

Includes observed issuances only. When data have a lease-up record but no record of issuance, Abt could not include that household in the calculations of success rates.

Source: HUD Administrative Data Extract of Voucher Issuances and Lease-Ups, 2016–20

The Abt research team has several explanations for the higher success rate among households attempting to leave homelessness and the relatively high success rate given the very tight housing market in Los Angeles. One explanation is that people staying in shelters or on the street may be highly motivated to find housing and, therefore, willing to work harder to search for available rental units and find a landlord who will accept a voucher.

Another explanation could be that the result of the system for referring people experiencing homelessness to a PHA is that a client matched to a voucher usually has a case manager from a homeless service provider, county DHS and DMH, or VA.<sup>9</sup> The interviews with PHAs, homeless service providers, and DMH confirmed that most homeless households referred to the voucher program during the study period had case managers. The scope of the data collection for the study did not permit Abt to link the households that received vouchers to specific referring organizations or determine whether the household had a case manager; however, having a case manager seems to be helpful. Interviews with PHA staff supported the finding that the help people receive from case managers in the lease-up process can be important.

When a household has a case manager from a homeless service provider, the case manager can help the household in their housing search, offer information about neighborhood amenities and proximity to services, and negotiate with landlords. Case managers and households use various tools to find rental units in Los Angeles County, such as Facebook Marketplace, Craigslist, and Zillow, and by driving around communities looking for rental signs. A Los Angeles program named

<sup>9</sup> Attempts to provide supports and services to assist voucher holders in finding units to improve success rates has a long history, particularly in higher-opportunity neighborhoods. The most recent evidence finds strong positive effects in a randomized experiment in the Seattle area (Bergman et al., 2023), although other efforts have proven less successful (Schwartz, Mihaly, and Gala, 2016).

LeaseUp, which was created by one of the region’s homeless service providers, recruits landlords and rents to people experiencing homelessness.

Most service provider staff interviewed for the study also described relying on relationships that they created with landlords in the community. Some staff explained that they would reach out to their current clients’ landlords or landlords they have worked with in the past to see whether they have any rental vacancies. Case managers often help households contact landlords and management companies of rental units and accompany households to view units.

In Abt’s interviews, people with lived experience exiting homelessness with a voucher stated that support from their case manager was important in navigating their application and housing search and providing support overall. However, households’ experiences with case managers vary. One household might have a positive experience during which their case manager helps them find housing; others might not.

Yet another explanation for the relatively high success rate for households experiencing homelessness is that they benefited from landlord incentives provided by Los Angeles County. In 2016, the county established the Homeless Incentive Program (HIP), funded by Measure H, a local sales tax dedicated to funding homeless services and housing available to all Los Angeles PHAs. HIP has been used by several of the region’s PHAs. The program provides private-market landlords with financial incentives for agreeing to rent units to people experiencing homelessness who have federal rental subsidies. HIP provides unit-holding fees, security deposits, damage mitigation, rental application fees, credit checks, and utilities arrears mitigation.<sup>10</sup>

Success rates for people experiencing homelessness were high across racial and ethnic groups—for example, 66 percent for households identifying as Black, non-Hispanic; 66 percent for Hispanic/Latinx households of any race; and 60 percent for White, non-Hispanic households (exhibit 3). Black and Hispanic households had higher rates of success if they were using vouchers to leave homelessness than if not. Case managers may have helped Black and Hispanic voucher holders overcome barriers to leasing up.

**Exhibit 3**

Lease-up Success Rates for New Households Issued Vouchers, by Race/Ethnicity (2016–20)

Racial/Ethnic Category	New Vouchers Issued to Homeless Households (#)	Lease-up Rate for Homeless Households Issued Vouchers (%)	New Vouchers Issued to Other Households (#)	Lease-up Rate for Other Households Issued Vouchers (%)
<b>Black, Non-Hispanic</b>	6,289	66	5,527	58
<b>Hispanic (any race)</b>	2,783	66	3,283	59
<b>White, Non-Hispanic</b>	2,258	60	2,710	68
<b>Asian, Non-Hispanic</b>	174	67	652	65
<b>Indigenous, Non-Hispanic</b>	176	56	69	55
<b>Other, Non-Hispanic</b>	91	65	36	56

Notes: The “Indigenous” category is households identifying as Native American, Alaskan Native, Native Hawaiian, or Pacific Islander. The “Other” category includes people identifying as mixed race.

Source: HUD Administrative Data Extract of Voucher Issuances and Lease-Ups, 2016–20

<sup>10</sup> The EHV program that was enacted and allocated later also included landlord incentives as a strategy to help households experiencing homelessness successfully lease housing.

## **Housing Subsidy Costs of People Experiencing Homelessness Using Vouchers**

Serving people experiencing homelessness may have implications for the per-unit costs of voucher assistance. The factors that determine the subsidy cost incurred by PHAs are household size and income. On average, households experiencing homelessness are smaller than other assisted households (having fewer members) but also have less income. Across the 19 Los Angeles PHAs, the housing subsidy payment for people experiencing homelessness is only slightly greater than the subsidy payment for serving other households—\$1,137 per month for homeless households versus \$1,108 for other households, a difference of \$29 per month, or about 3 percent.

Only 2 percent of households experiencing homelessness have an income of less than \$1,000 per year—that is, essentially having no income from wages or benefits. That share is no different than the share of other households with essentially no income. However, households having recently experienced homelessness are much more likely than households not having recently experienced homelessness to have incomes less than \$5,000 per year (23 percent versus 9 percent). The lowest incomes by far are for the category of households that are not families, not disabled, and not elderly. A single person with a disability determination is likely to receive Supplemental Security Income, which is greater than \$10,000 per year with the California supplement. However, once stably housed, people who have been experiencing homelessness may have more success at securing a higher income through employment or additional public benefits. Therefore, their lower income at lease up may be temporary.

## **Policy Implications**

The previous objective of the voucher program was to create a more flexible and cost-effective form of housing assistance at a time when increasing numbers of renters were paying distressingly high shares of their income for housing, and fewer housing units had major quality issues (Hills and McKenna, 1982). A program based on helping renters with low incomes to rent units in the private housing market was also thought to hold promise for avoiding concentrations of racial minorities resulting from a history of legal segregation and for helping families access neighborhoods where their children would have more life opportunities (Briggs, Popkin, and Goering, 2010).

**Add to the overall pool of housing choice vouchers that PHAs can use for various populations and needs.** The increasing use of housing vouchers to end homelessness threatens to eclipse the earlier objectives of preventing severe rent burdens that crowd out other needs and improving the life chances of children. Although it is entirely appropriate that Los Angeles County PHAs are committing all or most of their turnover vouchers to help people leave homelessness, U.S. Congress should appropriate funds for substantial numbers of incremental vouchers each year that are not constrained to be used for a specific purpose. Unlike the recent appropriation of EHVs, those vouchers should permanently increase the number of vouchers available to PHAs across the United States. Although a universal or open-enrollment voucher program may not be realistic, adding substantial numbers of unconstrained vouchers would make it possible for PHAs to balance the needs of different populations, including families with children and people unable to work because of age or disability.

**Focus research on deepening the understanding of incentive payments and additional case management support.** Across the country, PHAs and homeless service systems use various strategies, including intensive case management, financial incentives for landlords, and housing search assistance to help people experiencing homelessness become ready for a voucher, find a unit, and successfully lease it. However, untangling the effect that each of these strategies has on successful lease up is difficult. For example, how do different case management models, intensity of services, and timing of services affect client outcomes? In addition, depending on the local and federal funding available, different voucher types (for example, EHV) come with different financial incentives for landlords. Do such incentives give some voucher holders an advantage when securing a rental unit? As funders continue to invest substantial amounts of funding into these strategies, further research on their implementation and outcomes would be useful for federal and local policymakers and practitioners.

**Create ways to link a community's Homeless Management Information System with HCV program HUD-50058/PIC data.** During the dissemination of the Abt study on which this article is based, the top questions asked of researchers were about the acuity level of voucher holders and their interaction with the homeless service system, both before they were matched to vouchers and while they were searching for housing. The research was not able to include administrative data from the Los Angeles region's homeless services systems, such as client-level data from the Continuum of Care's Homeless Management Information Systems or coordinated entry assessments. However, such analysis could help PHAs, homeless service system leadership, and policymakers understand the needs of clients and the acuity levels of households successfully using vouchers. Matching these data sources together would offer insight into housing and service pathways that could lead to successful lease up and housing retention.

**Understand the housing retention rates of people who successfully used a voucher to leave homelessness.** Communities across the country use tenant-based housing vouchers as a pathway to permanent housing for people experiencing homelessness. Research has also shown that, with support such as case management and financial incentives for landlords, people experiencing homelessness are successful at finding a housing unit and leasing it. However, no research has been conducted on the retention rates of people who successfully use vouchers to leave homelessness. As communities continue to use vouchers as a response to homelessness, they need to know if these vouchers have a long-term impact on keeping people housed. For people who have succeeded in maintaining housing stability with a voucher, what resources have enabled them to achieve that goal? For people who are unable to maintain housing using a voucher, what resources could have supported them?

## Authors

Nichole Fiore is a principal associate with Abt Global. Jill Khadduri is a principal associate with Abt Global. Sam Dastrup is a senior associate with Abt Global.

## References

- Bergman, Peter, Raj Chetty, Stefanie DeLuca, Nathaniel Hendren, Lawrence F. Katz, and Christopher Palmer. 2023. *Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice*. NBER Working Paper No. 26164. Cambridge, MA: National Bureau of Economic Research.
- Briggs, Xavier de Souza, Susan J. Popkin, and John Goering.. 2010. *Moving to Opportunity: The Story of an American Experiment to Fight Ghetto Poverty*. New York: Oxford University Press.
- Chinchilla, Melissa. 2019. *Stemming the Rise of Latino Homelessness: Lessons from Los Angeles County*. Los Angeles, CA: Latino Policy and Politics Initiative.
- Conroy, Stephen J., and David M. Heer. 2003. "Hidden Hispanic Homelessness in Los Angeles: The 'Latino Paradox' Revisited," *Hispanic Journal of Behavioral Sciences* 25 (4): 530–538.
- Dunton, Lauren, Meghan Henry, Eliza Kean, and Jill Khadduri. 2014. *Study of PHAs' Efforts to Serve People Experiencing Homelessness*. Washington, DC: U.S. Department of Housing and Urban Development.
- Gubits, Daniel, Marybeth Shinn, Michelle Wood, Scott Brown, Samuel Dastrup, and Stephen Bell. 2018. "What Interventions Work Best for Families Who Experience Homelessness? Impact Estimates from the Family Options Study," *Journal of Policy Analysis and Management* 37 (4): 735–766.
- Henry, Meghan, Adam Travis, Tanya de Sousa, Jhenelle Marson, Ed Prestera, and Colette Tano. 2023. *The 2021 Annual Homelessness Report (AHAR) to Congress: Part 2*. U.S. Department of Housing and Urban Development, Office of Community Planning and Development.
- Hills, Carla A., and William F. McKenna. 1982. *The Report of the President's Commission on Housing*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Community Planning and Development. [https://www.huduser.gov/portal/publications/affhsg/presid\\_Comm\\_1982.html](https://www.huduser.gov/portal/publications/affhsg/presid_Comm_1982.html).
- Khadduri, Jill, Nichole Fiore, Samuel Dastrup, Lauren Dunton, Keely Stater, and Haisheng Yang. 2022. *Using Tenant-based Housing Vouchers to Help End Homelessness in Los Angeles, 2016–2020*. Rockville, MD: Abt Associates. [https://www.hiltonfoundation.org/wp-content/uploads/2022/07/Abt\\_Voucher-Report\\_FINAL\\_7.8.22.pdf](https://www.hiltonfoundation.org/wp-content/uploads/2022/07/Abt_Voucher-Report_FINAL_7.8.22.pdf).
- Los Angeles Homeless Services Authority (LAHSA). 2020. "2020 Greater Los Angeles Homeless Count—Los Angeles Continuum of Care (CoC)." <https://www.lahsa.org/documents?id=4585-2020-greater-los-angeles-homeless-count-los-angeles-continuum-of-care-coc->.
- Newman, Sandra, and Howard Goldman. 2008. "Putting Housing First, Making Housing Last: Housing Policy for Persons With Severe Mental Illness," *The American Journal of Psychiatry* 165 (10): 1242–1248.
- Rosenheck, Robert, Wesley Kasprow, Linda Frisman, and Wen Liu-Mares. 2003. "Cost-effectiveness of Supported Housing for Homeless Persons With Mental Illness," *Archives of General Psychiatry* 60 (9): 940–951.

Schwartz, Heather L., Kata Mihaly, and Breann Gala. 2016. "Encouraging Residential Moves to Opportunity Neighborhoods: An Experiment Testing Incentives Offered to Housing Voucher Recipients," *Housing Policy Debate* 27 (2): 230–260.

Shinn, Marybeth, and Jill Khadduri. 2020. *In the Midst of Plenty: Homelessness and What to Do About It*. Wiley Blackwell.

U.S. Department of Housing and Urban Development (HUD), Office of Policy Development and Research (PD&R). 2020. "Picture of Subsidized Households (POSH)," Assisted Housing: National and Local. <https://www.huduser.gov/portal/datasets/assthsg.html>.

# The Role of Vouchers in the Low-Income Housing Tax Credit Program

Dan Emmanuel  
Andrew Aurand  
National Low Income Housing Coalition

---

## Abstract

*The Housing Choice Voucher (HCV) program was originally intended for use in the private market, but a subset of HCVs is used for affordable housing units financed through the Low-Income Housing Tax Credit (LIHTC) program. This article examines the relationship between these programs, which are two of the most significant federal sources of affordable housing funding. It provides background information on each program, reviews what is known about their relationship, and identifies areas for data improvements and future research that can inform federal policymaking. Further research based on nationally representative data is needed to answer basic questions about the extent to which HCVs are used in LIHTC units and whether it is an efficient use of the subsidy in the context of scarce resources for affordable housing. Future research can also address questions about cross-subsidization, the role that rental assistance might play in mounting preservation challenges within the LIHTC program, and implications for voucher success and mobility.*

## Introduction

Housing Choice Vouchers (HCVs) help millions of low-income renters afford housing. Originally intended for use in the private market, a subset of HCVs helps ensure that the federal Low-Income Housing Tax Credit (LIHTC) program serves renters with extremely low incomes. However, the relationship between HCVs, the nation's largest public source of tenant-based rental assistance, and the LIHTC program, the nation's largest single public source of affordable housing production and preservation capital, remains understudied and underappreciated.

Key differences and complementary features of the HCV and LIHTC programs suggest a significant potential to improve a range of policy outcomes through the coordination of these subsidies, especially for the lowest-income renters. Exhibit 1 summarizes different ways that coordinating

HCVs and LIHTC may improve outcomes across three broad areas of concern for housing policy: affordability and stability, preservation, and voucher success and mobility.

**Exhibit 1**

Potential Effects of Coordinating Housing Choice Vouchers and Low-Income Housing Tax Credit

Affordability and Stability	Preservation	Voucher Success and Mobility
<ul style="list-style-type: none"> <li>• HCVs could make LIHTC rents more affordable for renters with incomes well below the LIHTC program’s maximum income limits, helping the LIHTC program to serve a wider range of tenants while reducing cost burdens.</li> <li>• LIHTC rents could be more affordable to voucher holders than similar units in the private market, helping to reduce cost burdens among voucher holders.</li> <li>• Deeper affordability provided through HCVs might protect LIHTC tenants from housing instability or eviction.</li> <li>• Additional rental income that LIHTC owners can sometimes collect from HCVs could be used to cross-subsidize tenants without rental assistance.</li> </ul>	<ul style="list-style-type: none"> <li>• HCVs could protect LIHTC tenants from rent increases or displacement when LIHTC affordability restrictions end.</li> <li>• LIHTC property owners could reinvest additional subsidy provided through HCVs to help preserve the financial health and physical quality of their properties.</li> </ul>	<ul style="list-style-type: none"> <li>• LIHTC units might expand opportunities for HCV holders to successfully use their vouchers.</li> <li>• LIHTC units could facilitate voucher mobility by helping voucher holders access higher-opportunity neighborhoods than they might otherwise.</li> </ul>

*HCV = Housing Choice Voucher. LIHTC = Low-Income Housing Tax Credit.*

*Source: National Low Income Housing Coalition*

Whether many of these potential effects are realized in practice and whether the “doubling-up” of subsidies is necessarily an efficient use of scarce resources remain unclear. Data limitations currently prevent researchers and analysts from exploring and definitively answering these fundamental questions about the extent to which the integration of HCVs and LIHTC provides positive outcomes. Even the full extent of the overlap between the programs is currently unknown.

This article provides essential background information for understanding the relationship between HCVs and LIHTC and its potential for positive policy outcomes, addresses what is currently known about the role of vouchers in the LIHTC program, and outlines important areas for data improvements and future policy-relevant research. Better data and further research about the relationship between vouchers and LIHTC are needed to inform federal policymaking because these programs are increasingly central to the housing safety net for the lowest-income renters.

**Background**

The HCV and LIHTC programs differ in several respects, but they also have complementary features. On the most basic level, HCVs are intended to subsidize tenant incomes so that they can afford existing housing in the private market, whereas LIHTC provides a subsidy for the construction or preservation of rent-restricted housing with an eye toward increasing the overall supply of affordable housing units. The programs differ in other ways, but the most important differences include income eligibility, rent-setting, and the duration of the subsidy provided. Understanding these differences is necessary to appreciate the relationship between HCVs and LIHTC, particularly regarding outcomes for the lowest-income renters. Key complementary features



of these programs, such as a requirement for LIHTC property owners to accept HCVs and the potential for owners to collect higher rents through vouchers, are also pivotal to understanding the relationship and its potential effect on housing policy outcomes.

## **Differences in Program Design**

The HCV and LIHTC programs differ when it comes to income eligibility. Under federal law, maximum income eligibility thresholds for LIHTC units are limited to either 50 or 60 percent of the Area Median Income (AMI), with an income averaging option that allows some units in a property to serve households up to 80 percent of AMI. However, states frequently incentivize or require deeper income targeting in practice, and LIHTC units can serve households with incomes below the stipulated maximum threshold for the unit. Meanwhile, the HCV program is more explicit about targeting the lowest-income renters. Federal law requires that 75 percent of new and turnover vouchers must serve extremely low-income households, those earning less than the federal poverty guideline or 30 percent of AMI, whichever is higher.

The HCV and LIHTC programs also differ markedly in terms of rent-setting. LIHTC rents are not based on actual tenants' incomes. Instead, maximum allowable rents are set at 30 percent of units' maximum income-eligibility thresholds minus a certain amount for utilities. This stipulation means that LIHTC households earning below the maximum income threshold for a unit can be cost-burdened, paying more than 30 percent of income on rent and utilities. LIHTC rents can also increase independently of tenants' household incomes because maximum rents are pegged to AMI.

Unlike LIHTC rents, HCV rents are fundamentally based on market rents, and the tenants' contributions toward rent are tied to their personal incomes. The HCV subsidy typically covers the difference between 30 percent of tenants' income and the payment standard the PHA determines—typically between 90 and 110 percent of the Fair Market Rent (FMR). In cases with the LIHTC rent exceeding a voucher's payment standard, voucher holders may be responsible for contributing more than 30 percent of their adjusted monthly incomes toward rent. Some voucher holders in LIHTC units, as a result, might be housing cost-burdened. However, voucher holders may not pay more than 40 percent of their monthly adjusted income when moving to new units.

Another difference between the programs is that income restrictions and rent restrictions associated with the LIHTC program can expire. The minimum duration of these restrictions is 30 years under federal law, although some properties can exit after 15 years through the qualified contract loophole in which current owners can opt out of LIHTC restrictions if they wish to sell their property, but the state cannot find a buyer. Some states incentivize or require longer periods of affordability, or they incentivize or require developers to waive their right to a qualified contract through their qualified allocation plans. As many as 178,754 LIHTC units may reach the end of their federally or state-mandated eligibility and affordability restrictions in the next 5 years. Voluntary restrictions of greater duration than the federal or state minimums might cover some of these units (NHPD, 2023). The U.S. Department of Housing and Urban Development (HUD) began collecting property-level data on LIHTC program restriction end dates only recently, so a more precise national estimate of LIHTC units with expiring use restrictions that include longer restrictions that owners voluntarily opted into is not yet feasible.

## **Complementary Features of the Housing Choice Voucher and LIHTC Programs**

One complementary feature of the relationship between the HCV and LIHTC programs is that LIHTC property owners can, in some cases, collect rent through the voucher subsidy in excess of the maximum allowable LIHTC rents. This exception can occur when the voucher payment standard exceeds the LIHTC maximum rent threshold for a unit. No requirements are specified for what an owner must do with this additional income.

Although some states and localities have passed legislation banning source of income discrimination, discriminating against voucher holders based on their sources of income is still legal in many communities. Another important complementary feature of the HCV and LIHTC programs is that LIHTC property owners are required to accept vouchers. An LIHTC property owner, more specifically, cannot refuse to lease to a voucher holder simply because they have a voucher, even in communities where source of income discrimination is still permitted.

## **Questions for Research and Policy**

Fundamental differences in income-targeting and rent-setting suggest it is important for policymakers to understand whether the combination of HCVs and LIHTC provides deeper affordability than what is possible through either program alone and whether vouchers allow the LIHTC program to serve a broader range of tenants, particularly those with the lowest incomes. Relatedly, it is also important to know whether the coordination of these subsidies might result in greater housing stability than either subsidy might achieve on its own. Given how local income and rent levels determine LIHTC rents and FMRs, respectively, the question is also how these dynamics might vary between different housing markets.

The limited duration of eligibility and affordability restrictions in the LIHTC program raises the question of whether vouchers might offer LIHTC tenants a degree of protection from mounting subsidy expirations. Freddie Mac (2022) found that LIHTC properties generally remain affordable to households at or below 60 percent of AMI after eligibility and affordability restrictions expire. However, this income threshold may far exceed the incomes of some existing LIHTC tenants because LIHTC can serve households earning below the maximum income thresholds. Even a modest rent increase following an LIHTC property's exit from the program has the potential to destabilize renters earning well below the 60-percent AMI threshold, particularly those without access to rental assistance. However, LIHTC tenants with HCVs might have some protection from rent increases and be able to take their subsidy elsewhere when LIHTC preservation efforts fail, which is especially important given that the LIHTC program does not provide tenant protection vouchers when restrictions expire. The extent to which HCVs might insulate the lowest-income LIHTC tenants from mounting preservation challenges is a pressing question for housing policy.

The potential for LIHTC property owners to collect additional rent through vouchers than they might otherwise also implies potentially positive effects on housing policy outcomes. Previous research by the National Low Income Housing Coalition suggests that mission-driven LIHTC owners sometimes use this additional rental income to cross-subsidize other units for the lowest-income renters (Bolton, Bravve, and Crowley, 2014). This additional rental income could also be reinvested in a property to help preserve its physical quality and financial health, or owners could

also simply capture the extra income without reinvesting it in the property or benefiting tenants. The fact that at least 63 percent of LIHTC properties have for-profit owners suggests it is a real possibility (NHPD, 2024). How much additional rental income LIHTC owners collect because of vouchers, where it occurs, and what LIHTC owners do with this additional income are all important questions for policymakers.

In some cases, it can also be difficult for LIHTC property owners to collect the maximum LIHTC rent for a unit without rental assistance. Bolton, Bravve, and Crowley (2014) observed that LIHTC rents set at 60 percent of AMI are comparable with market rents in many communities and that LIHTC property owners must compete with the private market for tenants at these income levels. HCVs have the potential to provide a stable source of tenants and revenue to LIHTC property owners under these circumstances. Similarly, in their examination of LIHTC preservation issues in Detroit, Dewar, Deng, and Bloem (2020) found that the operating support provided by rental assistance helped preserve the financial and physical health of LIHTC properties. The role that vouchers might play in supporting LIHTC properties in weaker housing markets is worth further exploration.

Finally, the requirement for LIHTC property owners to accept vouchers is of particular interest for research and policy given the challenges that voucher holders can face with successfully leasing units. The national voucher success rate, which is the share of new voucher holders who can successfully find and lease apartments within a specified period, appears to be on the decline. Kennedy and Finkel (1994) estimated a success rate of 81 percent for 1993; Finkel and Buron (2001) estimated a rate of 69 percent for 2000; and Ellen, O'Regan, and Stochak (2021) most recently estimated a success rate of 61 percent for 2019. Discrimination, low vacancy rates, a lack of units renting at or below the voucher payment standards, low-quality housing stock, an insufficient supply of larger units and units with accessibility features, and a lack of information about housing choices all constrain rental options for voucher holders (Bergman et al., 2019; Collinson and Ganong, 2018; Finkel and Buron, 2001; Finkel et al., 2003). It is unknown whether some of these constraining factors, or voucher success rates more generally, push voucher holders to lease up in LIHTC units. The relationship between rental housing market characteristics and voucher utilization in tax credit properties is an important area for policy-relevant research. Understanding these dynamics could shed light on whether the coordination of HCVs and LIHTC might bolster voucher success rates or promote mobility.

Beyond questions about how the coordination of HCVs and LIHTC might affect different housing policy outcomes, the overarching question of efficiency is also a concern. The question at the most basic level is whether LIHTC units offer voucher holders a degree of affordability they would not be able to attain with vouchers alone in the private market. If the LIHTC program might improve voucher success rates or mobility, another question is whether these same outcomes could be achieved more efficiently, at a lower cost, through other means such as housing search assistance or mobility counseling. If the doubling-up of HCVs and LIHTC is inefficient, the potential policy impacts of coordinating these subsidies might be irrelevant.

Several features of the HCV and LIHTC programs raise questions about how their coordination might affect housing policy outcomes, particularly when it comes to the lowest-income renters. Fundamental questions remain about whether doubling up these subsidies is efficient or even

necessary. The next section presents what is currently known about the relationship between HCVs and LIHTC, with an eye toward identifying necessary data improvements and questions for future policy-relevant research.

## **What Do We Know About the Relationship Between Vouchers and LIHTC?**

Efforts to better understand the relationship between HCVs (and rental assistance more generally) and the LIHTC program go back at least as far as the late 1990s, when the topic was covered as part of a U.S. Government Accountability Office (GAO) investigation into LIHTC program oversight (GAO, 1999, 1997). These GAO reports and subsequent studies by Buron et al. (2000), Williamson, Smith, and Strambi-Kramer (2009), Williamson (2011), NYU Furman Center (2012), O'Regan and Horn (2013), Bolton, Bravve, and Crowley (2014), and Richter, Barkley, and Higgins (2017) relied on varying, and sometimes limited, samples to examine rental assistance use among LIHTC households. Moreover, these efforts provided infrequent snapshots of the relationship between rental assistance and LIHTC, employing varying definitions of rental assistance.

Consistent national data collection about LIHTC tenant characteristics, including rental assistance utilization, started only with the passage of the Housing and Economic Recovery Act (HERA) in 2008. Although HUD had been collecting and publishing property-level LIHTC data since the mid-1990s, HERA empowered HUD to collect a range of tenant-level data, including data on race, ethnicity, family composition, age, income, disability status, rental payments, and use of rental assistance. HUD published its first LIHTC tenant data in 2014. Although HUD is now consistently publishing LIHTC tenant data, the completeness of certain data varies significantly by state because of differences in reporting by the state housing finance agencies that administer the LIHTC program (HUD, 2023a). The decentralized administration of the LIHTC program, limited oversight and enforcement powers for both HUD and state housing finance agencies, and limited technology and staff capacity are all significant obstacles to improving the quality and completeness of LIHTC data (Aurand et al., 2022). The LIHTC program also exempts properties with 100 percent low-income units and properties in their extended-use period from annual income recertifications, further complicating efforts to collect complete data (HUD, 2023a). Ultimately, the completeness of LIHTC tenant data reported to HUD is a key challenge for providing timely, sufficiently detailed public data about the role that HCVs play in the LIHTC program, especially when it comes to serving the lowest-income renters.

### **How Widespread is the Current Use of Housing Choice Vouchers in LIHTC Units?**

The most recent publicly available HUD-published LIHTC tenant data provide information on the specific sources of federal rental assistance LIHTC tenants used in 2021. However, HUD notes that a confident determination of the completeness of these data is not currently possible (HUD, 2023a). Meanwhile, studies of voucher use in the LIHTC program are inconsistent in defining the scope of rental assistance and are either dated or based on potentially unrepresentative samples. Estimates regarding the share of LIHTC households with tenant-based rental assistance in these studies range from 6 percent in Buron et al. (2000) to 18.5 percent in Williamson (2011).

A comprehensive national estimate of HCV use in the LIHTC program is not available, but HUD's LIHTC tenant data are more complete regarding the receipt of rental assistance from any source (federal, state, local, or nonprofit).<sup>1</sup> In 2021, approximately 40 percent of LIHTC households received some amount of rental assistance from any source, and 28.4 percent reported some amount of rental assistance from a federal source (HUD, 2023b).

### Who Currently Uses HCVs in LIHTC Units, and How Do HCVs Affect Affordability?

The limited information that HUD publicly provides about rental assistance use in the LIHTC program at the national level is not broken down by household characteristics like household income or housing cost burden. Both household income and housing cost burden are essential to understanding the role that rental assistance programs, including HCVs, play in the LIHTC program, especially when it comes to serving the lowest-income renters. O'Regan and Horn (2013) provided the most recent national estimates of rental assistance use among LIHTC tenants by income and housing cost burden.

LIHTC tenant data spanning 2009–10 from 26 states indicated that 44.7 percent of LIHTC households had incomes at or below 30 percent of AMI, and 70 percent of those had some form of rental assistance (NYU Furman Center, 2012; O'Regan and Horn, 2013). Among the lowest-income LIHTC households without rental assistance, 28 percent had moderate housing cost burdens, spending between 31 and 50 percent of their income on rent, and 58.1 percent were severely cost-burdened, spending more than one-half of their income on rent (O'Regan and Horn, 2013). The O'Regan and Horn findings clearly indicate that rental assistance plays a pivotal role in making LIHTC units affordable to the lowest-income renters, although the authors were unable to analyze specific sources of rental assistance, such as HCVs.

More recent estimates can be derived using 2019 microdata on LIHTC tenants that HUD provided to the authors. Based on a convenience sample of 660,840 LIHTC households from 34 states and the District of Columbia for whom sufficient data were available on income, rent, and rental assistance receipt, 49.1 percent of LIHTC households had incomes of 30 percent or less of AMI, and 69.2 percent of these households received some amount of rental assistance from any source (exhibit 2).

#### Exhibit 2

Low-Income Housing Tax Credit Households and Rental Assistance by Income

Area Median Income	LIHTC Households (%)	Share of LIHTC Households With Rental Assistance (%)
0 to 30%	49.1	69.2
> 30 to 40%	18.4	37.1
> 40 to 50%	15.8	22.1
> 50 to 60%	10.1	12.4
> 60%	6.5	9.3

LIHTC = Low-Income Housing Tax Credit.  
Source: 2019 HUD LIHTC tenant microdata

<sup>1</sup> LIHTC tenant data reported to HUD are often incomplete regarding the specific sources of federal rental assistance, such as HCVs. Estimates of the share of federal rental assistance attributable to HCVs can vary significantly from year to year as a result.

Rental assistance clearly continued to play a pivotal role in driving deep affordability in the LIHTC program in 2019. Among the lowest-income LIHTC households receiving rental assistance, 17.1 percent were moderately housing cost-burdened, and 15.8 percent were severely cost-burdened compared with 18.2 and 59.1 percent, respectively, among their peers without rental assistance (exhibit 3). Overall, 77.3 percent of the lowest-income LIHTC households without rental assistance had some degree of cost burden, although 32.9 percent of the lowest-income households were still cost-burdened despite having rental assistance.

**Exhibit 3**

Cost-Burden Prevalence Among LIHTC Households by Income and Rental Assistance Receipt

Area Median Income	Share of LIHTC Households With Moderate Cost Burden		Share of LIHTC Households With Severe Cost Burden	
	Rental Assistance (%)	No Rental Assistance (%)	Rental Assistance (%)	No Rental Assistance (%)
0 to 30%	17.1	18.2	15.8	59.1
> 30 to 40%	15.1	65.4	1.0	22.4
> 40 to 50%	12.4	76.3	0.4	3.6
> 50 to 60%	9.4	59.1	0.5	0.3
> 60%	5.1	10.3	0.5	0.0

*LIHTC = Low-Income Housing Tax Credit.  
Source: 2019 HUD LIHTC tenant microdata*

The incompleteness of HUD’s LIHTC tenant data regarding sources of federal rental assistance hinders making meaningful comparisons between LIHTC households with and without HCVs as their rental assistance. However, a much smaller convenience sample of 65,743 households can be drawn from the 2019 microdata. Sufficient data from that sample are available to identify LIHTC households receiving HCVs, defined to include both tenant-based vouchers and project-based vouchers. Those data also include rents and incomes. Among the lowest-income LIHTC households with HCVs, 41.9 percent had some degree of housing cost burden, 27.3 percent were moderately cost-burdened, and 14.6 percent were severely cost-burdened. In a study of HCV cost burdens, Dawkins and Jeon (2017) found that 45.8 percent of the lowest-income HCV households had some degree of cost burden, 34.8 percent were moderately cost-burdened, and 11.1 percent were severely cost-burdened. These findings suggest that using HCVs in LIHTC units might provide a modest reduction in cost burdens among voucher holders compared with private market use. However, a more representative sample of LIHTC households with HCVs and further analysis are needed.

**To What Extent Do Rents Collected From Vouchers in LIHTC Units and LIHTC Maximum Rents Differ, and Where Does It Tend to Occur?**

Previous research examining the effect of rental assistance on rental income in the LIHTC program is extremely limited. Bolton, Bravve, and Crowley (2014), relying on a random sample of 104 LIHTC properties from five states totaling 8,758 units, found that rental assistance often allowed LIHTC owners to collect the full LIHTC maximum rent for a unit when they might not otherwise and, sometimes, collect rent in excess of the maximum LIHTC rent. Based on interviews with LIHTC property owners, the same report found that nonprofit owners sometimes used additional

rent collected through HCVs to cross-subsidize other units. However, Bolton, Bravve, and Crowley (2014) also noted that owners could use the additional rental income for other purposes and that further research is needed to understand the relationship between tax credit and voucher rents.

To explore the potential for additional rental income that HCVs might provide in the LIHTC program, the authors used the 2019 LIHTC tenant microdata to draw a convenience sample of 63,834 HCV households residing in LIHTC units. The estimated total rent collected for each unit (the combined tenant and voucher contributions) was then compared with the maximum LIHTC rent permitted for the unit. The monthly rent collected was greater than the maximum LIHTC rent for 22.9 percent of households, and it was \$210.18 higher on average among those households. Rent collected from LIHTC households with vouchers was more likely to exceed the maximum LIHTC rent in metropolitan areas (24.2 percent) than in nonmetropolitan areas (13.6 percent). Among households where rent collected exceeded the maximum LIHTC rent, rent collected was \$212.03 higher on average for households in metropolitan areas and \$184.89 higher for households in nonmetropolitan areas.

This analysis suggests a potential for significant differences between rents collected from voucher households in LIHTC units and LIHTC maximum rents. These differences might vary geographically, at least at the regional level. However, a nationally representative sample of LIHTC households with vouchers is needed to draw firm conclusions. Furthermore, such an analysis still cannot provide insight into the extent to which HCVs might allow owners to collect the maximum LIHTC rent when they might otherwise be unable to do so. Further research into the relationship between rents collected from voucher households in LIHTC units and maximum LIHTC rents is clearly warranted.

### **How Does Using Vouchers in LIHTC Units Relate to Voucher Success and Mobility?**

Research about whether LIHTC units facilitate voucher success and how housing market characteristics affect voucher utilization in LIHTC units is extremely limited. Using Ohio Housing Finance Agency data on subsidized households, Richter, Barkley, and Higgins (2017) found limited evidence that voucher holders in tighter housing markets and higher quality neighborhoods were more likely to use their subsidy in LIHTC units, suggesting that voucher use in LIHTC units could play a limited role in facilitating voucher success and mobility. Williamson, Smith, and Strambi-Kramer (2009), using data on subsidized households in Florida, found mixed evidence regarding mobility. Research based on more nationally representative samples is needed to draw conclusions regarding voucher success rates and mobility that can inform federal policymaking.

### **The Need for More Complete Data and Further Research**

HUD and housing finance agencies face significant challenges in collecting and reporting complete data on LIHTC tenants, including their use of rental assistance. However, more complete tenant data are needed to better inform federal policymaking in relation to the HCV and LIHTC programs. Ideally, more complete LIHTC tenant data would permit HUD to provide regular reporting on and crosstabulations of rental assistance use by source of assistance, tenant income, cost-burden level, and household demographics in the LIHTC program. Regular, standardized reporting describing

the use of HCVs in LIHTC units could inform the implementation of both programs and monitor progress toward federal policy goals. For example, such reporting would be critical in monitoring any efforts to coordinate the HCV and LIHTC programs to ensure efficient use of subsidies or better align subsidies to serve target populations.

Nationally representative data—whether sourced through careful sampling, innovative approaches to matching LIHTC and HCV administrative datasets, or improvements to HUD’s existing LIHTC tenant data—are needed to answer more complex, lingering questions about the relationship between the HCV and LIHTC programs. More research is needed to understand better whether and how the coordination of HCVs and LIHTC might potentially improve outcomes across three areas of concern for housing policy: affordability and housing stability, preservation, and voucher success and mobility.

### **Affordability and Housing Stability**

Aside from more timely data about the prevalence of HCV use in the LIHTC program and its effect on cost burdens within the program, which would ideally be included in HUD’s public LIHTC tenant characteristics reports, further research is needed to understand better the affordability of LIHTC units compared with private market units for voucher holders. Does the combination of LIHTC and HCV subsidies provide deeper affordability than HCVs in the private market alone? How might it vary by housing market or household characteristics? If the combination of HCVs and LIHTC does provide deeper affordability, then it is also worth exploring how these programs can be intentionally coordinated, especially with regard to serving the lowest-income renters. Answering these questions would also help determine whether combining HCVs and LIHTC is an efficient use of subsidy, an especially important consideration because only one in four households that qualify for federal housing assistance receive it (Fischer, Acosta, and Gartland, 2021).

Given the apparent prevalence of severe cost burdens among the lowest-income LIHTC households without rental assistance, it would also be worth exploring potential differences in housing stability among LIHTC tenants with and without HCVs. For example, to what extent might HCVs protect LIHTC tenants from evictions? Answering this question could be part of a larger examination of housing stability in the LIHTC program.

Finally, another issue concerns additional rental income collected from HCVs as it relates to cross-subsidization. Preliminary analysis suggests that HCVs present a significant opportunity to collect rental income beyond what LIHTC maximum rents permit, but this opportunity might vary by housing market. A nationally representative sample of LIHTC households with HCVs is needed to estimate how much additional rent LIHTC owners may collect and where it occurs. Such research could help quantify the scope of the opportunity that HCVs provide for cross-subsidization in the LIHTC program. However, further research would also be needed to determine whether LIHTC owners actually use additional rental income for cross-subsidization or other purposes.

### **Preservation**

Little to no research has been conducted regarding the role vouchers might play with regard to looming preservation challenges in the LIHTC program. Further research is needed to understand whether voucher holders in LIHTC units might be insulated from the effects of expiring



affordability restrictions in cases in which tenants might be faced with rent increases. Such research might compare housing stability outcomes for the lowest-income LIHTC tenants with and without HCVs in LIHTC properties exiting the program as the result of the qualified contract loophole or the expiration of the extended-use period. The extent to which owners of former LIHTC properties continue to accept HCVs would also be of interest.

Future research should also investigate whether HCVs contribute to the long-term physical and financial health of LIHTC properties by providing a stable source of tenants and allowing owners to collect maximum LIHTC rents when they might otherwise be unable to do so. However, tenant-based housing choice vouchers are typically not counted as rental income for the purposes of underwriting, which could affect properties seeking to finance capital improvements. An examination of how tenant- and project-based vouchers affect the financial health of LIHTC properties is warranted. As with cross-subsidization, the issue of how the potential for additional rental income from HCVs relates to preservation is another concern. To what extent, if any, might additional rental income from vouchers be reinvested in LIHTC properties? In what contexts might it be possible?

### **Voucher Success and Mobility**

Further research using nationally representative data is needed to better understand the relationship between voucher use in tax credit properties and housing market and neighborhood characteristics. For example, are vouchers more likely to be used in tax credit properties in tighter housing markets or in communities lacking source of income protections? Research along these lines could help to answer questions about whether LIHTC units might facilitate voucher success when voucher holders face known challenges with discrimination, low vacancy rates, a lack of units renting at or below FMR, low-quality housing stock, an insufficient supply of larger units, or limited units with accessibility features. If LIHTC units do contribute to voucher success, the question of whether comparable outcomes could be achieved through robust housing search assistance would remain unresolved. Finally, nationally representative data could shed further light on how the use of HCVs in LIHTC units relates to mobility.

## **Conclusion**

Knowledge about the relationship between HCVs and LIHTC and how the coordination of these subsidies might improve housing policy outcomes remains fundamentally limited. Although HCVs can clearly help make LIHTC rents more affordable to the lowest-income renters, more complete data and further research are needed to answer basic questions about the extent to which HCVs are used in LIHTC units and whether it is an efficient use of subsidy in the context of scarce resources for affordable housing. A related question is how voucher use in LIHTC units relates to voucher success rates. Answering these questions can help determine whether these programs should be coordinated and to what end, especially with regard to serving the lowest-income renters. Further research into the relationship between HCVs and LIHTC can also help policy analysts understand the potential for cross-subsidization, the role that rental assistance might play in mounting preservation challenges within the LIHTC program, and implications for mobility. A better understanding of the relationship between two of the nation's most significant affordable housing programs is necessary to shape federal housing policy more effectively.

## Authors

Dan Emmanuel is a research manager at the National Low Income Housing Coalition. Andrew Aurand is a senior vice president for research at the National Low Income Housing Coalition.

## References

Aurand, Andrew, Dan Emmanuel, Kelly McElwain, and Eric Brushett. 2022. *Improving Low-Income Housing Tax Credit Data for Preservation*. Washington, DC: National Low Income Housing Coalition; Public and Affordable Housing Research Corporation.

Bergman, Peter, Raj Chetty, Stefanie Deluca, Nathaniel Hendren, Lawrence F Katz, and Christopher Palmer. 2019. *Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice*. NBER Working Paper No. 26164. Cambridge, MA: National Bureau of Economic Research.

Bolton, Megan, Elina Bravve, and Sheila Crowley. 2014. *The Alignment Project: Aligning Federal Low Income Housing Programs with Housing Need*. Washington, DC: National Low Income Housing Coalition.

Buron, Larry, Sandra Nolden, Kathleen Heintz, and Julie Stewart. 2000. *Assessment of the Economic and Social Characteristics of LIHTC Residents and Neighborhoods: Final Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Collinson, Robert, and Peter Ganong. 2018. “How Do Changes in Housing Voucher Design Affect Rent and Neighborhood Quality?” *American Economic Journal: Economic Policy* 10 (2): 62–69.

Dawkins, Casey, and Jae Sik Jeon. 2017. *Rent Burden in the Housing Choice Voucher Program*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Dewar, Margaret, Lan Deng, and Melissa Bloem. 2020. “Challenges for Low-Income Housing Tax Credit Projects at Year 15 and Beyond in a Weak Housing Market: The Case of Detroit, Michigan,” *Housing Policy Debate* 30 (3): 311–334.

Ellen, Ingrid Gould, Katherine O’Regan, and Sarah Stochak. 2021. *Using HUD Administrative Data to Estimate Success Rates and Search Durations for New Voucher Recipients*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Finkel, Meryl, and Larry Buron. 2001. *Study on Section 8 Voucher Success Rates: Volume 1 Quantitative Study of Success Rates in Metropolitan Areas*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Finkel, Meryl, Jill Khadduri, Victoria Main, Linda Pistilli, Claudia Solari, Kristin Winkel, and Michelle Wood. 2003. *Costs and Utilization in the Housing Choice Voucher Program*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Fischer, Will, Sonya Acosta, and Erik Gartland. 2021. *More Housing Vouchers: Most Important Step to Help More People Afford Stable Homes*. Washington, DC: Center on Budget and Policy Priorities.

Freddie Mac. 2022. *Low-Income Housing Tax Credit (LIHTC) at Risk*. Washington, DC: Freddie Mac Multifamily.

Kennedy, Stephen, and Meryl Finkel. 1994. *Section 8 Rental Voucher and Rental Certificate Utilization Study: Final Report*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

National Housing Preservation Database (NHPD). 2024. "Data Extract." National Low Income Housing Coalition; Public and Affordable Housing Research Corporation. <https://nhpd.preservationdatabase.org/Data>.

———. 2023. "Preservation Profiles." National Low Income Housing Coalition; Public and Affordable Housing Research Corporation. <https://preservationdatabase.org/reports/preservation-profiles/>.

NYU Furman Center. 2012. *What Can We Learn about the Low-Income Housing Tax Credit by Looking at the Tenants?* New York: New York University.

O'Regan, Katherine M., and Keren Horn. 2013. "What Can We Learn about the Low-Income Housing Tax Credit Program by Looking at the Tenants?" *Housing Policy Debate* 23 (3): 597–613.

Richter, Francisca Garcia-Cobián, Brett Barkley, and Amy Higgins. 2017. "Do Low-Income Rental Housing Programmes Complement Each Other? Evidence from Ohio," *International Journal of Housing Policy* 19 (1): 17–45.

U.S. Department of Housing and Urban Development (HUD). 2023a. "Documentation Guide for HUD's Low Income Housing Tax Credit (LIHTC) Tenant Data." Washington, DC: HUD, Office of Policy Development and Research.

———. 2023b. "Tenants in LIHTC Units as of December 31, 2021." <https://www.huduser.gov/portal/Datasets/lihtc/2021-LIHTC-Tenant-Tables.pdf>.

U.S. Government Accountability Office (GAO). 1999. *Tax Credits: The Use of Tenant-Based Assistance in Tax-Credit-Supported Properties*. Washington, DC: GAO. <https://www.gao.gov/assets/rced-99-279r.pdf>.

———. 1997. *Tax Credits: Opportunities to Improve Oversight of the Low Income Housing Program*. Washington, DC: GAO. <https://www.gao.gov/products/ggdrced-97-55>.

Williamson, Anne. 2011. "Can They Afford the Rent? Resident Cost Burden in Low Income Housing Tax Credit Developments," *Urban Affairs Review* 47 (6): 775–799.

Williamson, Anne, Marc T. Smith, and Marta Strambi-Kramer. 2009. "Housing Choice Vouchers, the Low-Income Housing Tax Credit, and the Federal Poverty Deconcentration Goal," *Urban Affairs Review* 45 (1): 119–132.

---

# Project Basing Housing Choice: What We Know and Need to Know About Project-Based Vouchers

Daniel Teles  
Alyse D. Oneto  
Urban Institute

---

## Abstract

*The use of project-based vouchers (PBVs) has increased drastically during the past 20 years. This article provides an overview of the PBV program, explores existing research and evidence, and highlights outstanding knowledge gaps related to the program. The authors focus on three key areas of interest: the importance of PBVs in the development and preservation of affordable housing, the effect of PBVs on housing choice and access to more desirable neighborhoods, and the factors or criteria that should be considered in the evaluation of PBVs, specifically when considering outcomes for and benefits to tenants and communities. The authors then chart a path forward for a research and policy agenda.*

## Introduction

The number of households that receive rental assistance in the form of project-based vouchers (PBVs) has increased by nearly 300,000 since 2010. PBVs now account for roughly 10 percent of the Housing Choice Voucher (HCV) program, and with tens of thousands of units in development, they are expected to make up an even larger share of housing assistance in the future. This trend is a massive shift for the administration of the HCV program. It is also a philosophical reversal of the decades-long trend in the United States that moved away from hard units and toward tenant-based assistance.

With an ongoing housing crisis and limited federal funding, only one in four households eligible to receive rental assistance receive it (Acosta and Gartland, 2021). In this climate, ensuring that those who do receive housing assistance get the best possible form of it is especially important. Given the state of the remaining public housing stock and the massive shortage of affordable housing in the country, the expansion of the PBV program could benefit residents, public housing

agencies (PHAs), and communities. However, the risk is that PBVs might limit housing choice and concentrate families in higher poverty, lower opportunity neighborhoods.

Policymakers lack the data and evidence they need to determine whether continuing to increase the number of PBVs is sound public policy. New research is needed to assess whether the PBV program is meeting its goals and for whom, and whether improvements to the program are needed to realize those goals. Before committing to further policy adjustments or an expansion of the PBV program, one needs to answer two fundamental questions: How many PBVs should a community have? What is the right mix of tenant- and project-based assistance?

This article provides an overview of the PBV program and describes the growth of PBVs during the past decade. It then delves into what prior research says or does not say about the following key areas of interest: the importance of PBVs in developing and preserving affordable housing; the effect of PBVs on housing choice and access to more desirable neighborhoods; and the factors or criteria that should be considered in the evaluation of PBVs, specifically when considering outcomes and benefits for tenants and communities. Finally, it outlines a proposed direction for future research to help inform the design of PBV policy moving forward.

## Growth of Project-Based Vouchers

The PBV program was created as a component of the HCV program under the Quality Housing and Work Responsibility Act of 1998.<sup>1</sup> PBVs have the same eligibility criteria as the tenant-based vouchers (TBVs) that make up most of the HCV program. For both, units are rented to eligible households that pay up to 30 percent of their income toward rent and utilities combined, and the voucher covers the difference. Importantly, they have a few key differences. Unlike TBVs that theoretically allow households to rent any eligible, reasonably priced unit from a landlord who will accept vouchers, PBVs are attached to a specific unit through a long-term contract between the property owner and the PHA. A household with a TBV may later move to any eligible unit with the same voucher. If a household moves out of a PBV unit before the contract is up, the rental assistance remains with the specific unit for the duration of the contract.<sup>2</sup>

For some PHAs, PBVs may be more effective than tenant-based assistance. PBVs may be especially beneficial for PHAs when households struggle to find landlords willing to accept vouchers or in rental markets with either rapidly rising rents or a lack of affordable housing. Adding dedicated voucher units can address these issues.

PHAs initially had difficulty taking advantage of the PBV program. Significant policy changes in 2000, 2001, 2008, and most recently in 2016 through the Housing Opportunity Through Modernization Act (HOTMA) have allowed PHAs to drastically increase the share of their HCV program that was dedicated to PBVs. Under the current policy, PHAs can project-base up to 20

---

<sup>1</sup> The Quality Housing and Work Responsibility Act merged the Section 8 voucher and the Section 8 Rental Certificate programs, which previously included authorization for both tenant- and project-based rental assistance. See section 545 of the Quality Housing and Work Responsibility Act of 1998.

<sup>2</sup> Although the PBV stays with the unit, PBV households that have been in their units for at least a year can move out with a TBV when a qualifying unit becomes available. See “Family Right to Move,” 24 CFR 983.261 <https://www.law.cornell.edu/cfr/text/24/983.261>.

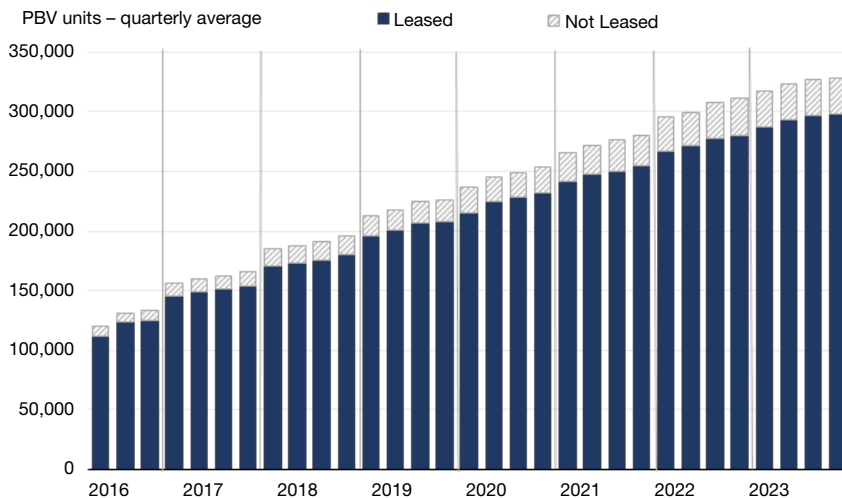
percent of their authorized HCVs and project-base an additional 10 percent if those vouchers serve households of special populations (for example, veterans, people with disabilities, older adults, people experiencing homelessness) or are in lower-poverty neighborhoods. HOTMA also expanded the cap on the number of PBVs that could be used in a single project from 25 to 40 percent in low-poverty neighborhoods and exempted previously required rent-restricted units and other project-based assistance from the cap altogether.

Although these policy changes allowed PHAs to use a greater share of the HCV authority for PBVs, the Rental Assistance Demonstration (RAD) has facilitated the conversion of public housing to PBV units. RAD was created in 2012 to address the unfunded capital needs of public housing and enabled PHAs to convert public housing properties to either PBV units or Section 8 Project-Based Rental Assistance (PBRA).<sup>3</sup>

The combination of these policy changes led to rapid growth in PBV program use. PBVs now account for roughly 10 percent of the HCV program and, given recent trends, can be expected to make up an even larger share of housing assistance in the future. In 2010, about 43,000 PBVs were under contract (Mast and Hardiman, 2017), accounting for less than 2 percent of the HCV program and less than 1 percent of all U.S. Department of Housing and Urban Development (HUD)-funded housing assistance. By the end of 2016, more than 125,000 PBV units were under contract, and that number has steadily increased since (exhibit 1). By November 2023, about 328,000 PBV units were under contract (roughly 13 percent of all vouchers in the HCV program).

## Exhibit 1

### Rapid Growth in the Number of Project-Based Voucher Units



PBV = project-based voucher.

Notes: Figure displays 3-month averages for April 2016 through September 2023. Because data were not available for December 2023, the November 2023 data are displayed in lieu of a 3-month average, the fourth quarter of 2023.

Source: HUD (n.d.a.) Housing Choice Voucher (HCV) Data Dashboard

<sup>3</sup> PBVs are a part of the HCV program, operated by PHAs and overseen by the Office of Public and Indian Housing. HUD's Office of Multifamily Housing Programs operates the PBRA program. For more about the differences between RAD PBVs and RAD PBRA, see [https://www.hud.gov/sites/documents/RFS10\\_PBV\\_PBRA.PDF](https://www.hud.gov/sites/documents/RFS10_PBV_PBRA.PDF)

Although most PHAs still do not have any PBVs as of November 2023, 846 PHAs include PBV units in their portfolios (HUD, n.d.a.).<sup>4</sup> For most of these agencies, PBVs make up a small share of their voucher portfolios: 369 PHAs dedicated between 1 and 9 percent, and 231 PHAs dedicated between 10 and 19 percent of their portfolios to PBVs. For 83 agencies, however, PBVs make up more than 40 percent of their overall portfolio.

## Developing and Preserving Affordable Housing

One of the primary benefits of the PBV program is that it can help PHAs develop and preserve affordable housing. Through PBV contracts, PHAs can provide a guaranteed revenue stream that makes the development of new affordable housing financially viable. Due to recent policy changes, PHAs have been able to further increase affordable housing opportunities for their households through longer-term contracts with landlords for PBV units, often in tandem with other programs like RAD or the Low-Income Housing Tax Credit (LIHTC). However, more research is needed that documents and explains how these programs work together and evaluates their effects on communities' efforts to develop or preserve affordable housing.

### Research and Evidence

Prior to the policy reforms in the Housing and Economic Recovery Act (HERA) of 2008, PHAs had few tools to preserve or develop affordable housing.<sup>5,6</sup> Several reforms in the 2000s allowed PHAs to use PBVs in new and creative ways to develop and preserve affordable housing—notably by making it easier to use PBVs in combination with other programs, like LIHTC.

Since the 1980s, LIHTC has been the largest federal program designed specifically to help finance the development of additional affordable housing. By 2021, more than 3.5 million units were financed with LIHTC (HUD, n.d.b.). Rents for LIHTC units are set aside for lower-income households, with rents set to be affordable for households earning 50 or 60 percent of the Area Median Income. However, these units are still not affordable to people with the lowest incomes unless they have an additional subsidy, like a TBV. Although tenant-based assistance can be—and frequently is—used for units in LIHTC properties, affordable units are not reserved specifically for these families (Khadduri et al., 2012; O'Regan and Horn, 2013).

Motivated by a goal of increasing mixed-income housing and a concern that LIHTC alone was not enough to create deeply affordable housing, the U.S. Congress passed a series of PBV policy reforms in the 2000s (Sard, 2023). Today, an agreement to enter into a Housing Assistance Payments contract for PBVs can be used as collateral for financing new developments (Glassman, 2008).

<sup>4</sup> They include units converted to PBVs through RAD.

<sup>5</sup> PHAs' ability to preserve or develop new housing units was limited after the Housing and Urban Rural Recovery Housing Act of 1983, which repealed the statutory authority to fund new properties or perform substantial rehabilitation to properties with Section 8 PBRA and the Faircloth Amendment (1999), which set a limit on the number of public housing units a PHA could operate and effectively stopped the development of new public housing units. [https://www.hud.gov/program\\_offices/housing/mfh/rfp/s8bkinfo](https://www.hud.gov/program_offices/housing/mfh/rfp/s8bkinfo) and <https://www.hud.gov/sites/dfiles/PIH/documents/Faircloth%20FAQ%20.pdf>.

<sup>6</sup> HOPE VI (1992) and Choice Neighborhoods (2010) were two key HUD initiatives aimed at preserving public housing or other HUD-assisted units (<https://www.hud.gov/hopevi> and <https://www.hud.gov/cn>). More recently, the Faircloth-to-RAD program (2021) has created a new avenue to fund developing affordable housing that will be supported with PBRA or PBV contracts.



However, it took the 2000 legislation, which expanded the length of a PBV contract to 10 years, and HERA, which further expanded contracts to 15 years with unlimited renewal, to make this work with LIHTC development (Glassman, 2008; Sard, 2023).

PBV units are frequently developed using LIHTC financing (Khadduri et al., 2012; O'Regan and Horn, 2013), although the extent of this connection is not well documented outside Moving to Work (MTW) agencies. Galvez et al. (2021) estimated that more than one-fourth of PBVs at MTW agencies were in LIHTC properties in 2016. MTW flexibilities allow for additional program waivers that could make the PBV program easier to finance. For example, Boulder Housing Partners modified several of their HCV program's administrative processes, such as waiving the competitive bidding process, establishing local rent limits, and allowing agency staff to conduct inspections directly rather than contracting third parties. The Cambridge Housing Authority in Massachusetts developed a program that allows them to preserve affordable housing by entering into PBV contracts for units where other subsidies are expiring.

RAD is also responsible for a major shift toward project-based assistance in the past decade. Originally, the program was capped at converting up to 65,000 units. In 2018, however, the RAD cap was increased to 455,000 units, or about 45 percent of public housing. As of November 2023, more than 100,000 PBV units have been converted from public housing via RAD, and RAD units account for more than one-third of all leased PBV units (HUD, n.d.a.). As a HUD demonstration, RAD has a built-in evaluation component, so a substantial amount of published and ongoing research exists that focuses on RAD-converted units.<sup>7</sup> The existing research shows that small PHAs using RAD tend to make a complete shift away from public housing (Galvez et al., 2021; Hayes, Gerken, and Popkin, 2021). The research also shows that MTW agencies were able to move quickly to take advantage of RAD. At least in its first 5 years, MTW agencies were more likely to use RAD for PBV than for PBRA (Galvez et al., 2021). By 2020, 43 percent of all RAD conversions received LIHTC allocations (McClure and Schwartz, 2021).

## **Knowledge Gaps**

Additional research is needed on the use of PBVs with other affordable housing development and preservation programs. In the case of RAD, specifically, research is needed to understand why some agencies chose to use RAD to convert their public housing stock and others did not, what the differences are between units converted to PBV versus PBRA assistance, and the extent to which PBV developments leveraged federal, state, and local funds and programs to produce and preserve affordable units. An accounting of the programs used and research into and development of best practices are necessary for agencies to move forward with their plans. The field needs a better understanding of how, when, and why RAD and LIHTC are used in conjunction with each other and whether differences exist between properties that layer these programs and those that do not. Given that LIHTC funding is fixed, the growth of RAD and the growth of PBVs more broadly could crowd out other affordable housing developments (McClure and Schwartz, 2021). Research is needed to determine whether crowding out occurs.

---

<sup>7</sup> For example, see Bossie and Joice (2021).

Current research says relatively little about how PHAs are using PBV contracts in existing buildings as a tool to preserve affordable housing. The quality of PBV-supported housing also needs to be documented and evaluated, which means comparing PBV units with PBRA, public housing, and units accessed through TBVs. How physical unit quality and management differ between types of PBV developments (for example, single versus scattered site and 100-percent PBV or mixed-income) should also be explored.

## Impact on Housing Choice

In the context of housing assistance, choice is often thought of in two ways: access to lower-poverty neighborhoods and greater opportunity and ability to move. Although the effect of PBVs on housing choice is an open question, it is almost certainly context dependent. The location of PBV developments, the availability of other housing that will qualify for and accept TBVs, and the local administration of the program will determine whether PBVs increase or decrease options for voucher families.

## Research and Evidence

The existing research says significantly more about PBV locations than about the ability to move. To begin with, an abundance of evidence shows that families receiving housing assistance frequently live in areas of concentrated poverty (Galvez, 2010; Pendall, 2000; Teles, Fiol, and Su, 2022). This is true whether they live in affordable housing developments or use TBVs.

By definition, PBVs do not offer the choice and flexibility of a TBV, but sound policies might open new developments and neighborhoods up as options for assisted households. Since the 2000s, the PBV program has included the provision that PBV administration should be consistent with the goal of “deconcentrating poverty and expanding housing and economic opportunities.”<sup>8</sup> To that end, the program also had a cap of no more than 25 percent of units in a building supported by PBVs.<sup>9</sup> HERA modified the 25-percent cap to refer to a project instead of a single building, increasing flexibility for mixed-income designs and potentially increasing the overall number of affordable units (Glassman, 2008). Then, in 2016, HOTMA expanded the cap of the number of PBVs that could be used in a single project in a low-poverty neighborhood from 25 to 40 percent.

Despite these policies, the extent to which PBVs offer pathways to low-poverty neighborhoods is less clear. It should be expected that PBV units developed through RAD tend to sit in high-poverty, lower-opportunity neighborhoods because the legacy public housing stock tends to sit in areas of concentrated poverty (Sard, 2023). Furthermore, RAD now makes up more than one-third of all PBVs. LIHTC properties also tend to be found in areas of concentrated poverty (Dawkins, 2013). Although they are less concentrated than public housing, LIHTC legislation includes incentives for LIHTC to be in lower-poverty neighborhoods, and prior research has shown LIHTC properties do appear in suburban areas more often than vouchers (Ellen, O’Regan, and Voicu, 2009; Freeman, 2004; McClure, 2006).

---

<sup>8</sup> “Site Selection Standards,” 24 CFR Part 983.57(b)(1).

<sup>9</sup> The program allows limited exceptions to this cap if those vouchers serve households of specific special populations.

Mast and Hardiman (2017) and Galvez et al. (2021) found that PBVs tended to be in higher-poverty neighborhoods than TBVs but in lower-poverty neighborhoods compared with public housing. Looking at families with children, Teles, Fiol, and Su (2022) found that only 11 percent of households with children in PBV units live in low-poverty neighborhoods compared with 15 percent of households using TBVs and 4 percent of households in public housing. Another study found that, although not statistically significant, households with children receiving TBVs tend to move into less disadvantaged neighborhoods, whereas households with children that enter PBV units live in slightly more disadvantaged neighborhoods (Fenelon, Slopen, and Newman, 2023).<sup>10</sup> Studies have also found that PBVs tend to be in areas with lower environmental quality and with lower performing schools but closer to jobs and transportation compared with TBVs (Galvez et al., 2021; Mast and Hardiman, 2017).

Research focusing on MTW agencies shows that some agencies use PBVs to help residents access more desirable neighborhoods. For example, the King County Housing Authority in the state of Washington intentionally places developments in high-opportunity areas as part of an initiative to increase access (Galvez, Simington, and Treskon, 2017). However, King County is more of an exception than the rule. In 2017, the agency supported more households with children in low-poverty neighborhoods with PBVs than any other PHA (Teles, Fiol, and Su, 2022). Furthermore, although none of the three MTW agencies Galvez et al. (2021) studied used PBVs to target low-poverty areas specifically, all three emphasized the importance of their PBVs to a broader goal of housing choice for their residents.

Recent and ongoing research is exploring the links between neighborhood characteristics and long-term economic opportunity and the potential mechanisms—for example, Chetty et al. (2022). Furthermore, some existing research is available on understanding community integration and social connections for households receiving rental assistance (Chinchilla et al., 2020; Ellen, Suher, and Torrats-Espinosa, 2019).

LIHTC developments and RAD conversions can change the makeup of the neighborhoods in which they sit. LIHTC developments tend to raise poverty rates in high-income neighborhoods and reduce poverty rates in low-income neighborhoods (Diamond and McQuade, 2019; Ellen, Horn, and O'Regan, 2016). RAD conversions have led to declines in the share of nearby residents with low incomes and an increase in nearby residents with college degrees (Lowell and Smith, 2022). However, as RAD and PBVs continue to expand, additional research in this area is needed to understand the mechanisms at work better.

Less is known about the ease of movement for households in PBV units. The PBV program tries to maintain housing choice through the Family Right to Move requirement, which allows families who have lived in a PBV unit for at least a year to move with a TBV or other available, comparable assistance.<sup>11</sup> Currently, little evidence shows that PBVs—despite being place-based assistance—

---

<sup>10</sup> “Disadvantaged neighborhood” is an index based on poverty rate, median family income, percentage of unemployed, percentage of college graduates, percentage on public assistance, median household income, percentage of female-headed households, percentage of renter-occupied households, percentage of vacant, and percentage living in different house 5 years prior.

<sup>11</sup> “Family Right to Move,” 24 CFR 983.261.

keep a large number of families stuck in undesired housing or severely limit their ability to move. However, this lack of evidence is partially due to a lack of studies focused on PBV resident experiences and preferences and is something that needs to be studied further as the number of PBVs increases.

More studies focus on the ability to move and resident choice for households in RAD-converted project-based units. Residents of RAD PBV or PBRA units have a similar right to TBVs—called the Choice Mobility option.<sup>12</sup> Still, the current research shows that relatively few tenants have taken advantage of this option (Treskon et al., 2022). Two recent studies focused on residents of RAD PBV and PBRA units, exploring their experiences with RAD and the Choice Mobility option (Hayes, Gerken, and Popkin, 2021; Treskon et al., 2022). Residents pointed to the lack of alternative options and difficulties with the search for housing as reasons for not requesting a Choice Mobility voucher (Treskon et al., 2022). Another study found that about one-half of survey respondents preferred a Choice Mobility voucher to their current RAD PBV or PBRA unit (Stout et al., 2019). These preferences differed depending on tenant characteristics. For example, elderly respondents were much less likely than younger, working-age respondents to be interested in the Choice Mobility option (32 compared with 62 percent).

## Knowledge Gaps

Given that the use of PBVs will likely continue to increase, understanding how project-based assistance affects resident choice is imperative, including understanding residents' experiences with PBVs, their preferences and access to tenant-based assistance, and any other barriers to mobility for PBV households. TBVs can be difficult to use for a variety of reasons, including difficulty finding landlords who will rent to voucher holders or tight rental markets (Ellen, 2020). However, by better understanding resident experiences, preferences, and barriers, researchers can also better evaluate who is best served through PBVs rather than tenant-based options (for example, harder-to-house populations, people living in tighter rental markets, families with children versus single adults). In addition, the limited existing research has too frequently described potentially atypical subsets of voucher holders, such as those in RAD properties or served by MTW agencies. Future work should evaluate a wider group of PBV households.

More research is also needed on PBV unit move-outs as the program matures. PHAs should track requests to move out of PBV units and the time it takes for households to move. Additional monitoring is similarly needed to determine whether the Choice Mobility option might become more popular as time passes after the initial RAD conversions. Research is also needed to understand the resident experience and determine whether the right to move is easily accessible.

## Measuring Outcomes

Despite the marked increase in PBVs, neither researchers, policymakers, nor advocates have coalesced around a set of criteria with which to evaluate the program's success or the success of individual PBV developments. Most of the research to date has focused on short-term outcomes for individuals or households.

---

<sup>12</sup> For more information, see HUD (2023).

## **Research and Evidence**

Scally and Koenig (2012) proposed a framework for affordable housing outcomes and highlighted the need to examine three distinct scales: households, projects, and communities. Existing research into outcomes for PBVs—which is limited—focuses primarily on individual- or household-level outcomes and is primarily quantitative. These studies tend to focus on locational outcomes, comparing PBV with TBV households or on a specific subset of voucher holders, such as RAD or MTW households.

As this article has described, multiple studies found that PBVs, in aggregate, are more likely to be in high-poverty neighborhoods and less likely to offer access to low-poverty neighborhoods than TBVs (Galvez et al., 2021; Mast and Hardiman, 2017; McClure, Schwartz, and Taghavi, 2015; Teles, Fiol, and Su, 2022). Both Mast and Hardiman (2017) and Galvez et al. (2021) examined other interim outcomes and found that PBVs tend to be in areas with lower environmental quality and lower-performing schools but closer to jobs and transportation. Mast and Hardiman (2017) also found that the length of stay was much longer for households in TBV units than for households in PBV units (with a median of 8.1 compared with 5.9 years). However, the creation of new PBV units during the past decade might have entirely driven the shorter length of stay among households in PBV units.<sup>13</sup> Mast and Hardiman (2017) also found that PBVs are better at constraining rent burdens than TBVs, that the average rent burden for a PBV household with children was 31 versus 37 percent for comparable TBV households.

Although the length of stay, location, and rent burden are important interim outcomes, they also help to forecast longer-term outcomes like health and access to opportunity. For example, households with higher rent burdens face increased stress and housing instability and tend to be at greater risk of accepting poorer quality housing and facing long-term health challenges (Galvez, Brennan, and Meixell, 2017).

Although not specifically PBV-focused, some research has found that project-based assistance can have positive long-term outcomes for assisted households. For example, Fenelon et al. (2022) found that adults in project-based housing were less likely than adults on the waiting lists to have glycated hemoglobin, or A1C, levels, indicating uncontrolled diabetes. However, Fenelon et al. (2022) did not find similar differences for households that received tenant-based assistance. Other measures of health used in prior place-based research include interviews and questionnaire-based measures of psychological distress (Fenelon et al., 2017).

## **Knowledge Gaps**

Beyond generating evidence on the location of PBV units, existing research is narrow in its scope and findings. Future research should examine interim and longer-term outcomes for households living in PBV units and the effects of PBV developments on communities. Researchers should prioritize studying interim outcomes such as the length of time that households spend in a PBV unit and moves from PBV units. Longer-term outcomes will continue to be difficult to evaluate in the near term given the relatively recent increase in PBV use. Future research should eventually

---

<sup>13</sup> The authors also note that this discrepancy may be due to data quality.

include longitudinal studies to gain a better understanding of long-term outcomes—like mobility, civic engagement, health outcomes, and economic success for PBV households, both independently and compared with other housing assistance types.

Research should also examine the effects of PBV development on neighborhoods and on housing supply and affordability. The literature on LIHTC can serve as a guide (NYU Furman Center, 2017; McClure, 2019; Park et al., 2021). Research should examine issues such as whether PBV developments change neighborhoods, whether they reduce the concentration of poverty, and whether they lead to displacement of unassisted, low-income residents. Research should then explore the effect of PBV development on the housing supply and the broader housing market, including estimating the extent to which developing and preserving affordable housing with PBVs affects rents across the market. This research should also look at the difference between properties that layer multiple programs and those that do not (for example, PBVs in non-LIHTC and non-RAD properties) and compare PBV developments using RAD with developments using other funding sources.

## **Discussion: A Path From Evidence to Policy**

The prospect of using PBVs as a tool to increase affordable housing and offer better options to assisted households is exciting. However, PHA leaders and federal policymakers do not yet have the information they need to determine how many PBVs should be available, where they should be located, or what is the right mix of tenant- and project-based assistance. With so much still unknown, HUD and researchers should prioritize studies that will most directly help shape policy at both the local and national levels.

As a foundation, HUD, housing authorities, advocates, and researchers need to come together to document how the PBV program is working in practice and how PHAs develop and place PBVs in communities and their motivations for doing so. It should begin with qualitative research documenting the experiences of households in PBV units and should explore whether the experiences of people placed PBVs in middle-income or opportunity neighborhoods are more similar to those of people using TBVs to rent in those neighborhoods or more similar to the experiences of people concentrated in subsidized housing developments in low-income neighborhoods. Qualitative studies with PHA staff from a wide, diverse group of agencies can document PBV strategies and develop a better understanding of agencies' motivations for using PBVs. Next, quantitative impact studies can build on this work to begin to explore the relationship between PBV assistance and outcomes, such as employment, savings, and health. Finally, with this foundational evidence in place, researchers can begin to explore the effects PBVs have on their communities. These studies should estimate whether PBV development leads to detectable changes in rents and cost burdens. They also should build on the evidence about PHA motivations and estimate the extent to which PBV developments are meeting agency goals.

As the PBV program continues to expand, PHAs need tools to determine how, when, and where to use PBVs. Researchers should attempt to identify metrics that agencies could monitor to assess whether their portfolios would benefit from additional PBVs—for example, determining whether low success rates for families with TBVs are associated with higher demand for PBVs and

identifying strategies to track waiting lists and the use of the Family Right to Move and the RAD Choice Mobility option to help agencies balance portfolios.

At a national level, policymakers need research and evidence to determine whether they should encourage or limit the growth of PBVs. HUD should track the cost-effectiveness of PBVs relative to all other housing assistance types—while accounting for differences in rental costs and population needs. Compared with TBVs, PBVs may be more common in urban areas with more multifamily housing, and they may also be used more frequently to house older residents and people with disabilities but are less likely to house larger families. These factors may drive costs as much or more than structural differences between types of assistance. As PBV contracts end, HUD should also rigorously track whether and where contracts are extended, whether developments are remaining affordable, and where residents move when contracts are not extended. Until this research can be developed, policymakers should draw on research and evidence about LIHTC properties whose required period of affordability ends—for example, Khadduri et al. (2012).

Decades of research provide evidence of the benefits of TBVs, improving housing choice while reducing homelessness and rent burdens (Ellen, 2020). Competitive and discriminatory housing markets that limit the benefits of TBVs might make PBVs a necessary tool. Federal policy changes have allowed the PBV program to grow. It is now time to evaluate whether the PBV program has benefited assisted households and communities and to use that evidence to adjust PBV program policy accordingly.

## Acknowledgments

The authors thank the reviewers, including Martha Galvez, and editors for their thoughtful feedback on this manuscript.

## Authors

Daniel Teles is a principal research associate in the Metropolitan Housing and Communities Policy Center at the Urban Institute. Alyse D. Oneto is a senior research associate in the Metropolitan Housing and Communities Policy Center at the Urban Institute.

## References

Acosta, Sonya, and Erik Gartland. 2021. *Families Wait Years for Housing Vouchers Due to Inadequate Funding: Expanding Program Would Reduce Hardship, Improve Equity*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/housing/families-wait-years-for-housing-vouchers-due-to-inadequate-funding>.

Bossie, Natan, and Paul Joice. 2021. “The Rental Assistance Demonstration,” *Cityscape* 23 (2): 3–7.

Chetty, Raj, Matthew O. Jackson, Theresa Kuchler, Johannes Stroebel, Nathaniel Hendren, Robert B. Fluegge, Sara Gong, Federico Gonzalez, Armelle Grodin, Matthew Jacob, Drew Johnston, Martin Koenen, Eduardo Laguna-Muggenburg, Floirán Mudekerezá, Tom Rutter, Nicolaj Thor, Wilbur Townsend, Ruby Zhang, Mike Bailey, Pablo Barberá, Monica Bhole, and Nils Wernerfelt. 2022. “Social Capital I: Measurement and Associations With Economic Mobility,” *Nature* 608 (7921): 108–121.

Chinchilla, Melissa, Sonya Gabrielian, Amy Glasmeier, and Michael F. Green. 2020. “Exploring Community Integration Among Formerly Homeless Veterans in Project-Based Versus Tenant-Based Supportive Housing,” *Community Mental Health Journal* 56 (2020): 303–312. <https://link.springer.com/article/10.1007/s10597-019-00473-x>.

Dawkins, Casey. 2013. “The Spatial Pattern of Low Income Housing Tax Credit Properties: Implications for Fair Housing and Poverty Deconcentration Policies,” *Journal of the American Planning Association* 79 (3): 222–234. <https://doi.org/10.1080/01944363.2014.895635>.

Diamond, Rebecca, and Tim McQuade. 2019. “Who Wants Affordable Housing in Their Backyard? An Equilibrium Analysis of Low-Income Property Development,” *Journal of Political Economy* 127 (3): 1063–1117. <https://doi.org/10.1086/701354>.

Ellen, Ingrid Gould. 2020. “What Do We Know About Housing Choice Vouchers?” *Regional Science and Urban Economics* 80: 103380. <https://doi.org/10.1016/j.regsciurbeco.2018.07.003>.

Ellen, Ingrid Gould, Keren M. Horn, and Katherine M. O’Regan. 2016. “Poverty Concentration and the Low Income Housing Tax Credit: Effects of Siting and Tenant Composition,” *Journal of Housing Economics* 34: 49–59. <https://doi.org/10.1016/j.jhe.2016.08.001>.

Ellen, Ingrid Gould, Katherine M. O’Regan, and Ioan Voicu. 2009. “Siting, Spillovers, and Segregation: A Reexamination of the Low Income Housing Tax Credit Program.” In *Housing Markets and the Economy: Risk, Regulation, and Policy*, edited by Edward L. Glaeser and John M. Quigley. Cambridge, MA: Lincoln Institute of Land Policy: 233–267.

Ellen, Ingrid Gould, Michael Suher, and Gerard Torrats-Espinosá. 2019. “Neighbors and Networks: The Role of Social Interactions on the Residential Choices of Housing Choice Voucher Holders,” *Journal of Housing Economics* 43: 56–71. <https://doi.org/10.1016/j.jhe.2018.09.005>.

Fenelon, Andrew, Kasia J. Lipska, Whitney Denary, Kim M. Blankenship, Penelope Schlesinger, Denise Esserman, and Danya E. Keene. 2022. “Association Between Rental Assistance Programs and Hemoglobin A1C Levels Among US Adults,” *JAMA Network Open* 5 (7): e2222385–e2222385. DOI: 10.1001/jamanetworkopen.2022.22385.

Fenelon, Andrew, Patrick Mayne, Alan E. Simon, Lauren M. Rossen, Veronica Helms, Patricia Lloyd, Jon Sperling, and Barry L. Steffen. 2017. “Housing Assistance Programs and Adult Health in the United States,” *American Journal of Public Health* 107 (4): 571–578.



Fenelon, Andrew, Natalie Slopen, and Sandra J. Newman. 2023. "The Effects of Rental Assistance Programs on Neighborhood Outcomes for U.S. Children: Nationwide Evidence by Program and Race/Ethnicity," *Urban Affairs Review* 59 (3): 832–865. <https://doi.org/10.1177/10780874221098376>.

Freeman, Lance. 2004. *Siting Affordable Housing: Location and Neighborhood Trends of Low Income Housing Tax Credit Developments in the 1900s*. Washington, DC: Brookings Institution.

Galvez, Martha M., 2010. *What Do We Know About Housing Choice Voucher Program Location Outcomes?* Washington, DC: What Works Collaborative. <https://www.urban.org/research/publication/what-do-we-know-about-housing-choice-voucher-program-location-outcomes>.

Galvez, Martha M., Maya Brennan, and Brady Meixell. 2017. *Housing as a Safety Net: Ensuring Housing Security for the Most Vulnerable*. Washington, DC: Urban Institute. <https://www.urban.org/research/publication/housing-safety-net>.

Galvez, Martha M., Jasmine Simington, and Mark Treskon. 2017. *Moving to Work and Neighborhood Opportunity*. Washington, DC: Urban Institute. <https://www.urban.org/research/publication/moving-work-and-neighborhood-opportunity>.

Galvez, Martha M., Daniel Teles, Alyse D. Oneto, and Matthew Gerken. 2021. *Moving to Work Retrospective: Moving to Work Agencies' Use of Project-Based Voucher Assistance*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/publications/MTW-Project-Based-Voucher-Assistance.html>.

Glassman, Amy. 2008. "Project-Based Voucher Reforms Will Facilitate Development of Affordable Units but Should Be Taken Further," *Journal of Affordable Housing & Community Development Law* 18 (1): 71–80. <https://www.jstor.org/stable/25781125>.

Hayes, Christopher, Matthew Gerken, and Susan J. Popkin. 2021. "Impact of Rental Assistance Demonstration Program Conversions on Public Housing Tenants," *Cityscape* 23 (2): 27–46. <https://www.huduser.gov/portal/periodicals/cityscape/vol23num2/article2.html>.

Khadduri, Jill, Carissa Climaco, Kimberly Burnett, Laurie Gould, and Louise Elving. 2012. *What Happens to Low-Income Housing Tax Credit Properties at Year 15 and Beyond?* Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. [https://www.huduser.gov/portal/publications/hsgfin/lihtc\\_report2012.html](https://www.huduser.gov/portal/publications/hsgfin/lihtc_report2012.html).

Lowell, Warren, and Imari Smith. 2022. "Wealthier Neighbors and Higher Rents: The Rental Assistance Demonstration and Gentrification," *Urban Affairs Review* 59 (5): 1626–1664. <https://doi.org/10.1177/10780874221109453>.

Mast, Brent D., and David Hardiman. 2017. "Project-Based Vouchers," *Cityscape* 19 (2): 301–322. <https://www.huduser.gov/portal/periodicals/cityscape/vol19num2/ch21.pdf>.

McClure, Kirk. 2019. "What Should Be the Future of the Low-Income Housing Tax Credit Program?" *Housing Policy Debate* 29 (1): 65–81. <https://doi.org/10.1080/10511482.2018.1469526>.

———. 2006. “The Low-Income Housing Tax Credit Program Goes Mainstream and Moves to the Suburbs,” *Housing Policy Debate* 17 (3): 419–446. <https://doi.org/10.1080/10511482.2006.9521576>.

McClure, Kirk, and Alex Schwartz. 2021. “Movement Toward High Opportunity and Racial and Ethnic Integration for Hispanics in the Housing Choice Voucher Program,” *Cityscape* 23 (3): 137–160. <https://www.huduser.gov/portal/periodicals/cityscpe/vol23num3/article5.html>.

McClure, Kirk, Alex F. Schwartz, and Lydia B. Taghavi. 2015. “Housing Choice Voucher Location Patterns a Decade Later,” *Housing Policy Debate* 25 (2): 215–233. <https://doi.org/10.1080/10511482.2014.921223>.

NYU Furman Center. 2017. *The Effects of the Low-Income Housing Tax Credit (LIHTC)*. New York: New York University, Furman Center for Real Estate and Urban Policy. <https://furmancenter.org/research/publication/the-effects-of-the-low-income-housing-tax-credit-lihtc>.

O'Regan, Katherine M., and Keren M. Horn. 2013. “What Can We Learn About the Low-Income Housing Tax Credit Program by Looking at the Tenants?” *Housing Policy Debate* 23 (3): 597–613. <https://doi.org/10.1080/10511482.2013.772909>.

Park, Sohyun, Aram Yang, Hui Jeong Ha, and Jinhyung Lee. 2021. “Measuring the Differentiated Impact of New Low-Income Housing Tax Credit (LIHTC) Projects on Households' Movements by Income Level within Urban Areas,” *Urban Science* 5 (79): 1–18. <https://doi.org/10.3390/urbansci5040079>.

Pendall, Rolf. 2000. “Why Voucher and Certificate Users Live in Distressed Neighborhoods,” *Housing Policy Debate* 11 (4): 881–909. <https://www.tandfonline.com/doi/abs/10.1080/10511482.2000.9521391>.

Sard, Barbara. 2023. *Project-Based Vouchers: Lessons from the Past to Guide Future Policy*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/housing/project-based-vouchers-lessons-from-the-past-to-guide-future-policy>.

Scally, Corianne Payton, and Richard Koenig. 2012. “Beyond NIMBY and Poverty Deconcentration: Reframing the Outcomes of Affordable Rental Housing Development,” *Housing Policy Debate* 22 (3): 435–461.

Stout, Dennis, Frankie Clogston, Alexander Thackeray, Jennifer Stoloff, Brad Anthony, and Christopher Hayes. 2019. *Final Report: Evaluation of HUD's Rental Assistance Demonstration (RAD)*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/sites/default/files/pdf/RAD-Evaluation-Final-Report.pdf>.

Teles, Daniel, Olivia Fiol, and Yipeng Su. 2022. *Families in Subsidized Rental Units Rarely Live in Low-Poverty Neighborhoods*. Washington, DC: Urban Institute. <https://www.urban.org/research/publication/families-subsidized-rental-units-rarely-live-low-poverty-neighborhoods>.

Treskon, Mark, Martena Reed, Susan J. Popkin, and Elizabeth Champion. 2022. *Evaluation of the Rental Assistance Demonstration (RAD)—Early Findings on Choice Mobility Implementation*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/publications/RAD-Early-Findings-on-Choice-Mobility-Implementation.html>.

U.S. Department of Housing and Urban Development (HUD). n.d.a. “Housing Choice Voucher (HCV) Data Dashboard.” [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/dashboard).

———. n.d.b. “Low-Income Housing Tax Credit (LIHTC): Property Level Data.” <https://www.huduser.gov/portal/datasets/lihtc/property.html>.

———. 2023. *RAD Choice Mobility Guidebook: Effective Implementation of Residents’ Choice-Mobility Rights in RAD Conversions: A Best Practices Guide for PHAs and Owners*. Washington, DC: HUD, Office of Policy Development and Research. [https://www.hud.gov/sites/dfiles/Housing/documents/RAD\\_ChoiceMobilityGuidebook-052223.pdf](https://www.hud.gov/sites/dfiles/Housing/documents/RAD_ChoiceMobilityGuidebook-052223.pdf).

---

# Can Rental Markets Absorb a Major Voucher Expansion?

Will Fischer

Center on Budget and Policy Priorities

---

## Abstract

*Growing calls to expand housing vouchers or similar rental assistance and ultimately make them universal have raised attention on whether rental markets could absorb assistance for millions more households. In practice, the Housing Choice Voucher program has a long and continuing record of assisting additional households, and research—although limited—indicates that voucher expansion has done little to drive up market rents. This reflects several factors making vouchers easier to absorb and less prone to inflate rents than some critics assume, including the large share of families receiving vouchers who already rent housing, although often with very high rent burdens. There is no indication that the program has hit a limit on expansion, so absent a major change, it is reasonable to expect that markets could continue to absorb substantial numbers of added vouchers. Making rental assistance available to all eligible households, however, would require an unprecedentedly large expansion. There are strong reasons to believe this expansion would be feasible, but guaranteed assistance would likely be more successful if accompanied by rental assistance reforms giving participants access to more of the housing stock and broader interventions in tight rental markets to expand supply and limit excessive rent growth.*

## Introduction

Housing vouchers are a highly effective, evidence-based form of assistance that reduces homelessness, housing instability, and overcrowding and improves a range of other outcomes for participants (Fischer, Rice, and Mazzara, 2019). Expanding vouchers or similar rental assistance to reach all low-income people who need it will be crucial both to addressing housing-related hardship and to broader efforts to ensure that everyone has enough resources to meet their basic needs and thrive (Collyer, 2023; Cunningham, 2020). However, as a demand-side subsidy, vouchers' effectiveness depends on the availability of units that voucher holders can rent.

Calls have grown to expand rental assistance and ultimately make it universal, which has increased attention on the question of whether rental markets could absorb assistance for millions

of additional households. In practice, the voucher program has a long history of assisting an increasing number of households (including growth of at least 59,000 in 2023 alone), with the number of vouchers in use limited mainly by funding constraints rather than market capacity. In addition, the available research—while limited—indicates that voucher expansion has done little to drive up overall market rents.

This article examines that record and discusses several reasons why vouchers are easier to absorb and less prone to inflate rents than critics sometimes assume: most people who use vouchers and most unassisted families who need them already occupy a housing unit, although often precariously; markets have substantial capacity to absorb new households despite supply constraints; and the program has administrative controls designed to prevent vouchers from paying above-market rents.

Although it is not possible to predict future trends with certainty, there is no indication that the program has hit a limit on the capacity of markets to absorb vouchers. As a result, absent a major shift in how expansions play out, it is reasonable to expect that vouchers could continue to assist many additional families, as they have during periods of relatively rapid growth in the past. Making rental assistance universal, however, would break new ground, requiring that many participants rent from owners who do not accept vouchers today and significantly increasing rental housing demand even in supply-constrained regions.

There are reasons to believe that an expansion on that scale would be feasible (including the same factors noted above that have facilitated voucher absorption to date), but the number of families who successfully use assistance would likely be considerably higher and the risk of market rent increases lower if expansion were accompanied by other policy changes. Such changes include rental assistance reforms to make it easier to use assistance in a wide segment of the housing stock as well as broader interventions to expand housing supply and limit excessive rent increases, particularly in tight markets.

## **The Voucher Program Has a Long Record of Successful Expansion**

The number of households assisted through the Housing Choice Voucher program and its predecessors has grown almost continuously since the enactment of Section 8 of the U.S. Housing Act in 1974. Housing vouchers currently assist 2.42 million households,<sup>1</sup> which means that the program has expanded by an average of about 50,000 households per year since it was established. That expansion was concentrated in the first 3 decades of the program's history, when more than 100,000 vouchers or certificates were added in some years, and has slowed since due to a reduction in the number of new vouchers funded (Collinson, Ellen, and Ludwig, 2015). Nonetheless, the number of households assisted has continued to grow in most years. In the 5 years through 2023, an average of 35,000 additional vouchers were put to use annually, including

---

<sup>1</sup> In addition to regular Housing Choice Vouchers, which assisted 2.30 million households in November 2023 (the last month for which data are currently available), this figure and the estimates in this paragraph of the number of vouchers added include two subprograms that fund Section 8 vouchers: Mainstream vouchers, which assisted 56,000 households in November 2023, and Emergency Housing Vouchers, which assisted 63,000 households as of February 28, 2024. Data are from HUD's Housing Choice Voucher and Emergency Housing Voucher dashboards.

59,000 in the portion of 2023 for which data are available, so there is no indication that the program has bumped up against a ceiling that prevents further expansion.<sup>2</sup>

## **The Number of Vouchers in Use Is Constrained by Funding, Not Market Capacity**

Vouchers and other federal rental assistance still reach only about one-fourth of households in need, and voucher waitlists are long in nearly all parts of the country (Acosta and Gartland, 2021). However, the main constraint preventing vouchers from helping more households is limited funding, not market capacity or other barriers to using vouchers. Congress sets appropriations for vouchers each year, and the state and local public housing agencies (PHAs) that administer vouchers receive fixed funding allocations based on their subsidy costs in the previous year, adjusted for inflation.<sup>3</sup> PHAs use somewhat less than all their funding in some years and somewhat more in others (by drawing down reserves), but on average from 2013–22, they spent 99.5 percent of the voucher subsidy funding they received.<sup>4</sup>

In markets with low vacancy rates, voucher holders and other households have more difficulty renting units, but well-run agencies in tight markets still use virtually all their voucher funds. For example, the PHAs for Boston, Massachusetts, and Los Angeles, Orange, and San Diego Counties in California all had budget utilization rates above 99 percent in 2022.

This should not be oversimplified. PHAs often manage funds conservatively, partly because program funding rules encourage it (Sard, 2024), and are sometimes particularly reluctant to draw on reserves, with the result that some have accumulated large reserve balances. Utilization rates can decrease temporarily because of tightening rental markets or unusually large funding increases—which both occurred in 2021, when use of funds fell to 96.2 percent before recovering to 98.0 percent in 2022. The overall trend is clear, however: budget utilization percentages have remained in the high 90s or higher even as the amount of funding and the number of vouchers in use have grown—rather than dropping, as would be expected if the program had hit a limit on the capacity of markets to absorb vouchers (exhibit 1).

Two statistics are sometimes misread as indicating that the voucher program cannot use the resources available to it. First, PHAs consistently use far less than 100 percent (85 percent in 2022, for example) of the vouchers they are authorized to administer, which is the sum of the new vouchers awarded to the PHA over the years. However, that occurs mainly because most agencies do not receive enough annual funding to cover all their authorized vouchers; nearly all *funded* authorized vouchers are used.

---

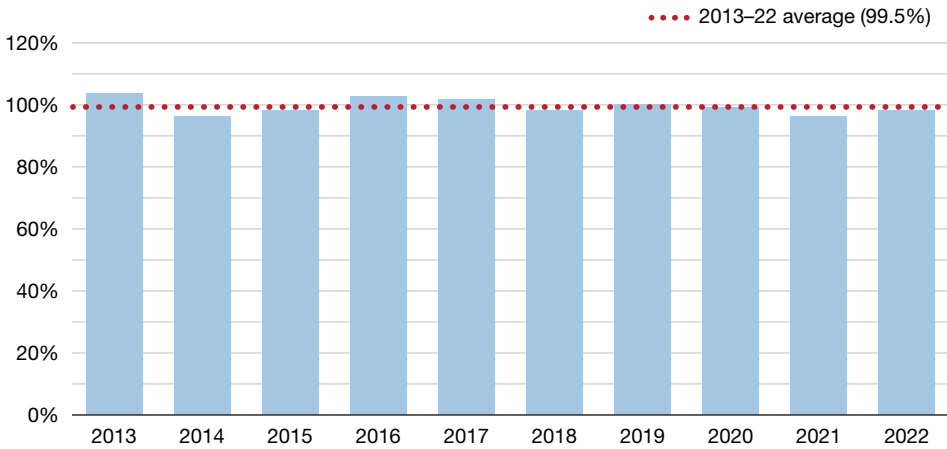
<sup>2</sup> Center on Budget and Policy Priorities (CBPP) analysis of HUD's Housing Choice Voucher and Emergency Housing Voucher dashboards.

<sup>3</sup> PHAs can request added funding from HUD to cover shortfalls, but the amount set aside for that purpose is capped and is low relative to the overall amount of voucher funding. Agencies participating in the Moving to Work (MTW) demonstration are funded using different formulas.

<sup>4</sup> The budget utilization figures in this article use data from HUD's Housing Choice Voucher dashboard and exclude MTW PHAs, which are allowed to shift voucher funds to other purposes.

**Exhibit 1**

Percentage of Annual Housing Voucher Assistance Funding Spent



*Notes: Figures do not include agencies participating in the Moving to Work demonstration, which allows agencies to shift voucher funds to other purposes. The share of annual voucher assistance funding spent can be more than 100 percent because agencies can use unspent funds left over from previous years.*

*Source: Center on Budget and Policy Priorities (CBPP) analysis of HUD data*

Second, more than one-third of families issued vouchers are not able to use them before the voucher expires.<sup>5</sup> Black and Hispanic families, who often are discriminated against by landlords, have even lower success rates (Ellen, O’Regan, and Stochak, 2024). This is a major shortcoming that unnecessarily burdens people who are struggling to afford housing. Policymakers should make raising success rates a top priority, and there are promising policy options that have the potential to do so (including many of the reforms discussed later in this article). However, even when some families cannot use their vouchers, PHAs can still use all their funds by issuing vouchers to additional families from their waiting lists and could be expected to serve more families if they had the funds to do so.

Emergency Housing Vouchers (EHVs) illustrate how a sizable voucher expansion can be absorbed. This temporary, separately funded subprogram was enacted in 2021 as part of the American Rescue Plan Act to assist people experiencing or at risk of homelessness and survivors of violence. The initiative faced headwinds, including unusually low vacancy rates in much of the country, competition from the large short-term Emergency Rental Assistance Program that was scaling up simultaneously, and the need to set up referrals from the homelessness system to PHAs.

As a result, the use of EHVs grew slowly after they were first allocated to PHAs in July 2021. Growth then accelerated, however, and as of February 28, 2024, the program was assisting more than 63,000 households—94 percent of the total EHVs awarded. Utilization rates varied across PHAs and regions, but overall, agencies were able to use the bulk of their EHVs even in tight rental

<sup>5</sup> In 2019, 63 percent of voucher holders were able to use their vouchers successfully within 240 days (Ellen, O’Regan, and Stochak, 2021). That percentage is somewhat lower than an estimate in an earlier study that the national success rate in 2000 was 69 percent, although, due to differences in methods and samples, those figures may not be directly comparable (Finkel and Buron, 2001).



markets (exhibit 2). That success was aided by supports, flexibilities, and alternative requirements that HUD established to make EHV's easier to use, many of which could be extended to the program as a whole. EHV funding is limited, and the program will soon begin to shrink through attrition because PHAs were not permitted to reissue EHV's to new households after September 30, 2023. Absent those constraints, however, the number of households assisted with EHV's would likely continue to grow.

**Exhibit 2**

Data for the 10 Metro Areas With Largest Number of Emergency Housing Vouchers

Metropolitan Area	Average 2022–23 Rental Vacancy Rate (%)	Locally Administered EHV's in Use on February 28, 2024	
		Number	As Percentage of EHV's Awarded to PHAs (%)
New York-Newark-Jersey City	3.7	8,236	99
Los Angeles-Long Beach-Anaheim	4.0	7,391	93
San Francisco-Oakland-Hayward	6.0	2,203	95
Seattle-Tacoma-Bellevue	4.5	1,819	>100
Chicago-Naperville-Elgin	5.8	1,794	97
Miami-Fort Lauderdale-West Palm Beach	7.4	1,161	93
Philadelphia-Camden-Wilmington	4.7	1,139	88
Washington-Arlington-Alexandria	5.4	1,098	86
Houston-The Woodlands-Sugar Land	9.9	1,003	91
San Jose-Sunnyvale-Santa Clara	4.0	946	92
Dallas-Fort Worth-Arlington	7.7	922	82
National Total	6.1	63,351	94

Notes: Metro area numbers include all vouchers administered by local agencies that HUD's 2023 Picture of Subsidized Households database indicates are located in the area. Vouchers administered by state agencies are not included in the metro area counts.

Source: Center on Budget and Policy Priorities (CBPP) analysis of U.S. Census Bureau Housing Vacancies and Homeownership data and HUD administrative data

**Voucher Expansion Appears to Have Had Little Impact on Market Rents**

Rents have grown sharply in recent decades, rising more rapidly than overall inflation in all but 6 years from 1998 through 2023<sup>6</sup> and causing a record number of households to pay more than one-half of their income for rent (Alvarez and Steffen, 2023). For reasons of timing and scale, however, it is not plausible that vouchers were a significant factor in that surge. Rents rose most rapidly in the decade from 2013 to 2023, when, on average, the voucher program was experiencing some of the slowest growth in its history, with the number of added vouchers used each year amounting to just 0.06 percent of renter households. Even the voucher program as a whole amounts to only 5 percent of the rental market, too little to be a major driver of overall trends. Instead, analyses suggest that rent inflation has resulted mainly from factors affecting the broader market, particularly the failure of housing supply to keep up with demand in many regions (Been, Ellen, and O'Regan, 2023; Parrot and Zandi, 2021).

<sup>6</sup> CBPP analysis of Consumer Price Index data.

Vouchers could have contributed to rent inflation on the margins, but research that has sought to isolate the effect of rental assistance on market rents suggests that it has little impact. The first major study of this issue examined the Housing Allowance Supply Experiment (HASE), a 1970s demonstration that made rental assistance available to all eligible households in two cities and found no significant impact on market rents (Barnett, 1979). That demonstration tested housing allowances with significantly different rules from those for today's vouchers, but a voucher-specific study by economists Michael Eriksen and Amanda Ross (2015) reached similar findings. That study looked at voucher expansions that added more than 200,000 vouchers nationally from 2000 to 2002 and found that the new vouchers had no significant overall effect on market rents.<sup>7</sup>

Eriksen and Ross did find that added vouchers were associated with modest rent growth for some categories of units, but this was offset by reductions for other units. First, rents rose somewhat for units in the middle price range, where voucher holders are most likely to rent, but fell for lower-cost units. (Specifically, rents rose for units costing between 80 and 120 percent of the Fair Market Rent, or FMR, which HUD sets each year at the 40th percentile of local market rents and which is used to determine voucher payment standards, but fell for units below 80 percent of the FMR.) Second, rents rose modestly in rental markets where supply was most constrained (13 of the 94 metropolitan areas examined) but fell in other metropolitan areas (Eriksen and Ross, 2015).<sup>8</sup>

## Several Factors Ease the Absorption of Vouchers and Limit Rent Impacts

The body of research on this topic is limited, and additional studies updating and expanding on the HASE and the Eriksen and Ross findings would be useful. The conclusion that markets appear to have been able to absorb new rental assistance with little overall impact on market rents, however, is consistent with the effects predicted by economists who have carefully assessed the role of rental assistance in housing markets (Rothenberg et al., 1991), and likely reflects several factors that keep effects on rents far more limited than some critics expect.

### Most People Who Use Assistance Already Rent Homes but Struggle to Afford the Cost

First, most households that use vouchers—about two-thirds in one study—already rent a housing unit, so their vouchers do not increase the number of households demanding units in the market (Mills et al., 2006). Little data are available on how many voucher holders rent the *same* unit they were already renting, but a 2001 study estimated that 21 percent “lease in place” in this manner (Finkel and Buron, 2001). These households typically have a very high rent burden before receiving assistance, so using a voucher can enable them to spend more on other necessities, reduce pressure to accumulate debt, and make it less likely that they will be evicted or become

---

<sup>7</sup> An earlier study found that vouchers raised market rents substantially (Susin, 2002), but assessments by other researchers have generally concluded that this finding resulted wholly or partly from weaknesses in the study's methodology and that it is more plausible that vouchers have little overall impact on market rents (Glaeser and Gyourko, 2008; Olsen, 2003; Shinn and Khadduri, 2020).

<sup>8</sup> The study categorized areas based on housing supply elasticities—that is, by how responsive the supply of housing in the area is to increases in housing costs—and found that rent rose in markets where the price elasticity of supply was lower than 0.83 (Eriksen and Ross, 2015).

homeless. Providing vouchers to these families has little or no effect on housing demand, however, and it allows some vouchers to be easily put to use even in the tightest of markets.

Other voucher holders move from one unit to another—for example, to relocate to a neighborhood that better matches their needs or from an overcrowded home to one with adequate space. Such moves are likely to reduce demand for low-end units that unassisted low-income households often occupy, and to add demand closer to the middle of the market. However, they do not increase the total number of units demanded because other households can occupy the units the voucher holders vacate. These shifts likely contribute to the trend Eriksen and Ross observed, in which voucher expansion raised rents modestly for mid-market units but reduced them at the bottom of the market.<sup>9</sup>

### **Rental Markets Can Absorb Some New Households**

Sometimes, vouchers do increase the number of occupied units, by enabling people who are doubled up or homeless to afford housing. It would be imperative to assist these populations even if the result were tighter markets and higher rents because homeless and doubled-up people experience some of the most severe hardship in the United States today. However, the impact on rents would likely be dampened by the fact that rental markets have significant capacity to absorb new voucher households, just as they absorb other new renters, such as young people moving out of their parents' homes or workers relocating from other regions.

This is partly because many parts of the country have relatively soft markets. The rental vacancy rate exceeded 5 percent (often used as a rule of thumb to identify tight markets) in 52 of the 75 largest metropolitan areas in 2023 and exceeded 7.5 percent in 27 of those areas.<sup>10</sup> When vacancy rates are high, absorbing added renter households is easier, and doing so can benefit the community by filling units that might otherwise deteriorate and contribute to blight.

Other areas have far less slack. New vouchers can still be put to use in tight markets, as the EHV experience shows, partly by helping families keep their current homes (Whitford, 2024). However, tight conditions raise the odds that added demand will inflate rents to some degree and increase the importance of pairing rental assistance expansion with measures to expand supply.

Even in those markets, however, new households do not simply bid up rents for a fixed number of units, because owners of land and buildings still respond to added demand by making more units available than they otherwise would—although at a lower rate than in less supply-constrained markets (Saiz, 2010). Along with building more units, owners may respond by targeting a larger share of units as rentals, repairing deteriorated units that would have become uninhabitable, building accessory dwelling units, or converting a garage or a basement into an apartment. Some of those responses could happen quickly, but others would play out over several years, suggesting that

---

<sup>9</sup> Eriksen and Ross found that rents dropped more for low-end units than they rose for mid-market units. The authors note that this may be explained by owners' tendency to be slower to take housing units out of use when demand drops (as it does at the bottom of the market when voucher holders move out) than they are to provide more units when demand increases. As a result, rents and housing prices tend to drop more rapidly in markets and submarkets with declining demand than they rise in markets with growing demand (Eriksen and Ross, 2015; Glaeser and Gyourko, 2005).

<sup>10</sup> CBPP analysis of U.S. Census Bureau Housing Vacancies and Homeownership data.

even when voucher expansion in tight markets raises rents modestly in the near term (as Eriksen and Ross found), the effect could fade over time as markets adjust.

## Safeguards Limit Rents in Voucher Units

Vouchers' impact on rents is also limited by programmatic safeguards designed to prevent them from paying more for a unit than it would be worth on the unsubsidized market. Because vouchers currently reach only a small share of rental units, overpaying would be unlikely to influence overall market rents except in neighborhoods with unusually high voucher concentrations. The effects of overpayments would grow, however, if vouchers were expanded sharply. Even at the program's current size, preventing overpayments can enable vouchers to reach more families with available resources.

Voucher payment standards, which cap subsidies at levels based on typical rents in the local market, provide one check against excessive rents. PHAs generally must set payment standards between 90 and 110 percent of the HUD-determined FMR.<sup>11</sup> A family using a voucher may rent a unit somewhat above the payment standard, but it must pay all of the excess rent itself, so it has the same incentive as an unassisted household to avoid paying more than the unit is worth.<sup>12</sup>

In addition, before a voucher holder can rent a unit, the PHA must certify that the rent is reasonable compared with those charged for similar unassisted units.<sup>13</sup> Agencies vary in how they conduct these reviews, and some are likely more effective than others, but they appear to significantly affect the rents voucher holders pay. One indication of this is that the majority of landlords charge voucher holders rents well below the payment standard, even though the voucher rather than the tenant would pay the full rent up to 100 percent of the payment standard.<sup>14</sup>

To be sure, some landlords do inflate rents closer to the payment standard when the market rent is lower, and qualitative research suggests that overcharging is especially likely in lower-rent, higher-poverty neighborhoods (Rosen, 2020). One study estimated that from 2009 to 2011, owners of voucher units in Milwaukee charged an average of \$51 to \$68 a month above the market rent (Desmond and Perkins, 2016). Even with overcharging at that level, the reduction in the family's rent payment due to the voucher (likely more than \$500 a month for the Milwaukee sample) would dwarf the above-market rent going to the landlord. A national study using data from 2000, however, found voucher rents to be *lower than* market rents on average (ORC/Macro, 2001), and

---

<sup>11</sup> PHAs can set payment standards outside this 90-to-110-percent "basic range" if they meet certain criteria and receive approval from HUD. Since December 2021, HUD has established an expedited process that allows most PHAs to set payment standards up to 120 percent of the FMR if they wish to do so.

<sup>12</sup> Voucher holders are not permitted to rent a unit above the payment standard if doing so would cause them to pay more than 40 percent of their income for rent at the time of initial lease up.

<sup>13</sup> MTW PHAs are not required to follow the rules regarding payment standards and rent reasonableness that apply to other PHAs, and there have been high-profile instances of MTW agencies that used this flexibility to pay rents far above market levels (Manchir, 2014; Thompson, 2023).

<sup>14</sup> In 2020, 51 percent of voucher holders paid less than 95 percent of the payment standard, including 38 percent that paid less than 90 percent, according to CBPP analysis of HUD administrative data. Just 18 percent of voucher holders paid rent between 95 and 100 percent of the payment standard, and another 31 percent paid more than 100 percent of the payment standard and consequently covered the excess rent themselves. Those figures include contract rent and (for households with tenant-paid utilities) utility allowances and exclude project-based vouchers.

a review that examined those studies and several others concluded that “some find an aggregate overpayment and others an aggregate underpayment” and “the weight of the evidence is that these average differences are modest” (Olsen, 2019: 100).

Moreover, nearly all of this research used data that preceded a major recent policy change: the use of Small Area Fair Market Rents (SAFMRs). SAFMRs are based on the 40th percentile of market rents in a particular ZIP Code in metropolitan areas, so they reflect neighborhood rents more accurately than the metro-level FMRs used historically in the voucher program. Because rents vary much less within a ZIP Code than across an entire metropolitan area, SAFMRs leave less room for landlords in lower-rent ZIP Codes to overcharge without exceeding the payment standard.

A 2018 study examining both SAFMRs and metro-level FMRs found that a HUD policy raising certain metro-level FMRs to the 50th percentile (from the usual 40th) increased costs without enabling voucher holders to live in higher-quality units or in neighborhoods with more amenities and resources. The same study, however, found that switching to SAFMR-based payment standards enabled families to rent in better-resourced neighborhoods without raising costs (Collinson and Ganong, 2018). That finding has been supported by other research on the impact of SAFMRs (Dastrup et al., 2018).

SAFMRs are playing a growing role in the voucher program. HUD began testing the policy in 2011 at a small number of housing agencies and required that agencies in 24 metropolitan areas use them starting in 2018. An October 2023 notice increased the number of metro areas where SAFMRs will be required to 65, extending the policy to cover 45 percent of the nation’s vouchers starting in 2025 (HUD, 2023b). Some PHAs outside the required areas already use SAFMRs voluntarily,<sup>15</sup> and regulations require HUD to consider adding more mandatory SAFMR areas every 5 years. Consequently, the use of SAFMRs will likely become increasingly widespread, further reducing voucher overpayments.

## **Reforms Could Facilitate Rental Assistance Expansion**

Based on the evidence discussed above, there is no indication that markets have reached a limit on their capacity to absorb vouchers or that voucher expansion is driving up overall market rents. This suggests that it would be feasible to continue to expand the voucher program at a similar pace or somewhat more rapidly, as a number of recent proposals would do. For example, the Build Back Better bill passed by the House of Representatives in November 2021 would have added an estimated 300,000 vouchers over 5 years (Fischer, 2022), legislation introduced by Senators Chris Van Hollen and Todd Young would authorize 250,000 additional vouchers over 5 years for families with young children (NLIHC, 2023), and the Biden Administration’s fiscal year 2024 budget proposed guaranteed assistance for former foster youth and extremely low-income veterans that would add several hundred thousand vouchers over 10 years (HUD, 2023a).<sup>16</sup>

---

<sup>15</sup> According to HUD’s SAFMR dashboard, as of December 22, 2023, 85 agencies use SAFMRs voluntarily in all or part of their jurisdiction, some in areas where SAFMRs will be required starting in 2025.

<sup>16</sup> HUD estimated that 20,000 youth who exit foster care each year would be potentially eligible for the guaranteed assistance and that there are 450,000 extremely low-income veteran households. HUD stated that the veteran expansion would provide 50,000 vouchers in 2025, followed by further expansion in later years, but it did not estimate how many households would receive assistance at the end of the expansion (HUD, 2023a).

The annual increases under these proposals would be in line with those during years of relatively rapid growth over the voucher program's history (including the 59,000 additional households assisted during the part of 2023 for which data are available) and could likely be absorbed in a similar manner. As with EHVs, the exact pace of absorption would depend on a range of factors, but unless these expansions played out very differently from moderately large expansions over the voucher program's 5-decade history, there is little doubt that most or all of the new vouchers would ultimately be put to use without overwhelming rental markets and, as a result, would provide access to stable, affordable housing for hundreds of thousands of people with low incomes.

Guaranteeing rental assistance to all low-income people across demographic groups, however, would require a far more ambitious expansion. The Congressional Budget Office (CBO) estimated in 2015 that making vouchers available to all renters with incomes below 50 percent of the median would add 8 million vouchers over 10 years, more than quadrupling the current program (CBO, 2015). That figure would likely be somewhat higher today because of increased need and would be even greater if a larger share of eligible households participated than CBO assumed and if the guarantee covered all low-income households (defined by HUD as those with incomes at or below 80 percent of median). As of 2021, 18 million unassisted low-income renters paid more than 30 percent of their income for rent or lived in overcrowded or inadequate homes (Alvarez and Steffen, 2023).<sup>17</sup>

Even at this scale, rental assistance expansion would be aided by the same factors that have helped markets absorb vouchers in the past. The great majority of households who need assistance already have homes, so most of the new assistance could be provided without additional units (although demand would likely shift from lower-quality units to the middle of that market).

Also, while providing rental assistance to people who do not already have homes would fill more units, housing markets absorb many added households each year. Assisting all people who are doubled up or homeless would likely add about 2.4 million households.<sup>18</sup> Universal rental assistance proposals typically phase in assistance over as long as 10 years, however, which would add about 240,000 households per year—just a fraction of the 1.7 million added households that markets absorbed annually from 2016 to 2021 (McCue, 2023). Moreover, although such projections are always uncertain, slowing population growth is expected to reduce the number of households added in future years to fewer than 1 million per year by some estimates, potentially creating more space to house people who have been denied housing because they cannot afford it (Goodman and Zhu, 2021; McCue, 2018).

---

<sup>17</sup> Those renters included 7.1 million extremely low-income renters (with income below the federal poverty line or 30 percent of the local median, whichever is higher), 5.2 million additional very low-income households (with incomes up to 50 percent of the median), and 5.5 million additional low-income households (up to 80 percent of the median) (Alvarez and Steffen, 2023). Today, all very low-income households are income-eligible for vouchers, and PHAs are required to ensure that at least 75 percent of households admitted each year have extremely low incomes, but PHAs also have broad flexibility to increase the overall voucher eligibility limit to 80 percent of the median, so a guarantee of assistance for all eligible households would go up to that limit in at least some places. Take up of guaranteed income-based benefits, however, tends to be much lower among households with relatively higher incomes. For example, 94 percent of eligible households with incomes below the federal poverty line participated in the Supplemental Nutrition Assistance Program in early 2020, compared with just 19 percent of those with incomes above 130 percent of the federal poverty line (Vigil, 2022).

<sup>18</sup> An estimated 3.9 million people in 1.9 million households lived doubled up with other households because of economic hardship or housing loss in 2021 (Molly Richard, email to author, November 22, 2023; Richard et al., 2022), and 58,000 families with children and 467,000 other individuals were homeless on a single night in January 2023 (de Sousa et al., 2023).

These numbers suggest that universal rental assistance is a feasible goal, but implementing it would still pose significant challenges. Throughout the country, extending rental assistance to millions of added households would require many more landlords to rent to assisted families than do today. Furthermore, supply-constrained regions would have greater difficulty absorbing even the moderate number of additional households than would other areas. If a rental assistance guarantee backed by mandatory funding were established, with no other policy changes, the guarantee would still reach many people over time who would not have been assisted without it by eliminating the funding constraints that currently limit the reach of rental assistance. However, other people would be unable to use the assistance for which they are eligible, and rents could rise to some degree in tight markets.

Fortunately, policymakers could reduce those risks by enacting reforms alongside a major rental assistance expansion, with two major goals. First, the reforms should enable families to use rental assistance in a far wider segment of the existing stock than they do today. That goal could be advanced through targeted changes to the existing voucher program and by experimenting with alternative models that provide assistance directly to renters. Second, the reforms should seek to support rental assistance expansion by increasing supply and limiting excessive rent increases, particularly in tight markets.

## **Rental Assistance Reforms**

Of those two goals, enabling households to use rental assistance in a wider range of units is the more critical to implementing an expansion. If most unassisted low-income households could use rental assistance to help them afford their current home or move to another existing one, and if most homeless or doubled-up people could readily use assistance in existing units as they become vacant, this alone would be enough to absorb the bulk of an expansion. However, achieving those results would require major policy changes.<sup>19</sup>

Research suggests that many additional landlords would be willing to rent to voucher holders if the benefits and costs of doing so compared more favorably with those of renting to unassisted tenants (Garboden et al., 2018). A number of policy changes could shift that balance, both by easing administrative burdens (for example, by streamlining inspection requirements) and by ensuring that voucher subsidies are sufficient to compete with non-voucher applicants (as by setting adequate payment standards and allowing the use of voucher subsidies for security deposits).

Policymakers could also strengthen rules prohibiting landlords from discriminating against voucher holders. Such discrimination is illegal today in 17 states, more than 100 cities and counties, and most units built or rehabilitated using federal affordable housing subsidies, but those bans leave out many of the nation's rental units, and even where they apply, enforcement often is inadequate (PRRAC, 2023). In addition, because a large majority of voucher holders are people of color or fall into other protected classes, robust fair housing enforcement would also help protect them from discrimination.

---

<sup>19</sup> This section focuses on changes that would make it easier for families who receive rental assistance to use it. It is important to note, however, that under current policies some income-eligible households would not even be able to receive assistance because of rules strictly limiting eligibility based on citizenship status, a history of substance use, or involvement with the criminal justice system. Achieving truly universal assistance or moving as close as possible to it would require additional policy changes to ease those limits.

Better support for voucher holders would also help families find and successfully rent available units. Research shows that housing navigators who provide customized search assistance to voucher holders can be highly effective (DeLuca, Katz, and Oppenheimer, 2023), and federal, state, and local governments could all provide or expand search assistance funding. In addition, extending search times—which allow vouchers today to be revoked as soon as 60 days after they are issued—would likely enable more families to use vouchers successfully.

Other changes would enable more vouchers to be used in housing types other than traditional rental units. PHAs can allow vouchers to be used for a variety of “special housing types,” including homeownership, single-room occupancy units, and several forms of shared housing, but this is not required, and the share of vouchers used for these purposes is small. Federal policymakers and PHAs could open up a substantial additional share of the housing stock to voucher holders by making these options available to more families, although they should also take care to protect tenants’ rights and continue prioritizing assistance for those with the greatest need.

Project basing (that is, tying some vouchers to particular developments through long-term contracts) can also help put vouchers to use, particularly in markets with low vacancy rates. PHAs have increased project basing in recent years, but many agencies in tight markets could still project-base more vouchers, and expanding the voucher program as a whole would allow even greater use of this option (because the number of project-based vouchers is capped as a percentage of the PHAs’ authorized vouchers). Project basing has limitations, however, because it constrains the choices available to participants, has historically been less effective than tenant-based vouchers at reaching families with children, tends to be located disproportionately in high-poverty neighborhoods, and is rarely used in the single-family and small multifamily properties that account for a large share of the nation’s rental units. For those reasons, rental assistance expansion should be implemented primarily by expanding tenant-based rather than project-based assistance (Sard, 2023).

Finally, increasing administrative capacity is a key foundation for efforts to expand voucher use because it would help PHAs more effectively implement all of the approaches described above. Policymakers could strengthen voucher administration by fully funding administrative fees and reforming the formula to match fees more closely to need, strengthening the program’s performance measurement system, and encouraging consolidation of some smaller agencies (Sard and Thrope, 2016).

The reforms and policy changes outlined above could occur within the existing voucher program, but policymakers should also test a more fundamental change: provision of rental assistance directly to tenants, with no requirement that owners enter a subsidy contract with the PHA or meet other administrative requirements of the current program (Fischer and Sard, 2021; McCabe and Shroyer, 2023). Direct rental assistance could potentially enable assisted families to rent from many landlords who do not now accept vouchers and, particularly, allow more households to use assistance in their current homes. Notably, direct rental assistance proposals typically eliminate the requirement that PHAs ensure that rents are reasonable compared with the local market, so other mechanisms would be needed to limit above-market rents (such as allowing participants to keep some savings if their rent is below the maximum subsidy).



## Broader Market Interventions

Although enabling people to use rental assistance in a larger segment of the housing stock would be enough to extend assistance to most eligible households, an expansion will be more successful if it is accompanied by a set of broader housing market interventions to increase supply and limit excessive rents, particularly in tight markets. These measures could help increase participation further, reduce the risk of even modest impacts on market rents, and make expansion more feasible by lowering subsidy costs.

First, policymakers should seek to expand the supply of housing in tight markets, in effect reducing the degree to which areas fall into the category of supply-constrained markets that are more prone to rent increases from rental assistance expansion. Most fundamentally, state and local governments should ease regulatory barriers that limit development of both market-rate and subsidized housing, such as multifamily housing bans and large minimum lot sizes. New market-rate units are typically occupied by higher-income households, but they also prompt chains of moves that free up housing and ease price pressures further down the market, including in the mid-range units where most vouchers are used (Been, Ellen, and O'Regan, 2023).

Subsidizing affordable housing development through programs such as the Low-Income Housing Tax Credit (LIHTC), HOME, and the National Housing Trust Fund can also increase supply in tight markets. In units built through each of those programs, owners are prohibited from discriminating against voucher holders. These subsidies can also play a role in less supply-constrained areas because they can help rehabilitate and preserve deteriorating housing.

Policymakers could also act to limit excessive rent increases. Especially in tight markets with limited developable land, owners often have market power enabling them to raise rents well above the cost of providing the unit—and this problem would be unlikely to go away completely even with aggressive steps to expand supply as suggested above. Well-designed “anti-gouging” rent regulations could limit such increases without deterring owners from building or maintaining units (House, Murphy, and O'Regan, 2021).

Affordable housing subsidy programs (along with supporting construction and rehabilitation) can also limit rent increases for an extended period if they are accompanied by long-term or permanent affordability protections or provisions requiring public or community ownership or control. This could be achieved through new initiatives to create “social housing” with these characteristics or by strengthening protections in existing programs—for example, through requirements in state LIHTC qualified allocation plans (Lindsay, Taylor, and Tegeler, 2023).

If they are successful, strong measures to expand supply or limit excessive rent increases could constrain costs enough to enable some families to afford housing *without* rental assistance, reducing the size of the expansion needed. This will not be the case, however, for most people with incomes around or below the poverty line, who make up a majority of those with severe housing needs.<sup>20</sup>

---

<sup>20</sup> Among unassisted renter households paying more than one-half their income for housing or living in severely substandard housing in 2021, 59 percent—6.1 million—had extremely low incomes (Alvarez and Steffen, 2023). In addition, the great majority of the 653,000 people experiencing homelessness in January 2023 likely had extremely low incomes (Meyer et al., 2021).

Households at that income level typically cannot afford enough rent to cover even the ongoing cost of operating and managing rental housing.<sup>21</sup>

As a result, even if development subsidies cover the full cost of construction or if regulatory reforms allow many additional units to be built, the new units will not be affordable to millions of families who struggle to afford housing today unless those families also receive a voucher or other rental assistance. Similarly, even if rent regulation or socially controlled housing curtails windfall profits, the rents required to keep a unit in good condition will still be beyond the reach of many unassisted households. Consequently, those policies will not address the nation's most pressing housing needs unless they are accompanied by more rental assistance—and for purposes of allocating new federal housing investments, rental assistance expansion should generally be the top priority (Fischer, Acosta, and Gartland, 2021).

## Conclusion

Two broad conclusions can be drawn from the analysis in this article. First, it supports the notion that expanding rental assistance toward the goal of reaching all eligible households would be operationally feasible if the political will exists to do it. Second, it makes clear that for a rental assistance guarantee to fully meet its potential (that is, to reach the great majority of those in need while minimizing rental market impacts), it should be part of a broader policy agenda that includes rental assistance reforms to give participants access to a larger segment of the housing stock and measures to expand supply and constrain rent increases in tight markets.

Importantly, the pieces of this agenda can, and in some cases must, move forward independently. It is unclear when a political window might open for a major rental assistance expansion, but the political dynamics for many of the complementary policy changes described here are different, and opportunities to enact them could open up sooner. Moreover, there are often strong arguments for making those changes independent of the role they would play in facilitating rental assistance expansion.

For example, many needed rental assistance reforms have little or no budgetary cost and could be put in place through authorizing legislation that could potentially receive broad bipartisan support,<sup>22</sup> or in some cases through HUD administrative or regulatory action or by PHAs directly. These reforms could deliver powerful benefits even in advance of a major rental assistance expansion by increasing success rates and expanding housing choice. Similarly, state and local governments could move forward on their own with actions to ease barriers to development and constrain rent increases — and these policies are needed to address the more general shortages and affordability challenges that affect supply-constrained areas, in addition to facilitating rental assistance expansion.

---

<sup>21</sup> The average extremely low-income renter household had an income of \$11,451 in 2021, according to CBPP analysis of American Community Survey data. Government programs and private-sector owners and lenders often consider housing affordable if it costs no more than 30 percent of household income, which for this household works out to \$286 a month for rent and utilities. Many households, including those most at risk of homelessness, have much lower incomes and can afford even less in rent. In 2021, the median operating cost for units included in an apartment industry survey was \$566. (IREM, BOMA, and NAA, 2023; data from Income Expense IQ 2021, provided to author on December 6, 2023).

<sup>22</sup> For example, the substantial package of rental assistance reforms in the 2016 Housing Opportunity Through Modernization Act was passed unanimously in both chambers of Congress.

There is also no need to hold off on accelerating rental assistance expansion (whether by providing additional incremental vouchers through appropriations legislation or by enacting legislation to phase in a rental assistance guarantee) to wait for the full slate of complementary policy changes to be put in place. Implementing a guarantee could take as long as a decade even if legislation establishing it were enacted immediately, and longer under other scenarios, so there would be time to make other reforms alongside the expansion. Because the voucher program has a long record of successful expansion that has been constrained mainly by funding limitations and that continues today even in tight markets, moving forward with the first stages of expansion—even in advance of other changes—can be expected to enable many more families to receive the assistance they urgently need.

## Acknowledgments

The author would like to thank Erik Gartland for contributing data analysis to this article and Rob Cady for graphic design.

## Author

Will Fischer is Senior Director of Housing Policy at the Center on Budget and Policy Priorities.

## References

- Acosta, Sonya, and Erik Gartland. 2021. *Families Wait Years for Housing Vouchers Due to Inadequate Funding*. Washington, DC: Center on Budget and Policy Priorities.
- Alvarez, Thyria A., and Barry L. Steffen. 2023. *Worst Case Housing Needs: 2023 Report to Congress*. Washington, DC: HUD.
- Barnett, C. Lance. 1979. "Expected and Actual Effects of Housing Allowances on Housing Prices," *Real Estate Economics* 7 (3): 277–441.
- Been, Vicki, Ingrid Gould Ellen, and Katherine O'Regan. 2023. *Supply Skepticism Revisited*. NYU Law and Economics Research paper No. 24-12. New York: New York University.
- Collinson, Robert, Ingrid Gould Ellen, and Jens Ludwig. 2015. *Low-Income Housing Policy*. NBER Working paper No. 21071. Cambridge, MA: National Bureau of Economic Research.
- Collinson, Robert A., and Peter Ganong. 2018. "How Do Changes in Housing Voucher Design Affect Rent and Neighborhood Quality?" *American Economic Journal: Economic Policy* 10 (2): 62–89.
- Collyer, Sophie. 2023. *The Anti-Poverty Impact of Expanding Section 8 Housing Choice Vouchers*. Fact sheet. New York: Center on Poverty and Social Policy at Columbia University.
- Congressional Budget Office (CBO). 2015. *Federal Housing Assistance for Low-Income Households*. Washington, DC: CBO.

Cunningham, Mary K. 2020. "It's Time to Reinforce the Housing Safety Net by Adopting Universal Vouchers for Low-Income Renters," *Urban Wire*, April 7.

Dastrup, Samuel, Meryl Finkel, Kimberly Burnett, and Tanya de Sousa. 2018. *Small Area Fair Market Rent Demonstration Evaluation: Final Report*. Washington, DC: HUD.

de Sousa, Tanya, Alyssa Andrichik, Ed Prester, Katherine Rush, Colette Tano, and Micaiah Wheeler. 2023. *The 2023 Annual Homelessness Assessment Report (AHAR) to Congress: Part 1: Point-in-Time Estimates of Homelessness*. Washington, DC: HUD.

DeLuca, Stefanie, Lawrence F. Katz, and Sarah C. Oppenheimer. 2023. "When Someone Cares About You, It's Priceless': Reducing Administrative Burdens and Boosting Housing Search Confidence to Increase Opportunity Moves for Voucher Holders," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 179–211.

Desmond, Matthew, and Kristin L. Perkins. 2016. "Are Landlords Overcharging Housing Voucher Holders?" *City & Community* 15 (2).

Ellen, Ingrid Gould, Katherine O'Regan, and Sarah Stochak. 2024. "Race, Space, and Take Up: Explaining Housing Voucher Lease-up Rates," *Journal of Housing Economics* 63: 101980.

———. 2021. *Using HUD Administrative Data to Estimate Success Rates and Search Durations for New Voucher Recipients*. Washington, DC: HUD.

Eriksen, Michael D., and Amanda Ross. 2015. "Housing Vouchers and the Price of Rental Housing," *American Economic Journal: Economic Policy* 7 (3): 154–176.

Finkel, Meryl, and Larry Buron. 2001. *Study on Section 8 Voucher Success Rates: Volume I: Quantitative Study of Success Rates in Metropolitan Area*. Washington, DC: HUD.

Fischer, Will. 2022. *Housing Investments in Build Back Better Would Address Pressing Unmet Needs*. Washington, DC: Center on Budget and Policy Priorities.

Fischer, Will, Sonya Acosta, and Erik Gartland. 2021. *More Housing Vouchers: Most Important Step to Help More People Afford Stable Homes*. Washington, DC: Center on Budget and Policy Priorities.

Fischer, Will, Douglas Rice, and Alicia Mazzara. 2019. *Research Shows Rental Assistance Reduces Hardship and Provides Platform to Expand Opportunity for Low-Income Families*. Washington, DC: Center on Budget and Policy Priorities.

Fischer, Will, and Barbara Sard. 2021. *Streamlined Rental Assistance Demonstration*. Washington, DC: Center on Budget and Policy Priorities.

Garboden, Phillip M.E., Eva Rosen, Stefanie DeLuca, and Kathryn Edin. 2018. "Taking Stock: What Drives Landlord Participation in the Housing Choice Voucher Program," *Housing Policy Debate* 28 (6): 979–1003.

Glaeser, Edward L., and Joseph Gyourko. 2008. *Rethinking Federal Housing Policy: How to Make Housing Plentiful and Affordable*. Washington, DC: AEI Press.

———. 2005. “Urban Decline and Durable Housing,” *Journal of Political Economy* 113 (2): 345–375.

Goodman, Laurie, and Jun Zhu. 2021. *The Future of Headship and Homeownership*. Washington, DC: Urban Institute.

House, Sophie, Matthew Murphy, and Katherine O’Regan. 2021. *Rent Regulation for the 21st Century: Pairing Anti-Gouging with Targeted Subsidies*. Policy brief. New York: NYU Furman Center.

Institute of Real Estate Management (IREM), Building Owners and Managers Association (BOMA), and National Apartment Association (NAA). 2023. “Income Expense IQ: 2021.”

Lindsay, Robert, Janelle Taylor, and Philip Tegeler. 2023. *Social Housing Goals in State Housing Allocation Plans: A 50-State Survey*. Washington, DC: Poverty & Race Research Action Council.

Manchir, Michelle. 2014. “After Scrutiny, CHA Cuts Value of “Super Vouchers,” *Chicago Tribune*, August 18.

McCabe, Brian, and Aaron Shroyer. 2023. “Creating a Direct Rental Assistance Demonstration,” Message from PD&R Senior Leadership, *PD&R Edge*, September 5.

McCue, Daniel. 2023. *The Surge in Household Growth and What It Suggests About the Future of Housing Demand*. Cambridge, MA: Harvard Joint Center for Housing Studies.

———. 2018. *Updated Household Growth Projections: 2018–2028 and 2028–2038*. Cambridge, MA: Harvard Joint Center for Housing Studies.

Meyer, Bruce D., Angela Wyse, Alexa Grunwaldt, Carla Medalia, and Derek Wu. 2021. Learning About Homelessness Using Linked Survey and Administrative Data. Working paper 2021-65. Chicago, IL: University of Chicago, Becker Friedman Institute for Economics.

Mills, Gregory, Abt Associates Inc., Daniel Gubits, Larry Orr, David Long, Judie Feins, Bulbul Kaul, Michelle Wood, Amy Jones & Associates, Cloudburst Consulting, and The QED Group. 2006. *Effects of Housing Vouchers on Welfare Families*. Washington, DC: HUD.

National Low-Income Housing Coalition (NLIHC). 2023. “Bipartisan ‘Family Stability and Opportunity Vouchers Act’ Introduced in House,” *Memo to Members*, June 12.

Olsen, Edgar O. 2019. “Does HUD Overpay for Voucher Units, and Will SAFMRs Reduce the Overpayment?” *Cityscape* 21 (3): 89–102.

———. 2003. “Housing Programs for Low-Income Households.” In *Means-Tested Transfer Programs in the United States*, edited by Robert A. Moffitt. Chicago, IL: University of Chicago Press.

ORC/Macro. 2001. *Quality Control for Rental Assistance Subsidies Determinations*. Washington, DC: HUD.

Parrott, Jim, and Mark Zandi. 2021. *Overcoming the Nation's Daunting Housing Supply Shortage*. Brief. Washington, DC: Urban Institute.

Poverty & Race Research Action Council (PRRAC). 2023. *Expanding Choice: Practical Strategies for Building a Successful Housing Mobility Program*. Appendix B.

Richard, Molly K., Julie Dworkin, Katherine Grace Rule, Suniya Farooqui, Zachary Glendening, and Sam Carlson. 2022. "Quantifying Doubled-Up Homelessness: Presenting a New Measure Using U.S. Census Microdata," *Housing Policy Debate* 34 (1): 3–24.

Rosen, Eva. 2020. *The Voucher Promise: Section 8 and the Fate of an American Neighborhood*. Princeton, NJ: Princeton University Press.

Rothenberg, Jerome, George C. Galster, Richard V. Butler, and John R. Pitkin. 1991. *The Maze of Urban Housing Markets: Theory, Evidence, and Policy*. Chicago, IL: University of Chicago Press.

Saiz, Albert. 2010. "The Geographic Determinants of Housing Supply," *The Quarterly Journal of Economics* 125 (3): 1253–1296.

Sard, Barbara. 2024. "The Evolution of Funding Policy in the Housing Choice Voucher Program and Lessons for the Future," *Cityscape* 26 (2): 15–40.

———. 2023. *Project-Based Vouchers: Lessons from the Past to Guide Future Policy*. Washington, DC: Center on Budget and Policy Priorities.

Sard, Barbara, and Deborah Thrope. 2016. *Consolidating Rental Assistance Administration Would Increase Efficiency and Expand Opportunity*. Washington, DC: Center on Budget and Policy Priorities.

Shinn, Marybeth, and Jill Khadduri. 2020. *In the Midst of Plenty: Homelessness and What to Do About It*. Hoboken, NJ: Wiley-Blackwell.

Susin, Scott. 2002. "Rent Vouchers and the Price of Low-Income Housing," *Journal of Public Economics* 83 (1): 109–152.

Thompson, Steven. 2023. "D.C. Housing Officials Say They Will Stop Overpaying Landlords," *The Washington Post*, March 10.

Vigil, Alma. 2022. *Trends in Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2016 to Fiscal Year 2020*. Washington, DC: USDA.

Whitford, Alma. 2024. "These NYC Voucher Holders Are Fighting to Stay Put," *City Limits*, February 13.

U.S. Department of Housing and Urban Development (HUD). 2023a. *2024 Congressional Justifications*. Washington, DC: HUD.

———. 2023b. "HUD Expands More Housing Choices to a Total of 800,000 Households with Rental Assistance." Press release. Washington, DC: HUD.

# Learning from a Crisis: Strategies to Increase Flexibility in Housing Choice Voucher Implementation

Sarah Gallagher  
Sophie Siebach-Glover  
Alayna Calabro  
Victoria Bourret  
Andrew Aurand  
National Low Income Housing Coalition

---

## Abstract

*The U.S. Department of Treasury Emergency Rental Assistance (ERA) program was a national effort of unprecedented scale to help renters in crisis during the COVID-19 pandemic. ERA allowed program flexibilities not typically found in federal housing assistance programs, including direct-to-tenant assistance, self-attestation for certain eligibility criteria, categorical eligibility, fact-specific proxy, and housing stability services. Treasury provided regular guidance on these flexibilities to help grantees ensure that funds reached households with the greatest needs in time to prevent evictions.*

*Preliminary data suggest that grantees with direct-to-tenant payments, categorical eligibility, and fact-specific proxy served a slightly greater share of low-income renter households in their jurisdiction compared with grantees that did not. Housing stability services were positively associated with households successfully moving through the application process and receiving funds.*

*The Housing Choice Voucher (HCV) program currently assists over two million households. However, renters face challenges in both accessing and using HCVs due to scarcity of resources, burdensome requirements, uninterested landlords, and racial discrimination. Learning from and incorporating flexibilities from pandemic-era initiatives, such as ERA, the Emergency Housing Voucher program, and waivers authorized under the Coronavirus Aid, Relief, and Economic Security Act, into the HCV program could allow public housing agencies to address these challenges, improving access to and utilization of the program.*

## Introduction

The U.S. Department of the Treasury (Treasury) Emergency Rental Assistance (ERA) program, a national effort of unprecedented scale, distributed critically needed emergency rent and utility assistance to millions of renter households at risk of losing their homes during the COVID-19 pandemic. Congress appropriated \$46.5 billion for ERA, including \$25 billion through the Consolidated Appropriations Act of 2021 (ERA1) and \$21.6 billion through the American Rescue Plan Act of 2021 (ERA2). ERA provided financial assistance for the payment of rent, rental arrears, utility costs and arrears, other housing costs, housing stability services, and, as applicable through ERA2, other affordable rental housing and eviction prevention activities. During the pandemic, ERA programs provided more than 10 million payments to households (Treasury, 2024).

ERA introduced several flexibilities not typically found in housing assistance programs to ensure that funds reached households with the greatest needs in time to prevent evictions. Treasury regularly released guidance clarifying how grantees could use program flexibilities and encouraging grantees to incorporate them into ERA programs. Treasury's ERA guidance resulted in real-time changes and improvements to ERA programs. Previously published studies and preliminary data indicate that (1) grantees utilized program flexibilities when allowed by Treasury, (2) the share of programs that used flexibilities increased over time, and (3) select program flexibilities were positively associated with the pace of ERA spending and the share of low-income renters that applied for and received assistance. Given the positive impact of ERA, expanding the use of program flexibilities could improve other housing programs, particularly the Housing Choice Voucher (HCV) program.

The HCV program successfully assists more than two million renter households. However, applicants and public housing agencies (PHAs) face challenges, including scarcity of resources, burdensome documentation requirements, uninterested landlords, and racial discrimination. Only 61 percent of initial voucher recipients use their vouchers within 180 days, indicating that too many households fail to successfully lease an apartment (Ellen, O'Regan, and Strochak, 2021). Although PHAs can simply give the voucher to another household, failures to lease up cause further stress for families in need of assistance and delays in voucher utilization. Meanwhile, the income recertifications of existing voucher holders consume significant administrative time (Turnham et al., 2015).

This article examines how lessons learned from pandemic-era programs' implementation of flexibilities can be applied to address challenges in the HCV program. The authors draw upon early research and present new analysis of the utilization and impact of ERA flexibilities—including direct-to-tenant assistance, self-attestation, categorical eligibility, fact-specific proxy, and housing stability services. The article also discusses how Coronavirus Aid, Relief, and Economic Security (CARES) Act-funded programs and the EHV program incorporated various flexibilities and reviews federal statutes and regulations governing the HCV program to explore whether and how said flexibilities could be incorporated into the HCV program.



## **Historical Challenges in the Housing Choice Voucher Program Impacting Access and Success Rates**

The HCV program is the nation's largest rental assistance program, currently assisting more than two million households. However, renters face challenges in accessing and using HCVs due to scarcity of resources, burdensome documentation requirements that strain renters and PHAs, uninterested landlords, and racial discrimination. The burdens renters face are not equally distributed.

Households with fewer resources—including people with criminal histories, older adults, and Black households—often experience the lowest success rates (Aiken, Ellen, and Reina, 2023).

### **Scarcity of Resources**

The HCV program is woefully underfunded. The last national survey of PHAs in 2016 found that more than half of HCV programs were closed to new applicants, and the median wait time for households on HCV waitlists was 18 months. Twenty-five percent of voucher-administering PHAs had waiting times of 3 years or more (Aurand et al., 2016). Overall, only one in four eligible families receives any type of housing assistance such as HCVs or public housing (Center on Budget and Policy Priorities, 2022). Given the significant underfunding relative to demand, nearly 98 percent of budget authority was utilized at the end of August 2023 (HUD, 2023d), masking challenges that a significant share of households experience in utilizing their voucher. Research suggests that only 61 percent of new voucher recipients use their voucher within 180 days, putting them at risk of losing their assistance (Ellen et al., 2021).

Despite low household-level success rates, PHAs have limited resources for improving them. Budget utilization remains high because the demand for vouchers far exceeds the supply. When voucher recipients fail to use their vouchers and return them to the PHA, other households on the waitlist receive the assistance.

In addition, the administrative fee structure can pose a challenge for PHAs funding housing-related services. In the HCV program, PHAs' administrative fees are determined based on the number of units leased.<sup>1</sup> PHAs receive higher administrative fees when they have more vouchers under lease. However, many of the tasks required to run HCV programs, including housing navigation services, occur before clients lease up, and the costs of these tasks are not covered directly (McCabe, 2022). No compensation is provided for efforts to overcome tenants' barriers to securing a housing unit—such as improved search assistance and stronger mobility counseling—if they do not result in a tenant signing a lease (McCabe, 2022).

### **Burdensome Documentation Requirements**

Assembling required HCV documents is a cumbersome aspect of the voucher application process. Burdensome administrative and documentation requirements related to income eligibility and proof of residency prevent households from successfully completing the application process and maintaining their place on a waitlist. Applicants must regularly update their address and contact information to remain on a PHA waitlist—a task that can be particularly difficult for applicants

---

<sup>1</sup> In accordance with Section 8(q) of the "United States Housing Act of 1937" and related appropriations law.

facing housing instability and experiencing homelessness (Aiken, Ellen, and Reina, 2023). Administrative burden—the time and energy spent accessing public benefits—impacts individuals unequally and leads to disproportionate underutilization of public benefits by the communities who need them most (Executive Office of the President, 2021).

Case managers, PHAs, and people with lived experience have cited HCV documentation requirements as one of the most challenging steps in accessing a voucher (Khadduri et al., 2022). In a 2022 study, PHA interviewees noted the vast amount of paperwork required for tenants to prove income and residency to qualify for a voucher (McCabe, 2022). In addition, a series of administrative tasks are required. Households attend an initial intake meeting and provide documentation proving income, citizenship status, and residency. Complex, multistep processes decrease the likelihood that eligible households complete the certification process and receive assistance. One agency noted that failure to provide paperwork was among the most common reasons households did not receive vouchers (McCabe, 2022). Language, technology, time, and transportation barriers exacerbate the challenges faced by households in meeting these burdensome requirements and successfully navigating the process.

### **Uninterested Landlords and Discrimination**

The HCV program requires what Aiken, Ellen, and Reina (2023) coined as “double take-up”—the need for both tenant and landlord participation in which tenants apply and qualify for the program and landlords receive rental assistance payments directly from the PHA on behalf of tenants. Uninterested landlords can be a significant barrier to household-level success rates. A U.S. Department of Housing and Urban Development (HUD)-funded study of voucher discrimination found that voucher holders were rejected in 78 percent of tests in the Fort Worth, Texas metropolitan area, 76 percent of tests in Los Angeles, California, and 67 percent of tests in Philadelphia, Pennsylvania (Cunningham et al., 2018). Other landlord research in Baltimore, Maryland; Cleveland, Ohio; and Dallas, Texas, found that between 21 and 45 percent of landlords thought voucher holders were worse tenants than other renters (Garboden et al., 2018). Landlords unwilling to accept HCVs cited issues with inspections, lack of support from PHA staff during landlord-tenant conflicts, paperwork, and bureaucracy.

At least 18 states and more than 100 localities have source-of-income (SOI) discrimination laws prohibiting landlord discrimination against voucher holders (Poverty and Race Research Action Council, 2023). A 2018 study of landlord acceptance of HCVs by the Urban Institute found that states with SOI laws had lower landlord denial rates (less than 31 percent) than states without SOI laws (67 percent or higher) (Cunningham et al., 2018). Even in jurisdictions with SOI laws, discrimination persists because enforcement is generally weak, and laws do not cover all voucher holders (Tighe, Hatch, and Mead, 2017).

## **Emergency Rental Assistance: Strategies to Increase Access and Success Rates**

The COVID-19 pandemic caused families across the country to fall behind on their rent. By the end of 2020, renters had accrued an estimated \$50 billion in rent and utility arrears. Nearly one in five renter households reported being behind on rent, and one in six reported that eviction was very likely within 2 months (Leibenluft, 2023). Overwhelmingly, low-income tenants and people of color disproportionately bore the economic brunt of the pandemic.

The \$46.5 billion ERA program provided financial assistance to households with the greatest need to prevent evictions. ERA incorporated flexibilities not typically found in housing assistance programs to increase access to aid and accelerate spending. Direct-to-tenant assistance, self-attestation, categorical eligibility, fact-specific proxies, and housing stability services sought to ensure that ERA reached the lowest-income and most marginalized households. These flexibilities helped to overcome burdensome documentation requirements, landlord refusal to participate, discrimination, and household barriers such as language, technology, and transportation.

Throughout 2021, Treasury released regular guidance and other resources to encourage state and local programs to use these flexibilities in their program design and expedite the distribution of ERA. In addition to program guidance, Treasury's website-published *Promising Practices for ERA Programs* addressed critical programmatic topics—including outreach, methods for simplifying application processes, the use of fact-specific proxies, and strategies for promoting housing stability—and supported grantees with technical assistance as they worked to implement flexibilities (Treasury 2021b).

**Direct-to-tenant assistance (DTA)**, or payments made to the renter rather than to the landlord, was an important ERA program innovation. Treasury guidance, released on May 7, 2021, explicitly allowed ERA1 payments to be made to renters in cases in which landlords or utility providers refused to participate in the program. This guidance further established that ERA2 program administrators were required to allow tenants to apply directly for assistance, regardless of landlord participation, and that administrators did not need to seek the cooperation of a landlord prior to making a DTA payment (Treasury, 2021a).

**Self-attestation** was the most common way state and local ERA programs sought to reduce documentation barriers. Treasury guidance provided explicit permission for ERA grantees to rely on written attestation as an alternative to traditional source documentation for every aspect of a household's eligibility for ERA, including COVID-19 hardship, the risk of homelessness or housing instability, income, and amount of rental arrears (Calabro, 2022). Grantees did not necessarily adopt self-attestation for all eligibility criteria.

Treasury guidance allowed for several other solutions for reducing documentation burdens, including income-eligibility determination based on categorical eligibility and fact-specific proxy. **Categorical eligibility** deems a household eligible for assistance if it has been verified as low-income by another local, state, or federal program, such as the Supplemental Nutrition Assistance Program (SNAP), the Temporary Assistance for Needy Families (TANF) program, the Special

Supplemental Nutrition Program for Women, Infants, and Children, or Medicaid. Treasury added **fact-specific proxy** to its guidance in May 2021 as another method for verifying income eligibility by allowing a program to use other facts to infer a household's income-eligibility, such as the median income of the household's census tract (Siebach-Glover, Foley, and Aurand, 2022).

Treasury allowed up to 10 percent of ERA1 and ERA2 funds to be used for **housing stability services**. Allowable uses included outreach, application support, housing counseling, case management related to housing stability, eviction prevention and diversion, and relocation and rehousing assistance (Treasury, 2023a). Housing stability services can both support households during the application and housing search process and help increase success rates, particularly for households with multiple barriers to housing as well as help break the cycle of housing instability (Treasury, 2023a).

Published research about the Treasury ERA program, data from the National Low Income Housing Coalition's (NLIHC) Treasury ERA Database, and preliminary Treasury ERA1 administrative data allow for the examination of how grantees utilized allowed flexibilities and whether flexibilities are positively associated with ERA program performance.

### **Uptake of Program Flexibilities**

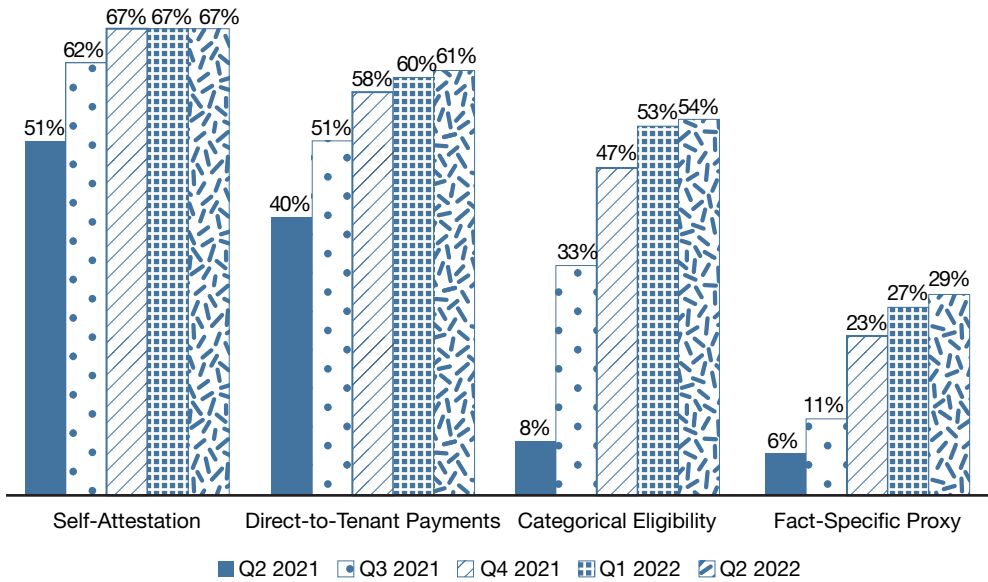
NLIHC tracked the features of more than 500 Treasury ERA programs, including nearly 400 non-Tribal programs, using programs' public-facing documents (NLIHC, 2023). An increasing share of grantees incorporated flexibilities into their programs as Treasury released updated guidance (exhibit 1). Aiken, Ellen, and Reina (2023) show that as Treasury released new and more flexible guidance in the spring of 2021, programs revised their documentation requirements, usually to require fewer documents. The authors note that, although some administrators desired these flexibilities from the start, they had been frustrated by federal guidelines perceived as "compliance-heavy," suggesting that when provided with full and clear guidance, administrators are eager to implement new ways to deliver assistance.

By the second quarter of 2022, 91 percent of grantees had implemented at least one flexibility. Sixty-seven percent of grantees had implemented self-attestation for at least one eligibility criterion, 61 percent had implemented payments directly to tenants in at least some situations, more than 50 percent had implemented categorical eligibility, and 29 percent had implemented fact-specific proxy.

More grantees may have utilized these flexibilities than those represented here. A national survey of program administrators conducted in 2021 found a significantly higher share of surveyed programs utilizing self-attestation (81 percent, N=99) and categorical eligibility (71 percent). Programs did not always make information regarding flexibilities clear in their public-facing documents (Aiken et al., 2022).

**Exhibit 1**

Share of Grantees Utilizing Flexibilities in ERA1 Program by Quarter, 2021–22



Note: N=398.

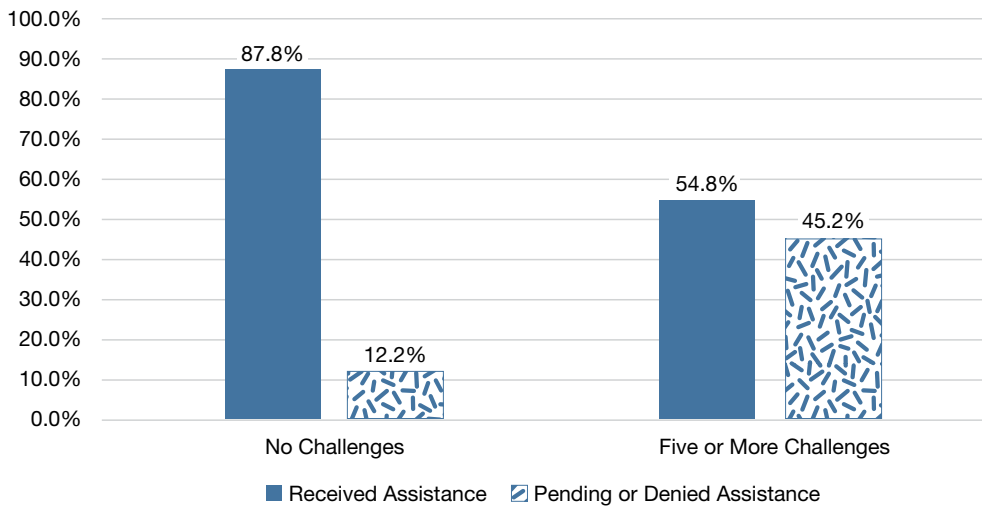
Sources: NLIHC COVID-19 Emergency Rental Assistance Database; Treasury administrative data

**Impact of Program Flexibilities**

ERA program performance can be measured in a variety of ways, including the number of payments, the pace of spending, and the share of renters who receive assistance. Previous research finds applicants to some programs reporting largely straightforward application processes and applicants to other programs reporting more frequent challenges. Challenges include trouble with completing the application, including not knowing whom to call for help (22.6 percent), and applications that were confusing (14.7 percent), too long (9.8 percent), and hard to locate (8.1 percent) (Gallagher et al., 2023). Tenants also faced trouble engaging their landlord in the application process (17.1 percent), providing required documentation (14.1 percent), and accessing the application portal due to limited internet access (6.2 percent) or because they needed disability-related accommodations that were not provided (1.5 percent). Tenants who faced more challenges during the application process were less likely to receive funding (exhibit 2). When asked how the process could be improved, tenants suggested linking applications to other administrative databases to streamline paperwork and help determine eligibility, and landlords cited a need for less paperwork and more resources to assist tenants with the application process (Gallagher et. al. 2023).

**Exhibit 2**

Impact of Application Challenges on ERA Funding Status



Source: Adapted from Gallagher et al. (2023)

In a 2021 assessment of ERA spending, programs that allowed for DTA spent a higher share of their ERA1 allocation by the end of July 2021 than those that did not (exhibit 3). Also, programs that allowed for any self-attestation (especially income self-attestation) and categorical eligibility spent a higher average share of their ERA1 allocation by the end of September 2021 than programs that did not. A survey of more than 10,000 ERA applicants indicated that approximately one in seven ERA applicants faced challenges in providing income documentation (Gallagher et al., 2023). Programs could have increased their pace of spending by allowing alternative means of determining eligibility.

**Exhibit 3**

Share of ERA1 Allocation Spent by September 30, 2021

	Any Self-Attestation (%)	Income Self-Attestation (%)	Categorical Eligibility (%)	Fact-Specific Proxy (%)	Direct-to-Tenant (DTA) Assistance (%)
<b>Allows Feature</b>	45.7	46.9	46.8	44.2	33.0
<b>Does Not Allow Feature</b>	41.8	42.4	42.5	43.7	27.7

Note: For DTA, the table shows the share of ERA1 spent by July 30, 2021.

Source: Adapted from Aiken et al. (2021)

ERA recipient data from the first quarter of 2021 through the fourth quarter of 2022 suggest that grantees that implemented self-attestation, direct-to-tenant payments, categorical eligibility, and fact-specific proxy served a slightly greater share of low-income renter households in their

jurisdiction compared to grantees that did not (exhibit 4).<sup>2</sup> These flexibilities appear to have been particularly impactful for households with incomes below 30 percent of area median income (AMI). Grantees that implemented these flexibilities served between 2 and 3 percentage points more of the households with incomes below 30 percent of AMI.

**Exhibit 4**

Share of Low-Income Population That Received ERA1, by Flexibility

	Implemented Flexibility (%)	Did Not Implement Flexibility (%)
<b>Self-attestation</b>	N = 241	N = 111
Overall	7	5
Below 30% AMI	9	6
30–50% AMI	3	2
50–80% AMI	1	1
<b>Self-attestation, income</b>	N = 173	N = 179
Overall	7	5
Below 30% AMI	9	7
30–50% AMI	3	2
50–80% AMI	1	1
<b>Direct-to-tenant payments</b>	N = 233	N = 119
Overall	7	5
Below 30% AMI	9	6
30–50% AMI	3	1
50–80% AMI	1	1
<b>Categorical eligibility</b>	N = 202	N = 150
Overall	7	5
Below 30% AMI	9	7
30–50% AMI	3	2
50%–80% AMI	1	1
<b>Fact-specific proxy</b>	N = 109	N = 243
Overall	7	6
Below 30% AMI	9	7
30–50% AMI	3	2
50–80% AMI	2	1

*Notes:* Self-attestation is for at least one eligibility criterion, such as income or COVID-19-related hardship. Self-attestation, Income is specific to income, non-traditional income, or loss of income. Grantees with no or questionable recipient data were excluded.

*Sources:* NLIHC COVID-19 Emergency Rental Assistance Database (2021–22); Treasury administrative data; Comprehensive Housing Affordability Strategy 5-year estimates (2016–20).

<sup>2</sup> HUD Comprehensive Housing Affordability Strategy data provided the number of low-income renter households by jurisdiction. NLIHC’s Treasury ERA Database and Treasury administrative data were used to determine grantees’ coverage area. In most instances, the authors assumed grantees covered the entire population within their administrative boundaries and grantees that pooled their resources for merged programs reported households served within their specific jurisdiction. Some state grantees did not serve counties and cities that received their own ERA allocation, but state their coverage evolved as local entitlement jurisdictions ran out of funds. For that reason, only two states reported no ERA payments to residents in local entitlement jurisdictions. For those two states, the authors removed the entitlement jurisdictions from the state low-income population count.

The provision of housing stability services in ERA was positively associated with households successfully moving through the application process and receiving funds. These services were provided by grantees and through partnerships with local, culturally competent, community-based organizations already working on housing stability issues. Survey results found that those who received help and guidance during the ERA application process—such as help understanding the application process, gathering required documents, or uploading documents online—had significantly higher approval rates. Eighty-six percent of respondents who received help were approved for or received funds, compared with 79.9 percent of respondents who received no help. Respondents who did not receive help were more likely to have been denied ERA (Gallagher et al., 2023).

## **Recommendations on Embedding Program Flexibilities into the HCV Program**

Program flexibilities, coupled with direct and clear guidance, increased the overall impact of ERA success in reaching the low-income households it was meant to assist. In the HCV program, 75 percent of all new and turnover vouchers must serve extremely low-income households earning less than 30 percent of the AMI or the federal poverty guideline, whichever is higher (24 CFR § 982.201). This section recommends ways the HCV program could better serve these households by incorporating flexibilities like those allowed in ERA and discusses lessons learned through EHV programs and CARES Act waivers.

Specifically, Congress should increase funding for the HCV program, enact legislation allowing direct-to-tenant assistance in the HCV program, and fund housing stability services. Second, PHAs should use both self-attestation and the safe harbor categorical eligibility provision and explore the use of fact-specific proxy. Finally, given the importance of guidance in promoting successful use of flexibilities in the ERA program, HUD should issue clear and regular guidance supporting PHAs in utilizing program flexibilities already allowed by the agency.

### **Congress Should Expand Funding for the HCV Program**

ERA was funded at an unprecedented level intended to meet the needs of all renters at risk of eviction. However, the same has not been done for the HCV program, despite the persistent and growing housing crisis. Congress can best improve the HCV program by addressing the insufficient funding that prevents the program from serving all eligible households. Congress should expand rental assistance to be universally available to all households in need. Universal rental assistance would enable PHAs to assist all income-eligible households rather than ration vouchers through waiting lists that create additional burdens for both PHAs and tenants. Even with increased resources, however, tenants would still face challenges benefiting from a universal voucher program without other reforms.



## **Congress Should Enact Legislation Allowing Direct-to-Tenant Assistance in the HCV Program**

DTA was associated with higher spending rates and the share of low-income renters able to access assistance. Adding a DTA component to the HCV program, through congressional authorization, could address challenges related to uninterested landlords and administrative burdens created through the “double take-up” aspect of the program. DTA could support households by reducing source-of-income discrimination if landlords realize a reduction in administrative burden. Aspects to consider in designing DTA through the HCV program include calculating, documenting, and monitoring assistance, housing quality inspections, and potential tax and benefit implications (Joice, O’Regan, and Ellen, 2024).

Current laws and regulations governing the HCV program require that housing subsidies are paid directly to the landlord by the PHA on behalf of the participating household (McCabe and Shroyer, 2023). However, the precursor to the HCV program, the Experimental Housing Allowance Program (EHAP), provided housing allowance payments directly to tenants. This method of payment was successful and resulted in reduced housing cost burdens for participating households (EHAP, 1976). Early evaluation found that a key element of EHAP’s administrative successes, including prompt workload processing, program integrity, and client and community satisfaction, was the limited nature of administrative functions, possible because of direct assistance to tenants. Researchers warned that providing funding to landlords directly would require outreach, negotiation of agreements, enforcement of contract terms, and a new recordkeeping system with substantial cost and unknown benefits (Kingsley, Kirby, and Rizer, 1982). Despite these concerns and the success of the housing allowance payments, the HCV program statute enacted by Congress did not allow direct payments to tenants.

In acknowledgement of the success of pandemic-era programs that provided assistance directly to tenants, such as ERA, economic impact payments, and the expanded child tax credit, HUD has begun engaging stakeholders in a Direct Rental Assistance pilot program. If the pilot generates positive results, Congress should authorize and provide additional funding for direct tenant assistance in the HCV program.

## **PHAs Should Utilize Self-Attestation to Ease Documentation Requirements**

HCV applicants must provide and participate in efforts to verify eligibility information required by HUD and the PHA (42 U.S.C. § 3544; 24 CFR § 982.551(b)). Although income verification is a key component of determining both eligibility and rent payments, HUD should consider further regulatory changes to streamline the screening process and enable more households to self-attest for certain eligibility criteria. PHAs incorporating self-attestation into their HCV programs could address key barriers preventing eligible households from accessing needed rental assistance, particularly for people experiencing homelessness. Allowing applicants to self-attest to program eligibility criteria and collecting necessary documentation after admission could also expedite the leasing process, helping individuals and families move into housing more quickly.

HUD is authorized and has experience utilizing self-attestation through the Housing Opportunity Through Modernization Act (HOTMA; P.L. 114-201), the CARES Act (P.L. 116-136), and the American Rescue Plan Act (ARPA; P.L. 117-2). Congress passed and President Obama signed into law HOTMA in 2016, making numerous changes affecting the HCV program. HUD issued HOTMA implementation guidance in September 2023 reminding PHAs that they may accept self-certification of income if the applicant reports zero income or if other third-party verification techniques are unavailable (HUD, 2023a). Moreover, PHAs are required to utilize HUD's Enterprise Income Verification (EIV) system to verify applicants' income. Using self-attestation coupled with EIV verification could significantly lower documentation requirements for applicant households.

Acknowledging that applicants, particularly people experiencing homelessness, face barriers in meeting its Social Security Number (SSN) requirements, HUD changed acceptable documentation for providing a SSN. PHAs may accept self-certification of an applicant's SSN and a third-party document, such as a bank statement, utility bill, or benefit letter with the applicant's name printed on it (HUD, 2023a). HUD should ensure that PHAs are aware of existing flexibilities that ease documentation requirements for households seeking assistance.

During the COVID-19 pandemic, HUD exercised the broad authority provided through the CARES Act and ARPA, via EHV, to adjust program practices and provide PHAs with flexibility to address pressing housing needs. These flexibilities included waiving the third-party income verification requirements, allowing PHAs to accept self-attestation as the highest form of income verification for admission, and relaxing documentation requirements at admission for SSN, date of birth, and disability status. Individuals had to provide the required documentation within 90 days of admission to continue receiving assistance (HUD, 2021a, 2021b). These pandemic-era waivers allowed PHAs to streamline the process for issuing vouchers and likely helped decrease voucher lease-up time (Khadduri et al., 2022). Many communities attribute their success in quickly leasing EHV's—vouchers targeted to people facing high barriers to stable housing—to these flexibilities and waivers, including the state of Michigan; King County, Washington; Fairfax County, Virginia; and Los Angeles County (HUD, 2023b).

In addition, HUD approved requests by the Housing Authority of the City of Los Angeles and Los Angeles County Development Authority to modify HCV program admission requirements to accelerate efforts to move people experiencing homelessness into housing. The resulting waivers allow the housing authorities to issue vouchers to people experiencing homelessness and verify their income via independent, third-party sources within 60 days (HUD, 2023c). HUD also approved waivers allowing unhoused Angelenos to self-certify their SSN, date of birth, and disability status (City of Los Angeles, 2023). Allowing individuals to self-attest that they meet HCV eligibility criteria removes one of the most significant roadblocks faced by voucher holders in utilizing their voucher.

### **PHAs Should Allow the Use of Categorical Eligibility in the HCV Program**

Congress and federal agencies have taken steps to streamline eligibility rules of federal assistance programs, including through categorical eligibility. Programs that have adopted categorical eligibility include SNAP and the Low-Income Home Energy Assistance Program, among others. Categorical

eligibility policies have been shown to facilitate access to federal assistance programs and reduce administrative costs (GAO, 2017). Expedited eligibility for SNAP dates to 1971 and was enacted to simplify administration of the SNAP program, facilitate program access for eligible households, and improve coordination among federal benefit programs (Aussenberg and Falk, 2022).

A “Safe Harbor” provision within HOTMA allows PHAs to use income determinations from certain means-tested federal assistance programs for an alternate income determination (24 C.F.R. § 5.609(c)(3)). In the final rule, HUD added to the list of means-tested programs that PHAs can rely on for income determination, including TANF, Medicaid, SNAP, the Low-Income Housing Tax Credit, HOME Investment Partnerships Program, and other programs for which HUD establishes a memorandum of understanding (88 C.F.R. § 9600). Unfortunately, PHAs are not required to take advantage of this flexibility.

Using income determinations from other forms of assistance would expedite the admissions process and reduce the administrative burden on applicants and PHAs. HUD should ensure that PHAs are aware of the HOTMA Safe Harbor provision and encourage—or require—that PHAs incorporate this flexibility into their policies.

## **Congress Should Fund Housing Stability Services**

Housing stability services provided through the ERA and EHV programs demonstrated positive results for tenants in successfully navigating the application process and receiving and utilizing assistance. ERA’s housing stability services, such as outreach, application support, and housing navigation, were positively associated with helping households successfully move through the application process and receive funds. The EHV program’s supplemental funding assisted fund strategies to help voucher holders quickly identify housing and persuade landlords to accept vouchers. Participating PHAs received an additional \$3,500 per voucher to provide housing navigation services, such as creating landlord outreach teams, hiring brokers to find available housing units, and providing landlord incentives (HUD, 2022). Because of its ability to help tenants with multiple barriers to housing find and obtain units, researchers recommend that flexible service funding be incorporated into the HCV program to serve a wider range of tenants (Economy, Finnigan, and Espinoza, 2023). PHAs need funding to support renters with the greatest needs by offering application assistance, improved search assistance, stronger mobility counseling, landlord incentives, extended search periods, and other services that could assist tenants (McCabe, 2022).

Congress should fund housing stability services as a line item in the Transportation, Housing and Urban Development appropriations bill, which would be obligated to PHAs through currently allowed competitive processes.<sup>3</sup> Funding housing stability services distinct from administrative fees determined by voucher utilization (i.e., successful lease ups) could provide PHAs flexibility to provide services that help higher-need households access and utilize HCVs. Consistent and predictable services funding also allows PHAs to partner with community-based organizations working directly with households, an effective strategy used in ERA (NLIHC, 2022).

---

<sup>3</sup> 24 CFR Part 791 Subpart D (up to date as of February 29, 2024) Allocation of Budget Authority for Housing Assistance. Office of Secretary, Housing Assistance Programs and Public and Indian Housing Programs, Department of Housing and Urban Development. <https://www.ecfr.gov/current/title-24/part-791/subpart-D>.

## **HUD Should Support PHAs in Utilizing Allowable Flexibilities Through Regular and Clear Guidance**

Over time, more ERA programs incorporated program flexibilities as Treasury released guidance and provided resources and support. Ultimately, PHAs decide how they will incorporate allowable flexibilities into their programs. Lack of incentive, unclear or limited guidance, and established ways of administering the program can prevent PHAs from exploring ways to improve the HCV program. HUD should issue clear guidance on existing flexibilities related to self-certification of income and categorical eligibility, provide answers to frequently asked questions, spotlight innovative programs, and provide tools to support embedding flexibility within the HCV program. For example, guidance could provide sample forms to support implementation of self-attestation, strategies to access and utilize administrative data for categorical eligibility, and innovative program models that provide rental assistance payments directly to tenants.

### **Potential Challenges**

Although PHAs currently have the authority to use self-attestation and categorical eligibility, challenges exist, particularly when it comes to rent determination. Using HUD's EIV system to verify an applicant's income for rent determination based on the household's past year's income could mitigate this challenge. In addition, units that are subsidized with an HCV must undergo an inspection and meet housing quality standards. If Congress authorizes direct rental assistance to tenants, policies must be put in place to provide landlords confidence that tenants can afford rent and to ensure housing quality for tenants receiving direct assistance (Joice, O'Regan, and Ellen, 2024).

Prior analysis observed that fact-specific proxy was associated with decreased application processing times, increased fund disbursement, and increased application accessibility (Siebach-Glover, Foley, and Aurand, 2022). Although using fact-specific proxy may decrease administrative burden, increase program efficiency, and enhance equity, concerns related to rent determination exist. More work should be done to understand the feasibility of integrating fact-specific proxy into the HCV program. Having multiple proxies and tools for determining program eligibility may increase PHAs' ability to reach households in need of assistance.

## **Conclusion**

The ERA program helped prevent millions of evictions during the pandemic (Treasury, 2023b). The use of program flexibilities (such as DTA, self-attestation, and categorical eligibility) and housing stability services to reduce barriers tenants face when applying for and receiving assistance were key to this success. ERA provides important lessons and evidence on ways to make HCVs more accessible to the lowest-income and most marginalized renters. Although challenges exist in integrating flexibilities into the HCV program, policymakers and administrators should apply these lessons to the HCV program to the greatest extent possible.

## Authors

Sarah Gallagher is vice president of state and local innovation with the National Low Income Housing Coalition. At the time of writing, Sophie Siebach-Glover was a research analyst with the National Low Income Housing Coalition. Alayna Calabro is a senior policy analyst with the National Low Income Housing Coalition. Victoria Bourret is a project manager with the National Low Income Housing Coalition. Andrew Aurand is senior vice president for research with the National Low Income Housing Coalition.

## References

Aiken, Claudia, Isabel Harner, Vincent Reina, Andrew Aurand, and Rebecca Yae. 2021. *Treasury Emergency Rental Assistance Programs in 2021: Preliminary Analysis of Program Features and Spending Performance*. Philadelphia, PA: The Housing Initiative at Penn. [https://nlihc.org/sites/default/files/HIP\\_NLIHC\\_Brief\\_121621.pdf](https://nlihc.org/sites/default/files/HIP_NLIHC_Brief_121621.pdf).

———. 2022. *Emergency Rental Assistance (ERA) During the Pandemic: Implications for the Design of Permanent ERA Programs*. Philadelphia, PA: The Housing Initiatives at Penn. [https://nlihc.org/sites/default/files/HIP\\_NLIHC\\_2022\\_3-10\\_FINAL.pdf](https://nlihc.org/sites/default/files/HIP_NLIHC_2022_3-10_FINAL.pdf).

Aiken, Claudia, Ingrid Gould Ellen, and Vincent Reina. 2023. “Administrative Burdens in Emergency Rental Assistance Programs,” *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 100–121.

Aurand, Andrew, Dan Emmanuel, Diane Yentel, Ellen Errico, Zoe Chapin, Gar Meng Leong, and Kate Rodrigues. 2016. *The Long Wait for a Home*. Washington, DC: National Low Income Housing Coalition. [https://nlihc.org/sites/default/files/HousingSpotlight\\_6-1.pdf](https://nlihc.org/sites/default/files/HousingSpotlight_6-1.pdf).

Aussenberg, Randy A., and Gene Falk. 2022. *The Supplemental Nutrition Assistance Program (SNAP): Categorical Eligibility*. Congressional Research Service. <https://sgp.fas.org/crs/misc/R42054.pdf>.

Calabro, Alayna. 2022. “Treasury Emergency Rental Assistance Program,” *NLIHC Advocates’ Guide 2022: A Primer on Federal Affordable Housing & Community Development Programs & Policies*. [https://nlihc.org/sites/default/files/2022-03/2022AG\\_09-06\\_Treasurey-ERA.pdf](https://nlihc.org/sites/default/files/2022-03/2022AG_09-06_Treasurey-ERA.pdf).

Center on Budget and Policy Priorities. 2022. “Policy Basics: Federal Rental Assistance.” [https://www.cbpp.org/research/policy-basics-federaBudget%20and%20Policy%20Priorities%20\(cbpporg\)](https://www.cbpp.org/research/policy-basics-federaBudget%20and%20Policy%20Priorities%20(cbpporg))

City of Los Angeles. 2023. “Mayor Bass Secures Critical Permanent Housing Agreement with Federal Housing Department to Cut Red Tape and Bring More Angelenos Inside, and Faster.” Press release. Los Angeles, CA: City of Los Angeles. <https://mayor.lacity.gov/news/mayor-bass-secures-critical-permanent-housing-agreement-federal-housing-department-cut-red>.

Cunningham, Mary, Martha Galvez, Claudia Aranda, Rob Santos, Doug Wissoker, Alysse Oneto, Rob Pitingolo, and James Crawford. 2018. *A Pilot Study of Landlord Acceptance of Housing Choice Vouchers*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/portal/sites/default/files/pdf/Landlord-Acceptance-of-Housing-Choice-Vouchers.pdf>.

Economy, Christi, Ryan Finnigan, and Marisa Espinoza. 2023. "Using Emergency Housing Vouchers to Address Homelessness." University of California, Berkeley, Terner Center for Housing Innovation, March 7. <https://ternercenter.berkeley.edu/blog/emergency-housing-vouchers-lessons/>.

Ellen, Ingrid Gould, Katherine O'Regan, and Sarah Stochak. 2021. *Using HUD Administrative Data to Estimate Success Rates and Search Durations for New Voucher Recipients*. Washington, DC: U.S. Department of Housing and Urban Development. [https://www.huduser.gov/portal/portal/sites/default/files/pdf/Voucher-Success\\_Rates.pdf](https://www.huduser.gov/portal/portal/sites/default/files/pdf/Voucher-Success_Rates.pdf).

Executive Office of the President, Office of Management and Budget. 2021. *Study to Identify Methods to Assess Equity: Report to the President*. Washington, DC: Office of Management and Budget. [https://www.whitehouse.gov/wp-content/uploads/2021/08/OMB-Report-on-E013985-Implementation\\_508-Compliant-Secure-v1.1.pdf](https://www.whitehouse.gov/wp-content/uploads/2021/08/OMB-Report-on-E013985-Implementation_508-Compliant-Secure-v1.1.pdf).

Experimental Housing Allowance Program (EHAP). 1976. *Housing Allowances: The 1976 Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/sites/default/files/pdf/Housing-Allowances-1976-Report-to-Congress.pdf>.

Gallagher, Sarah, Sophie Siebach-Glover, Andrew Aurand, Victoria Bourret, Cypress Marrs, Rebecca Yae, Claudia Aiken, et al. 2023. *Beyond Housing Stability: Understanding Tenant and Landlord Experiences and the Impact of Emergency Rental Assistance*. Washington, DC: National Low Income Housing Coalition.

Garboden, Philip M.E., Eva Rosen, Stefanie DeLuca, and Kathryn Edin. 2018. "Taking Stock: What Drives Landlord Participation in the Housing Choice Voucher Program," *Housing Policy Debate* 28 (6): 979–1003.

Joice, Paul, Katherine O'Regan, and Ingrid Gould Ellen. 2024. "Direct Rental Assistance: Returning to the Roots of Housing Allowances," *SSRN Electronic Journal*.

Khadduri, Jill, Nichole Fiore, Samuel Dastrup, Lauren Dunton, Keely J. Stater, and Haisheng Yang. 2022. *Using Tenant-Based Housing Vouchers to Help End Homelessness in Los Angeles, 2016–2020*. Rockville, MD: Abt Associates. [https://www.abtassociates.com/files/insights/reports/2022/Abt\\_Voucher%20Report\\_FINAL\\_7.8.22.pdf](https://www.abtassociates.com/files/insights/reports/2022/Abt_Voucher%20Report_FINAL_7.8.22.pdf).

Kingsley, G. Thomas, Sheila Nataraj Kirby, and W. Eugene Rizer. 1982. *Housing Allowance Program Administration: Findings From the Supply Experiment*. Santa Monica, CA: Rand Corporation. <https://www.huduser.gov/portal/sites/default/files/pdf/Housing-Allowance-Program-Administration-Findings.pdf>.

Leibenluft, Jacob. 2023. "Emergency Rental Assistance: Supporting Renting Families, Driving Lasting Reform." Washington, DC: U.S. Department of the Treasury. <https://home.treasury.gov/news/featured-stories/emergency-rental-assistance-supporting-renting-families-driving-lasting-reform>.

McCabe, Brian. 2022. "Ready to Rent: Administrative Decisions and Poverty Governance in the Housing Choice Voucher Program," *American Sociological Review* 88 (1): 86–113.

McCabe, Brian, and Aaron Shroyer. 2023. "Creating a Direct Rental Assistance Demonstration." Washington, DC: U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/pdredge/pdr-edge-frm-asst-sec-090523.html>.

National Low Income Housing Coalition (NLIHC). 2022. *Emergency Rental Assistance: A Blueprint for a Permanent Program*. Washington, DC: NLIHC. <https://nlihc.org/sites/default/files/2022-ERA-Blueprint.pdf>.

———. 2023. "NLIHC COVID-19 Emergency Rental Assistance Database." Washington, DC: NLIHC. <https://docs.google.com/spreadsheets/d/1hLfybfo9NydIptQu5wghUpKXecimh3gaoqT7LUlJGc8/edit#gid=2071264019>.

Poverty and Race Research Action Council. 2023. *Appendix B: State, Local, and Federal Laws Barring Source-of-Income Discrimination*. Washington, DC: Poverty and Race Research Action Council. <https://www.prrac.org/pdf/AppendixB.pdf>.

Siebach-Glover, Sophie, Emma Foley, and Andrew Aurand. 2022. *Implementing Fact-Specific Proxy in ERA Programs: Key Considerations and Lessons Learned*. Washington, DC: National Low Income Housing Coalition. <https://nlihc.org/sites/default/files/Fact-Specific-Proxy-Report.pdf>.

Tighe, J.R., M.E. Hatch, J. Mead. 2017. "Source of Income Discrimination and Fair Housing Policy," *Journal of Planning Literature* 32 (1): 3–15.

Turnham, Jennifer, Meryl Finkel, Larry Buron, Melissa Vandawalker, Bulbul Kaul, Kevin Hathaway, and Chris Kubacki. 2015. *Housing Choice Voucher Program: Administrative Fee Study*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/publications/pdf/AdminFeeStudy2015ExecSummary.pdf>.

U.S. Department of Housing and Urban Development (HUD). 2021a. *Notice PIH 2021-14 (HA)*. <https://www.hud.gov/sites/dfiles/PIH/documents/PIH2021-14.pdf>.

———. 2021b. *Notice PIH-15 (HA): Emergency Housing Vouchers – Operating Requirements*. <https://www.hud.gov/sites/dfiles/PIH/documents/PIH2021-15.pdf>.

———. 2022. *Emergency Housing Vouchers: A How-To Guide for Public Housing Agencies*. <https://files.hudexchange.info/resources/documents/Emergency-Housing-Vouchers-How-To-Guide-For-Public-Housing-Agencies.pdf>.

———. 2023a. *Notice PIH 2023-27: Implementation Guidance: Sections 102 and 104 of the Housing Opportunity Through Modernization Act of 2016*. <https://www.hud.gov/sites/dfiles/OCHCO/documents/2023-27pihn.pdf>.

———. 2023b. “Emergency Housing Voucher Success Stories.” <https://www.hudexchange.info/programs/public-housing/ehv/success-stories/>.

———. 2023c, August 18. “HUD Approves Changes to Housing Choice Voucher Program to Accelerate Homelessness Solutions in Los Angeles.” Press release. Washington, DC: HUD. [https://www.hud.gov/press/press\\_releases\\_media\\_advisories/HUD\\_No\\_23\\_175](https://www.hud.gov/press/press_releases_media_advisories/HUD_No_23_175).

———. 2023d. “Housing Choice Voucher Program Dashboard.” Washington, DC: HUD. [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/dashboards](https://www.hud.gov/program_offices/public_indian_housing/dashboards).

U.S. Department of the Treasury (Treasury). 2021a. “Emergency Rental Assistance Fact Sheet.” [https://home.treasury.gov/system/files/136/FACT\\_SHEET-Emergency-Rental-Assistance-Program\\_May2021.pdf](https://home.treasury.gov/system/files/136/FACT_SHEET-Emergency-Rental-Assistance-Program_May2021.pdf).

———. 2021b. “Promising Practices for ERA Programs” <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/emergency-rental-assistance-program/promising-practices>. Accessed 2023.

———. 2023a. “Building Housing Stability Infrastructure.” <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/emergency-rental-assistance-program/promising-practices/housing-stability>.

———. 2023b. “Emergency Rental Assistance. Keeping Families in Their Homes.” <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/emergency-rental-assistance-program>.

U.S. Government Accountability Office (GAO). 2017. *Federal Low-Income Programs: Eligibility and Benefits Differ for Selected Programs Due to Complex and Varied Rules*. Washington, DC: GAO. <https://www.gao.gov/assets/690/685641.pdf>.



# Direct Rental Assistance: Returning to the Roots of Housing Allowances

Paul Joice

U.S. Department of Housing and Urban Development

Katherine O'Regan

Ingrid Gould Ellen

New York University

*The views expressed in this article are those of the authors and do not represent the official positions or policies of the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. Government.*

---

## Abstract

*At \$30 billion in expenditures annually, the Housing Choice Voucher program is the federal government's largest rental housing assistance program. Although seen as highly successful in many ways, the voucher program suffers from three interrelated challenges: the program imposes high administrative burdens on recipients, landlords, and housing authorities; many recipients are unable to successfully use their vouchers to rent homes after waiting years to receive them; and program rules distort behaviors in ways that undermine the program's goal of leveraging market efficiency. Amid interest in reforming or expanding the voucher program, this article considers whether and how providing the voucher rental subsidy directly to the recipient might mitigate those challenges. It outlines a set of design considerations for such a program and proposes a demonstration that could inform both voucher reforms and a direct rental assistance program.*

## Introduction

The Housing Choice Voucher (HCV) program is the federal government's largest rental housing assistance program, spending approximately \$30 billion each year to support 2.3 million low-income households. However, when Congress appropriated an extraordinary \$46.5 billion for emergency rental assistance in response to the COVID-19 pandemic, funds were not sent through the HCV program. Instead, the Emergency Rental Assistance (ERA) program was administered by

the U.S. Department of the Treasury (Treasury), presumably in the hope that the funds might flow faster. Initially, ERA payments went to the landlord on behalf of an eligible renter, following the HCV model, but when local program administrators had trouble disbursing funds—partly due to the challenge of reaching landlords and persuading them to participate—Treasury officials adjusted program guidelines to allow payments to be made directly to eligible households. That policy pivot helped to motivate the “direct rental assistance” concept presented in this article.

ERA was not, however, the first time the federal government provided rental assistance directly to renters. Fifty years ago, the U.S. Department of Housing and Urban Development (HUD) Experimental Housing Allowance Program (EHAP)—which laid the foundation for what would become the HCV program—provided eligible households with a housing subsidy that they could use along with their own funds to pay the full rent to their landlord. It was, essentially, cash assistance earmarked for housing. When Congress created the Section 8 program in 1974, it shifted key responsibilities to the local public housing authority (PHA) and landlord, making the program less like cash and more like in-kind assistance. In the HCV program, the PHA must inspect and approve the unit, the landlord must agree to a Housing Assistance Payment (HAP) contract with the PHA, and the PHA must pay the subsidy directly to the landlord. This article explores how certain key challenges the HCV program currently faces could be overcome by returning to a direct rental assistance approach like the “housing allowances” tested in EHAP.

## **Housing Choice Voucher Program Review**

The HCV program enjoys broad support among researchers, policymakers, and practitioners. Vouchers have proven to be effective at reducing rent burden, overcrowding, homelessness, and housing instability (Mills et al., 2006; Gubits et al., 2016). Research has consistently shown vouchers to be less expensive than public housing (Kennedy, 1980; Mayo et al., 1980; Shroder and Reiger, 2000), and voucher holders live in lower poverty neighborhoods than public housing residents. Evidence also shows that vouchers improve non-housing outcomes, such as children’s school performance (Schwartz et al., 2019), and produce long-term educational and labor market gains compared to public housing (Chetty, Hendren, and Katz, 2016).

However, the HCV program faces three related challenges that undermine its potential promise, each of which could potentially be addressed through a direct rental assistance model. First, the HCV program imposes sizable administrative burdens on all three parties involved in the program: voucher recipients, landlords, and PHAs. Second, many households that are offered a voucher are unable to successfully lease up. Third, program rules distort the behavior of all three parties in ways that undermine the program’s goal of leveraging market efficiency.

Starting with administrative burden, before a household can receive a voucher subsidy, they must apply to the program and navigate a multi-step process with responsibilities divided between the household, PHA, and landlord. The PHA pulls the household’s name from the waiting list, reviews their current income to confirm their eligibility, and then issues a voucher. From that point, the household has limited time to find an acceptable unit and willing landlord and complete the admission process. Once they find a unit, the PHA must conduct a housing quality inspection and a rent reasonableness determination. If the voucher recipient, landlord, and PHA all agree to

proceed, they execute a lease (between the tenant and landlord) and a HAP contract (between the PHA and landlord) to formalize the three-party relationship. The voucher household pays a total tenant payment (TTP) generally equal to 30 percent of their income. The PHA pays the landlord a subsidy covering the rest of the gross rent (the unit's contract rent plus a utility allowance) up to a cap known as the payment standard. The payment standard is based on HUD-calculated Fair Market Rents (FMRs) or Small Area Fair Market Rents (SAFMRs); FMRs are meant to indicate the 40th percentile of the metro area rental market, and SAFMRs aim to approximate the 40th percentile of the rental market in each ZIP Code.

PHAs spend, on average, 13.8 hours per voucher per year on activities related to the day-to-day operation of the HCV program, including determining household eligibility, verifying household income, calculating TTP, and conducting inspections and rent reasonableness determinations (Turnham et al., 2015). HUD provides funding for this work; however, research has shown that the funding is not sufficient to cover all program administration costs. PHAs often seek ways to simplify and streamline program administration.

For a landlord, the burdens imposed by the HCV program are particularly acute during the leasing process. A landlord considering renting to a voucher recipient must coordinate with the PHA to provide access to the unit for the inspection. If the unit fails to pass the initial inspection, the landlord must address any deficiencies. Landlords must familiarize themselves with the HAP contract, agree to sign it, and adhere to its terms, such as passing annual housing inspections. A recent summary of landlord experience in the voucher program highlighted inspections as particular pain points for landlords (HUD, 2018). Landlords express frustration with inspections being arbitrary and unpredictable, inspection and leasing delays, voucher rents not matching market rents, and general bureaucratic inefficiency when dealing with PHAs (Garboden et al., 2018). Whether a landlord is willing to tolerate these burdens depends on their alternatives; landlords who expect to struggle to rent their unit in the private market are more likely to accept the burdens of the voucher program, and landlords with highly desirable units are more likely to refuse (Rosen, 2020).

Most concerning is the burden the HCV program places on the low-income renters it serves. They must figure out how and when to apply for a voucher, submit all the necessary documents, and find a voucher-eligible unit to rent. These burdens underlie the second key challenge that threatens the promise of the voucher program: many voucher recipients fail to successfully lease homes with their vouchers.

It is hard enough for any renter to navigate the housing search process—to determine whether a particular unit meets their needs, assess housing and neighborhood quality, avoid bad landlords, compete against other renters, and pay application fees, security deposits, and moving expenses. Voucher recipients face the additional barrier of finding units that meet voucher program requirements and are owned by landlords willing to participate in the program. A recent HUD study that used paired testing methods to imitate the voucher search process demonstrated how high these barriers are (Cunningham et al., 2018). To identify one unit that appeared to meet HCV requirements, the researchers had to screen 39 rental listings. When they inquired about a voucher-eligible unit, they found that, in many cases, the landlord openly refused to accept vouchers. In

three of five sites, the landlord refusal rate was more than 66 percent. In the other two sites, refusal rates were 31 and 15 percent, despite those jurisdictions having laws banning discrimination based on source of income. The researchers found that landlords were significantly more likely to refuse vouchers for units in low-poverty neighborhoods than for units in high-poverty neighborhoods. In cases when the landlord claimed to accept vouchers, and the tester pair made appointments to view the property, landlords were significantly less likely to show up to the appointment for a voucher tester relative to a matched non-voucher tester.

Many voucher recipients are unable to lease a unit with their voucher and must return the voucher to the PHA. According to a recent estimate, only 61 percent of voucher issuances in 2019 resulted in a successful lease up and program admission (Ellen, O'Regan, and Stochak, 2023). The fact that 39 percent of voucher recipients have to return their voucher—and receive no subsidy—is remarkable, considering how generous the subsidy is. Nationwide, the average voucher subsidy is \$10,825 per year,<sup>1</sup> and a household can continue to receive it for as long as they remain eligible. Further, vouchers are scarce and waiting lists are long. Only one in four eligible households receives any form of federal rental assistance (Alvarez and Steffen, 2023) and typically spend years on a waiting list to receive that assistance. That so many households are unable to use this golden voucher ticket demonstrates how heavy a burden the program places on the households it is meant to help. There may also be racial disparities in these burdens. Recent research examining voucher lease-up rates in 433 metropolitan areas from 2015 to 2019 (Ellen, O'Regan, and Stochak, 2024) finds that Black and Hispanic voucher recipients are less likely to lease up than their White counterparts in the same market, even after controlling for a large set of individual factors.

A third set of challenges in the HCV program relates to the incentives faced by the three parties—tenants, landlords, and PHAs. In theory, the HCV program should leverage the incentives and efficiency of the free market—in which buyers shop for a good deal and impose price discipline on sellers—but voucher holders have neither the luxury of shopping for a good deal nor the incentive to do so. For any unit with rent below the payment standard, the voucher household pays the same TTP—30 percent of their income—regardless of the unit's rent. Choosing a less expensive unit would not benefit the household, though it would benefit the PHA by reducing the subsidy. Savvy landlords know that payment standards, FMRs, and SAFMRs are public information; if they want voucher tenants, they can attempt to set their asking rent as close as possible to the payment standard, even if it is more than what the private market would bear. The only mechanism to prevent rent inflation in the voucher program is the requirement that PHAs conduct a rent reasonableness determination, which is an inherently difficult task that requires PHA staff to consider all aspects of a unit—size, quality, amenities, and location—and identify comparable units (Thrope et al., 2022). PHAs sometimes use rent reasonableness as a negotiating tactic to reduce the rent late in the leasing process, which landlords see as an unfair bait and switch (Cossyleon, Garboden, and DeLuca, 2020).<sup>2</sup> Landlords, in turn, have ways of gaming the rent reasonableness process, such as by contesting the PHA's determination and providing more favorable comparisons (Rosen, 2020). One study estimated that voucher-assisted units in

---

<sup>1</sup> Authors' calculation of average per unit cost as of April 30, 2023 (HUD, 2023).

<sup>2</sup> Particularly with the increased use of data-driven pricing for units, property managers may not have the latitude to “negotiate” rent with the PHA (Cossyleon, Garboden, and DeLuca, 2020).

Milwaukee charged between \$51 and \$68 more in monthly rent relative to comparable unassisted units (Desmond and Perkins, 2016).

These challenges are not inherent to a housing voucher program. Rather, they stem from choices made in the early days of the Section 8 program.

## **Historical Context and the Experimental Housing Allowance Program**

In 1968, the final report from the President's Committee on Urban Housing (the Kaiser Committee) considered three approaches to helping low-income families with housing: project subsidies, housing allowances (cash subsidies that were tied to housing consumption), and income maintenance (unrestricted cash assistance). The report stated that housing allowances would "provide purchasing power directly to the housing consumer" and "offer the opportunity for the free market to operate in its traditional fashion" (The President's Committee on Urban Housing, 1968). Housing allowances would "permit the consumer to make his own choices in the marketplace, a freedom which tends to enhance personal dignity. By relying on market forces, it should bring about a better matching of consumer demands and housing supply." The Kaiser Committee called for housing allowances to be tested on an experimental basis, and 2 years later, the Housing Act of 1970 authorized HUD to launch the Experimental Housing Allowance Program (EHAP) to develop and test the concept.

The EHAP Demand Experiment<sup>3</sup> tested two main subsidy formulas. The first covered some fraction of a household's actual rent (with subgroups testing different fractions of rent). The second formula (which most resembles housing choice vouchers) covered the gap between some fraction of a household's income and the average local cost of "modest" housing. One of the housing gap subgroups received "unconstrained" assistance—that is, with no housing requirement. There were also two control groups—neither received a subsidy, but one group participated in housing information sessions (Kennedy, 1980). Notably, landlords had no direct engagement with the subsidy program for any of the experimental groups. All EHAP subsidies were provided directly to low-income participants, who were then responsible for securing housing on the private market and paying the full rent to the landlord. All participants (except for the unconstrained assistance group) were required to meet some form of housing requirement, such as passing a minimum quality standard inspection or paying a minimum rent, before receiving a housing allowance (Struyk and Bendick, 1981). Households could request that their current residence be inspected, or they could identify a dwelling to which they planned to move (the inspection of which could come after they moved in). As a result, many households resided in the units at the time of inspection (Struyk and Bendick, 1981). Households living in units that failed one or more quality standards either needed to secure requisite repairs in negotiation with their landlord or move to a unit that met standards before receiving the subsidy (Khadduri, 1979). Families also needed to spend at least the amount of the subsidy they received on housing. In these ways, EHAP was a demand-side subsidy earmarked for housing by imposing housing requirements on recipients.

---

<sup>3</sup> EHAP included three distinct studies: the Supply Experiment, Demand Experiment, and Administrative Agency Experiment. This article focuses on the Demand Experiment.

When Congress created the Section 8 program in 1974, it deviated from the EHAP model in several respects. Perhaps most fundamentally, subsidies were paid directly to landlords through a contract with the local housing authority. Similar to EHAP, units had to meet quality standards, but under Section 8, PHAs engaged more directly with landlords in the inspection process. Second, unlike EHAP, the gap formula adopted was based on the difference between a fixed percentage of a household's income and the rent of the *specific* unit rented (rather than the average costs of local housing) and subject to a rent ceiling cap. This approach meant that households would bear none of the cost of higher rent (up to the ceiling cap) and reap none of the savings from securing less costly housing. To offset the participant's lack of incentive to economize, Section 8 originally incorporated a somewhat complex rent reduction, or "shopping" incentive, which proved ineffective and was later eliminated (Khadduri, 1979). To prevent landlords from raising their rents to charge ceiling rents, housing authorities were also required to assess rent reasonableness for each leased unit (HUD, 1978). An assessment of early Section 8 operations revealed much greater rent increases than observed in EHAP. Specifically, relative to their initial units, rents increased 71 percent for Section 8 participants who moved compared to 34–46 percent for movers in the EHAP experiments, and 31 percent for Section 8 participants who leased in place compared to 2–8 percent in EHAP (Khadduri, 1979). Section 8 rents were clustered close to FMRs, suggesting these ceiling rents were serving as a target. Indeed, 37 percent of surveyed Section 8 landlords who had increased rents responded that they did so to meet the FMR. Khadduri credits the collection of design differences between the two programs leading to Section 8 not being administered as a "market mechanism" program (Khadduri, 1979: 46).

The seemingly subtle differences between housing allowances and housing vouchers illustrate that there is a continuum of potential policies between project-based (in-kind) housing assistance and unrestricted cash assistance. Specific policy features can move a rental assistance program along the continuum. The design of housing vouchers made the subsidy more like in-kind assistance than housing allowances were. Several innovations of the past few years—the payment of ERA directly to tenants, the expanded Child Tax Credit, and the proliferation of guaranteed income pilots—suggest an appetite among policymakers to move the other way along the continuum toward cash assistance. However, these efforts have been challenging to sustain. Housing allowances, or direct rental assistance, could strike the right balance—maintaining a targeted focus on housing and realizing the vision of the Kaiser Committee to provide households with freedom of choice, personal dignity, and purchasing power while also leveraging market forces. The remainder of this article explores what a direct rental assistance model might look like and how it could inform the future of the HCV program.

## Direct Rental Assistance Design Considerations

The core features of any direct rental assistance model include: (1) the subsidy is designed to cover housing expenses and targets the same population as the HCV program; (2) the subsidy is paid to the household, not the landlord; and (3) interaction between the PHA<sup>4</sup> and the landlord is

---

<sup>4</sup> This article assumes PHAs would administer direct rental assistance (DRA); for DRA to inform the future of the HCV program, it seems reasonable to rely on the administrative infrastructure that already exists for the voucher program.

minimized, if not eliminated entirely. The following sections explore three other important design parameters that could vary according to secondary objectives.

## **Housing Quality Requirement**

One of the most difficult direct rental assistance design choices is how to handle housing quality requirements. Housing quality standards were a major barrier to enrollment in EHAP, as they are today in the HCV program. Households in the unconstrained assistance EHAP group faced no housing quality requirement, and they were more than twice as likely to receive the subsidy than the recipients facing housing requirements.<sup>5</sup> However, about two-thirds of the unconstrained group lived in substandard housing (Allen, Fitts, and Glatt, 1981). Households eligible for EHAP were especially unlikely to complete enrollment and receive assistance if they lived in low-quality housing at baseline and/or if they lived in an area with less adequate housing (Struyk and Bendick, 1981: 12, 109–112). Importantly, there were also racial disparities in how participation rates varied by the stringency of quality standards. Across experimental arms, more stringent housing quality standards differentially constrained the participation of households of color compared to eligible White households in the same market (Struyk and Bendick, 1981: 94). There was a clear tradeoff between providing assistance to needy households and incentivizing people to improve their housing.

That program designers prioritized housing quality in the 1970s is unsurprising. The balance might differ today because housing quality has improved considerably in the past 50 years,<sup>6</sup> even for the lowest-income households. In 1975, 12 percent of households with income in the lowest quintile lived in severely inadequate housing; by 1997, this had dropped to 3 percent, barely higher than the rate for households in the highest-income quintile (Orr and Peach, 1999).

As housing quality has increased, the predominant housing problem has become affordability. Of the 8.53 million renter households with “worst case housing needs” in 2021, 97.2 percent paid more than one-half of their income toward rent, and only 5.6 percent had severely inadequate housing (Alvarez and Steffen, 2023). Nowhere in the United States can a person working full-time at the minimum wage afford a two-bedroom rental at the FMR (National Low Income Housing Coalition, 2022). The shifting nature of housing problems today—from a quality problem to a cost problem—also changes the calculus of tradeoffs between meeting quality standards versus increasing program reach. Given the prominence of housing inspections in landlord critiques of the voucher program, direct rental assistance requires a different approach.

One option is simply to eliminate the housing quality requirement. With no inspection and no HAP contract, a household offered direct rental assistance (DRA) could begin receiving assistance immediately for the unit they already occupy (“leasing in place”). In contrast, a household with a voucher can only lease in place if their landlord agrees to sign the HAP contract and the unit passes

---

<sup>5</sup> This result compares the unconstrained assistance group with the other groups under the housing gap plan, which faced minimum standard requirements.

<sup>6</sup> In 1975, roughly 5 percent of housing units were “severely inadequate;” this had fallen to 2 percent by 1997 and 1.4 percent in 2021 (Orr and Peach, 1999; authors’ analysis of 2021 American Housing Survey (AHS) data). Declines were similar for housing units with “moderate” physical problems (Eggers and Thackeray, 2007; authors’ analysis of 2021 AHS data). An alternative measure of housing quality that does not focus exclusively on severe or moderate inadequacy also shows significant improvement between 1985 and 2009 (Eggers and Moumen, 2013).

inspection. Lowering the barrier to leasing in place would enable DRA recipients to get assistance faster, reduce their rent burden, and search for better housing—if and when they choose—under less duress.

With no inspection requirement, DRA recipients would be trusted to search for housing and assess quality the same way that unassisted renters do. If they perceive a unit to be unacceptably low quality, they would simply look elsewhere. The ability to look elsewhere is, of course, constrained by many factors; but if the DRA subsidy succeeds in its primary objective—defraying housing costs without deterring landlords—recipients should have access to a broader segment of the housing market and have the opportunity to be more selective.

Nonetheless, it is likely that in the absence of any housing quality requirement, some subsidized households would occupy inadequate housing. Using taxpayer dollars to subsidize such arrangements could be highly controversial. Thus, a politically acceptable DRA program might have to retain some form of quality standards.

Several aspects of landlords' dislike of inspections could potentially be addressed by DRA. The first is simply logistics. Coordinating and conducting the inspection takes time and effort on the landlord's part, and the process often requires that landlords keep units off the market for multiple months. During the leasing process, time is money. A second challenge for a landlord is to correct any deficiencies before the unit can be approved for a voucher subsidy. (This article does not address a third concern: landlords' complaints that inspectors are arbitrary, unpredictable, and overly picky. HUD's new inspection framework is meant to create more consistent and objective inspections (REAC, n.d.)).

To address logistical challenges related to inspections, any DRA inspection should either be integrated into standard leasing processes or removed from the leasing process altogether. For example, during the leasing process, an inspection could take place when the prospective renter visits the unit, imposing no burden on the landlord. One option inspired by EHAP is “participant inspections,” in which the assisted household conducts the inspection using a PHA-provided checklist. As in the “no inspection” option, the assisted household would bear responsibility for assessing the unit, but they would be guided by the PHA checklist and could be required to attest to the PHA that the unit passed, in their view. A second option, growing out of HUD guidance during the COVID-19 pandemic, is to do remote inspections. When an assisted household views a prospective unit, they would use their phone to do a video walkthrough or video call to enable a PHA inspector to inspect the unit virtually. In either case, if a deficiency is identified, the tenant could ask the landlord to fix it (as an unassisted renter might do). If the landlord refuses to do so, the PHA could require that the household continue their search.

Outside of the leasing process, it should be possible to do a standard inspection—in person, by a trained inspector. Standard, in-person inspections could apply whenever a DRA recipient leases in place or if issues arise during the tenancy. The tenant would grant the inspector access to the unit; the landlord would not be burdened or even need to be made aware. If a deficiency is identified, it is unclear what action should be taken. With no HAP contract between the PHA and the landlord, the PHA would have no leverage or legal recourse to force the landlord to make improvements to



pass the inspection. The PHA could help the tenant negotiate with the landlord, but the tenant would also have limited leverage during their lease term. Should the PHA continue paying a subsidy for the tenant to live in a unit known to have deficiencies? Or should the PHA end the household's subsidy (which would not fix the housing quality problem), report the landlord to the city for code enforcement violation (which might result in the unit being deemed uninhabitable), or require the tenant to break their lease and move out? With exceptions for the most severe life-threatening deficiencies, a reasonable compromise is to allow the tenant to continue receiving the subsidy through the term of their lease, but to require them to move at the end of the lease if deficiencies persist.

## **Subsidy Calculation**

The subsidy provided through direct rental assistance should be roughly equivalent in generosity to the HCV HAP subsidy. One option is to follow the exact same procedures as the HCV program: to measure a participant's income each year, set their TTP at 30 percent of their income, and provide them with DRA equal to the difference between their TTP and the lesser of their unit's rent or the payment standard. Alternatives might overcome some of the voucher program's challenges that were previously discussed. Most importantly, the DRA subsidy should incentivize the household to get the most value out of their subsidy. The DRA subsidy could possibly create better incentives for households to increase their income as well.

The most extreme change would be for DRA to be a fixed subsidy that does not vary based on a household's income or the specific unit they rent. For example, each household might receive a subsidy equal to two-thirds of the FMR,<sup>7</sup> which would remove any work disincentive from the subsidy. It would also be extremely easy to administer, as it would not require a PHA to do annual income examinations or a complex household-specific subsidy calculation. More importantly, it would empower assisted households to be full participants in the rental housing market—to weigh tradeoffs between unit cost, quality, and location, and to make the choice that best meets their needs. A household that chooses a less expensive unit would receive the same DRA subsidy and, therefore, use less of their own funds to pay rent. Relative to the current HCV subsidy calculation, this should impose greater market discipline and could exert downward pressure on rents. There are, however, two significant problems with this approach. First, it would raise vertical equity concerns, providing the same subsidy to more and less needy households. Second, households might choose unacceptably low-quality units or neighborhoods to limit spending their own funds.

Alternatively, DRA could follow a version of the EHAP “housing gap” model—setting subsidies based on the difference between 30 percent of household income and the local payment standard and capping the subsidy at the gross rent of the chosen unit. This approach addresses the vertical equity issue and still allows households to benefit from choosing a unit with rent below the payment standard, up to a certain point. Capping the subsidy at the unit's gross rent prevents households from receiving a subsidy greater than the amount they pay for rent, which would be

---

<sup>7</sup> Setting the subsidy at the full FMR would be significantly more generous than the HCV program—essentially eliminating the TTP entirely. Nationwide, the average ratio of HAP to FMR is about two-thirds, which suggests a flat subsidy of two-thirds the FMR would be equivalent, on average, to the HCV subsidy. The exact ratio should be refined based on further analysis for specific sites preparing to implement a DRA model.

difficult to justify as housing assistance. This excess subsidy may matter for political support of the program and whether the subsidy is treated as income for taxes and other benefit programs (an issue discussed more later in this article). Similar to EHAP, capping the subsidy at the gross rent of the household's chosen unit should ensure that DRA is treated as housing assistance. Exhibit 1 provides a numerical example.

**Exhibit 1**

Subsidy Calculation Example (Payment Standard=\$1,100; Monthly Household Income=\$1,000)				
	Gross Rent of Unit Leased:			
	\$1,100	1,000	\$800	\$700
<b>HCV:</b>				
Subsidy	\$800	\$700	\$500	\$400
Tenant paid rent	\$300	\$300	\$300	\$300
<b>DRA:</b>				
Subsidy	\$800	\$800	\$800	\$700
Tenant paid rent	\$300	\$200	\$0	\$0

Source: Authors

For a household with a \$1,000 monthly income and a payment standard of \$1,100, the maximum subsidy would be \$800 under both the HCV and DRA approaches. If the household chooses a unit with gross rent below \$1,100, the HCV subsidy would be reduced dollar for dollar; the household does not benefit from choosing a lower-cost unit, and all savings go to the PHA. Under the DRA model, if the household chooses a less expensive unit in this range, every dollar of savings would offset a portion of their contribution to rent. (The household's DRA subsidy would not change for any unit with gross rent between \$800 and \$1,100.) However, the DRA subsidy structure would offer no benefit to choosing a unit below \$800. This design should encourage assisted households to be economical but not to excessively sacrifice housing and neighborhood quality.

DRA could also build on the precedent of HUD's rent reform experiments by reducing the frequency at which PHAs reexamine income and recalculate the subsidy—doing so every 3 years rather than every year (Riccio, Deitch, and Verma, 2017).<sup>8</sup> A triennial reexamination cycle would reduce administrative burden, provide households with a predictable subsidy beyond 1 year, and enable households to increase their income within that 3-year window without the penalty of a decreased subsidy.

Finally, while basing payment standards on FMRs would be simplest, using SAFMRs would build on recent efforts at HUD to incentivize (and enable) voucher households to choose higher-quality neighborhoods (HUD Public Affairs, 2023).

**Subsidy Usage and Monitoring**

The DRA subsidy is intended for housing, but it is unclear whether or how a PHA should ensure that the subsidy is used for housing. Similar to EHAP, it seems reasonable to consider the subsidy

<sup>8</sup> To accommodate households that experience a loss of income, the PHA could adopt a hardship policy to allow limited interim recertifications.

to be supporting access to decent, affordable housing as long as the household provides the PHA with a valid lease, demonstrating that the minimum amount (equal to the monthly subsidy) will be spent on rent each month.<sup>9</sup> Indeed, recent research suggests that cash transfers only nominally targeted for specific uses do increase spending on that use. For example, expenses on child-related goods and services increase because of assistance that is fundamentally unrestricted but labeled as being intended for children—such as the expanded Child Tax Credit (Parolin et al., 2024) and the “Baby’s First Years” study (Gennetian et al., 2022). Perhaps DRA recipients would similarly use the funds for housing, even without monitoring and enforcement. After all, “the rent eats first” (Desmond, 2016). Housing is, by far, the largest expense for low-income households; among households in the lowest-income quintile, housing consumes 41 percent of the average household’s total annual budget (\$13,376 per year). The next largest categories of expenses are food (15.6 percent), transportation (15.1 percent), and health care (10.3 percent) (U.S. Bureau of Labor Statistics, 2023).

In the context of a DRA pilot or demonstration, monitoring how the funds are used would be a primary objective of the research. Regardless of the findings from such a demonstration, if the DRA model were implemented more widely, it could be argued that some amount of monitoring is desirable. If a DRA recipient fails to pay rent, not only would they be violating program rules, but more importantly, they would be at risk of eviction. Monitoring subsidy usage could, therefore, avert evictions in addition to ensuring program fidelity. PHAs could require ex-post documentation of rent payment before providing the next month’s subsidy. Paying the subsidy by direct deposit (which would have the added benefit of ensuring that recipients have a bank account) or using another electronic payment platform might enable monitoring without imposing an excessive administrative burden.

## **Potential Challenges**

The previous section explored three areas in which policymakers might choose different approaches to direct rental assistance. This section explores challenges that could arise during the policy design or implementation process.

### **Landlord Awareness in the Leasing Process**

Although one might think that replacing a voucher with direct rental assistance and removing the PHA-landlord relationship would make the housing subsidy invisible, this is unlikely, at least for households entering into a new lease with a new landlord.

Landlords typically vet prospective tenants by checking their credit and income; in many cases, landlords will be aware of a housing subsidy no matter the form it takes. Indeed, without knowledge of the housing subsidy, a landlord might conclude that a subsidized household cannot afford the rent. PHAs should provide DRA recipients with documentation of the subsidy, and the household could decide whether to provide that to the landlord. In most cases, informing the landlord of the additional subsidy will almost certainly be in the tenant’s interest. A landlord

---

<sup>9</sup> If a household moves, they would inform the PHA and provide a new valid lease to ensure that the subsidy does not exceed their new rent.

should prefer a DRA-assisted renter over an unassisted renter with similarly low income, but it is unclear how landlords will respond to DRA relative to HCV or to unassisted renters with slightly higher income. One aspect of the HCV program that landlords appreciate is the guaranteed monthly payment from the PHA. A landlord considering renting to a DRA recipient may believe that the household can pay the rent but still be skeptical that they will pay the rent. Ultimately, landlord attitudes about DRA will depend on (1) how much of the HCV administrative burden is eliminated in DRA and (2) whether the DRA housing requirement gives the landlord confidence that the DRA recipient will pay their rent reliably.

## **Tax and Benefit Implications**

In-kind government benefits, such as housing assistance (including vouchers), are not considered income for federal income taxes or other means-tested government programs. Unrestricted cash assistance and other cash-like programs, however, are sometimes considered income for federal taxes and other benefits.<sup>10</sup> In some cases, receiving cash assistance might make a household worse off if they are on the precipice of a “benefits cliff” where the increased income makes them ineligible for other programs. It is important to ensure that direct rental assistance does not lead to adverse tax or benefit consequences relative to the voucher program.

The most relevant precedent comes from the ERA program. The IRS determined that ERA payments to eligible households should not be considered income (IRS, n.d.). Including a *housing requirement* in DRA—requiring that DRA be used for housing, requiring the recipient to provide a lease, and setting the subsidy not to exceed the recipient's rent—should ensure that DRA is considered housing assistance rather than general income.

## **Why Not Cash?**

Some might wonder why direct rental assistance is worth testing; why not go further and just give cash? In addition to concerns about tax and benefit implications, sustaining guaranteed income pilot programs beyond a year or two has been challenging. Many have relied on flexible, one-time funds provided by the federal government as part of the COVID-19 response. The sole federal program providing cash assistance to low-income families on an ongoing basis—Temporary Aid to Needy Families (TANF)—has eroded significantly over the past 20 years, suggesting a lack of political will for providing cash assistance nationwide (Shrivastava and Thompson, 2022). Incorporating some of the tenets of cash assistance into the HCV program but retaining the emphasis on *housing* may prove more politically viable than cash assistance.

---

<sup>10</sup> Generally, any money received by an individual counts as “income.” The IRS has a “General Welfare Exclusion” under which certain government benefit payments that “promote the general welfare” are excludable from a recipient's gross income (Ball, 2023). TANF is considered income by HUD but not by the IRS. Unemployment Insurance benefits are considered income by HUD but are partially excluded by the Internal Revenue Service (IRS). The Earned Income Tax Credit is not considered income by HUD or the IRS. Cash assistance funded by the Coronavirus State and Local Fiscal Recovery Funds program is not counted as income by the IRS or HUD because it is considered disaster relief. Basic income pilots funded by philanthropy are often classified as gifts and excluded from tax and benefit calculations, but longer-term assistance may not be considered a gift. If Congress established a guaranteed basic income, it could come with a provision to ensure it is not counted as income for taxes and benefit purposes, but absent such explicit statutory direction, it likely would be counted as income.

Furthermore, in most cases, addressing the *housing needs* of low-income families would have the same effect as cash assistance. The most common payment amount for guaranteed income pilots is \$500 per month (Guaranteed Income Pilots Dashboard, n.d.). Only 7 percent of rental units nationwide had a gross rent of less than \$500 in 2022. A household already paying at least \$500 in rent would experience virtually no loss of utility from receiving \$500 in DRA instead of \$500 in cash.

## **Moving Toward a Direct Rental Assistance Demonstration**

HUD has never attempted to directly compare the housing allowance model tested in EHAP with the voucher model adopted by Congress in 1974, but several recent efforts have taken steps toward that goal. In 2021, the Center on Budget and Policy Priorities (CBPP) called for testing a streamlined rental subsidy that would be paid to tenants, targeted to housing but with no inspection requirement, and administered at the state level (Fischer and Sard, 2021). This bold proposal was shared with HUD, where staff were already exploring the possibility of testing direct rental assistance as a cohort of the Moving to Work (MTW) Expansion (through which PHAs get waivers from many standard HUD rules). The Research Advisory Committee guiding the MTW Expansion considered a direct rental assistance cohort in its fall 2021 meetings (HUD, 2022). Meanwhile, the Philadelphia Housing Development Corporation and the Housing Initiative at the University of Pennsylvania were working on designing a program called PHL Housing Plus, which was successfully launched in Philadelphia in 2022. PHL Housing Plus provides unrestricted cash assistance for 2.5 years, calculated using a formula nearly identical to the HCV program, to households on the HCV waiting list (Philadelphia Housing Development Corporation, n.d.). An evaluation will compare the effects of receiving cash to two control groups—one receiving vouchers and a second with households that remain on the HCV waiting list. PHL Housing Plus is very promising, but more experimentation is needed to explore alternative policy designs and examine effects in different market types.

HUD's effort to test DRA in the MTW context faltered partly due to uncertainty about whether HUD's housing assistance funds can legally be provided to tenants instead of landlords. HUD has since sought to encourage DRA pilots that would be developed and funded organically by local housing agencies and their partners (McCabe and Shroyer, 2023). Such pilots would be a welcome step, building on the strong start of PHL Housing Plus, but a HUD-led demonstration—with clear authorization and support from Congress—presents four potential benefits over independent pilots. First, it would enable federal policymakers, researchers, and national stakeholder groups to guide the policy design—to ensure that the DRA model(s) can inform the future of tenant-based rental assistance. Second, a HUD-led demonstration would be better positioned to produce rigorous multi-site evidence through careful site selection, an adequate sample size, and a consistent research approach. Third, DRA funded by HUD would clearly be “rental assistance”—not “income” that could affect taxes and other benefits. Finally, it would be essential for researchers to observe how DRA recipients navigate the housing search process—how they balance cost, housing quality, and location—and how landlords react. A HUD-led demonstration—that provides at least 3 years of DRA subsidy and transitions households to the voucher program at the end of

the study period—would provide the long-term certainty households need when considering whether and where to move.

This article considers many choices that must be made in the design of a direct rental assistance model but does not argue for a single preferred approach. The designers of a DRA pilot or demonstration should consider the issues presented here, as well as the CBPP and PHL Housing Plus models. Collaborating directly with people with lived experience would also be valuable to ensure that direct rental assistance meets the needs of low-income people currently using (or seeking to use) housing vouchers. Regardless of which design features are adopted, however, any direct rental assistance pilot or demonstration should use a rigorous, randomized controlled trial design. PHAs across the country have long waiting lists of households in need of rental assistance. These households should be invited to enroll in the demonstration and randomly assigned to receive direct rental assistance or a traditional HCV. A research team should closely monitor key outcomes, including leasing success rates, housing and neighborhood quality, housing costs, housing stability, and administrative costs and burden.

## **Conclusion**

During the 2020 presidential campaign, then-candidate Joe Biden proposed making the HCV program an entitlement, and the Biden administration has consistently pushed for incremental increases to the program. That nearly 40 percent of current voucher recipients fail to successfully use their vouchers shows that expanding reach requires more than additional funding; it requires program reform. If the HCV program were significantly scaled up as is, the programmatic challenges discussed in this article would possibly be exacerbated—the administrative burdens of the program could overwhelm PHAs, landlords, and tenants; the limited supply of eligible units with willing landlords could further reduce voucher success rates; and misaligned incentives could create inflationary pressure throughout the rental market. Reforming the voucher program first requires evidence about how different programmatic changes would improve the ability of rental assistance to reach those it intends to assist at scale and with what other consequences.

The variety of recent initiatives that have provided assistance directly to the intended beneficiaries—including the ERA program, the Expanded Child Tax Credit, and guaranteed income pilots—may be the bellwether of that reform. A direct rental assistance model might prove to be the perfect blend of the cash and in-kind approaches. It would maintain a focus on housing, continuing to advance the mission of HUD and the HCV program. But by embracing some elements of cash assistance, it might better live up to the original vision of housing allowances: to leverage the free market, empower tenants, and be a scalable, cost-effective model for ensuring that low-income renters have access to decent, affordable housing. Designing, implementing, and evaluating a direct rental assistance demonstration program are critical next steps.

## **Acknowledgments**

The authors thank the three anonymous reviewers who provided helpful feedback on a draft of this article. The authors also thank the dozens of participants in a November 2023 convening, hosted

by the Center on Budget and Policy Priorities and New York University's Furman Center, for a robust discussion on the topic of direct rental assistance.

## Authors

Paul Joice is a Social Science Analyst in HUD's Office of Policy Department and Research. Katherine O'Regan is Professor of Public Policy and Planning at New York University's Wagner School and a faculty director at the NYU Furman Center. Ingrid Gould Ellen is the Paulette Goddard Professor of Urban Policy and Planning at New York University's Wagner School and a faculty director at the NYU Furman Center.

## References

Allen, Garland E., Jerry A. Fitts, and Evelyn S. Glatt. 1981. "The Experimental Housing Allowance Program." In *Do Housing Allowances Work?* edited by Katherine L. Bradbury and Anthony Downs. Washington, DC: Brookings Institution: 1–31.

Alvarez, Thyria, and Barry Steffen. 2023. *Worst Case Housing Needs 2023 Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development.

Ball, Milan. 2023. *The IRS's General Welfare Exclusion*. Washington, DC: Congressional Research Service.

Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review* 106 (4): 855–902. DOI: 10.1257/aer.20150572.

Cossyleon, Jennifer, Philip Garboden, and Stefanie DeLuca. 2020. *Recruiting Opportunity Landlords: Lessons from Landlords in Maryland*. Washington, DC: Poverty & Race Research Action Council. <https://www.jstor.org/stable/resrep27291>.

Cunningham, Mary, Martha Galvez, Claudia L. Aranda, Robert Santos, Douglas A. Wissoker, Alyse Oneto, Rob Pitingolo, and James Crawford. 2018. *A Pilot Study of Landlord Acceptance of Housing Choice Vouchers*. Washington, DC: U.S. Department of Housing and Urban Development.

Desmond, Matthew. 2016. *Evicted: Poverty and Profit in the American City*. New York, NY: Broadway Books.

Desmond, Matthew, and Kristin Perkins. 2016. "Are Landlords Overcharging Housing Voucher Holders?" *City and Community* 15 (2). <https://doi.org/10.1111/cico.12180>.

Eggers, Frederick, and Alexander Thackeray. 2007. *32 Years of Housing Data*. Washington, DC: U.S. Department of Housing and Urban Development.

Eggers, Frederick, and Fouad Moumen. 2013. *American Housing Survey: Housing Adequacy and Quality as Measured by the AHS*. Washington, DC: U.S. Department of Housing and Urban Development. <http://dx.doi.org/10.2139/ssrn.2284174>.

Ellen, Ingrid Gould, Katherine O'Regan, and Sarah Strochak. 2023. *Using HUD Administrative Data to Estimate Success Rates and Search Durations for New Voucher Recipients*. Washington, DC: U.S. Department of Housing and Urban Development.

———. 2024. "Race, Space, and Take Up: Explaining Housing Voucher Lease-Up Rates," *Journal of Housing Economics* 63. <https://doi.org/10.1016/j.jhe.2023.101980>.

Fischer, Will, and Barbara Sard. 2021. "Memo: Streamlined Rental Assistance Payment Demonstration." Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/housing/streamlined-rental-assistance-payment-demonstration>.

Garboden, Philip, Eva Rosen, Kathryn Edin, Meredith Greif, and Stefanie DeLuca. 2018. *Urban Landlords and the Housing Choice Voucher Program: A Research Report*. Washington, DC: U.S. Department of Housing and Urban Development.

Gennetian, Lisa, Greg Duncan, Katherine Magnuson, Nathan Fox, Sarah Halpern-Meehin, Kimberly Noble, and Hirokazu Yoshikawa. 2022. "Unconditional Cash and Family Investments in Infants: Evidence from a Large-Scale Cash Transfer Experiment in the U.S. National Bureau of Economic Research." Working paper no. 30379. Cambridge, MA: National Bureau of Economic Research.

Guaranteed Income Pilots Dashboard. N.d. "The Guaranteed Income Pilots Dashboard." <https://guaranteedincome.us/>.

Gubits, Daniel, Marybeth Shinn, Michelle Wood, Stephen Bell, Samuel Dastrup, Claudia Solari, Scott Brown, Debi McInnis, Tom McCall, and Utsav Kattel. 2016. "Family Options Study: 3-Year Impacts of Housing and Services Interventions for Homeless Families." Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <http://dx.doi.org/10.2139/ssrn.3055295>.

HUD Public Affairs. 2023. "HUD Expands More Housing Choices to a Total of 800,000 Households With Rental Assistance." Press release. Washington, DC: U.S. Department of Housing and Urban Development. [https://www.hud.gov/press/press\\_releases\\_media\\_advisories/hud\\_no\\_23\\_242](https://www.hud.gov/press/press_releases_media_advisories/hud_no_23_242).

HUD Real Estate Assessment Center (REAC). n.d. "The Building of a New Inspection Model—National Standards for the Physical Inspection of Real Estate (Nspire)." U.S. Department of Housing and Urban Development. [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/react/nspire](https://www.hud.gov/program_offices/public_indian_housing/react/nspire).

Internal Revenue Service (IRS). n.d. "Emergency Rental Assistance Frequently Asked Questions." <https://www.irs.gov/newsroom/emergency-rental-assistance-frequently-asked-questions>.

Kennedy, Stephen. 1980. *Final Report of the Housing Allowance Demand Experiment*. Washington, DC: U.S. Department of Housing and Urban Development.



Khadduri, Jill. 1979. "The Rent Reduction Credit Feature of the Section 8 Existing Housing Program." In *Occasional Papers in Housing and Community Affairs*, vol. 6: 41–54.

Mayo, Stephen K., Shirley Mansfield, David Warner, and Richard Zwetchkenbaum. 1980. *Housing Allowance and Demand Experiment: Housing Allowances and Other Rental Housing Assistance Programs—A Comparison Based on the Housing Allowance Demand Experiment Part 2: Cost and Efficiency*. Cambridge, MA: Abt Associates.

McCabe, Brian J., and Aaron Shroyer. 2023. "Creating a Direct Rental Assistance Demonstration," *PD&R EDGE*. Washington, DC: U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/pdredge/pdr-edge-frm-asst-sec-090523.html>.

Mills, G., D. Gubits, L. Orr, D. Long, J. Feins, B. Kaul, M. Wood, A. Jones, Cloudburst Consulting Associates, and QED Group. 2006. *Effects of Housing Vouchers on Welfare Families: Final Report*. Prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research. Cambridge, MA: Abt Associates.

National Low-Income Housing Coalition. 2022. "Out of Reach: The High Cost of Housing." <https://nlihc.org/oor>.

Orr, James and Richard W. Peach. 1999. "Housing Outcomes: An Assessment of Long-Term Trends," *FRBNY Economic Policy Review*. <http://dx.doi.org/10.2139/ssrn.1007458>.

Parolin, Zachary, Giulia Giupponi, Emma K. Lee, and Sophie Collyer. 2024. "Consumption Responses to an Unconditional Child Allowance in the United States," *Nature Human Behaviour*. <https://doi.org/10.1038/s41562-024-01835-6>.

Philadelphia Housing Development Corporation. n.d. "PHL Housing Plus: Closing the Gap." <https://phdcphila.org/residents-and-landlords/homebuyers-and-renters/phlhousing-plus/>.

Riccio, James, Victoria Deitch, and Nandita Verma. 2017. *Reducing Work Disincentives in the Housing Choice Voucher Program: Rent Reform Demonstration Baseline Report*. Washington, DC: U.S. Department of Housing and Urban Development.

Rosen, Eva. 2020. *The Voucher Promise: "Section 8" and the Fate of an American Neighborhood*. Princeton, NJ: Princeton University Press.

Schwartz, Amy Ellen, Keren Mertens Horn, Ingrid Gould Ellen, and Sarah A. Cordes. 2019. "Do Housing Vouchers Improve Academic Performance? Evidence From New York City," *Journal of Policy Analysis and Management* 39 (1): 131–158. <https://doi.org/10.1002/pam.22183>.

Shroder, Mark, and Arthur Reiger. 2000. "Vouchers versus Production Revisited," *Journal of Housing Research* 11 (1): 91–107. DOI: 10.1080/10835547.2000.12091951.

Shrivastava, Aditi, and Gina Azito Thompson. 2022. *TANF Cash Assistance Should Reach Millions More Families to Lessen Hardship*. Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/research/family-income-support/cash-assistance-should-reach-millions-more-families>.

Struyk, Raymond J., and Marc Bendick. 1981. *Housing Vouchers for the Poor: Lessons From a National Experiment*. Washington, DC: Urban Institute Press.

The President's Committee on Urban Housing. 1968. *A Decent Home: The Report of the President's Committee on Urban Housing*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/publications/A-Decent-Home-the-Report.html>.

Thrope, Deborah, Marcos Segura, Bridgett Simmons, Jim Grow, and Philip Tegeler. 2022. "Memo: Rent Reasonableness Recommendations." National Housing Law Project and the Poverty & Race Research Action Council. <https://prrac.org/pdf/nhlp-prrac-rent-reasonableness-memo-hud-04-28-2022.pdf>.

Turnham, Jennifer, Meryl Finkel, Larry Buron, Melissa Vandawalker, Bulbul Kaul, Kevin Hathaway, and Chris Kubacki. 2015. *Housing Choice Voucher Program: Administrative Fee Study*. Washington, DC: U.S. Department of Housing and Urban Development.

U.S. Bureau of Labor Statistics. 2023. "Consumer Expenditure Survey: Table 1101."

U.S. Department of Housing and Urban Development (HUD). 1978. *Lower Income Housing Assistance Program (Section 8): Interim Findings of Evaluation Research*. Washington, DC: HUD, Office of Policy Development and Research. Washington.

———. 2018. *Housing Choice Voucher Program Landlord Listening Forums and Focus Groups September*. Washington, DC: HUD. <https://www.hud.gov/sites/dfiles/PIH/documents/ListeningForumsPublicSummary012320.pdf>.

———. 2022. "MTW Research Advisory Committee." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/ph/mtw/expansion/rac](https://www.hud.gov/program_offices/public_indian_housing/programs/ph/mtw/expansion/rac).

———. 2023. "Housing Choice Voucher Data Dashboard." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/hcv/dashboard](https://www.hud.gov/program_offices/public_indian_housing/programs/hcv/dashboard).

# The Future of Rental Assistance: Lessons Learned from Implementing and Evaluating a Direct-to- Tenant Cash Assistance Program, PHLHousing+

Vincent J. Reina  
Matthew Z. Fowle  
Sara R. Jaffee  
University of Pennsylvania

Rachel Mulbry  
Miranda Fortenberry  
Philadelphia Housing Development Corporation

*Disclaimer: Any opinions, conclusions, or recommendations expressed in this article are those of the authors and do not necessarily reflect the view of any entities whom they represent or who provide financial support.*

---

## Abstract

*This article examines a new rental assistance program in Philadelphia, called PHLHousing+, that disburses unconditional cash payments directly to tenants to eliminate their housing cost burden. The program is designed as a 2.5-year randomized controlled trial that aims to test the impact of direct-to-tenant cash assistance on household outcomes compared with traditional housing vouchers. The motivations for the program range from the need for more flexible tools that respond to the diverse needs of low-income renters to the desire for a robust evidence base on effective policies to improve household outcomes. The article also discusses the evolution of the idea behind PHLHousing+ before the COVID-19 pandemic through to its development, using knowledge obtained from upscaling local pandemic emergency rental assistance programs. Finally, the article describes the program's implementation, including participant enrollment, strategies to minimize benefits loss, and cash disbursement mechanisms. It reflects on the lessons learned throughout this process, such as the importance of flexible funding and a strong research-practice partnership. The goal is to provide guidance to those planning similar programs and inform local and national policy, especially on direct-to-tenant, cash-based housing assistance.*

## Introduction

More than 50 years ago, the Experimental Housing Allowance Program (EHAP) was launched to explore the effect of different forms of tenant-based (demand-side) assistance on housing outcomes. The experiment was meant to inform the development of a permanent demand-side housing assistance program, although Congress created the Section 8 program before the study was complete (Richardson, 2017). A lot has changed regarding housing markets and needs during the past half-century. Today, new demand-side assistance models are needed to complement existing tools, which is why this team launched PHLHousing+ in 2021, a randomized controlled trial testing direct-to-tenant, cash-based housing assistance.

The subsidy in PHLHousing+ operates like a traditional housing voucher in that the amount of the monthly subsidy is designed to eliminate household housing cost burdens so that the household pays no more than 30 percent of its income for housing. Unlike the Housing Choice Voucher program, the subsidy in PHLHousing+ is an unconditional cash payment flowing directly to the tenant rather than through a contract with a property owner. Participants for the program were randomly selected from the Philadelphia Housing Authority's waitlists to observe the impact on outcomes of providing cash-based assistance directly to tenants relative to a traditional housing voucher.

This article discusses the motivation for the program and offers reflections on lessons learned from its development, implementation, and evaluation. Given the unique nature of this program, the goal is to provide guidance to those planning similar programs and inform local and national policy, especially on direct-to-tenant, cash-based housing assistance.

## Motivation for the PHLHousing+ Program

Four key factors motivated the development of PHLHousing+:

1. The need for more rental assistance.
2. The local desire for a broader set of supply- and demand-side tools that were more flexible than existing tools and were responsive to the dynamic needs of renters and owners.
3. The acknowledgment of key challenges households face when using a housing voucher.
4. An openness to building an evidence base for whether and how policies improve household outcomes.

Locally and nationally, rental assistance is a significant need. Nationally, four households qualify for rental assistance for every one household that accesses it (Aurand et al., 2023). In Philadelphia, specifically, five times as many households are in need relative to those assisted (Reina, Aiken, and Epstein, 2021). Before the Biden-Harris administration, there was little growth in the number of vouchers available, and although recent increases should be lauded, funding is still far below actual need. This scarcity means that public housing authorities generally offer a voucher to a household only when someone currently receiving the benefit stops using it. The undersupply of vouchers and reliance on reusing the same voucher led to many public housing authorities closing their

waitlists because more people have already applied than can be served in the foreseeable future. Acknowledging the lack of rental assistance, the city of Philadelphia saw an imperative to explore locally funded forms of rental support.

In addition to increased rental assistance, many cities, such as Philadelphia, need more policy tools that can adapt quickly to changing housing markets and needs. Since 2018, the city of Philadelphia has been committed to developing new tools to meet the needs of renters and homeowners. When the city of Philadelphia announced its first citywide housing plan in 2018, *Housing for Equity*, the city also committed to increase support for its Housing Trust Fund by at least \$70 million between fiscal years 2019 and 2023 (City of Philadelphia, 2018). This commitment meant the city was positioned, for the first time, to develop new housing programs that were not defined by the rules that govern federal funding streams. The plan and funding ushered in a period of innovation in the city of Philadelphia across its programs aimed at increasing housing supply and improving housing quality, such as with its Small Landlord Loan Program, and addressing housing demand, such as with PHLHousing+. These programs were administered through the Philadelphia Housing Development Corporation (PHDC), a quasi-public agency operating under the umbrella of the city of Philadelphia's Department of Planning and Development (DPD).

In thinking through what form local demand-side assistance could take in Philadelphia, it was clear that using flexible local dollars to replicate the Housing Choice Voucher program made little sense. Despite the long-standing success of the Housing Choice Voucher program, many voucher recipients face considerable barriers to using the benefit (McCabe, 2023; Rosen, 2020). A core feature of the Housing Choice Voucher program is that a tenant must find a unit where the owner agrees to accept the subsidy. This requirement means that if an owner refuses to accept a voucher, then a tenant cannot use their subsidy to rent that unit. If a tenant does not find another owner who will accept the voucher during the mandated time limit to use the benefit, they could have the voucher taken away from them. Unlike most forms of public assistance, the dual receipt and redemption process for using the subsidy affects both whether someone can even use the assistance they need and where they can choose to live with it (Barnes, 2021). This reality, coupled with a broader set of administrative burdens associated with traditional vouchers, led the city of Philadelphia to develop a more flexible model of housing assistance.

The final motivation for PHLHousing+ was a desire to expand the evidence base for if and how policies improve household outcomes. Even with new funding, the level of housing need in Philadelphia exceeded available resources, which created a premium for evidence-based housing solutions and the use of that evidence to guide policy development at the local, state, and federal levels. Although this context is true in most places, the city of Philadelphia was serious about leveraging its resources to establish new models of housing assistance and show whether they actually worked in improving the livelihood of vulnerable residents. The drive for evidence was the primary motivation for Philadelphia DPD including the Housing Initiative at Penn (HIP) research team in the development of its housing plan and evaluation of several long-standing housing programs. Sharing this desire for research to inform policy, a local funder supported a fellowship for HIP's faculty director to dedicate substantial time to partnering directly with Philadelphia DPD to develop innovative housing solutions. This flexible funding to support human capital was crucial to the cocreation of PHLHousing+.

## Evolution of the PHLHousing+ Program

The idea behind the PHLHousing+ program was formed in 2019 when the Philadelphia DPD partnered with HIP, focusing on developing innovative policies that advance positive youth development. Together, they discussed potential concepts, including a cash assistance program to reduce poverty and housing insecurity in Philadelphia. During this period, several high-profile municipal cash assistance programs, such as the Stockton Economic Empowerment Demonstration launched by then-mayor Michael Tubbs, spurred an emerging guaranteed income movement (Baker et al., 2020); these programs were not specifically tied to housing, nor did payments vary on the basis of housing costs or household income. By early 2020, the Philadelphia DPD and HIP developed the concept with support from the Center for Guaranteed Income Research at the University of Pennsylvania for a cash assistance program to be administered by PHDC that would be designed to reduce poverty for 1,000 households in three streams: low-income renters with children, youth aging out of the foster care system, and people with disabilities. The proposed program was included in then-mayor Jim Kenney's budget proposal for the subsequent fiscal year.

The onset of the COVID-19 pandemic required the city of Philadelphia to eliminate the proposed investment from its budget. Instead, PHDC pivoted to launch the PHLRentAssist emergency rental assistance program, with support from HIP and the Mayor's GovLabPHL team.<sup>1</sup> With federal Emergency Rental Assistance funding, the program disbursed \$299 million to 46,500 households during the next 30 months (City of Philadelphia, 2022). To implement the program, the city, including GovLabPHL and PHDC, created robust information technology infrastructure, customer service systems, outreach and communication strategies, and data collection procedures. A crucial component of the program was a direct-to-tenant payment option, which served as a test case for a cash assistance pilot. Program staff quickly learned that direct-to-tenant payments were an important tool to support tenants renting from landlords who were difficult to reach or reluctant to accept the rental assistance payments. Despite diligent staff outreach, if owners were unresponsive, it was impossible to verify residency and rental arrears and, therefore, support tenants. As a result, over the course of the program, approximately 15 percent of all assistance was paid directly to tenants. Without a direct-to-tenant option, these tenants would have never received assistance.

By design, PHLRentAssist and its implementation were evaluated by HIP. The program evaluation found that those who received assistance had multiple positive outcomes, including lower rent arrears, a lower probability of rent-related debt, and a lower probability of experiencing frequent debilitating anxiety. For many tenants, however, rental challenges persisted, given the ongoing high levels of housing unaffordability in Philadelphia (Reina and Lee, 2023). Although PHLRentAssist was successful at keeping tens of thousands of Philadelphia families housed during the height of the COVID-19 pandemic, it also served as a stark reminder that many households affected by the health and economic impacts of the pandemic struggled with chronic rent burden and housing instability well before 2020. These households would need ongoing financial support, even after the end of the public health emergency. The experience of administering and evaluating PHLRentAssist furthered the case for implementing a direct-to-tenant, cash-based housing assistance program embedded in a broader research framework. As PHLRentAssist expended all available federal funding and would

---

<sup>1</sup> GovLabPHL is an initiative within the Mayor of Philadelphia's policy office focused on supporting and advancing data and evidence-based policymaking and solutions across city agencies.

down, Philadelphia DPD and PHDC leadership returned to the work of reimagining PHLHousing+ as a cash assistance program focused specifically on housing, which would leverage the perspectives, staffing, and infrastructure built during the pandemic.

## **Evaluation of the PHLHousing+ Program**

PHLHousing+ is designed as a 2.5-year randomized controlled trial, with participant households selected from Philadelphia Housing Authority housing assistance waitlists. This research design enables causal inferences about the effects of cash assistance compared with housing vouchers to be made. The study compares three groups:

1. Households who receive monthly cash payments.
2. Households offered a housing voucher under the existing Housing Choice Voucher program.
3. Control households who remain on the housing assistance waitlists, receiving no intervention.

To recruit households, 1,503 and 6,000 households were selected randomly from the bottom one-half of Philadelphia Housing Authority waitlists for the cash and control groups, respectively, and were invited to participate in the study in three waves.<sup>2</sup> Participants were informed that enrollment in the study would not affect their position on any housing assistance waitlist. The cash group comprises the first 300 households who responded to invitations and were eligible for participation.<sup>3</sup> The control group comprises the first 600 households who responded to invitations and some households who were eligible for the cash group but did not respond to requests for additional documentation when processing their application. In addition, 1,097 households randomly selected from the top one-half of the housing choice voucher waitlist and 1,137 additional households who received vouchers in the past 2 years were invited to the voucher group. The existence of the voucher group allows testing of whether direct-to-tenant payments are as effective (if not more so) as vouchers in promoting housing security, housing quality, and other measures of child, adult, and family well-being. The existence of the control group may be particularly informative if outcomes for the cash group are intermediate compared with those in the voucher and control groups because it allows an assessment of whether cash payments result in better outcomes than doing nothing at all.

The evaluation of PHLHousing+ includes three primary data collection methods. First, baseline surveys were conducted for all three study groups and then every 6 months thereafter to assess housing security, financial well-being, health, and child health and educational outcomes. Response rates for the third biannual survey were 80.3, 81.1, and 73.1 percent for the cash, voucher, and control groups, respectively. A monthly survey launched halfway through the study assessed daily activities related to health and well-being. Second, administrative data from the city of Philadelphia and electronic health records on public service usage, system involvement, child

---

<sup>2</sup> More households were invited to enroll in the control group compared with the cash group to obtain an adequate sample size to maximize statistical power.

<sup>3</sup> Households were ineligible for the cash group if they were a homeowner, lived in public housing, received a housing voucher, earned more than 50 percent of Area Median Income, did not live in Philadelphia, or did not have a child younger than 15 years old living in the household.

and adolescent academic outcomes, and health metrics are being linked to study participants. Third, semi-structured interviews probed the mechanisms linking cash payments and vouchers to housing, health, and well-being outcomes, the effect of the programs on household decision-making, and participant experiences of the programs. Approximately 50 households receiving cash payments and 25 households receiving housing vouchers have been interviewed, with additional interviews planned for later in the study.

## **Rationale for Cash-Based Housing Assistance**

Since the Experimental Housing Allowance Program 50 years ago, no study has compared cash assistance and vouchers. It is expected that direct cash assistance and housing vouchers differ with respect to their effect on tenant and landlord behavior and household outcomes. The following list includes three theoretical benefits of cash-based housing assistance over a traditional housing voucher tested in the PHLHousing+ evaluation.

### **1. Reduce Administrative Burdens**

The Housing Choice Voucher program can introduce numerous administrative burdens for renters seeking assistance, property owners engaging in the program, and even the housing authority administering the program. One key premise of PHLHousing+, and any direct-to-tenant assistance program, is determining whether or how program design can reduce burdens while maintaining or improving effectiveness and efficiency compared with traditional housing vouchers.

Tenants in the Housing Choice Voucher program encounter substantial burdens to using a voucher: a household must find a landlord willing to accept their voucher, fill out the necessary paperwork, and undergo an initial and annual housing quality inspection. These processes create delays in signing a lease, especially if a landlord decides not to cooperate or a unit fails inspection. In theory, the requirement that units pass initial and ongoing Housing Quality Standards inspections ensures access to safe and decent housing for recipients. Although data about the quality of voucher units are limited, evidence shows housing vouchers lead to increases in unit size and reductions in overcrowding (Mills et al., 2006). By contrast, PHLHousing+ imposes no unit quality requirements. Although the absence of inspections may mean direct-to-tenant cash assistance yields less improvement in housing quality for recipients, it is important to note that vouchers do not induce improvements in the overall quality of housing stock available to low-income renters (Eriksen and Ross, 2015). In a city like Philadelphia, where the overall quality of housing stock is low, renters do not have a lot of higher-quality housing choices. Voucher inspections, therefore, are ineffective tools for improving overall housing quality but may allow some recipient households to obtain better-quality housing. PHLHousing+ will provide insight into whether the benefits of eliminating a key administrative burden outweigh the costs of a reduction in unit quality.

For landlords, administrative processes in the Housing Choice Voucher program can create costly delays, especially if their unit sits vacant while awaiting housing authority approval.



Many landlords perceive housing inspectors to be inconsistent in applying standards and the inspection process to be onerous in its demands, particularly in cities with older housing stock (Garboden et al., 2018). For example, some inspectors may require either arbitrary or unrelated upgrades to the quality of the unit, and other inspectors accept bribes to overlook minor issues (Garboden et al., 2018; Greenlee, 2014). Interviews with tenants revealed scenarios where a tenant was so desperate to keep their voucher or to avoid a forced move that they spent their own money on repairs to their unit so it would pass inspection (DeLuca, Garboden, and Rosenblatt, 2013). Cash assistance, by comparison, has very few strings attached. In PHLHousing+, households do not need to find a landlord willing to accept a voucher, undergo housing quality inspections, and sign an agreement with the housing authority. Landlords renting to cash recipients may avoid the administrative burdens associated with vouchers but lose the security of a guaranteed monthly payment from the government.

For public housing authorities, cash assistance may be a cost-efficient alternative to vouchers. Major costs related to housing vouchers include ongoing administration for voucher holders, participant intake and eligibility determination, negotiation of rents and contracts with landlords, and housing inspections. Each year, housing authorities spend an average of 13.8 hours on administrative tasks related to a single voucher (Turnham et al., 2015). In PHLHousing+, negotiations with landlords and housing inspections are eliminated. Tenants may use their purchasing power to determine if a rental unit meets their standards, as other renters do on the private market. Leases would be signed between the tenant and landlord only, avoiding the need for the housing authority to be involved in the agreement. Nevertheless, it is unclear what impact the elimination of these administrative processes might have on tenant housing quality and what the impact would be of shifting some administrative burdens from housing authorities and landlords to tenants.

## **2. *Increase Lease-Up Rates and Improve Residential Options***

Providing assistance directly to tenants improves the ability to obtain the subsidy and lease a unit using these funds and could increase housing options. The costs of participating in the Housing Choice Voucher program lead to landlords with higher-quality units in more desirable locations refusing to rent to voucher holders. As a result, landlords with lower-quality housing are more likely to specialize in renting to voucher holders and actively recruit them. This specialization limits the pool of available housing for voucher holders and skews it to disadvantaged neighborhoods where landlords have more to gain by securing a tenant with a steady stream of federal rental support (Rosen, 2020). Moreover, although housing vouchers are designed to be portable across jurisdictional lines, in practice, bureaucratic hurdles may limit voucher holders to a single locality (Greenlee, 2011). PHLHousing+ is testing whether direct-to-tenant assistance could improve benefit use rates and increase a tenant's housing options. Rates of landlord participation in voucher programs are low in many cities (Cunningham et al., 2018). Research suggests that voucher use rates are sometimes even lower for Black

households and those with children, such that discrimination against voucher holders disproportionately hurts these groups (Reina and Winter, 2019). Direct cash assistance has the potential to help renters bypass these barriers.

Advocates of direct cash assistance argue that it is not only less expensive to deliver than other kinds of assistance but that it also has a greater impact on outcomes (Kenny, 2015). As a potentially “invisible” benefit, direct cash assistance may reduce the stigma and discrimination associated with traditional housing vouchers. Although Philadelphia has a local source of income discrimination law barring owners from rejecting a tenant on the basis of their desire to use a voucher to rent a unit, 67 percent of local landlords refused to accept a voucher in 2018 (Cunningham et al., 2018). In low-poverty neighborhoods, an even higher 83 percent of landlords rejected voucher holders (Cunningham et al., 2018). PHLHousing+ will determine whether direct cash assistance provides greater flexibility in where households can live, enabling them to move, for example, from neighborhoods characterized by high rates of violent crime to safer neighborhoods.

### 3. *Greater Flexibility for Households That Improves Their Housing Outcomes*

Direct-to-tenant cash assistance offers the recipient more authority and agency in when and how to use the benefit. Housing vouchers are in-kind transfers; as such, they must be used for a particular good—in this case, rental housing. The Housing Choice Voucher program further restricts the use of vouchers to only certain rental costs. The voucher covers the difference between 30 percent of a household’s income and fair market rent, and the voucher may not be used toward security deposits, rental application fees, or other housing-related costs. These restrictions ensure that the assistance is used for the intended purpose, but they may also hamper voucher holders’ abilities to find and lease a unit within a housing authority’s search time limit or to pay other costs that may directly affect their housing stability. Peterson (2000) also notes that some voucher regulations restrict aspects of what might be seen as a household’s private choice, such as the number of persons per bedroom, which limits voucher households’ abilities to trade off unit size and location. In reality, low-income households residing in nontraditional living arrangements—such as renting a single room, doubling up with another household, or verbally agreeing to a lease—are unfairly excluded from the Housing Choice Voucher program. In PHLHousing+, households who receive cash assistance may decide to stay in place, downsize to save money, or build their credit while waiting for more suitable rental units to enter the market. When they find a suitable rental unit, households receiving cash assistance may also be more likely to have a landlord accept their source of income.

Direct assistance could maximize each family’s ability to achieve housing stability by having more control, access, and use of funds. Mounting evidence shows that housing insecurity coincides with other forms of insecurity, including food and healthcare insecurity, both of which are associated with poor academic and behavioral outcomes for children (Cutts et al., 2011; Ma, Gee, and Kushel, 2008; Shankar, Chung, and Frank, 2017). The U.S. Census Bureau Household Pulse Survey (2022) found that among adults in the Philadelphia region who were behind on rent or at risk of eviction, more

than one-third reported sometimes or often not having enough food to eat. Direct cash assistance recognizes these multiple, overlapping needs. It demonstrates trust in low-income families' abilities to strategize and prioritize, which may reduce the stress, trauma, and administrative burdens often associated with navigating welfare programs (see, for example, Raker and Woods, 2023). Fears that assisted households will squander direct cash payments or drop out of the workforce appear largely unfounded; instead, evidence from the United States and Canada shows that unconditional cash transfers improve nutrition, increase educational attainment, reduce alcohol and cannabis dependence, decrease criminal activity, and lead to more positive interactions between children and parents (Akee et al., 2010; Forget, 2011; Hum and Simpson, 1993; Jones and Marinescu 2022; Salkind and Haskins, 1982).

One concern, however, is that this greater flexibility can apply to owners in ways that reduce some renter protections. Without contracts with landlords, housing authorities cannot attach more stringent eviction protections to the subsidy, which could expose some tenants receiving cash assistance to greater risk of displacement (Preston and Reina, 2021).

## **Lessons Learned From Program Implementation**

In early 2022, building off the infrastructure developed during the pandemic, PHDC and HIP launched the PHLHousing+ program, which delivers unconditional cash assistance to 300 low-income families with children. This launch process entailed randomizing waitlist data; replicating the Housing Choice Voucher program subsidy calculation methods; building an online intake process; reaching out to selected households on housing assistance waitlists; enrolling households using income, benefits, and housing cost information; and distributing debit cards used for payment disbursement.

**Enrollment.** PHLHousing+ was designed to mirror the Philadelphia Housing Authority's Housing Choice Voucher program, with the method of rental assistance payment being designated as the central difference. The eligible population for PHLHousing+ included low-income renter households in Philadelphia who have at least one child younger than the age of 16 and are not receiving a housing voucher or living in a public housing unit.

The team chose not to recruit households publicly and then randomly select from that group who would be enrolled in the program to prevent some households from applying but not receiving assistance. Instead, the team invited households from the bottom one-half of Philadelphia Housing Authority waitlists to apply for the PHLHousing+ program. By using the position households were randomly allocated on the waitlist by the housing authority, those at the bottom of the waitlist were unlikely to be offered a voucher soon and would maintain their waitlist position and access to long-term housing assistance, both during and after participation in PHLHousing+.<sup>4</sup> In addition, given the difficulties people face using a voucher, the team did not want to choose what form of assistance people should receive through random assignment to a cash or voucher group. Doing so would effectively be asking people needing support to sign up for a program in which they

---

<sup>4</sup> Before 2023, the Philadelphia Housing Authority voucher waitlist was last open to applications in 2010. It took more than 12 years to clear the 55,000 applications received.

could be guaranteed assistance in the direct-to-tenant cash assistance group for 2.5 years or be randomly assigned a voucher that could last a lifetime but comes with a greater number of known administrative burdens and the risk they may be unable to use.

Invitations were sent in multiple waves via postal mail, text message, and email, with followup phone calls made by PHDC staff. Phone calls were found to be the most effective mode of outreach. Sending invitations in waves allowed PHDC staff to monitor response rates closely so that all households who started the intake process and were found eligible were allowed to enroll in the 300-household cohort. The time from the completion of an intake form to enrollment varied greatly among households, depending on how difficult it was for them to produce the required documentation. To accommodate this variation and minimize the amount of time enrolled households were waiting to receive their first payment, PHDC began making monthly cash payments to households in three monthly cohorts from September through November 2022.

Simultaneously, using the same outreach methods, HIP researchers randomly invited households from the top one-half of Philadelphia Housing Authority's Housing Choice Voucher program waitlist to participate in the voucher group and households from the bottom one-half of housing assistance waitlists to participate in the control group.

It was necessary to invite a much larger number of randomly selected households to enroll in the program and the study than needed because contact information on the Philadelphia Housing Authority waitlists was often outdated. It was assumed that control group households, because of their location on the bottom one-half of waitlists, would not be offered any form of housing assistance in the 2.5 years participating in the study, but study participation did not (and could not) deny families the right to accept housing assistance if it was offered to them.

PHDC used an online-only application process, which proved to be both accessible and efficient, based on participant survey and interview results. Prospective participants completed an intake form and uploaded supporting documents via a dedicated online portal built by PHDC using the QuickBase platform. The intake form collected contact information, household composition and demographics, public benefits, housing expenses, and employment and income for each household member. Documentation proving a Philadelphia address, all income sources, and at least one child in the household was required. Each household was assigned a single point of contact through the intake process whom they could contact with questions. Application processes mirrored Philadelphia Housing Authority guidelines as closely as possible.

**Benefits Loss Mitigation.** PHDC employed a threefold strategy to proactively protect and minimize the effect of cash payments on households' existing public benefits. First, PHDC calculated the risk to each applicant's existing benefits using the Atlanta Federal Reserve Bank's Benefits Cliff Dashboard so households could consider the risk of benefits loss when choosing whether to enroll in PHLHousing+. Afterward, applicants with a high risk of benefits loss were required to attend an online group benefits counseling session led by the Benefits Access Unit of the city of Philadelphia's Office of Community Empowerment and Opportunity. Applicants with a low or medium risk were strongly encouraged to attend. Overall, 94 percent of enrolled

households attended a benefits counseling session, and many households noted that group sessions, rather than individual sessions, were especially helpful.

Second, waivers from the Pennsylvania Department of Human Services were obtained to protect Temporary Assistance for Needy Families, Medicaid, Low Income Home Energy Assistance Program, and Low Income Household Water Assistance Program benefits. The Benefits Unit at Community Legal Services, a local legal aid organization, also offered extensive guidance regarding the risk to public benefits for households receiving Supplemental Security Income (SSI) and Supplemental Nutrition Assistance Program (SNAP) benefits. PHDC recommended that households receiving SSI or Child Care and Development Fund subsidies not enroll in the program because the risk of benefits loss was high.

Third, PHDC established a *hold harmless fund* to reimburse participants for any financial impact of the cash payments on SNAP benefits. During the public health emergency, household SNAP benefits were only reduced if their PHLHousing+ income was high enough to make them completely ineligible for SNAP. When the public health emergency rules ended—and on the basis of new federal guidance—the Pennsylvania Department of Human Services expanded the original waiver to include SNAP benefits, after which the hold harmless fund was closed.

**Disbursement of Cash Payments.** The program was designed to make the delivery of assistance as easy as possible for participants. Households in the cash group received monthly cash payments to eliminate their rent burden, so they paid no more than 30 percent of their monthly income toward housing costs. The amount of the cash payment was calculated using the same methodology as housing vouchers, except housing costs at intake were based on the Small Area Fair Market Rent (SAFMR) for a household's current place of residence rather than the actual rent cost of their unit. Each year, the U.S. Department of Housing and Urban Development (HUD) establishes the maximum rent level for a unit leased with a voucher, adjusted for bedroom count. This maximum level was traditionally established for a metropolitan area, but HUD began allowing housing authorities to use estimates determined at the ZIP Code level to account for the variation in rents across neighborhoods in 2011. The Housing Choice Voucher (HCV) program then pays the lesser of the payment standard and the actual housing costs. By contrast, PHLHousing+ used SAFMR estimates to calculate a monthly payment amount to be paid immediately upon enrollment. When the program began, the median monthly payment was \$881.

PHDC contracted with Mobility Capital Finance, Inc. (MoCaFi), a social impact financial services company, to provide every household in the study with a reloadable debit card that could be used in person and online. Payments were loaded directly onto each household's card on the 20th of each month, and they could access their funds without restriction. The same debit cards processed survey compensation payments. Approximately 40 percent of funds were withdrawn as cash.

PHDC used an online form to recertify household addresses, income, expenses, members, and living arrangements after 12 months of participation in the PHLHousing+ program. Unlike during enrollment, households were required to submit rental leases or proof of three monthly rental payments during recertification. Households who paid rent in cash could provide paper receipts or, as a last resort, signed and dated letters from their landlord. Monthly cash payments

were recalculated on the basis of current income and actual housing costs, and standard utility allowances were used to mirror the Philadelphia Housing Authority's protocol. After recertification, the median monthly payment amount dropped slightly to \$850. This decrease was likely due to the use of actual housing costs in place of SAFMR because more than 80 percent of households reported rents below SAFMR. In addition, 6 percent of households were found not to be housing cost-burdened during recertification and received a \$0 monthly payment until their income or housing costs changed and an interim recertification showed no cost burden. After recertification, 3 percent of households had moved outside the city of Philadelphia, which is allowed under the program to mirror the ability to port a voucher.

Households could request an interim recertification up to once every 6 months for the duration of the program but were not otherwise required to complete another recertification. PHLHousing+ program recertification protocols followed the Philadelphia Housing Authority recertification protocol for housing choice vouchers as closely as possible.

**Funding.** This program was only possible due to multiple forms of flexible public and private funding. PHDC, the City of Philadelphia, and HIP secured \$4.4 million in funding for the project from philanthropic partners, including Spring Point Partners LLC, the William Penn Foundation, and additional support from the Stoneleigh Foundation. The flexible funding from the Stoneleigh Foundation allowed the HIP team to work with the City of Philadelphia through several years of program design and development and provided early research funding support. In addition, significant support for the research component from the William Penn Foundation ensured that the study was an essential part of the program's ongoing operations. Finally, substantial support from Spring Point Partners LLC for tenant cash assistance bridged a serious gap in funding to make the project feasible. Additional financial support for the program came from the Samuel S. Fels Fund, and financial support for staffing and research on additional health outcomes came from the Russell Sage Foundation and the National Institutes of Health.

This private support was paired with \$4.7 million in funding from the City of Philadelphia. Flexible public funding from the city's Housing Trust Fund and bond proceeds from the Neighborhood Preservation Initiative were keys to PHLHousing+ success. These relatively local, new funding sources support a wide range of housing and community development programs, including new programs like PHLHousing+ that address housing insecurity in innovative ways that would be difficult to fund with existing federal sources.

**Research-Practice Partnership.** A strong research-practice partnership from the program's inception enabled a comprehensive evaluation structure to be embedded throughout the PHLHousing+ program. The long-term collaboration between PHDC and HIP ensured that research was integral to the program design and that practitioners received timely, policy-relevant insight. Given the shifting policy and funding landscape and the complex research design, this close partnership was essential to the design, launch, and ongoing operation of the program. An interdisciplinary research team with expertise in housing, public health, and psychology continues to support research on a range of outcomes, including housing security, financial well-being, health, parent-child relationships, and child education.

## **Conclusion**

The future of rental assistance should include programs that reflect the broad and complex needs of low-income renters and the housing realities they face. With that in mind, PHLHousing+ aims to provide insight into whether and how direct-to-tenant, cash-based housing assistance affects household incomes and to inform broader policy efforts to address housing unaffordability effectively. Compared with the Housing Choice Voucher program, PHLHousing+ has the potential to reduce administrative burdens for tenants, landlords, and housing authorities; increase tenant lease-up rates and improve residential options; and provide greater flexibility for households that improves their housing outcomes, including their housing stability. To test these outcomes, a randomized controlled trial sampling from tenants on the Philadelphia Housing Authority's housing assistance waitlists was designed. The study compares households receiving direct-to-tenant cash assistance with a comparison voucher group and a control group receiving no assistance.

The enrollment strategy reduced burdens and negative effects on households through a low-barrier online application system that minimized upfront administrative costs and ensured that study participation would not affect any household's ability to receive a housing voucher in the future. Potential benefits loss from receiving cash assistance was mitigated by providing benefits counseling sessions, obtaining waivers to protect key benefits, and creating a reserve fund to compensate households for a loss of benefits. To disburse cash payments to tenants as quickly as possible, housing quality inspections were eliminated, the housing authority's role in negotiating with landlords was removed, and payments were calculated using the SAFMR for the household's current place of residence. In addition, tenants received debit cards that could be used in-person or online, where funds would be deposited monthly.

Two key factors that enabled the development of this program were (1) an ongoing research partnership between the City of Philadelphia and HIP, leading to the cocreation of the program and its evaluation, and (2) flexible support from funders who provided upfront funding for the human capital costs needed to develop the program, cash assistance disbursed to tenants, and evaluation of the program. The authors hope that the insight shared here and in the findings planned for release in 2025 will inform the design of other rental assistance programs locally and nationally and show the way research and researchers can be a central component.

## **Acknowledgments**

This work is supported by grants for program development and operations and for research design and implementation by the Stoneleigh Foundation, William Penn Foundation, Russell Sage Foundation, National Institutes of Health, Samuel S. Fels Fund, and Spring Point Partners LLC.

The authors gratefully acknowledge the contributions of the many staff involved in establishing, designing, and implementing PHLHousing+. Specifically, we thank Greg Heller and Jane Allen for their roles in conceptualizing and building support for the program. We also appreciate the support of leadership and staff at the City of Philadelphia and PHDC, including Ryan Ambrose, Alberta Benn, Anjali Chainani, Anne Fadullon, Ryan Harmon, Raissah Kouame, Mariele McGlazer,

Ali Mooney, Nathaniel Olin, Maari Porter, and Dave Thomas, and at the Philadelphia Housing Authority, Kelvin Jeremiah, Kyle Flood, and Bret Holden. Dr. Amy Castro, Dr. Stacia West, and Erin Coltrera at the University of Pennsylvania Center for Guaranteed Income Research provided guidance on program development, survey design, and qualitative data collection. J.J. Meyer at the Jaffee Lab provided important project management and research implementation support. We are grateful to Brian McCabe for his helpful feedback on the manuscript.

## Authors

Vincent J. Reina is an associate professor in the Department of City and Regional Planning and Faculty Director of the Housing Initiative at Penn at the University of Pennsylvania. Matthew Z. Fowle is a postdoctoral fellow in the Housing Initiative at Penn at the Stuart Weitzman School of Design at the University of Pennsylvania. Rachel Mulbry is a housing programs manager at the Philadelphia Housing Development Corporation. Miranda Fortenberry is a program analyst at the Philadelphia Housing Development Corporation. Sara R. Jaffee is a professor and chair of the Department of Psychology at the University of Pennsylvania.

## References

- Akee, Randall K.Q., William E. Copeland, Gordon Keeler, Adrian Angold, and E. Jane Costello. 2010. "Parents' Incomes and Children's Outcomes: A Quasi-Experiment Using Transfer Payments From Casino Profits," *American Economic Journal: Applied Economics* 2 (1): 86–115.
- Aurand, Andrew, Dan Emmanuel, Emma Foley, Matt Clarke, Ikra Rafi, and Diane Yentel. 2023. *The Gap: A Shortage of Affordable Homes*. National Low Income Housing Coalition. [https://www.nlihc.org/sites/default/files/gap/Gap-Report\\_2023.pdf](https://www.nlihc.org/sites/default/files/gap/Gap-Report_2023.pdf).
- Baker, Amy Castro, Stacia Martin-West, Sukhi Samra, and Meagan Cusack. 2020. "Mitigating Loss of Health Insurance and Means Tested Benefits in an Unconditional Cash Transfer Experiment: Implementation Lessons From Stockton's Guaranteed Income Pilot," *Social Science and Medicine (SSM) - Population Health* 11: 100578.
- Barnes, Carolyn Y. 2021. "'It Takes a While To Get Used to:' The Costs of Redeeming Public Benefits," *Journal of Public Administration Research and Theory* 31 (2): 295–310.
- City of Philadelphia. 2022. "Philadelphia COVID-19 Emergency Rental and Utility Assistance Dashboard." COVID-19 Emergency Rental Assistance Program. City of Philadelphia <https://phlrentassist.org/dashboard/>.
- . 2018. *Housing for Equity: An Action Plan for Philadelphia*. <https://www.housinginitiative.org/uploads/1/3/2/9/132946414/housing-action-plan-final-for-web.pdf>.
- Cunningham, Mary, Martha Galvez, Claudia L. Aranda, Rob Santos, Doug Wissoker, Alyse Oneto, Rob Pitingolo, and James Crawford. 2018. *A Pilot Study of Landlord Acceptance of Housing Choice Vouchers*. U.S. Department of Housing and Urban Development. <https://www.huduser.gov/portal/portal/sites/default/files/pdf/Landlord-Acceptance-of-Housing-Choice-Vouchers.pdf>.



- Cutts, Diana Becker, Alan F. Meyers, Maureen M. Black, Patrick H. Casey, Mariana Chilton, John T. Cook, Joni Geppert, Stephanie Ettinger de Cuba, Timothy Heeren, Sharon Coleman, Ruth Rose-Jacobs, and Deborah A. Frank. 2011. "US Housing Insecurity and the Health of Very Young Children," *American Journal of Public Health* 101 (8): 1508–1514.
- DeLuca, Stefanie, Philip M.E. Garboden, and Peter Rosenblatt. 2013. "Segregating Shelter: How Housing Policies Shape the Residential Locations of Low-Income Minority Families," *The Annals of the American Academy of Political and Social Science* 647 (1): 268–299.
- Eriksen, Michael D., and Amanda Ross. 2015. "Housing Vouchers and the Price of Rental Housing," *American Economic Journal: Economic Policy* 7 (3): 154–176.
- Forget, Evelyn L. 2011. "The Town With No Poverty: Using Health Administration Data To Revisit Outcomes of a Canadian Guaranteed Annual Income Field Experiment," *Canadian Public Policy* 37 (3): 283–305.
- Garboden, Philip M., Eva Rosen, Stefanie DeLuca, and Kathryn Edin. 2018. "Taking Stock: What Drives Landlord Participation in the Housing Choice Voucher Program," *Housing Policy Debate* 28 (6): 979–1003.
- Greenlee, Andrew J. 2014. "More Than Meets the Market? Landlord Agency in the Illinois Housing Choice Voucher Program," *Housing Policy Debate* 24 (3): 500–524.
- . 2011. "A Different Lens: Administrative Perspectives on Portability in Illinois' Housing Choice Voucher Program," *Housing Policy Debate* 21 (3): 377–403.
- Hum, Derek, and Wayne Simpson. 1993. "Economic Response to a Guaranteed Annual Income: Experience From Canada and the United States," *Journal of Labor Economics* 11 (1, Part 2): S263–S296.
- Jones, Damon, and Ioana Marinescu. 2022. "The Labor Market Impacts of Universal and Permanent Cash Transfers: Evidence From the Alaska Permanent Fund," *American Economic Journal: Economic Policy* 14 (2): 315–340.
- Kenny, Charles. 2015. "Give Poor People Cash," *The Atlantic*. <https://www.theatlantic.com/international/archive/2015/09/welfare-reform-direct-cash-poor/407236/>.
- Ma, Christine T., Lauren Gee, and Margot B. Kushel. 2008. "Associations Between Housing Instability and Food Insecurity With Health Care Access in Low-Income Children," *Ambulatory Pediatrics* 8 (1): 50–57.
- McCabe, Brian J. 2023. "Ready to Rent: Administrative Decisions and Poverty Governance in the Housing Choice Voucher Program," *American Sociological Review* 88 (1): 86–113.
- Mills, Gregory, Daniel Gubits, Larry Orr, David Long, Judie Feins, Bulbul Kaul, and Michelle Wood. 2006. *Effects of Housing Vouchers on Welfare Families*. Washington, DC: U.S. Department of Housing and Urban Development. [https://www.huduser.gov/portal/Publications/pdf/hsgvouchers\\_1\\_2011.pdf](https://www.huduser.gov/portal/Publications/pdf/hsgvouchers_1_2011.pdf).

Peterson, George. 2000. "Housing Vouchers: The U.S. Experience." In *Vouchers and the Provision of Public Services*, edited by C. Eugene Steuerle, Van Doorn Ooms, George Peterson, and Robert D. Reischauer. Washington, DC: Brookings Institution Press.

Preston, Gregory, and Vincent J. Reina. 2021. "Sheltered From Eviction? A Framework for Understanding the Relationship Between Subsidized Housing Programs and Eviction," *Housing Policy Debate* 31 (3–5): 785–817.

Raker, Ethan J., and Tyler Woods. 2023. "Disastrous Burdens: Hurricane Katrina, Federal Housing Assistance, and Well-Being," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (5): 122–143.

Reina, Vincent J., Claudia Aiken, and Jenna Epstein. 2021. *Exploring a Universal Housing Voucher*. Philadelphia: The Housing Initiative at Penn. <https://www.housinginitiative.org/universal-voucher.html>.

Reina, Vincent J., and Yeonhwa Lee. 2023. "COVID-19 and Emergency Rental Assistance: Impact on Rent Arrears, Debt, and the Well-Being of Renters in Philadelphia," *RSF: The Russell Sage Foundation Journal of the Social Sciences* 9 (3): 208–229.

Reina, Vincent J., and Ben Winter. 2019. "Safety Net? The Use of Vouchers When a Place-Based Rental Subsidy Ends," *Urban Studies* 56 (10): 2092–2111.

Richardson, Todd M. 2017. *Blast From the Past: How the Experimental Housing Allowance Program of the 1970s Can Inform the Moving to Work Expansion Today*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/pdredge/pdr-edge-frm-asst-sec-032017.html>.

Rosen, Eva. 2020. *The Voucher Promise: "Section 8" and the Fate of an American Neighborhood*. Princeton, NJ: Princeton University Press.

Salkind, Neil J., and Ron Haskins. 1982. "Negative Income Tax: The Impact on Children From Low-Income Families," *Journal of Family Issues* 3 (2): 165–180.

Shankar, Priya, Rainjade Chung, and Deborah A. Frank. 2017. "Association of Food Insecurity With Children's Behavioral, Emotional, and Academic Outcomes: A Systematic Review," *Journal of Developmental and Behavioral Pediatrics* 38 (2): 135–150.

Turnham, Jennifer, Meryl Finkel, Larry Buron, Melissa Vandawalker, Bulbul Kaul, Kevin Hathaway, and Chris Kubacki. 2015. *Housing Choice Voucher Program Administrative Fee Study: Final Report*. Washington, DC: U.S. Department of Housing and Urban Development. [https://www.huduser.gov/portal/publications/pdf/adminfeestudy\\_2015.pdf](https://www.huduser.gov/portal/publications/pdf/adminfeestudy_2015.pdf).

U.S. Census Bureau. 2022. "Phase 3.4 PUF Releases." Household Pulse Survey Public Use File (PUF). Suitland, MD: U.S. Census Bureau. <https://www.census.gov/programs-surveys/household-pulse-survey/datasets.html>.

# Refereed Papers

*Refereed papers that appear in Cityscape have undergone a thorough and timely double-blind review by highly qualified referees. The managing editor reviews submitted manuscripts or outlines of proposed papers to determine their suitability for inclusion in this section. To submit a manuscript or outline, send an e-mail to [cityscape@hud.gov](mailto:cityscape@hud.gov).*

---

# Complete Streets as a Redevelopment Strategy

Arthur C. Nelson  
Robert Hibberd  
University of Arizona

*Our main streets and thoroughfares need a radical redesign. Complete Streets aren't just about bike lanes and sidewalks; [they're] also about traffic signals, medians, and transit. It's about helping people move around freely and safely, stopping the traffic carnage on our streets, building affordable housing, and supporting economic development. If we do this correctly, it will create redevelopment opportunities while improving affordability, safety, and community livability.*

Earl Blumenauer, Member of Congress<sup>1</sup>

---

## Abstract

*This article asserts that converting America's main streets and thoroughfares into Complete Streets is an important redevelopment strategy. Although this article will show that they improve safety, their principal purpose—the extent to which they are associated with redevelopment—has not been researched. This article presents the first comprehensive assessment of the role of Complete Streets as a redevelopment strategy. Using statistical analysis applied to 26 Complete Streets in 16 central counties, research reported in this article establishes associations between Complete Streets and increased jobs, people, and households; improved jobs-housing balance; increased commuting via transit, walking, and biking; working from home; and increased multifamily residential rents with respect to proximity, meaning that people are more willing to pay to be close to Complete Streets. Moreover, constituting less than six-tenths of one percent of their central county urbanized land areas between 2013 and 2019 (after the Great Recession but before the COVID-19 pandemic), Complete Streets accounted for disproportionately large shares of central county growth and change. Although the Complete Streets in the research sample cost about \$600 million to build (in 2023 dollars), much of which would have been spent anyway in the normal cycle of street rehabilitation and upgrades, it is estimated that they are associated with \$6 billion in redevelopment investments. Few economic development programs match this return on investment. Although some evidence indicates gentrification, policy interventions are outlined to help mitigate adverse outcomes. It may be difficult to imagine more cost-effective redevelopment strategies than Complete Streets.*

---

<sup>1</sup> Adapted and expanded from <https://blumenauer.house.gov/media-center/press-releases/blumenauer-introduces-bipartisan-bill-to-maintain-nation-s-orphan-highways> pursuant to correspondence of November 20, 2023.

## Overview

According to the U.S. Department of Transportation, Complete Streets provide safe options for all users of streets, including pedestrians, bicyclists, motorists, and transit riders. This article will show that, in addition to their primary purpose of improving safety, Complete Streets attract jobs, people, and households; improve the local jobs-housing balance ratio; reduce automobile dependency; and increase real estate values. Complete Streets are thus an important redevelopment strategy. It will also contend that Complete Streets help meet the market demand for walkable and transit-accessible communities. Given that the market demand for them vastly exceeds supply, an approach is outlined to capture the value added from Complete Street investments in a way to leverage more of them. Strategies to mitigate potentially adverse gentrification outcomes are also presented.

The article begins with a review of what Complete Streets are, including their history and their principal planning and design features, with special reference to improving pedestrian, cyclist, and traffic safety. It continues by asserting that Complete Streets are a form of redevelopment because they involve the redevelopment of the physical streets on which they are formed. This assertion leads to the proposition that Complete Streets leverage redevelopment along and near their corridors in the ways described in this article. After reviewing redevelopment concepts and applications relevant to Complete Streets, this discussion closes by showing that the market demand for Complete Streets and associated landscapes far exceeds supply.

The article continues by presenting various theories associated with redevelopment outcomes with respect to Complete Streets along the dimensions of safety, jobs, people (including households), housing, gentrification, jobs-housing balance, change in commuting mode to work, and real estate values focusing on multifamily rents. This discussion is followed by a review of the literature reporting Complete Streets outcomes along those dimensions. The section continues by identifying gaps in the literature on the association between Complete Streets and redevelopment outcomes. Gaps are framed in terms of research questions, which are followed by hypotheses that guide the research for which findings are reported in subsequent sections.

The following sections present research designs, data, methods, and results with interpretations with respect to the association between Complete Streets and attracting jobs; attracting people and households, with special reference to gentrification; change in the jobs-housing balance ratio; change in commuting patterns; and influence on multifamily rents.

This article concludes with a summary assessment of research findings showing how Complete Streets are an important redevelopment strategy. The conclusion outlines an approach to capturing the value added from Complete Street investments to create new ones and to help mitigate such impacts as gentrification. The authors also call for an expansion of Complete Streets to meet market needs and to increase opportunities for jobs and people. Finally, the conclusion discusses how Complete Streets could affect housing, improve jobs-housing balance, reduce automobile dependency, and improve real estate values.

The article proceeds with an introduction to the Complete Streets movement, what they are, how they advance safety, the market demand for them, and their role in facilitating redevelopment.

## The Complete Streets Movement

This section provides a brief history of Complete Streets, their policy purpose, their planning and design, their role in improving safety, the apparent market demand for them, and their potential role as a redevelopment strategy.

### Brief History and Purpose

Arguably, Oregon launched the nation's first Complete Streets effort in 1971. Over the objections of highway interests, the Oregon Department of Transportation (ODOT), and the state's then pro-land use planning governor, Tom McCall, Oregon enacted the "Bike Bill." The current version of this state law requires that new or rebuilt roads accommodate bicycles and pedestrians safely and conveniently. ODOT now works with local governments to plan, design, and fund bicycle and pedestrian facilities in the state's rights-of-way. One percent of the state's highway budget is earmarked for this purpose.

Since Oregon's initiative, 32 more states, the District of Columbia, and Puerto Rico have adopted Complete Street statutes. California may best capture the purpose of Complete Streets, as follows:

[A] balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways (including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, public transportation, and seniors) for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context.<sup>2</sup>

The U.S. Department of Transportation offers this definition of Complete Streets (McCann, Boutros, and Biton, 2023):

Complete Streets is a transformative strategy in which the transportation network is planned, designed, built, operated, and maintained to enable safe mobility and access for all road users, including, but not limited to, pedestrians, bicyclists, motorists, and transit riders across a broad spectrum of ages and abilities.

By 2024, more than 1,700 cities, towns, and counties had adopted Complete Streets policies.<sup>3</sup>

### Complete Street Planning and Design

Every Complete Street is different because no single template exists for them. Each one is designed respecting its community context, whether downtown, urban, suburban, or rural. Unfortunately, no inventory of Complete Streets exists; hence a call is made to assemble one for information, technology transfer, and research.

Complete Streets vary considerably in their purposes, planning, and design on the basis of individual community objectives. Broadly, four areas of Complete Street design are relevant (Litman, 2015):

---

<sup>2</sup> State of California, Assembly Bill No. 1358, 2008.

<sup>3</sup> For periodic updates, see <https://smartgrowthamerica.org/program/national-complete-streets-coalition/policy-atlas/>.

**Pedestrian Infrastructure.** This infrastructure includes sidewalks, traditional and raised crosswalks, and median crossing islands. Other design considerations address ADA (Americans with Disabilities Act of 1990) features such as audible signals for people with low vision, crosswalk push buttons that are reachable by people in wheelchairs, curb cuts, and curb extensions.

**Traffic Calming.** Traffic calming features are designed to reduce the speed of automobiles and define the edges of vehicular travel lanes. Design elements can include road diet schemes, shorter curb corner turning radii, elimination of free-flow right-turn lanes, angled and face-out parking, street trees, planter strips, and ground cover, among other features.

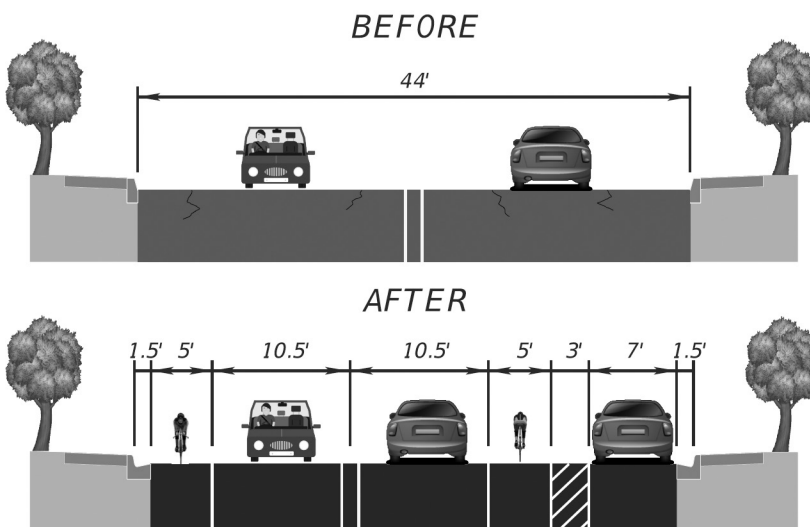
**Bicycle Accommodations.** Complete Streets usually include a range of bicycle accommodations, such as protected or dedicated bicycle lanes, neighborhood green-painted (greenway) lanes, wide paved shoulders, and bicycle parking.

**Public Transit.** Local public transit design features are often included for bus rapid transit, bus pullouts, transit signal priority, bus shelters, and dedicated bus lanes. Heavy rail (often called third rail) and commuter rail transit is usually not built into Complete Streets.

A Complete Street may thus include such elements as sidewalks, bike lanes (including wide paved shoulders), dedicated bus lanes, comfortable and accessible transit stops and stations, safe crosswalks, median strips and islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and other features (NCSC, 2018; Smart Growth America and NCSC, n.d.). Illustrations of Complete Street design for suburban and rural settings without transit and urban settings with transit are illustrated in exhibits 1 and 2, respectively.

### Exhibit 1

“Before” and “After” Conceptualizations of Suburban and Rural Complete Streets

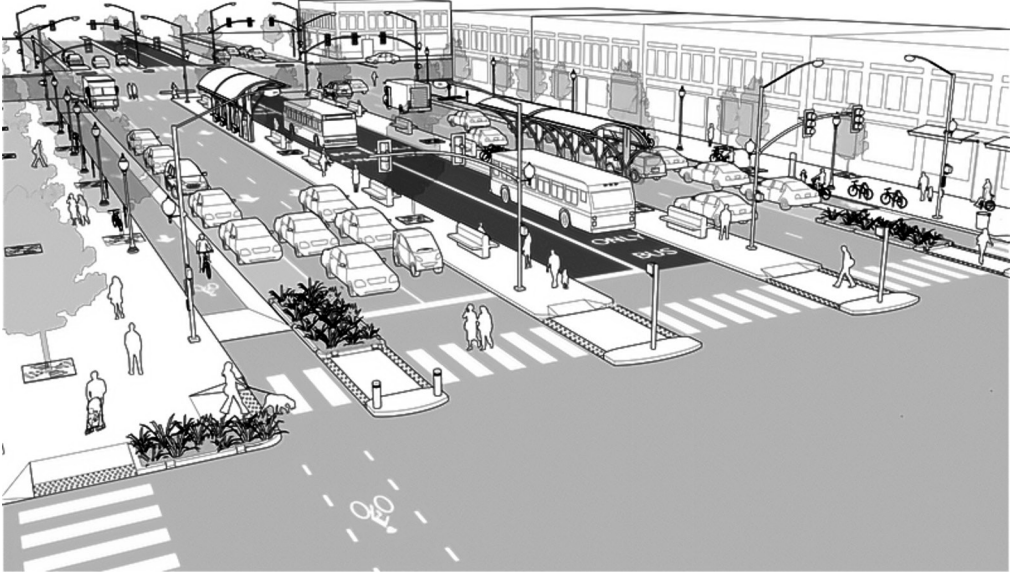


Source: Adapted from City of Tampa, FL [https://www.tampa.gov/sites/default/files/content/files/migrated/presentation\\_publicmtg1\\_columbusdr\\_coi\\_18d00007\\_2019\\_final.pdf#view=Fit&amp;toolbar=1](https://www.tampa.gov/sites/default/files/content/files/migrated/presentation_publicmtg1_columbusdr_coi_18d00007_2019_final.pdf#view=Fit&amp;toolbar=1)



## Exhibit 2

### Complete Street with Transit in Urban Setting



Source: NACTO guidance on median transitway

[https://nacto.org/wp-content/themes/sink\\_nacto/views/design-guides/retrofit/urban-street-design-guide/images/dedicated-median-bus-lanes/dedicated-median-bus-lanes.png](https://nacto.org/wp-content/themes/sink_nacto/views/design-guides/retrofit/urban-street-design-guide/images/dedicated-median-bus-lanes/dedicated-median-bus-lanes.png)

## Safety as the Driver of the Complete Streets Movement

Streets are dangerous, often being characterized as dangerous by design (Smart Growth America and NCSC, 2022). In 2020, for instance, more than 6,500 people were killed while walking along streets or crossing them, which was 4.5 percent more than in 2019 (Smart Growth America [hereafter, SGA] and National Complete Streets Coalition [hereafter, NCSC] (Smart Growth America and NCSC, n.d.). Concerns about pedestrian and bicyclist safety led to a national movement to make streets safer, culminating in the founding of the National Complete Streets Coalition in 2005 (McCann, 2010).<sup>4</sup> The literature review section of this article will provide evidence of the association between Complete Streets and safety.

## Market Demand for Complete Streets

The Complete Streets movement is consistent with the emerging market demand for walkable communities, transit-accessible communities, and “missing middle housing” communities (Nelson, 2012, 2013, 2020; Parolek and Nelson, 2020). For instance, the National Association of REALTORS® (NAR) periodically produces a “Community Preference Survey” (CPS). The NAR’s

<sup>4</sup> David Goldberg, then the communications director for Smart Growth America, coined the term *Complete Streets* in 2003 (McCann, 2010).

CPS is applied to the nation’s 50 largest metropolitan statistical areas, which account for most of the nation’s population and growth. The survey includes 2,000 adults aged 18 years or older. The method used is called “stated preference,” meaning that, given a narrow set of plausible though opposite choices, which one would the respondent prefer? (AAA FTS, 2011). Exhibit 3 summarizes key findings from its 2023 CPS.

**Exhibit 3**

Key Findings from National Association of REALTORS® 2023 Community Preference Survey, Revealing Implicit Residential Market Demand for Complete Streets

Community Preference Survey Question	Prepandemic 2017 (%)	Pandemic 2020 (%)	Postpandemic 2023 (%)
Given a choice: Would you prefer to own or rent an apartment or townhouse, and you have an easy walk to shops and restaurants and have a shorter commute to work? YES reported.	50	48	53
If you were moving to a new home, would you be willing to spend more to live in a community where you could easily walk to parks, shops, and restaurants? YES reported.	60	57	78

Source: National Association of REALTORS® 2023

More than one-half (53 percent) of respondents from the 50 largest metro areas would choose to own or rent an apartment or townhouse if they had an easy walk to shops and restaurants and a shorter commute to work. This percentage is the highest share since before or during the pandemic.

More than three-quarters (78 percent) of respondents would be willing to spend more to live in a community where one could easily walk to parks, shops, and restaurants. This share is a substantial increase over the sentiment during the pandemic (57 percent) or before (60 percent).

Taken together, it appears that as more workers work from home, they want to do so in a neighborhood where it is easy for them to walk to places, and they are willing to pay for it. Because the NAR survey findings are richly detailed in terms of demographics, income, region, and so forth, an opportunity exists for the survey to inform policymakers and planners about changing community preference trends.

Unfortunately, these opportunities may be available to only about 13 percent of America’s urban households (Koschinsky and Talen, 2015). Roughly 40 million households in the nation’s 50 largest metropolitan areas want to live in walkable communities and are willing to pay for them; only about 10 million households in those metropolitan areas have that opportunity. The gap is thus about 30 million households in the 50 largest metropolitan areas, which account for about 55 percent of the nation’s population. The inference is that the national demand for living in walkable communities that are accessible to shops, restaurants, and services, with a short commute to work for those not working at home, is about 70 million households. About 20 million households live in those kinds of communities now, leaving a gap of 50 million. Even if all new residential units were built in these kinds of communities through the year 2050, the current demand would not be met.

How can the pent-up market demand for walkable, transit-accessible, and middle-housing communities be met? Redevelopment efforts are needed to transform the existing built environment into such communities through Complete Streets. This link is made in the next section.

## **Complete Streets as a Redevelopment Strategy**

Complete Streets entail the redevelopment of existing streets. Some of them are very expensive redevelopments of downtown corridors, such as in Cleveland for the HealthLine bus and rapid transit (BRT) system connecting downtown to the Case Western Reserve University medical facilities. Most of these redevelopments are much less expensive, involving adjusting travel lanes and parking, adding bicycle lanes, widening sidewalks, and so forth. The construction of Complete Streets is thus an exercise in redevelopment per se.

Moreover, although the explicit purpose of Complete Streets is to improve safety, other purposes include increasing the number of jobs and people near them. In effect, Complete Streets are seen as a way to leverage new development along them. Given that Complete Streets are built mostly along existing, developed corridors, the development that occurs along them is mostly a form of redevelopment, including the redevelopment of parking lots. Whether and to what extent this happens will be discussed in subsequent sections of this article.

The redevelopment objectives of Complete Streets are consistent with redevelopment purposes overall (Blaesser and Cody, 2008). An important difference is that whereas Complete Streets address the redevelopment of the street, redevelopment generally involves changes to the built environment on parcels of land in targeted areas, such as redevelopment districts.

The need for the public sector to facilitate the redevelopment of the built environment indicates that the physical stock of urban development—such as buildings, infrastructure, and even parking lots—depreciates over time and eventually becomes obsolete. This aging of infrastructure can lead to structural blight, in which buildings become unfit to occupy, and economic blight, in which new investment is dissuaded from renewing an area's vitality. Indeed, urban areas go through cycles of development and redevelopment (Bourne, 1967). However, sometimes, the private sector cannot redevelop an area for such reasons as insufficient infrastructure capacity; parcels of insufficient size, shape, or location to be rejuvenated efficiently; and fragmented or unknown ownership that prevents assembly of property for efficient development, among other impediments. The public sector is thus needed to overcome barriers to private-sector investment in an area. Public-private partnerships are often created where private-sector investment is leveraged from public-sector resources pursuant to a planning and policy process (Nelson, 2014).

Through various initiatives such as redevelopment authorities, the public sector often takes the lead in redeveloping underinvested or blighted areas. As the Urban Design Lab notes, several different approaches to redevelopment are possible, such as the following or combinations of them:<sup>5</sup>

---

<sup>5</sup> Adapted from Urban Design Lab, "What is Urban Development, Redevelopment and Conservation." <https://urbandesignlab.in/development-urban-redevelopment-conservation/>.

**Urban regeneration** involves creating new buildings and infrastructure in poor-quality neighborhoods through comprehensive interventions, leading to economic, social, and environmental improvements.

**Urban revitalization** refers to reviving older parts of cities by creating new functions for older structures while often protecting the existing social and economic structure.

**Urban reconstruction** results in demolishing structures in blighted areas and replacing them through reconstruction and redevelopment.

**Urban clearance** means demolishing the existing urban structure, often through the removal of slum neighborhoods, and replacing it with new physical structures, which frequently leads to displacement.

**Urban renewal** is a formal program of land redevelopment that involves recreating a new urban fabric patterned after the morphology and functions of existing buildings that were demolished, often in areas of moderate- to high-intensity urban land use.

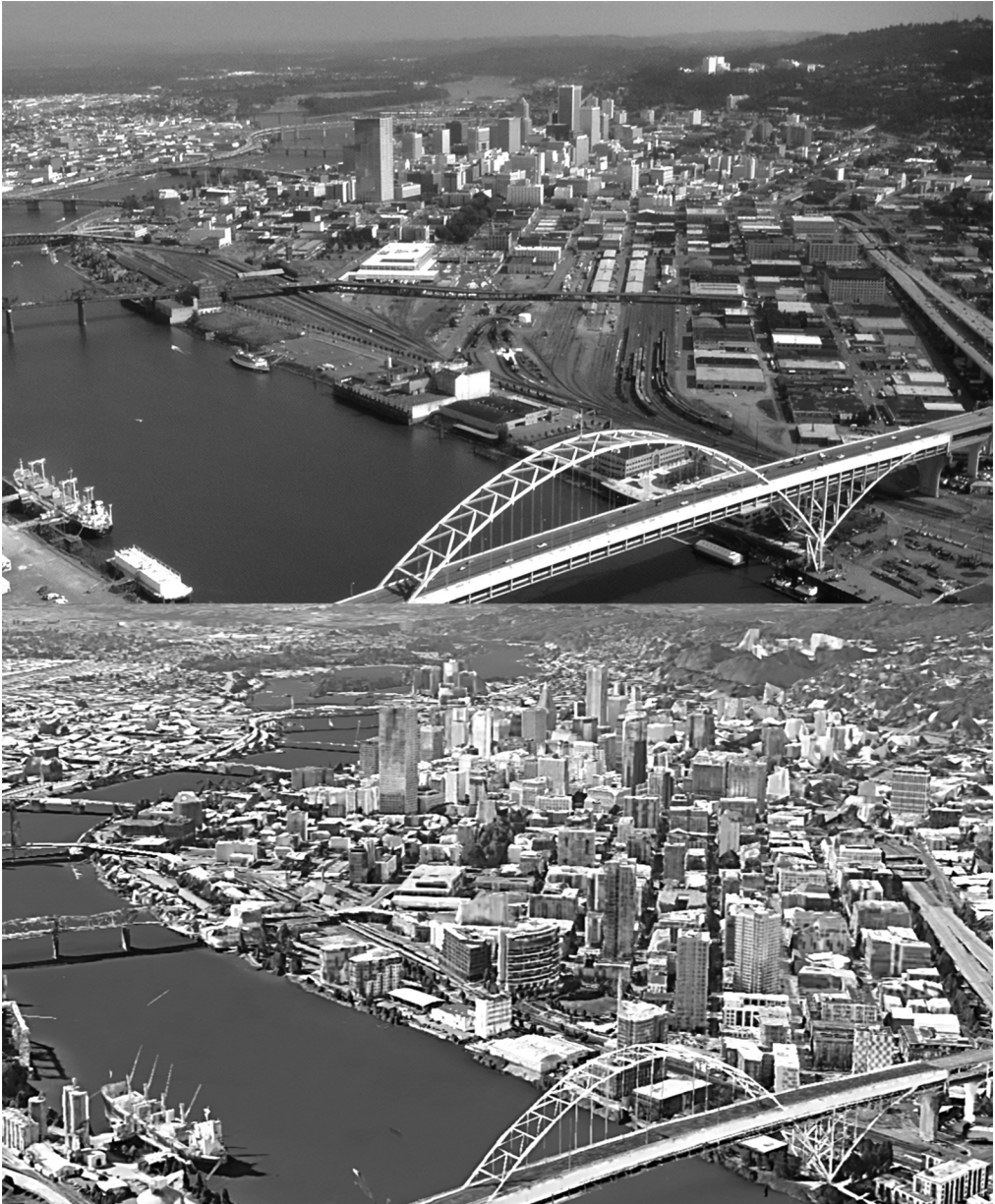
**Adaptive reuse** is the process of reusing old sites or buildings for purposes other than for what they were built or intended, such as converting warehouses into residential lofts, and it is often viewed as the middle ground between preservation and demolition.

**Urban retrofitting** provides urban areas with new or modified features that were not possible at the time of initial development, often including infill of vacant or abandoned sites and the development of parking lots.

Thousands of American cities, towns, and counties are engaged in redevelopment. Many rely on independent redevelopment authorities that have planning, eminent domain, financing, development, and management powers. Notable examples of redevelopment are Baltimore's Inner Harbor; New York City's Battery Park; Portland, Oregon's Pearl District; New Orleans' French Quarter; and thousands of others, ranging from less than a city block to large swaths of jurisdictions. One thing that is common to nearly all these efforts is the taking advantage of existing transportation infrastructure investments or, often, investing in new transportation systems. Indeed, Portland incorporated its streetcar into the Pearl District's redevelopment of an old railyard and warehouses north of downtown (exhibit 4).

**Exhibit 4**

Before (1988) and After (2022) Images of Portland's Pearl District (Foreground) Redevelopment Area



Source: Top image, Bob Heims, U.S. Army Corps of Engineers, 1988. Bottom image, Google Earth, 2022, accessed November 15, 2023, from <https://earth.google.com/web/@45.53283317,-122.67922885,11.32390806a,1584.70049221d,35y,166.82917209h,77.37204764t,0.00000001r/data=OgMKATA>

What are the specific ways in which Complete Streets can facilitate redevelopment? In addition to making streets safer, the next section of this article will review literature suggesting that Complete Streets should attract jobs, people, and households (Anderson and Searfoss, 2015; Federal

Highway Administration, 2022; National Association of City Transportation Officials, 2012). By making streets safer and more attractive, these outcomes would arise even in the absence of formal public redevelopment efforts. Thus, at the intersection of the economic benefits of streets and the push to make streets safer and more attractive, investing in Complete Streets can be viewed as a redevelopment strategy. This article may be the first to make this explicit claim, at least in the context of research supporting that claim.<sup>6</sup>

However, the literature on Complete Streets misses another important benefit: improving the jobs-housing balance (Stoker and Ewing, 2014). To the extent that Complete Streets are job-rich, which usually means they are in an urban context and are therefore relatively housing-poor, attracting more households to them would improve their jobs-housing balance. The result would create such benefits as reducing dependency on automobiles in the journey to work and increasing the use of transit, walking, and biking (Bas et al., 2023).

Finally, if they are successful in attracting jobs and people, Complete Streets should influence the real estate market such that properties closer to them gain a premium in value or rent (Yu et al., 2018).

The next section reviews the Complete Streets literature to derive theories and hypotheses that guide the research that is presented in this article.

## **Literature, Theory, Hypotheses, and Research Strategy**

This section reviews the literature addressing how Complete Streets improve pedestrian, cyclist, and traffic safety. It continues with a review of the scant literature on the outcomes of Complete Streets with respect to attracting jobs and people, with special reference to gentrification, jobs-housing balance, commuting mode, and real estate value (based on multifamily rents) with respect to Complete Streets proximity. The literature review leads to theories and hypotheses that, in addition to safety, frame the research strategy.

## **Progress in Safety—A Complete Streets Priority**

This discussion starts with the mismatch between vehicles and pedestrians or cyclists. Using Newton's physics of mass times speed with respect to human physiology, Hutchinson (2018) developed a theory that equates vehicular impact with pedestrian (and, by extension, cyclist) injury and death. The lighter the car and the slower its speed at impact, the less likely injury or death occurs. Empirical studies show that the average risk of severe pedestrian injury when struck by a car of average weight is about 10 percent at 16 miles per hour (mph), 25 percent at 23 mph, 50 percent at 31 mph, 75 percent at 39 mph, and 90 percent at 46 mph (AAA FTS, 2011). Simply slowing vehicular speeds can improve pedestrian and cyclist safety significantly. Based on this cause-and-effect relationship, reducing speed is the chief objective of "road diets" as an element of Complete Streets (FHWA, n.d.).

An implicit theory embodied in the genre of research into "dangerous by design" shows how the physical design of roads, sidewalks, crosswalks, signage, traffic lights, lighting, and so forth affects

---

<sup>6</sup> The authors are indebted to an anonymous reviewer who pointed out this fact.

the safety of pedestrians, cyclists, and occupants of vehicles. The word *implicit* is used because the dangerous-by-design literature does not establish cause-and-effect relationships or associations between improvements in specific design elements—other than vehicular speed—and safety (Smart Growth America and NCSC, 2022). Readers are referred to the design recommendations of the National Association of City Transportation Officials (2012).

Evaluations of safety outcomes associated with Complete Streets are thin (Mofolasayo, 2020). As a general proposition, interventions to improve pedestrian and cyclist safety within and along roadways can be accomplished, although the extent of improvements is mixed in the literature (Jordan and Ivey, 2021; Namatovu et al., 2022). With respect to Complete Streets, research by Hanson, Noland, and Brown (2013) shows that different road features influence the number of pedestrian casualties. These features include sidewalks, traffic lighting, travel speeds, the number and width of travel lanes, and evening visibility, among others. In their case studies of nine Complete Streets, Hanson and Botchwey (2018) found that vehicular crashes declined after Complete Street safety-related intervention.

To date, the most comprehensive assessment of Complete Street safety outcomes is the study conducted by Porter et al. (2018) in Florida from 1975 to 2013. Using data from that study, Schneider (2018) focused on the period during which Florida implemented a statewide Complete Street policy, 1984–2013. Analysis shows that over those 29 years, Florida’s pedestrian fatality rate decreased by about 0.5 percent more per quarter than would have been expected on the basis of national trends. This calculation translates into preventing about 3,500 pedestrian fatalities over the 29-year study period.

Numerous case studies show the improved safety outcomes of Complete Streets. For instance, Great Neck Village officials redesigned Great Neck Road to reduce vehicle speeds, enhance the downtown environment, improve walkability, and better serve bicyclists and transit vehicles. The number of automobile travel lanes was reduced, bikeways were installed, and other changes were made. The result was a 64-percent reduction in injury-related accidents, not to mention a more vibrant and visually pleasing main street (NYSDOT, n.d.). Before and after images are shown in exhibit 5.

**Exhibit 5**

Before and After Images of Great Neck Road in Great Neck, NY

---



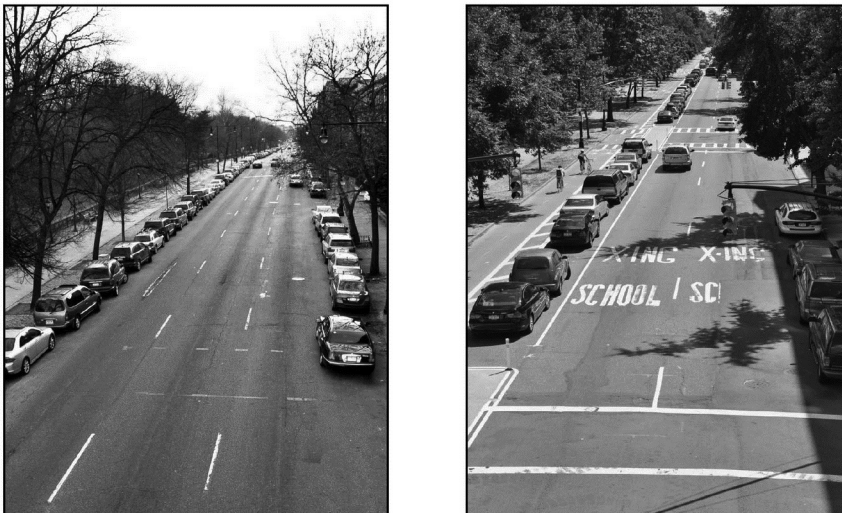
Source: New York State Department of Transportation

A second case study comes from New York City, where the redesign of Prospect Park West reduced crashes by 16 percent, tripled weekday use of cycling, and reduced crossing times for pedestrians (Project for Public Spaces, n.d.). Before and after images are shown in exhibit 6.

**Exhibit 6**

Before (Left) and After (Right) Images of Prospect Park West in New York City

---



Source: New York City Department of Transportation

The emerging evidence shows that Complete Streets result in safer streets (Anderson and Searfoss, 2015). They do so by redeveloping existing “incomplete streets” into those that separate traffic from people and cyclists, reduce traffic speeds, and increase mobility options, among other improvements (Shapard and Cole, 2013). What is not clear is whether and the extent to which Complete Streets help achieve other outcomes of redevelopment, such as increasing the number of jobs and people, improving the jobs-housing balance, reducing automobile dependence, and improving real estate values. Literature related to these dimensions is reviewed next. Data and



methods, results, and interpretations along each of these dimensions are reported in subsequent sections of this article.

## Job Change

Conventional theory posits that streets are associated with economic development (Berg et al., 2015). Moreover, a local street network that is safe, vibrant, and efficient is a key ingredient of local economic development (Global Designing Cities Initiative, 2016). By contrast, congested or dangerous streets can undermine economic exchange. By extension to Complete Streets, improvements to flow, safety, and mobility, among other features, are expected to improve economic exchange along them. In their effort to improve flow and traffic safety, expand multimodal options, and create physically attractive locations, Complete Streets should attract economic development even if that is not a principal policy objective (Liu and Shi, 2020). Unfortunately, very little research has been done on the association between Complete Streets and economic development, such as job growth generally or by economic sector.

The theory is offered that Complete Streets will influence the kinds of jobs attracted to them or even repelled by them over time (NCSC, 2016b; see also New York City Department of Transportation, 2013). The kinds of jobs matter. For instance, the authors anticipate that Complete Streets will not attract industrial or institutional jobs because of the land-extensive nature of those employers, but Complete Streets are expected to attract jobs in retail, food service, lodging, information, office, education, health, arts, and culture.<sup>7</sup> But do they?

One of the only studies on the association between Complete Streets and change in retail sales was conducted by the New York City Department of Transportation (2013). Using descriptive analysis, the study showed that retail sales along seven “sustainable streets” increased more over time than in the city as a whole.

Another case study found that an investment of \$11.5 million to create a Complete Street in Lancaster, California, leveraged \$130 million in new private investment that also nearly doubled sales tax revenues. Through multiplier analysis, the study showed that this Complete Street generated \$273 million in additional economic output (Congress for the New Urbanism, 2013). This study showed the potential for multiplier effects of Complete Street investments (Nelson et al., 2009).

Based on 11 responses to a survey, the NCSC found that Complete Streets can facilitate redevelopment, leading to increases in jobs (Anderson and Searfoss, 2015). In comparing employment within one or two blocks of Complete Streets between 2 years before and 1 year after their completion, their study found that jobs increased in the areas represented by 7 of the 11 responses. In 6 of those 11 projects, job growth outpaced citywide job growth during the same period. The NCSC cautioned, however, that their study was based on a small number of cases with limited, project-level data. More systematic research is needed (Anderson and Searfoss, 2015: 19).

Although one metric that can be used in the analysis is simply the change in jobs overall and jobs by sector, that comparison would not necessarily show that Complete Streets attract jobs,

---

<sup>7</sup> For an application of economic sector analysis along a transit corridor similar to a Complete Street, see Nelson et al., 2013.

especially if the region grows faster than the corridor. Regions are defined as the counties within which Complete Streets are located, all of which are central counties as defined by the census. The authors created a metric that measures the extent to which Complete Streets gained or lost their proportionate share of jobs in the region. This question guides the authors' research:

Is there an association between proximity to Complete Streets and an increase in the share of jobs overall relative to the region over time and with respect to economic sectors?

Another consideration exists for which literature offers no theory or empirical analysis. One could imagine an aspiration in which Complete Streets attract lower-wage jobs, benefiting lower-skilled workers living nearby or within an easy commute. An alternative perspective is that Complete Streets would attract higher-wage workers who are attracted to firms that are also attracted to Complete Streets for their improved safety, multimodal accessibility, and street design amenities. Lacking theoretical guidance, the following open-ended research question is offered:

Is there an association between proximity to Complete Streets and an increase over time in the share of lower-, middle-, or upper-wage jobs relative to the region?

The null hypothesis posits no change in the share of regional jobs per se or jobs based on wages locating along and near Complete Streets during the study period compared with central counties. Its rejection would indicate that Complete Streets are associated with the change over time in the share of regional jobs and jobs based on wages.

## **People, Households, Housing Tenure, and Household Income, with Special Reference to Gentrification**

As a form of redevelopment, one can look to theories to draw inferences regarding the effect of Complete Streets on people, population, households, housing tenure, income, and gentrification.

An extensive literature review by Mehdipanah et al. (2017) shows that although redevelopment is associated with increases in population and households, the share of minority residents and households falls while income increases. Younger households without children also move into redevelopment areas, leading to minority households, lower-income households, households with children, and older households being displaced, resulting in gentrification. However, no clear direction of change in housing tenure for owners and renters is evident.

No clear theory has been developed on the kinds of people and households that would be attracted to Complete Streets. Although one may assume *a priori* that Complete Streets would become more non-Hispanic White, with higher-income households and fewer households with children—similar to redevelopment expectations—this conjecture has no foundation in the literature on Complete Streets.

What Complete Streets outcomes should one expect? The introductory section of this article shows that more than one-half of Americans want to live in a walkable community (National Association of REALTORS®, 2023). Moreover, an overwhelming number of Americans support

policies that would make their communities more livable by reducing traffic speed, providing more mobility options, and, especially, creating safer pedestrian environments (National Association of REALTORS®, 2017). This perspective is the heart of the Complete Streets philosophy:

The streets of our cities and towns are an important part of the livability of our communities. They ought to be for everyone, whether young or old, motorist or bicyclist, walker or wheelchair user, bus rider or shopkeeper. But too many streets are designed only for speeding cars, or worse, creeping traffic jams. They are unsafe for people on foot or bike—and unpleasant for everybody. (NCSC, 2016a)

Complete Streets can lead to important social benefits. Lower-income households, including younger households, transportation-disadvantaged persons, and persons of color, are less likely to own cars and more likely to rely on public transportation. Complete Streets—when successful—expand job and housing options without people having to own a car (Brenman and Sanchez, 2012; Sanchez and Brenman, 2008).

Exhibit 7 shows the percentages of households that do not own a car based on minority, income, single-person/single-parent status, tenure, and walk/bike and transit trip mode. These figures are from the Nationwide Household Transportation Survey of 2017. Compared with White households, twice the share of non-White households do not own. Moreover, about a quarter of households earning less than \$25,000 (in 2017) do not own cars. While about a fifth of households who walk or bike to destinations do not own cars, two-thirds of those who use transit do not own cars. If Complete Streets improve accessibility to destinations, they may be attractive residential choices among those HHs who do not own cars.

**Exhibit 7**

Percentages of Households Without Cars Based on Demographic and Commuting Features

Household Feature	No Vehicles (%)
All Households	9
White	6
Non-White	18
Income <\$25,000 (2017)	26
Single-Person	20
Single-Parent	13
Renter	21
Walk, Bike Daily	24
Use Transit Daily	67

Source: Compiled by authors from the Nationwide Household Travel Survey (NHTS), Federal Highway Administration (2017)

One concern is that successful Complete Streets can lead to displacement and gentrification (Chapple and Loukaitou-Sideris, 2019; Dawkins and Buehler, 2010; Dawkins and Moeckel, 2016; Hwang and Lin, 2016; Padeiro, Louro, and da Costa, 2019; Rayle, 2015; Zuk et al., 2018). Although no literature associating Complete Streets with gentrification has been published, some literature speculated that it is an outcome with respect to transit-oriented developments (Culver, 2017; Olesen, 2020). On the other hand, little empirical evidence seems to indicate that transit

station-area development leads to large-scale displacement, although some certainly occurs (Delmelle, Nilsson, and Bryant, 2021). If Complete Streets are effective in attracting people, the housing supply along and near them must be increased; otherwise, constrained supply in the face of elevated demand can lead to displacement and gentrification.

The empirical analysis presented in this article will show that although people and households are attracted to Complete Streets, this trend does not lead to higher homeownership rates or households with incomes that are higher than in the central county. The analysis will also show that although Complete Streets in aggregate may lead to some gentrification, this trend may not be the case for individual Complete Streets—this calculation is an area for future research. As suggested elsewhere in this report, the market demand for Complete Streets appears robust. It justifies increasing their supply in case gentrification emerges due to the lack of sufficient supply relative to demand.

On the basis of the literature and theory derived from it, the following research questions are posed that guide research reported previously in this article:

Over time, does the number of people and households increase in aggregate and as a share of regional change?

If so, does the demographic composition of people—with respect to minority status, households by type, housing tenure for owners and renters, and income—change over time with respect to Complete Street proximity?

If so, does this change signal displacement or gentrification?

As noted previously, *regions* in this context means central counties.

The null hypothesis is that Complete Streets are not associated with significant increases in the number or share of population or households, changes in the number or share of minority persons or households or households by type and income, or gentrification.

If Complete Streets attract jobs and people, to what extent should they alter the jobs-housing balance? This topic is addressed next.

## Jobs-Housing Balance

Inasmuch as theory does not directly connect the jobs-housing balance concept to Complete Streets, this is done here.

Achieving a balanced mix of land uses is a key objective of urban redevelopment (Keith et al., 2018).<sup>8</sup> One of the metrics used to measure land use mix is “jobs-housing balance,” or JHB (Giuliano, 1991). This metric implies conceptually that communities or areas should be self-

---

<sup>8</sup> The Urban Land Institute has assembled hundreds of redevelopment projects spanning decades. A common theme is achieving a mix of land uses within redevelopment projects and connecting those projects with the nearby community. For examples, see <https://casestudies.uli.org/tag/urban-redevelopment/>. See also the mission of the Cambridge (Mass.) Redevelopment Authority at <https://www.cambridgeredevelopment.org/history>.

contained or self-sufficient, meaning that a sufficient number of workers are available for the jobs in the area. The concept dates back to Ebenezer Howard's *Garden City* concept (Howard, 1902) and C.B. Purdom's *Town Theory and Practice* (Purdom, 1921), a guidebook for planning in the United Kingdom (see also Mumford, 1968). The "area," however, must be considered carefully because very small areas may be mostly job- or housing-rich and difficult to change over time, whereas an entire metropolitan area may be in nearly perfect balance (Wu, Zhang, and Yang, 2015). As Giuliano (1991) frames it, jobs-housing balance "refers to the distribution of employment relative to the distribution of workers within a given geographic area. A community is considered balanced when these distributions are approximately equal and when available housing choices complement the earning potential of available jobs" (Giuliano, 1991: 305). In terms of Complete Streets, achieving JHB would mean bringing the ratio of jobs to housing closer to balance over time, whether that means adding more jobs than housing units or vice versa (see also Stoker and Ewing, 2014). Balance also implies matching jobs with skill levels and incomes in the area (Cervero, 1989). This theory will be operationalized for analysis in a subsequent section of this article.

No literature is available on whether and to what extent Complete Streets improve JHB over time; indeed, such literature with respect to TODs is also thin. Recent research by Blumenberg and King (2021) and Blumenberg and Siddiq (2023) shows that, in the absence of policy interventions, higher-income households are more likely to move toward job-rich TODs, whereas lower-skill and lower-wage workers are pushed out of those TODs, thereby exacerbating housing affordability and increasing aggregate commuting. Those researchers recommend policies that increase the supply of housing in job-rich and high-housing-cost areas, especially near transit stations.

To the extent that Complete Streets aim to improve the mix of land uses, an implicit theory is that once constructed, Complete Streets will improve the JBH ratio over time, meaning that relatively job-rich Complete Streets will become less so as more households are added or that relatively house-rich Complete Streets will become less so as more jobs are added. The research question is framed as follows:

Is there an association between Complete Streets and change in jobs-housing balance over time such that job-rich or, alternatively, household-rich corridors become less so?

The null hypothesis would assert no change in the Complete Street corridor jobs-housing balance ratio compared with the central county during the study period. Its rejection would imply that Complete Streets are associated with changes in JHB ratios.

The implications of job and household change and JBH on changes in commuting mode are discussed in the following paragraphs.

## Commuting Mode

Although no theory directly associates Complete Streets with reductions in the use of automobiles and increases in transit, walking, or biking in the journey to work, such a theory exists with respect to TOD proximity. As workplaces and residences are closer to TODs, commuting by car should decrease, and commuting by other means should increase (Kwoka, Boschmann, and Goetz,

2015). In terms of Complete Streets, this theory is extended by asserting that improvements in street design that make streets safer, make them more attractive, and increase mobility options will reduce commuting by automobile and increase commuting by other modes. A review of relevant literature supports these assertions.

Almost by definition, Complete Streets should change commuting mode patterns. As noted previously, Complete Streets are designed to improve the opportunities and choices for walking, cycling, and, to some extent, choosing transit over driving. Doing so also generates health, environmental, and social benefits that may further enhance the attractiveness of Complete Streets. Complete Streets should thus change commuting mode choices and patterns in two ways: first, by encouraging people to leave their cars, and second, by increasing the use of transit, walking, and biking (NCSC, 2016a).

Complete Streets can achieve these objectives by expanding job opportunities close to where people live. For instance, the NHTS shows that about one-half of all metropolitan trips are 3 miles or less, and more than one-quarter are 1 mile or less, which are distances easily traversed by foot or bicycle. Yet about two-thirds of metropolitan trips under 1 mile are made by automobile. One reason may be incomplete streets that make it dangerous or unpleasant to walk, ride a bicycle, or take public transit (NCSC, 2016b). Another mobility feature of Complete Streets is expanding the supply of safe routes to school (Ewing, Schroeder, and Greene, 2004).

To date, no studies explore the association between Complete Streets and mode choice in the journey to work or any other trip purpose. One simulation prepared for the state of Maryland found that current models of transportation mode choice do not account adequately for the influence of Complete Streets on nonmotorized modes (Bas et al., 2023). Nonetheless, literature on transit station proximity research suggests that people living near Complete Streets should be more likely to walk, bike, or use transit in their journey to work than people living farther away (Ewing, Tian, and Lyons, 2017; Renne, 2009).

A separate issue that has not been addressed in the literature is whether a higher share of people who work at home live near Complete Streets than elsewhere in the region. For these people, accessing transit for trips other than commuting to work improves their transport options. Again, no research on this is available, but the subject will be addressed later in this article.

Given the preceding with respect to TOD research, the authors theorize that Complete Streets will alter commuting behavior in ways that increase the use of transit, walking, and biking; reduce the need to own an automobile; and lead to more people working from home, relative to the region as a whole. This expectation leads to the following research question:

Are Complete Streets associated with increasing shares of walking, biking, transit use, working at home, and households owning no cars compared with the region over time?

The null hypothesis would assert no change in the commuting mode to work between Complete Streets generally and with respect to central counties in terms of driving, transit, walking, biking, working from home, and not owning cars.

The influence of Complete Streets' proximity on multifamily rents as a proxy for real estate value is considered next.

## Multifamily Rent

Standard theory of urban real estate values establishes that the more accessible land is to markets, the more valuable it becomes. In a city with one center, being at the center confers the highest value because it is the closest to all parts of the region. By contrast, being at the fringe confers the lowest value because it is the farthest from all parts of the region (Alonso, 1964; Mills, 1967; Muth, 1969—also known as the AMM model). The AMM model assumes a monocentric city where all the jobs are located while all workers commute to downtown from residences located outside it. However, regions are not monocentric.

As one relaxes the constraints of the AMM monocentric city model, it is possible to imagine the same principles working at smaller scales (Hajrasouliha and Hamidi, 2017). For instance, Complete Streets can serve as a mini-downtown. If so, their effect on real estate markets should be such that the closer real estate is to a Complete Street, the higher its value, all things considered (Nelson, Eskic et al., 2015; Nelson and Ganning, 2015; Nelson, Miller et al., 2015). However, there can be negative proximity effects as well. For instance, suppose a transit station is unattractive—maybe surrounded by parking garages, brownfields, and the like. Real estate values would fall with respect to transit station proximity (Li and Brown, 1980; Nelson, 1992; Nelson and McClesky, 1990).

Nonetheless, finding a positive association between real estate values and Complete Street proximity signals that the market values this relationship and implicitly wants more development near Complete Streets. This preference would be an important policy rationale for local planners to use to increase the supply of development near Complete Streets. That topic is discussed at the end of this article.

The research on the extent to which such interventions as Complete Streets influence real estate values is small. One line of research called *Foot Traffic Ahead* (Leinberger and Lynch, 2015; Rodriguez and Leinberger, 2023) shows that proximity to safe and walkable streets adds value to real estate. Although these reports do not specifically evaluate the effect of Complete Streets' proximity on real estate value, *Foot Traffic Ahead's* findings are clearly applicable to them.

Another strand of relevant research assesses the association between real estate values and transit station proximity. The weight of the statistical evidence shows that the closer real estate is to transit stations, the more valuable it is per square meter; for brevity in citing all the relevant research, the reader is directed to a meta-analysis conducted by Rennert (2022). Nelson et al. (2021), however, shows that proximity to transit stations does not always confer positive associations and instead can confer ambiguous or even negative ones.

Vandegrift and Zaroni (2018) evaluated whether the presence of Complete Street policies in New Jersey cities—but not whether Complete Streets existed—elevated the mean value of all homes in those cities. Controlling for such factors as income and distance to downtown New York City

and Philadelphia, they found no citywide Complete Street policy effect compared with other cities without them. It would seem that the market is more likely to respond to whether Complete Streets exist and, further, with respect to proximity to them.

The only study directly assessing Complete Street proximity on real estate value is that of Yu et al. (2018). They evaluated the value appreciation of single-family detached residential property before and after the implementation of Edgewood Drive, a Complete Street in Orlando, Florida, during the housing market boom from 2000 to 2007. They found that, on average, single-family homes within 800 meters of Edgewood Drive had 8.2-percent-higher home value appreciation than homes outside that range.

For reasons reviewed subsequently in this article, the research reported in this article uses multifamily rents as a proxy for the influence of Complete Streets' proximity on real estate values. Thus, the proximity of multifamily residential units to Complete Streets should confer a positive benefit that is capitalized in the market in the form of higher value or higher rent, assuming that accessibility value exceeds externality value. As an alternative, proximity would confer a negative or ambiguous benefit if the externality value exceeds the accessibility value. The research question posed in this respect is thus the following:

Do Complete Streets confer a positive or negative premium to real estate value with respect to proximity?

The null hypothesis asserts that there would be no change in real estate value with respect to proximity to Complete Streets.

## **Analytic Strategy**

Unfortunately, little is known about how successful Complete Streets are in achieving redevelopment objectives (Bian and Tolford, 2023). To help close the gap, this article is the first to report research into whether Complete Streets attract jobs and people, improve jobs-housing balance, reduce automobile dependence, and influence real estate values in expected ways.

The analytic strategy is introduced here with details provided below. The research is an empirically based analysis of whether and the extent to which Complete Streets attract jobs and people, change commuting patterns, and influence real estate values. Although the National Center for Complete Streets (NCSC) keeps an inventory of state and local Complete Street policies, no organization maintains an inventory of existing or proposed Complete Streets, their design features, land uses, performance, and so forth, which leads to a call for an entity to do so.

The study areas are those Complete Streets in existence throughout most of the study period based on case studies included in the NCSC's *Safer Streets, Stronger Economies* (Anderson and Searfoss, 2015), Mark Schlossberg et al.'s *Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations* (2013), and others in those metropolitan areas with transit systems that have been studied for the National Institute of Transportation and Communities (Nelson, Miller et al., 2015; Nelson and Ganning, 2015; Nelson and Hibbard, 2019a, 2019b; Nelson et al., 2021). In all, there are 26 Complete Streets in 16 central counties of 16 metropolitan areas for analysis. They are listed in exhibit 8, and their locations are illustrated in exhibit 9.



**Exhibit 8**

List of Complete Streets Projects Studied

Complete Street Project Name (year opened)	Metropolitan Statistical Area	Central County	Length in Kilometers	Length in Miles
Alder Street—Eugene, OR (2016)	Eugene	Lane	1.2	0.7
Barracks Row—8th Street SE, Washington, DC (2003)	Washington, DC	District of Columbia	0.8	0.5
Bell Street Park—Seattle, WA (2013)	Seattle	King	0.4	0.2
Brighton Blvd.—Denver, CO (2018)	Denver	Denver	3.4	2.1
Broad Street Pedestrian Plaza—Atlanta, GA (2017)	Atlanta	Fulton	0.1	0.1
College Avenue—Tempe, AZ (2011)	Phoenix	Maricopa	3.4	2.1
Decatur Street—New Orleans, LA (2017)	New Orleans	Orleans	1.0	0.6
East Blvd.—Charlotte, NC (2007)	Charlotte	Mecklenburg	2.3	1.4
Edgewater Drive—Orlando, FL (1999)	Orlando	Orange	2.4	1.5
Esplanade Ave.—New Orleans, LA (2010)	New Orleans	Orleans	2.6	1.6
Euclid Avenue—Cleveland, Ohio (2008)	Cleveland	Cuyahoga	7.0	4.4
15th Street NW—Washington, DC (2015)	Washington, DC	District of Columbia	1.9	1.2
Franklin Avenue—Minneapolis, MN (2011)	Minneapolis-St. Paul	Hennepin	0.8	0.5
La Jolla Blvd.—San Diego, CA (2007)	San Diego	San Diego	0.9	0.6
Mill Avenue—Tempe, AZ (2003)	Phoenix	Maricopa	0.7	0.4
Multnomah Street—Portland, OR (2012)	Portland	Multnomah	1.8	1.1
NE 125th Street—Seattle, WA (2011)	Seattle	King	1.4	0.9
Nebraska Avenue—Tampa, FL (2008)	Tampa-St. Petersburg	Hillsborough	1.5	0.9
Nickerson St.—Seattle, WA (2011)	Seattle	King	1.7	1.0
North Williams Ave.—Portland, OR (2012)	Portland	Multnomah	3.1	1.9
South Carrollton Ave.—New Orleans, LA (2009)	New Orleans	Orleans	1.7	1.1
Stone Way N.—Seattle, WA (2007)	Seattle	King	1.8	1.1
SW 5th and 6th Avenues—Portland, OR (2009)	Portland	Multnomah	2.3	1.4
Tennyson Street—Denver, CO (2012)	Denver	Denver	0.8	0.5
Wells Avenue—Reno, NV (2015)	Reno	Washoe	1.3	0.8
West Magnolia Ave.—Fort Worth, TX (2008)	Dallas	Tarrant	1.6	1.0
Total Complete Street Length			47.9	29.6
Mean Complete Street Length			1.8	1.1
<b>Measure</b>			<b>Land Area in Square Kilometers</b>	<b>Land Area in Square Miles</b>
Central county urbanized land area 2010.			16,663.0	6,433.6
Census block (CB) land area for CBs falling wholly or partially within 100 meters of Complete Street centerlines. This measure is used for the analysis of change in jobs based on the Longitudinal Employment Household Dynamics (LEGD) database, which applied to census blocks.			15.8	6.1
Share of urbanized land area.			0.1%	0.1%
Census block group (CBG) land area for CBGs falling wholly or partially within 100 meters of Complete Street centerlines. This measure is used for the 2013 and 2019 5-year samples of the American Community Survey (ACS), which is applied to census block groups.			97.1	37.5
Share of urbanized land area.			0.6%	0.6%

Sources: Anderson and Searfoss, 2015; Nelson and Ganning, 2015; Nelson and Hibbard, 2019a, 2019b; Nelson, Miller et al., 2015; Nelson et al., 2021; Schlossberg et al., 2013

**Exhibit 9**

---

**Metropolitan Areas From Which Complete Streets Were Selected for Analysis**

---



Source: Authors

The analysis is limited to measuring change over time with respect to all the Complete Streets in the sample aggregated as a group. Future research will evaluate outcomes with individual Complete Streets. That research can also assess individual Complete Streets before and after opening and over time as they mature. The hope is that future research may use the analytic approach presented in this article as a template. Doing so creates a common framework for evaluating Complete Streets over time and under different analytic scenarios.

As will be seen below, prior research into the change in jobs and investment focused on the first and sometimes second block along Complete Streets. These studies were based on surveys or data collected by local government staff. Because secondary census data are used, which are considered more reliable than surveys or local staff-collected data, the study area based on census geographies is defined as any portion of a census block or block group falling within 100 meters of both sides of the centerline. The actual study area depends on the spatial context in which data are reported. For employment analysis, Longitudinal Employment-Household Dynamics (LEHD) census block (CB) data are used for 2013 and 2019. The total area of the LEHD study area, or all Complete Streets, is 15.8 square kilometers. Compared with the 16,663.0 square kilometers of urbanized land area of the central counties within which the sample of Complete Streets is located, Complete Streets account for about 0.1 percent of that area. For population, household, commuting, and income, American Community Survey (ACS) 5-year sample data are used at the block group (CBG) level for the 2009-through-2013 and 2015-through-2019 periods. Each CBG contains about 4 to

10 CBs. The total land area of CBGs in the Complete Street study area is 97.1 square kilometers, or about 0.6 percent of the central county urbanized land area. These calculations are summarized in exhibit 8.

The research questions, described in more detail below, are based on comparing changes along Complete Street corridors (the treatment) in terms of jobs, people, and households; changes in jobs-housing balance ratios; and changes in commuting mode choice over time with respect to a region defined as the central county (the control) within which a Complete Street is located. Thus, over time, relative to the central county, one could ask the following question:

Are Complete Streets associated with changes over time in their share of central county jobs, people, and households; increasing households relative to jobs; creating a more favorable jobs-housing balance ratio; and reducing automobile dependency?

Also included is an analysis of the association between Complete Street proximity and multifamily residential rent as an indicator of the market's willingness to pay for Complete Street proximity.

This research is not a counterfactual analysis in that one cannot know what would have happened to the sample of Complete Streets in the absence of intervention. Future research into before-and-after studies of individual Complete Streets is anticipated. Future research could also make comparisons of development and demographic outcomes on extensions to Complete Streets that did not receive interventions. The point of this study is to assess overall outcome associations between the presence of Complete Streets and patterns of change relative to the central counties in which they are located. The metrics used for this analysis can be applied to future studies.

As pointed out elsewhere in this article, all the Complete Streets in the sample are in existing, built-up urban and closer-in suburban areas. Although those areas can have an advantage in attracting jobs and people, doing so comes at higher costs of infill and redevelopment that are not needed elsewhere in central counties or their larger metropolitan areas.

Complete Streets are not randomly selected but are instead an outcome of a decisionmaking process that chooses them for investments and other policy interventions over other opportunities. This is a problem of selection bias. Nonetheless, the aim of this analysis is to assess whether there is an association between Complete Streets and outcomes in terms of attracting jobs and people, improving the jobs-housing balance, reducing dependency on the automobile for commuting, and increasing the value of real estate with respect to distance from Complete Streets. Although one would expect *a priori* that selection for Complete Street investments and other policies aimed at making them more attractive would lead to desired outcomes, the study aims to show whether this is the case. If not, the redevelopment premises of Complete Streets may have to be reconsidered.

There is an additional consideration. Because the sample size is small, at 26 Complete Streets in 16 central counties, and because much of this analysis is exploratory to provide the groundwork for future research, the two-tailed t-test is applied to differences in means between Complete Street and central county outcomes. Rejection of the null hypothesis would occur where  $p < 0.05$ . Statistically significant differences in mean outcomes between Complete Streets and central counties are found for all comparisons.

Finally, the research needs to be placed in a temporal context. The analysis is based on the period after the Great Recession of 2007–09 and before the COVID-19 pandemic of 2020–23. The study thus avoids analytic complications associated with disruptive economic events. As such, the work may be viewed as the benchmark period that provides context for analysis addressing pandemic and postpandemic outcomes.

The following section assesses Complete Street outcomes with respect to jobs.

## The Association Between Complete Street Proximity and Change in Regional Share of Jobs Over Time

This section reports the use of a systematic framework to measure the change in the share of a region's jobs that are attracted to Complete Streets and jobs based on wages. The sample of Complete Streets added jobs at about the same pace as the central county overall, but for individual economic groups (an example of a Complete Street, Cleveland's HealthLine, is illustrated in exhibit 10), Complete Streets added jobs at a faster pace. This fact is remarkable because, for the most part, Complete Streets can add development only through more expensive and time-consuming infill and redevelopment efforts. Findings also indicated that Complete Streets attract jobs paying somewhat higher wages than jobs in the central counties, which makes sense because more costly infill and redevelopment have to generate more revenue to finance ventures, calling for more productive labor that commands higher wages. This section starts with a summary of the theory, research design, and hypotheses, followed by data and method, results, and interpretation.

### Exhibit 10

---

Complete Street Example: HealthLine Route in Cleveland, Ohio

---



Source: Complete Streets route plotted by Eric Carlson using Google Earth image posted 6-28-2014. <https://earth.google.com/web/@41.50661962,-81.63183088,204.21807701a,3830.93973377d,30y,-77.94767459h,80t,0r/data=OgMKATA>

## Theory, Research Design, Research Questions, and Hypotheses

As theorized previously, Complete Streets should influence the kinds of jobs attracted to them or even repelled by them. Also, as noted earlier, Complete Streets are not anticipated to attract industrial or institutional jobs because of the land-extensive nature of those businesses, but they are expected to attract jobs in retail, food service, lodging, information, office, education, health, arts, and culture. This question guides the research:

Is there an association between proximity to Complete Streets and an increase over time in the share of jobs relative to the region overall and with respect to economic sectors?

The previous section of this article further addressed the proposition that Complete Streets would attract or repel jobs in lower-, moderate-, and higher-wage categories, which leads to the following research question:

Is there an association between proximity to Complete Streets and an increase over time in the share of jobs based on lower-, middle-, or upper-wage jobs relative to the region?

These research questions lend themselves to assessment through longitudinal, quasi-experimental design in which Complete Streets are the treatment and central counties are the control.

The null hypothesis posits no change in the share of regional jobs per se or jobs based on wages locating along and near Complete Streets during the study period compared with central counties. Rejection of the null hypothesis would indicate that Complete Streets are associated with a change over time in the share of regional jobs and jobs based on wages.

## Data and Method, Results, and Interpretations

The research design can be implemented using the Longitudinal Employment-Household Dynamics (LEHD) data for 2013 and 2019, which allow for evaluating the change in jobs over time.<sup>9</sup> These data are reported at the census block (CB) level. For brevity, most of the jobs in the 20 economic sectors constituting the North American Industrial Classification System (NAICS) are combined into the four economic groups shown in exhibit 11: industrial, office, institutional, and leisure; they comport generally to land use categories used in planning. Excluded are natural resources and construction jobs. Total jobs are also reported, which include those not assigned to the four land use categories. Three categories of jobs for lower-, middle-, and upper-income wages are also created as shown in exhibit 12. This is based on the national sample of the Census Bureau County Business Patterns, which shows roughly equal one-third shares of jobs allocated to each of the wage categories.

---

<sup>9</sup> For a review of how these data are collected and reported, see <https://www.census.gov/programs-surveys/ces/data/restricted-use-data/lehd-data.html>.

**Exhibit 11**

Combinations of NAICS Sectors into Economic Groups for Analysis

NAICS Code	NAICS Sector Title and Economic Group Name
<b>INDUSTRIAL</b>	
22	Utilities
31–33	Manufacturing
42	Wholesale Trade
48–49	Transportation and Warehousing
<b>OFFICE</b>	
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support, Waste Management, Remediation
81	Other Services (except Public Administration)
92	Public Administration
<b>INSTITUTIONAL</b>	
61	Educational Services
62	Health Care and Social Assistance
<b>LEISURE</b>	
44–45	Retail Trade
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services

*Note: Terms in italics are labels for the respective economic groups.*

*Source: Adapted from the North American Industrial Classification System by Arthur C. Nelson and Robert Hibberd, University of Arizona*

**Exhibit 12**

Allocation of Workers by Lower-, Middle- and Upper-Wage Groups (1 of 2)

NAICS	Description	Mean Annual Wages, 2013 (\$)	Wage Group	Share of Workers (%)
44	Retail Trade	25,779	Lower	NA
56	Administrative, Support, Waste Management, Remediation	35,931	Lower	NA
61	Educational Services	35,427	Lower	NA
71	Arts, Entertainment, and Recreation	32,188	Lower	NA
72	Accommodation and Food Services	17,453	Lower	NA
81	Other Services (except Public Administration)	29,021	Lower	NA
<b>Weighted National Share of Lower-Wage Workers</b>				<b>~33</b>
48	Transportation and Warehousing	45,171	Middle	NA
53	Real Estate and Rental and Leasing	46,813	Middle	NA
62	Health Care and Social Assistance	44,751	Middle	NA
92	Public Administration	51,340	Middle	NA

**Exhibit 12**

## Allocation of Workers by Lower-, Middle- and Upper-Wage Groups (2 of 2)

NAICS	Description	Mean Annual Wages, 2013 (\$)	Wage Group	Share of Workers (%)
<b>Weighted National Share of Middle-Wage Workers</b>				<b>~33</b>
22	Utilities	94,239	Upper	NA
31	Manufacturing	54,258	Upper	NA
42	Wholesale Trade	65,385	Upper	NA
51	Information	83,677	Upper	NA
52	Finance and Insurance	88,677	Upper	NA
54	Professional, Scientific, and Technical Services	75,890	Upper	NA
55	Management of Companies and Enterprises	105,138	Upper	NA
<b>Weighted National Share of Upper-Wage Workers</b>				<b>~34</b>

NA = not applicable.

Source: Calculated by the authors using County Business Patterns, U.S. Census Bureau

This analysis is a descriptive one that examines the change over time in jobs by economic group and wage category along Complete Street corridors compared with the central counties within which they are located.

For analytic purposes, a Complete Street corridor is composed of those CBs falling wholly or partially within 100 meters of a Complete Street centerline. This parameter corresponds to the study areas used in other research, in which corridors are one or two blocks along any given Complete Street.

The analysis separates Complete Street data from central counties to avoid double-counting. Analysis of the Complete Streets sample shows that they attracted a higher share of jobs overall and jobs in most economic sectors compared with central counties, but some surprises emerged. Complete Streets also attracted somewhat higher shares of middle- and upper-wage jobs compared with central counties, but the increase in the share of lower-wage jobs is not trivial. In the following section, results are reported for job change by economic group, with interpretations.

### Distribution of Share of Job Change by Economic Group with Interpretations

Exhibit 13 presents the distribution of change in jobs within 100 meters of Complete Streets by economic group between 2013 and 2019. To review, 2013 is a reasonable proxy for recovery from the Great Recession. It was the first year when new home sales prices were equivalent to pre-Great Recession prices.<sup>10</sup> The study period goes through 2019, the year before the COVID-19 pandemic. Exhibit 13 shows the change in jobs for the central county as a whole and then the change in jobs near Complete Streets.

<sup>10</sup> See <https://fred.stlouisfed.org/series/ASPUS>.

**Exhibit 13**

Change in Jobs by Economic Group Within 100 Meters of Complete Streets as Share of Central County Change, 2013–2019

Economic Group	Central Counties 2013	Central Counties 2019	Central County Change	Central County Percent Change (%)	100-Meter Complete Street Corridor 2013	100-Meter Complete Street Corridor 2019	100-Meter Complete Street Corridor Change	100-Meter Complete Street Corridor Percent Change (%)	Share of County Change (%)
Industrial	1,807,176	1,955,678	148,502	8.22	24,032	25,820	1,788	7.44	1.20
Office	4,191,155	4,702,309	511,154	12.20	220,724	268,309	47,585	21.56	9.31
Institutional	2,292,585	2,559,866	267,281	11.66	178,956	159,317	(19,639)	-10.97	-7.35
Leisure	2,489,881	2,779,326	289,445	11.62	94,086	106,427	12,341	13.12	4.26
<b>Total Jobs<sup>a</sup></b>	<b>11,294,476</b>	<b>12,694,597</b>	<b>1,400,121</b>	<b>12.40</b>	<b>529,777</b>	<b>573,604</b>	<b>43,827</b>	<b>8.27</b>	<b>3.13</b>

<sup>a</sup> Includes jobs in agriculture, forestry, fishing, mining, or other natural resource economic sectors and construction.

Note: The two-tailed t-test comparing central county and Complete Street corridor means rejects the null hypothesis at  $p < 0.05$ .

Source: Authors' use of LEHD data that are sorted into the economic groups, as described in the text

Overall, Complete Streets added jobs at a slower pace of 8.27 percent compared with 12.40 percent for central counties. That Complete Streets added jobs (and people, as noted below) can be viewed as positive because Complete Streets are located mostly in areas that are already built out (see Schlossberg et al., 2013). By contrast, many central counties have vast amounts of land available for new development. Growth along Complete Streets occurs mostly through the more expensive and time-consuming process of infill and redevelopment.

An interesting surprise is that the 7.44-percent rate of job growth in industrial jobs along Complete Streets nearly matches the 8.22-percent rate of central counties. This similarity may be explained in part because NAICS defines breweries, bakeries, coffee roasters, and related activities as manufacturing enterprises. Industrial jobs added to Complete Streets accounted for 1.20 percent of all such jobs added to central counties. This statistic is remarkable because Complete Streets account for only 0.1 percent of the urban land area of central counties.

Growth of 21.56 percent in office jobs along Complete Streets outpaced the 12.20-percent growth in central counties by nearly double. Indeed, Complete Streets accounted for 9.31 percent of all the changes in central counties, which is remarkable considering the small land area of Complete Streets. Future research can assess whether office jobs were more—or less—resilient along Complete Streets than in central counties in the postpandemic era (see Nelson, Stoker, and Hibberd, 2019).

Jobs in the leisure economic group expanded along Complete Streets at a somewhat higher pace of 13.12 percent, compared with 11.62 percent for central counties. However, Complete Streets as a group lost nearly 20,000 jobs in the institutional economic group, whereas central counties gained nearly 180,000 jobs. A reason is that new educational and healthcare facilities require large areas of land, with parking often in land-extensive, campus-like settings, which cannot be accommodated easily along Complete Streets.



Infill and redevelopment along Complete Streets is often more expensive and time consuming than conventional development elsewhere in the central county. Nonetheless, exhibit 13 shows that nearly 44,000 jobs were added to the sample of Complete Streets. Whereas central counties added vastly more jobs, about 530,000, the LEHD land area of the Complete Streets sample accounts for about 0.1 percent of central county urbanized land area (see exhibit 8). Put differently, although the 44,000 new jobs added to the sample of Complete Streets account for 3.13 percent of all central county job growth, that growth occurred on just 0.1 percent of the central county urban land area, meaning that Complete Streets had 31 times more development proportionate to their land area than central counties. If one removes the institutional economic group from the calculus for reasons noted previously, the Complete Streets accounted for 59 times more growth proportionate to their land area.

Based on this descriptive assessment, the null hypothesis is rejected.

Future research needs to tease out the extent to which Complete Streets would have attracted these jobs anyway, without intervention. Future research can also determine whether there are timing effects, such as growth in jobs soon after the intervention, perhaps absorbing that which was easiest to develop or redevelop first, then growth drifting toward the regional pace because more difficult sites are expensive and time consuming to process. Nonetheless, except for the institutional economic group, this sample of Complete Streets shows a strong association between their presence and growth in jobs during the study period of 2013–19, between the Great Recession and the COVID-19 pandemic.

The change in jobs by wage group is presented next, with interpretations.

### **Distribution of Job Change by Wage Group, with Interpretations**

The literature does not predict whether lower-, middle- or upper-wage jobs will be attracted to Complete Streets. For reasons noted previously, however, the authors expect that Complete Streets jobs will tend to attract middle- and upper-wage groups. Exhibit 14 confirms this point rather starkly with a surprise: lower-wage jobs fell in both central counties and along Complete Street corridors. Although that circumstance requires further research, one may surmise that lower-wage jobs migrated to suburban areas outside central counties, where development costs are lower and demand for those jobs to serve newly suburbanizing areas is higher than in central counties. Notably, Complete Street corridors accounted for 10.44 percent of central county losses in lower-wage jobs.

**Exhibit 14**

Change in Jobs by Wage Group within 100 Meters of Complete Streets as a Share of Central County Change, 2013–19

Wage Group	Central County Change	100-Meter Complete Street Corridor Change	Complete Street Corridor Share of Central County Change
<b>Numerical Change</b>			
Lower Wage	(395,427)	(41,292)	– 10.44%
Middle Wage	1,334,976	48,915	3.66%
Upper Wage	496,640	34,452	6.94%
<b>Share of Change</b>			
Lower Wage	NA	NA	NA
Middle Wage	72.89%	58.67%	NA
Upper Wage	27.11%	41.33%	NA

NA = not applicable.

Note: The two-tailed t-test comparing central county and Complete Street corridor means rejects the null hypothesis at  $p < 0.05$ .

Source: Authors' LEHD data sorted into the economic groups, as described in the text

By contrast, Complete Street corridors accounted for 3.66 percent and 6.94 percent of central county gains in middle- and upper-wage jobs, respectively. Moreover, the share of upper-wage jobs added along Complete Streets was higher, at 41.33 percent, than in central counties, at 27.11 percent, although middle-wage jobs dominated the overall share of change at 58.67 percent and 72.89 percent, respectively.

The conclusion is drawn that Complete Streets tend to attract middle- and, especially, upper-wage jobs, with middle-wage jobs dominating the distribution of change. As such, on the basis of descriptive assessment, the null hypothesis is rejected.

An assessment is presented next on the association between Complete Streets and change in people and households, including demographic, housing tenure, and income outcomes over time and with respect to central counties.

## The Association Between Complete Street Proximity and Change Over Time in People, Households, Housing Tenure, and Income, With Special Reference to Gentrification

This section will show that people and households appear to be attracted to Complete Streets (an example of the Tennyson Street Complete Street in Denver is illustrated in exhibit 15). This attraction does not lead to higher homeownership rates or households that have incomes that are higher than those in the central county. It will also show that, in aggregate, Complete Streets do not appear to lead to gentrification, although some individual Complete Streets might do so; that topic is an area for future research. Analysis suggests that the market demand for Complete Streets appears robust and justifies increasing their supply in case gentrification emerges due to a lack of sufficient supply relative to demand.

**Exhibit 15**

Complete Street Example: Tennyson Steet Route in Denver, Colorado



Source: Complete Streets route plotted by Eric Carlson using Google Earth image posted 9-28-2020. <https://earth.google.com/web/@39.77196107,-105.04474183,1646.58793007a,845.24421645d,35y,-80.43859268h,39.5t,0r/data=OgMKATA>

## Theory, Research Design, Research Questions, and Hypotheses

As noted previously, no clear theory exists relating to the kinds of people and households that would be attracted to Complete Streets. Empirical analysis can help close this gap. The analysis is guided by the interest in knowing how the demographic composition of the population and households has changed over time with respect to Complete Street proximity. One may also be

interested in knowing whether the evidence indicates displacement and gentrification associated with Complete Street proximity.

On the basis of the literature and theory summarized earlier in this report, the following research questions that guide research reported in this section should be considered:

Over time, does the number of people and households increase in aggregate and as a share of regional change?

If so, does the demographic composition of people with respect to minority status, type of housing, housing tenure of owners and renters, and income change over time with respect to Complete Street proximity?

If so, does this change signal displacement or gentrification?

As noted above, “regions” in this context means central counties.

The research questions lend themselves to a descriptive longitudinal, quasi-experimental design that compares change between the treatment— Complete Street corridors—and the control— central counties.

The null hypothesis is that Complete Streets are not associated with significant increases in the number or share of population or households, the number or share of minority persons or households, or households by type and income, or gentrification.

Data and methods are reviewed next.

## **Data and Methods, Results, and Interpretations**

American Community Survey (ACS) data are used for this analysis. The ACS includes reasonably detailed demographic data down to the census block group (CBG) level through its 5-year survey increments. The 2013 5-year survey is the starting point for analysis because it includes mostly data collected after the Great Recession, which ended, technically, in the middle of 2009. The 2019 5-year survey is used as the ending point because it covers a period entirely before the COVID-19 pandemic.

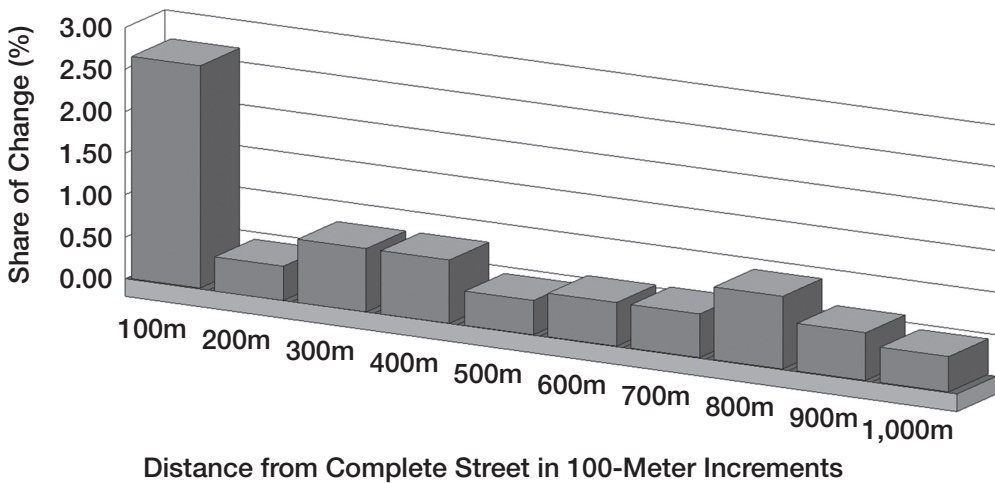
Because this mostly exploratory analysis compares changes for several ACS demographic variables, descriptive analysis is used based on change between 2013 and 2019 along Complete Street corridors as a group and compared with central counties in which they are located, also as a group. Descriptive analysis focuses on the first 100 meters along both sides of Complete Streets’ centerlines. The analysis uses a nearest-point assignment, whereby a census block group (CBG) is assigned to the closest 100-meter buffer.

To confirm the use of the 100-meter distance band for analysis, in exhibit 16, the share of the central county change in households for all central counties was calculated in 100-meter distance bands to 1.0 kilometer for all Complete Streets as a group. The first 100-meter distance band accounts for more than 2.5 percent of the central county share of household change over the

study period (see also exhibit 14), whereas all the other bands accounted for less than 1.0 percent. Consistent with other studies that measured change along the first block or two along Complete Streets, research in this section focuses wholly or partially on any part of CBGs that are within 100 meters of the centerline of Complete Streets.

**Exhibit 16**

Share of Central County Household Change 2013–19 by 100-Meter Distance Band from Complete Streets



*Note: The largest share of change is attributable to the first 100-meter distance band.*  
*Source: Authors*

Descriptive analysis uses the ACS 5-year samples for 2013 and 2019 (covering the period 2009 through 2019) to calculate population, household changes, shares of household change of Complete Streets compared with central counties, change in housing tenure, and change in household income for Complete Street corridors compared with central counties. Exhibit 17 summarizes these variables and their sources.

**Exhibit 17**

Change in Population and Households Along Complete Street Corridors and as a Share of Central County Change, 2013–19

Measure	Central Counties 2013	Central Counties 2019	Central County Change	Central County Percent Change (%)	100-Meter Complete Street Corridor 2013	100-Meter Complete Street Corridor 2019	100-Meter Complete Street Corridor Change	100-Meter Complete Street Corridor Percent Change (%)	Share of County Change (%)	Ratio of Complete Street Change to Central County Change
<b>Population</b>										
Population	20,539,285	22,449,914	1,910,629	9.30	205,504	240,214	34,710	16.89	1.82	1.82
White Non-Hispanic	11,283,190	11,664,985	381,795	3.38	137,032	153,750	16,718	12.20	4.38	3.61
Minority	9,256,095	10,784,929	1,528,834	16.52	68,472	86,464	17,992	26.28	1.18	1.59
<b>Household Type</b>										
Total Households	7,784,674	8,414,875	630,201	8.10	95,785	111,762	15,977	16.68	2.54	2.06
HH w/Child	2,485,393	2,570,210	84,817	3.41	14,593	15,635	1,042	7.14	1.23	2.09
HH no Children*	5,299,281	5,844,665	545,384	10.29	81,192	96,127	14,935	18.39	2.74	1.79
One-Person HH	2,343,006	2,497,799	154,793	6.61	47,167	53,665	6,498	13.78	4.20	2.09
<b>Householder Age</b>										
HH <=25	375,770	322,762	(53,008)	- 14.11	10,554	11,083	529	5.01	All	NA
HH 25–44	3,012,094	3,173,335	161,241	5.35	43,526	52,806	9,280	21.32	5.76	3.98
HH 45–64	2,925,455	3,084,491	159,036	5.44	27,534	30,028	2,494	9.06	1.57	1.67
HH >=65	1,471,355	1,834,287	362,932	24.67	14,171	17,845	3,674	25.93	1.01	1.05

HH = household. NA = Not applicable.

\*Excluding single-person households.

Note: The two-tailed t-test comparing central county and Complete Street corridor means rejects the null hypothesis at  $p < 0.05$ .

Source: Authors' use of ACS data that are sorted into the demographic groups, as described in the text.

The analysis is based on two sets of calculations, both of which separate Complete Street data from data for the rest of the central counties to avoid double counting. The first set of calculations is Complete Street demographic change and demographic change in the share of central county change in terms of total population, non-Hispanic White population, minority population, total households, and households by groups for household type and householder age. The second set of calculations is tenure (owner/renter) and median household income change in Complete Streets compared with central counties.

Exhibit 17 reports descriptive results in terms of the central county and Complete Street corridor figures for 2013 and 2019, along with numerical and percentage changes. The share of central county growth that is attributed to Complete Streets is also reported. The last column is an index of the ratio of Complete Street corridor change to central county change. Ratios above 1.0 indicate that Complete Street corridors are changing at a faster pace than central counties, whereas ratios below 1.0 (of which there are none) would indicate slower change relative to central counties.

Exhibit 17 presents results for the population overall and for White non-Hispanic and minority persons. It also reports results for change in total households, change in households by type from among households with and without children, single-person households by type, and households with householders younger than 25 years of age, between 25 and 44, between 45 and 64, and 65 and older. These results are compared with the results for central counties in terms of growth rates, share of central county growth attributable to Complete Streets, and the ratio of Complete Street to central county growth. Following the results, the authors offer interpretations, including special reference to gentrification.

## **Population**

Adding nearly 35,000 residents between 2013 and 2019, Complete Street corridors grew 16.89 percent, considerably faster than the 9.30-percent growth of central counties. Complete Streets also added minority persons at a much faster pace of 26.28 percent compared with 16.52 percent. On the other hand, the Complete Street corridor White non-Hispanic population grew 12.20 percent compared with 3.38 percent in central counties, or about 3.50 times more. Nonetheless, minorities accounted for most of the population change along Complete Street corridors. In terms of share of growth, Complete Street corridors accounted for 1.82 percent of the total population growth of central counties, 1.18 percent of the minority growth, and 4.38 percent of the White non-Hispanic growth. The null hypothesis that no difference exists in population growth rates between Complete Streets and central counties is rejected.

## **Households by Type**

Complete Streets accounted for a higher share of central county growth among households, 2.54 percent, compared with 1.82 percent for the overall population. Two key reasons account for this difference. First, the number of single-person households grew at about twice the rate along Complete Streets than in central counties, 13.78 percent compared with 6.61 percent—indeed, accounting for 4.20 percent of central county growth. The second reason is that Complete Street corridors accounted for the highest ratio in the change in the share of households with children;

that is, they attracted a ratio of 2.09 times the share of such households in central counties. By comparison, Complete Streets attracted a ratio of 1.79 times more households without children and a ratio of 2.09 times more single-person households. The number is small; 1,042 new households with children were located along Complete Streets compared with 15,977 total new households. The number is not trivial, and it is surprising because one would expect that Complete Streets would not necessarily attract a higher share of households with children than central counties as a whole.

Because households are the key driver of housing demand, demand for new housing along Complete Streets appears to be higher than for central counties. Put differently, by absorbing 2.54 percent of all new households between 2013 and 2019 on urban land area, representing just 0.6 percent of central county urban land area based on CBGs (see exhibit 8), Complete Street urban land area attracted proportionately 42 times more households than their central counties urban land area. This difference is all the more remarkable considering that Complete Street development occurs mostly through expensive and time-consuming infill and redevelopment processes.

The null hypothesis that no difference exists in growth rates among households and households by type between Complete Streets and central counties is supported.

### **Householders by Age, With Interpretations**

Growth among households of all four householder age groups in Complete Street corridors between 2013 and 2019 was more robust compared with growth in central counties. Analysis of the youngest-aged cohort is illustrative. As America ages, its population of younger age cohorts falls. Such is the case among the central counties, where the number of householders younger than 25 years of age fell 14.11 percent between 2013 and 2019. However, the number of these householders living in Complete Street corridors increased 5.01 percent. Mathematically, Complete Streets accounted for all central county growth among householders younger than 25 years of age.

The growth rates among householders between 25 and 44 and between 45 and 64 also eclipsed growth in central counties by 21.32 to 5.35 percent and 9.06 to 5.44 percent, respectively, accounting for 5.76 percent and 1.57 percent of central county growth, respectively. Even the growth rate among householders aged 65 years and older exceeded that of central counties by 25.93 to 24.67 percent, although this group accounted for only 1.01 percent of the share of central county growth.

The null hypothesis that no difference exists in growth rates among households and households by type or householder age between Complete Streets and central counties is rejected.

Changes in housing tenure and household income along Complete Street corridors compared with central counties are considered next.

### **Housing Tenure and Income, With Interpretations**

Exhibit 18 shows changes in housing tenure and median household income for Complete Streets compared with central counties over the study period. The homeownership rate of Complete



Streets fell at a notably faster pace—from 36.5 percent to 33.3 percent—than in central counties, which fell from 57.5 percent to 56.5 percent. Mathematically, 85.59 percent of all new households locating along Complete Street corridors were renters. One can surmise, for reasons noted earlier, that the economics of infill and redevelopment along Complete Streets favors rental over owner-occupied housing. Although the alternative perspective is that existing housing went from owner-occupied to rental, this idea is not supported by the data, which show that the supply of owner-occupied housing increased.

### Exhibit 18

Change in Tenure and Household Income Along Complete Street Corridors and as a Share of Central County Change, 2013–19

Measure	Central Counties 2013	Central Counties 2019	Central County Change	Central County Percent Change (%)	100-Meter Complete Street Corridor 2013	100-Meter Complete Street Corridor 2019	100-Meter Complete Street Corridor Change	100-Meter Complete Street Corridor Percent Change (%)	Share of County Change (%)
<b>Tenure</b>									
Owner HH	4,533,603	4,815,140	281,537	6.21	34,936	37,239	2,303	6.59	0.82
Ownership Rate	57.5%	56.5%	NA	-1.84	36.5%	33.3%	NA	-8.65	
Renter HH	3,251,071	3,599,735	348,664	10.72	60,849	74,523	13,674	22.47	3.92
<b>Income</b>									
Median HH Income (2019\$)	\$69,966	\$77,833	\$7,867	11.24	\$61,405	\$73,470	\$12,065	19.65	NA
Central County Ratio	NA	NA	NA	88%	94%	NA	NA	NA	NA

HH = household. NA = not applicable.

Note: The two-tailed t-test comparing central county and Complete Street corridor means rejects the null hypothesis at  $p < 0.05$ .

Source: Authors based on authors' use of ACS data that are sorted into the demographic groups, as described in the text

Although the homeownership rate fell nationally during the middle 2010s, the much more rapid decline along Complete Street corridors stands out. One reason noted previously is that development along Complete Street corridors is more expensive and time-consuming than elsewhere in central counties. If so, one of the outcomes could be more expensive housing along Complete Streets, leading to higher rental rates over time.

On the other hand, median household income—adjusted for 2019 dollars—rose along Complete Streets at a moderately faster rate of 19.65 percent compared with the 11.25-percent rate for central counties. Although this finding might suggest an increased ability of households to afford home purchases, the caveat is that household incomes along Complete Streets lagged behind the central county median through the study period, being 88 percent of the median in 2013 and 94 percent in 2019. Indeed, one may be surprised about the moderately steep decline in homeownership rate along Complete Streets compared with central counties. This topic is an area in need of additional research.

The null hypothesis that no difference exists in changes in housing tenure and median household income between Complete Streets and central counties cannot be rejected.

## **Special Reference to Gentrification**

The fact that Complete Streets appear to attract larger shares of the region's population and households suggests, first, that the market responds favorably to them and, second, that increased demand can lead to rising prices and, ultimately, gentrification. Some evidence for these trends appears among the sample during the study period. If the difference in median household income between 2013 and 2019 is applied to only the growth in households along Complete Streets, the median household income of new households in 2019 would be more than \$100,000, or much larger than the median household income in 2013. But this suggestion is misleading. Perhaps the higher income is merely spread evenly across new and existing households. Moreover, because of new jobs at higher wages, existing residents along and near Complete Streets have more job opportunities, leading to higher household incomes. Indeed, a previous section of this report shows a shift away from lower wages to moderate and higher ones. Moreover, because the ownership rate along Complete Streets fell at a faster pace than in the central county, whether gentrification in the form of increasing homeownership rates is emerging is not clear. Finally, ACS data do not clearly indicate whether newcomers are displacing existing residents. No clear evidence of this circumstance is indicated based on the minority composition of population change and that rental housing dominates the change in tenure. This subject is clearly an area needing research.

Nonetheless, if Complete Streets are successful, they will attract higher-income households, which could lead to displacement and gentrification. Solutions to moderating adverse gentrification outcomes include increasing the housing supply to meet market demand, increasing the supply of subsidized housing, and preserving existing lower-income housing stock, perhaps through public/private/nonprofit housing and community land trusts. These and other interventions are noted in a subsequent section of this report.

The next section presents an evaluation of changing commuting modes with respect to Complete Streets.

## **The Association Between Complete Streets and Improved Jobs-Housing Balance Ratios Over Time**

By attracting jobs and people, Complete Streets should alter the balance between jobs and households, but in what ways? (The example of the East Boulevard Complete Street in Charlotte is shown in exhibit 19.) A common perception is that commercial streets are job-rich enclaves of nonresidential development with not many people living nearby—at least, people who would work at those jobs. Converting commercial streets into Complete Streets should improve connectivity with workers living nearby and attract new residents, some of whom may work along Complete Street corridors. On the other hand, a Complete Street retrofitted into a residential area should attract jobs that some of the residents would take. A third alternative is one in which Complete Streets attract new residents who work remotely or are self-employed and who seek the Complete Street ambiance.

## Exhibit 19

### Complete Street Example: East Boulevard Route in Charlotte, North Carolina



Source: Complete Streets route plotted by Eric Carlson using Google Earth image posted 12-14-2021. <https://earth.google.com/web/@33.42744969,-111.94092127,354.4478887a,1942.08201563d,30y,-27.99876214h,62.2499736t,0r/data=OgMKATA>

## Theory, Research Design, Research Question, and Hypotheses

In theory, Complete Streets will alter the jobs-housing balance along their corridors, but the direction of change depends on whether the JHB favors jobs or housing at the outset. If the ratio favors jobs, one can theorize that the JHB ratio will adjust toward the household side of the calculation. The reason is that Complete Streets will attract households toward job-rich opportunities. The corollary to this reasoning is that job-rich Complete Streets may attract workers who work remotely or are self-employed and can choose anywhere to live, but they choose Complete Streets for their safety, amenities, accessibility to shops and restaurants, and multimodal options. If the ratio favors households, the JHB ratio will adjust toward jobs because Complete Streets are attracted to where labor is available. The research question is framed as follows:

Is there an association between Complete Streets and change in jobs-housing balance over time such that job-rich or, alternatively, household-rich corridors become less so?

The research question lends itself to a descriptive longitudinal, quasi-experimental design that compares change over time between the treatment—Complete Street corridors—and the control—central counties with respect to change in jobs-housing balance.

The null hypothesis would assert no change in the Complete Street corridor jobs-housing balance ratio compared with that of the central county during the study period. Its rejection would imply that Complete Streets are associated with changes in JHB ratios.

## Data and Method, Results, and Interpretation

ACS data are used for this analysis. The data provide details down to the CBG level in 5-year survey increments. For reasons noted previously, the 2013 and the 2019 5-year ACS surveys are used for analysis. ACS data show the number of people working in the CBG and the number of households. These data provide a direct measure of JHB ratios for Complete Street corridors and central counties. As noted earlier, the descriptive analysis focuses on the first 100 meters along both sides of Complete Streets’ centerlines. A nearest-point assignment is used, whereby a census block group (CBG) is assigned to the closest 100-meter buffer.

Exhibit 20 reports total jobs (based on LEHD data) and households (based on ACS data) in central counties and along Complete Street corridors in 2013 and 2019. Figures for central counties established benchmark JHB ratios of 1.40 in 2013, rising slightly to 1.46 in 2019. Considering that for every new household, there were 2.22 jobs (see bottom row of exhibit 20), more jobs than households moved into central counties. By contrast, the JHB for Complete Streets in 2013 was 5.53, which is sensible because many of them are commercial streets with higher densities of jobs than seen throughout central counties. However, in 2019, the JHB ratio for Complete Streets fell about 10 percent to 5.13. The reason is that whereas the number of jobs along Complete Streets increased by 8.27 percent, the number of households increased by 16.68 percent. More interesting is that the JHB considering just new jobs and households was 2.74, indicating a shift in trends toward households being attracted to Complete Street corridors at an increasing rate relative to jobs.

The conclusion is made that the null hypothesis is rejected.

### Exhibit 20

Change in Central County and Complete Street Corridor Jobs–Housing Balance, 2013–19

Measure	Central Counties 2013	Central Counties 2019	Central County Change	Central County Percent Change (%)	100-Meter Complete Street Corridor 2013	100-Meter Complete Street Corridor 2019	100-Meter Complete Street Corridor Change	100-Meter Complete Street Corridor Percent Change (%)
Jobs	10,764,699	12,120,993	1,400,121	12.40	529,777	573,604	43,827	8.27
Households	7,688,889	8,303,113	630,201	8.10	95,785	111,762	15,977	16.68
Jobs/ Household Balance	1.40	1.46	2.22	3.41	5.53	5.13	2.74	7.14

*Note: The two-tailed t-test comparing central county and Complete Street corridor means rejects the null hypothesis at  $p < 0.05$ .  
Source: Authors’ use of ACS data that are sorted into the groups, as described in the text*

## The Association Between Complete Street Proximity and Change in Commuting Over Time

Complete Streets aim to alter commuting modes away from driving and to transit, walking, biking, and working from home (the Mill Avenue, Tempe, Complete Street is shown in exhibit 21). Using ACS data over the period 2013–2019, the authors will show that compared with central counties, Complete Streets are associated with expected outcomes. Theory, research questions, research

design, and hypotheses are presented below, followed by a review of the data, analytic approach, and method, and concluding with results and interpretations.

## Exhibit 21

### Complete Street Example: Mill Avenue Route in Tempe, Arizona



Source: Complete Streets route plotted by Eric Carlson using Google Earth image posted 10-31-2022. <https://earth.google.com/web/@33.42744969,-111.94092127,35.4,4478887a,1942.08201563d,30y,-27.99876214h,62.2499736t,0r/data=OgMKATA>

## Theory, Research Design, Research Question, and Hypotheses

In theory, improving the street design by making streets safer, more attractive, and traversable would reduce dependency on automobiles in the journey to work relative to people living in the region—in this case, the central county. One would also expect that more people living along or near Complete Streets would not need to own vehicles relative to people living in the central county. This expectation is consistent with the theory of commuting behavior near TODs noted previously in this article.

The following research question guides research into this issue:

Over time, are Complete Streets associated with increasing shares of walking, biking, transit use, working from home, and households owning no cars compared with the region?

The research question lends itself to a descriptive longitudinal, quasi-experimental design, in which Complete Streets are the treatment and central counties are the control.

The null hypothesis would assert no change in the commuting mode to work between Complete Streets and central counties in terms of driving, transit, walking, biking, working from home, and not owning cars.

The analytic approach, results, and interpretations are reviewed next.

## **Data and Method, Results, and Interpretations**

Like the analysis reported previously, ACS data are used for this analysis. Data on the mode choice to work are reported at the CBG level in 5-year survey increments. For reasons already noted, the 2013 and 2019 5-year samples of the ACS are used. Central county data exclude data for Complete Street corridors.

Because this is an exploratory analysis that compares changes among several ACS commuting mode choices, descriptive analysis is used that compares changes between 2013 and 2019 along Complete Street corridors as a group and the central counties in which they are located, which are the control. The study area is the first 100 meters along both sides of Complete Streets' centerlines. A nearest-point assignment is used, whereby a census block group (CBG) is assigned to the closest 100-meter buffer. Exhibit 22 presents the results. Notably, the number of workers living along Complete Streets in the sample increased 23.01 percent compared with 14.97 percent for the central counties. Second, driving to work via car increased 15.64 percent for workers living in Complete Street corridors, which was slightly more than the 14.39-percent increase among workers living in central counties.

In all other respects, the increase in the non-auto commute to work is substantially more among workers living along Complete Streets than in the central county. Notably, transit use increased 25.05 percent in Complete Street corridors compared with 15.39 percent in the central county. Walking or biking to work increased 42.17 percent in Complete Street corridors, compared with 20.15 percent in central counties. Working from home increased 64.06 percent (before the pandemic) along Complete Streets, compared with 41.39 percent for central counties. Workers living along Complete Streets accounted for 10.97 percent of the share of change in central county workers walking or biking to work. This statistic is remarkable considering that central counties added more than 1.5 million workers compared with about 31,000 workers for Complete Streets.

Several insights can be drawn from the commuting mode analysis. One is that the number of workers who commuted to work via transit or walking/biking increased 67.22 percent along Complete Street corridors, which is about twice the rate of 35.54 percent in central counties.

## Exhibit 22

### Change in Commuting Mode Choice Along Complete Street Corridors and as a Share of Central County Change, 2013–19

Measure	Central Counties 2013	Central Counties 2019	Central County Change	Central County Percent Change (%)	100-Meter Complete Street Corridor 2013	100-Meter Complete Street Corridor 2019	100-Meter Complete Street Corridor Change	100-Meter Complete Street Corridor Percent Change (%)	Share of County Change (%)	Ratio of Complete Street Change to Central County Change
Workers	10,097,511	11,608,975	1,511,464	14.97	133,813	164,609	30,796	23.01	1.87	1.41
Drive to Work	8,072,245	9,233,878	1,161,633	14.39	65,305	75,521	10,216	15.64	0.88	1.09
Transit	539,917	623,035	83,118	15.39	14,501	18,134	3,633	25.05	4.37	1.63
Walk/Bike	375,794	451,514	75,720	20.15	22,133	31,466	9,333	42.17	12.33	2.09
Work from Home	525,413	742,872	217,459	41.39	7,555	12,395	4,840	64.06	2.23	1.55
No Vehicles	717,955	722,285	4,330	0.60	24,319	27,093	2,774	11.41	64.06	18.91
No-Drive	1,396,935	1,755,426	376,297	26.94	44,189	61,995	17,806	40.30	4.73	1.50
No-Drive Rate	13.83%	14.95%	22.87%	NA	33.02%	37.66%	57.82%	NA	NA	NA

NA = not applicable.

Note: The two-tailed t-test comparing central county and Complete Street corridor means rejects the null hypothesis at  $p < 0.05$ .

Source: Authors' use of LEHD data that are sorted into the commuting groups, as described in the text

Another insight is that 64.06 percent of the change in workers living along Complete Streets is attributable to those who work from home, compared with 41.39 percent for central counties. The reasons would seem that Complete Streets are safe and attractive places in which to live and work and have sufficient shopping and services nearby to avoid needing to reach them by car. Although one may surmise that Complete Streets are not for everyone, they are an option for those who seek the benefits and ambiance of Complete Street corridors. This option would be the case for those workers who can live anywhere. But even many of those people want to do business in such “third places” as neighborhood coffee shops or other places that are social gathering spots.

Exhibit 22 shows a no-drive statistic composed of transit, walking, biking, and working at home. For central counties, the number of workers not driving to work increased 26.53 percent between 2013 and 2019 (before the pandemic), but the figure was 40.30 percent for those living along Complete Street corridors. The next statistic, the no-drive rate, shows that for central counties, 24.90 percent of the change in commuting to work was via nondriving modes, which means that nearly 75 percent of the changes were attributable to those who previously drove to work. By contrast, 57.82 percent, or more than one-half of the change in workers living along Complete Street corridors, was attributable to those who did not drive to work. The implication is that more than one-half of the new workers living along Complete Streets do not drive to work but instead use transit, walk, bike, or work from home.

A final trend emerges from the data. The number of households along Complete Streets accounted for 64.06 percent of the increase among all households reporting no vehicles present. This rate of change was 18.91 times faster than for central counties. The implication is that those who live on or near Complete Streets depend on cars to a far lesser extent than those living elsewhere in the central county.

Unfortunately, the data do not allow for estimating the change in vehicle miles traveled per worker living along Complete Streets compared with central counties or the reduction in greenhouse gases or other pollutants. One may surmise from the literature that it would be in the order of one-half (Ewing et al., 2008). Numerous implications for Complete Streets policy and investment are offered in the concluding section of this article.

The null hypothesis that no difference exists in changes in commuting mode between Complete Streets and central counties is rejected.

The association between multifamily rents and proximity to Complete Streets is presented next.

## **The Association Between Complete Street Proximity and Multifamily Rents**

This final analysis addresses the extent to which the real estate market values proximity to Complete Streets (a Complete Street example is illustrated in exhibit 23 for Edgewater Drive in Orlando). The analysis uses commercial real estate data for multifamily rents from CoStar Group. As will be shown, a very positive and robust association exists between Complete Street proximity



and multifamily residential rent. This association leads to several important policy implications that will be addressed at the end of the article.

### Exhibit 23

#### Complete Street Example: Edgewater Drive Route in Orlando, Florida



Source: Complete Street route plotted by Eric Carlson using Google Earth image posted 11-8-2017. <https://earth.google.com/web/@28.56991933,-81.38903658,30.9647673a,2809.79830531d,30y,-38.99514918h,61.73581052t,0r/data=0gMKATA>

## Theory, Research Design, Research Question, and Hypotheses

Standard theory of urban real estate values establishes that the more accessible land is to markets, the more valuable it becomes. The study uses multifamily rents as a proxy for the influence of Complete Streets' proximity on real estate values. The proximity of multifamily residential units to Complete Streets should confer a positive benefit that is capitalized in the market in the form of higher value or higher rent, assuming that accessibility value exceeds "externality value." For instance, a form of externality value is proximity to a solid waste dump: the closer a property, the lower its value. If Complete Streets generate externalities such as noise, congestion, exhaust, speeding cars, unsafe pedestrian conditions and so forth, residential values (or rents) would fall the closer residential property is to those conditions. Alternatively, proximity would confer a negative or ambiguous benefit if the externality value exceeds the accessibility value. The research question posed in this respect is thus:

Do Complete Streets confer a positive or negative premium to real estate value with respect to proximity?

This research question lends itself to a temporal cross-section quasi-experimental design evaluating the association between Complete Street proximity and real estate values, controlling for other influences on real estate value at one point in time.

The null hypothesis asserts simply that no change in real estate value with respect to proximity to Complete Streets would be indicated.

The data, analytical approach, and model are presented next.

## Data and Method, Results, and Interpretations

Based on the preceding theory, research question, research design, and hypothesis, the analytic strategy entails measuring the change in real estate values with respect to distance from Complete Street centerlines. An upward-sloping gradient toward Complete Streets would be consistent with the theory in that Complete Streets confer centrality and accessibility value. A downward-sloping gradient would signal that Complete Streets are undesirable because real estate values are higher the farther away a property is from them.

The analysis requires data that reflect real estate value. Studies reviewed previously used local property tax assessor data for individual case studies. However, when evaluating multiple Complete Streets in several states, where the efficacy of assessor data varies on the basis of state and local regulations and the quality of data management, other data are needed. For this analysis, those data are provided by CoStar Group, the nation's largest centralized source of commercial real estate data.<sup>11</sup> CoStar Group data focus on rents for several types of real estate, including multifamily residential properties, which are used for this analysis. Data from 2019 are used because it was the year before the COVID-19 pandemic and the year in which all Complete Streets in this study were finished and functional. Finally, data are converted into metric units such as rents per square meter.

Multivariate ordinary least squares is used to tease out the influence of Complete Street proximity on multifamily rent per square meter. Using theoretical and research design foundations as a guide, the following general model is used for empirical application (Nelson, 2017).

$$R_i = f(S_i, SES_i, C_i, M_i, PT_i, Db_i) \quad (1)$$

Where:

**R** is the asking rent per square foot for property *i*.

**S** is the set of structural attributes of property *i*.

**SES** is the set of socioeconomic characteristics of the vicinity of property *i*.

**C** is a set of centrality attributes of property *i*—in this case, distance to the nearest freeway/expressway ramps because distance to downtown is included as a dimension leading to the Place Typology (**PT**) variable described below.

---

<sup>11</sup> See <https://www.costargroup.com/>.

**M** is the metropolitan area within which property *i* is located—because metropolitan area conditions and markets vary between them, identifying the location of property *i* within its respective market helps control for metropolitan-specific influences.

**PT** is the Place Typology based on cluster analysis using such factors as measures of urban form of the vicinity of property *i* and distance to downtown.

**DB** is the distance band (see below for specification details) of property *i* to a transit station.

The dependent variable **R** is the *Asking Rent per Square Foot* for property *i* reported by CoStar Group during 2019 for all multifamily properties in its inventory. Because CoStar Group data come from real estate brokerages participating in its network, the data exclude nonparticipating brokerages or entities and properties not for rent, such as owner-occupied properties. By logging the dependent variable, the semi-log model allows for coefficients to be interpreted reasonably as the percent change in rent attributable to a one-unit change in an independent variable, such as an individual distance band (Statistical Data Services, 2018).

The following control variables noted in the equation above are used to control for the influences on rent other than Complete Street distance.

**S** is the bundle of structure and lease restriction attributes for property *i* reported by CoStar Group, including the following:

**Gross Leasable Area** in units of 100 square meters, with the expectation that there will be a positive association between office and multifamily building area and rent because larger buildings presumably include more amenities than smaller ones.

**Effective Year Built** is the later of the year of construction or the year of renovation, as reported by CoStar Group, with the expectation that newer buildings will command more rent than older ones.

**Vacancy Rate** is reported by CoStar Group, with no expectation as to the association with rent. On the one hand, higher vacancy rates in a multifamily building imply weak markets that would reduce the asking rent, which is the dependent variable. Although that may be the case for some structures, it is the opposite for others. The reason is that higher vacancies can reflect higher turnover that allows landlords to raise rents toward the market rate, perhaps after years of rents being discounted for long-term tenants, which is a common practice. In effect, landlords are holding out for higher-paying tenants. Accordingly, signs may not be predictable, especially considering that the study area is composed of stable to rapidly growing central counties.

The number of **Stories** is also included, with the expectation that the taller the building, the higher the mean rent.

The **SES** dimension is composed of **Median Household Income** from the 5-year sample of the 2018 American Community Survey for the block group within which a CoStar Group property is located, for which a positive association is expected with respect to rent (Xiao, 2016).

Because the **PT** (Place Typology) variable (see below) includes distance from downtown, one variable includes the C dimension in this application: **Distance to Freeway**. This phrase is defined as the distance to the nearest freeway or expressway ramp in kilometers. Because freeway ramps can be considered nuisances in addition to accessibility benefits, no signs of association are predicted.

The **M** dimension is composed of the individual metropolitan areas within which the Complete Streets are located. Because these areas are controls that account for idiosyncrasies of metropolitan markets, no direction of associations is predicted.

The Place Typology (**PT**) protocol developed by Nelson et al. (2021) is also used as a control. This protocol is an index variable characterizing the urban landscape milieu that is comprised of the following:

- Jobs per acre.
- Proportion of jobs that are retail and arts.
- Total population per acre.
- Total households per acre.
- Percent of households with no kids.
- Percent of owner-occupied housing.
- Intersections per square mile.
- Proportion of intersections with three to four vertices.

The method uses LEHD (Longitudinal Employment-Household Dynamics) and census data applied at the block group (BG) level, producing these statistically unique place types, which also conform to *a priori* expectations.

- High Mixed-Use/Accessibility (**High-MA**) Centers, such as downtowns, suburban nodes, and other areas with high concentrations of jobs and people, high land use, and high levels of accessibility.
- Moderate Mixed-Use/Accessibility (**Moderate-MA**) areas, such as large combinations of BGs with modest mixes of jobs and people and lower connectivity between land uses, often surrounding High-MA centers.
- Low Mixed-Use/Accessibility (**Low-MA**) areas, which are usually low-density residential areas that some might characterize as urban sprawl and which are usually found between Moderate-MA and Poor-MA areas.
- Poor Mixed-Use/Accessibility (**Poor-MA**) areas, which are dominated by very low-density residential development, with no employment centers and the lowest levels of accessibility between land uses. *Poor-MA* will be used as the referent in analysis, meaning

that the variation in rents attributable to Place Typology will be estimated with respect to this variable, all other factors considered.

Controlling for all factors, rents along a continuum are predicted to be highest in the *High-MA* places and lowest in the *Poor-MA* places.

Although all the above variables are the controls, **DB**, or distance band, is the treatment or dependent variable. The literature indicates that about two-thirds of transit riders walk 400 meters or less to access transit (Guerra, Cervero, and Tischler, 2012). Accordingly, the study area extends to 400 meters from Complete Streets' centerlines. Cases and associated distances beyond 400 meters are called the referent because DB coefficients are measured with respect to those cases. DBs of 100-meters are used because they are roughly the width of typical urban blocks, although the range varies from one-half that distance (such as for downtown Portland, Oregon) to more than double (such as for downtown Salt Lake City, Utah). However, another DB is used that is a proxy for being on the front of Complete Streets, which is defined as less than or equal to 30 meters (about 100 feet). DBs are thus—

- Less than or equal to 30 meters, which is the proxy for fronting Complete Streets.
- More than 30 meters to 100 meters.
- More than 100 meters to 200 meters.
- More than 200 meters to 300 meters.
- More than 300 meters to 400 meters.
- More than 400 meters, as the referent.

Exhibit 24 summarizes the control and treatment variables, sources of data, measures, and predicted signs.

With nearly 14,000 cases, the model includes many times more data than used in most prior studies (Higgins and Kanaroglou, 2016). Although there are no a priori expectations of goodness-of-fit outcomes, the literature suggests that ordinary least squares regression analysis usually explains about one-fifth to two-thirds of the variation in the observed rent for cases. Note is made that whereas some analysts may be preoccupied with achieving high levels of regression model explanation, too many variables can lead to overspecification. It is best to emphasize that the variables most relevant to the question and the relevant controls are sufficient to avoid serious omitted variable bias (a form of endogeneity) in the model.

**Exhibit 24**

Variables, Data Sources, Measurement Type, and Predicted Rent Associations			
Variable	Data Source	Measure	Predicted Sign
<b>Dependent Variable</b>			
<b>Rent</b>			
Monthly Rent per Square Meter (logged)	CoStar Group	Continuous	NA
<b>Control Variables</b>			
<b>Structure Controls</b>			
Gross Leasable Area (100 m <sup>2</sup> )	CoStar Group	Continuous	+
Mean Unit Size (100 m <sup>2</sup> )	CoStar Group	Continuous	+
Stories	CoStar Group	Continuous	+
Effective Year Built	CoStar Group	Continuous	+
Vacancy Rate	CoStar Group	Continuous	+/-*
<b>Socioeconomic Control</b>			
Median Household (HH) Income (\$1,000 units)	Census ACS	Continuous	+
<b>Location Control</b>			
Distance from Freeway Ramp (per kilometer)	Computed	Continuous	-
<b>Metropolitan Control</b>			
Metropolitan Area Location	Assigned	Binary	NA
<b>Place Typology Control</b>			
High Mix/Accessibility	Computed	Binary	+
Moderate Mix/Accessibility	Computed	Binary	+
Low Mix/Accessibility	Computed	Binary	+
Poor Mix/Accessibility	Computed	Binary	Referent
<b>Treatment Variables</b>			
<b>Distance Band</b>			
<=30 frontage			
Bands of 30–100, >100–200, >200–300, >300–400 meters	Computed	Binary	See text
Beyond 400 meters	Computed	Binary	Referent

\* See text for explanation.

ACS = American Community Survey. NA = Not applicable.

Sources: American Community Survey; CoStar Group

Exhibit 25 presents regression results. All the control variables conformed to expectations. For instance, the larger the multifamily residential project, the higher the rent per square meter overall (larger projects can afford to provide more amenities), whereas the larger the individual dwelling unit, the lower the average rent per square meter (indicating diminishing returns to size). Moreover, the taller the building, the higher the rent per square meter, presumably because higher floors command better views, which raises the overall average rent. The effective age of the building, measured as the year of opening or recent renovations, shows that the newer the structure, the higher the rent per square meter. The coefficient for vacancy suggests that higher vacancy rates in the structure are associated with higher rents per square meter compared with the rest of the structure. Although initially counterintuitive, this suggestion makes sense for the reasons noted previously. Higher neighborhood incomes are also associated with higher rents. Lastly, the farther the structure is from the nearest freeway intersection, the lower the rent will be because of reduced automobile accessibility to the larger region.

**Exhibit 25****Complete Street Proximity Multifamily Rent Regression Results**

<b>Variables</b>	<b>Coefficient</b>	<b>T-Score</b>
Constant	- 3.647000	- 15.869
Gross Leasable Area (100 m <sup>2</sup> )	<b>0.000015</b>	6.591
Mean Unit Size (100 m <sup>2</sup> )	<b>- 0.000000</b>	- 32.993
Stories	<b>0.023000</b>	23.09
Effective Year Built	<b>0.002000</b>	18.394
Vacancy Rate	<b>0.004000</b>	10.813
Median HH Income	<b>0.003213</b>	31.67
Freeway Distance (km)	<b>- 0.017776</b>	- 12.253
Atlanta	- 0.440000	- 24.552
Charlotte	- 0.480000	- 24.55
Cleveland	- 0.579000	- 31.598
Dallas-Fort Worth	- 0.529000	- 30.188
Denver	- 0.173000	- 9.966
Eugene	- 0.353000	-10.531
Minneapolis-St. Paul	- 0.352000	- 21.226
New Orleans	1.812000	5.774
Orlando	- 0.358000	- 16.858
Phoenix	- 0.431000	- 26.939
Portland	- 0.249000	- 16.708
Reno	- 0.377000	- 15.04
San Diego	- 0.025000	- 1.668
Seattle	- 0.039000	- 2.623
Tampa-St. Petersburg	- 0.439000	- 22.365
Low MA	<b>1.4%</b>	1.09
Moderate MA	<b>5.7%</b>	4.237
High MA	<b>12.7%</b>	8.517
<=30 meters	<b>16.4%</b>	4.36
>30 meters to <=100 meters	<b>11.8%</b>	2.578
>100 meters to <=200 meters	<b>6.8%</b>	1.817
>200 meters to <= 300 meters	<b>10.0%</b>	3.195
>300 meters to <= 400 meters	<b>4.4%</b>	1.312
<b>Model Performance Metrics</b>		
Mean Monthly Rent per Square Meter	\$17.95	
Cases	13,736	
Adjusted R <sup>2</sup>	0.499	
Standard Error	0.313	
F-ratio	442.781	

Notes: Bold coefficients are  $p < 0.05$ . No significance determination is made for metropolitan controls because signs of association are not predicted. Coefficients for Place Typology and Distance Band variables are converted into percentages for ease of interpretation.

Source: Authors

Place Typology control outcomes are considered next. As previously stated, they are an index of the milieu of urban areas, ranging from the most integrated and mixed (High-MA) to the least (Poor-MA). Multifamily rent premiums within High-MA places clearly dominate, commanding 12.7 percent more than the mean for Poor-MA places, the referent. Indeed, the High-MA premium is also considerably higher than that for Moderate-MA places. One can imagine the premium the market is willing to pay to rent a residential unit in an area rich with amenities, services, and mobility options compared with a more sterile one. The role of Place Typologies in influencing rents will be revisited.

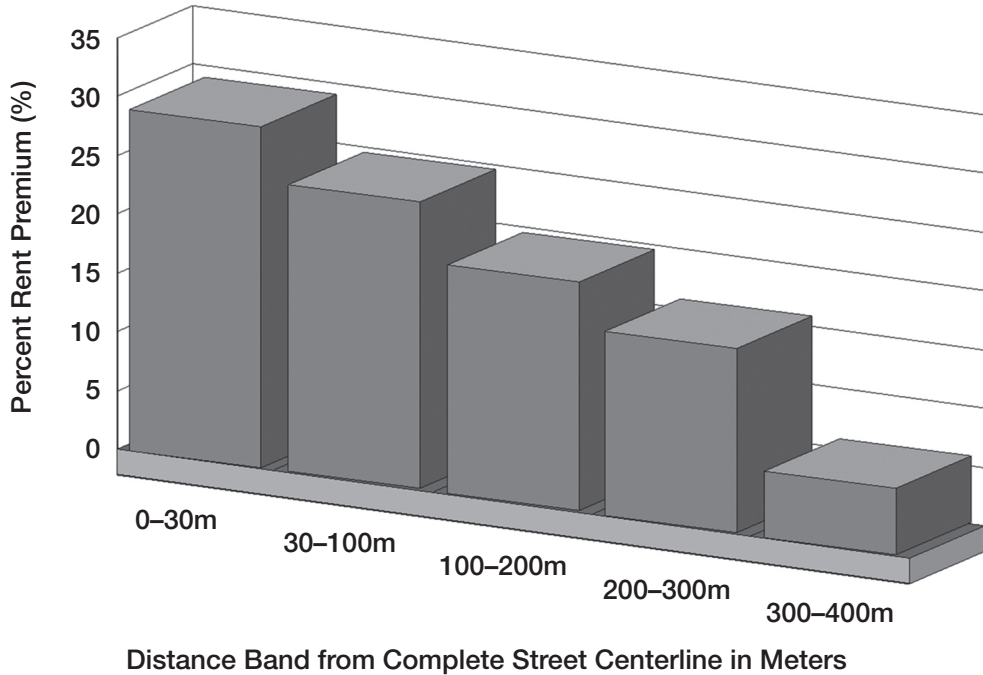
Of principal interest is the association between multifamily rents and Complete Street proximity. Controlling for all other factors, rent premiums are 16.4 percent higher in the 30-meter DB, the one fronting Complete Streets, than the mean for central counties, and they are 11.8 percent higher in the 30- to 70-meter distance band, which is essentially the rest of the Complete Street frontage block. The premium falls to 6.8 percent in the 200-meter distance band, rises anomalously to 10.0 percent in the 300-meter distance band, and then falls to 4.4 percent in the last distance band.

The market effect of Complete Street proximity can be estimated on the basis of the median rent of \$17.95 per square meter. For the first DB of less than or equal to 30 meters from the Complete Street centerline, rents would average \$20.89 per square meter, which is 16.4 percent, or \$2.94, higher than the sample mean. For an apartment of 100 square meters (a little less than 1,100 square feet), the rent premium for fronting on a Complete Street would be \$294.38 per month, or \$3,533 per year.

Because both the type of area that contains a Complete Street and the distance to Complete Streets matter, both elements can be combined to aid in interpretation. Suppose a given Complete Street is classified as being within a High-MA area. Suppose also that a rental unit fronts along a Complete Street. Based on the median rent of \$17.95 per square meter, the High-MA location adds 12.7 percent to the rent, whereas being in the closest DB adds another 16.4 percent. The combined place and location rent premium would be 29.1 percent, resulting in the mean rent increasing from \$17.95 to \$23.10, or \$5.22 more per square meter. Rent for the 100-square-meter apartment noted previously would increase from \$1,795 to \$2,317 per month, a difference of \$6,268 annually.

Exhibit 26 illustrates a hypothetical construct of rent premiums with respect to place and Complete Street proximity. Suppose the first three DBs are within the High-MA Place Typology, the fourth DB (200–300 meters away) is within the Moderate-MA Place Typology, and the fifth DB (300–400 meters away) is within the Low-MA Place Typology. Rent premiums based on place and distance from Complete Streets would be 29.1 percent, 24.5 percent, 19.5 percent, 15.7 percent, and 5.8 percent, respectively, as illustrated in exhibit 26. Annual rents based on the 100-square-meter apartment example used previously would range from \$27,808 in the closest DB (30 or fewer meters from the Complete Street) to \$22,789 in the fifth DB (300–400 meters from the Complete Street).



**Exhibit 26****Place and Location Rent Premiums With Respect to Distance From Complete Streets**

*m = meters.*

*Notes: In this illustration, the first three DBs are within the High-MA Place Typology, the fourth DB (200–300 meters) is within the Moderate-MA Place Typology, and the fifth DB (300–400 meters) is within the Low-MA Place Typology (see text for details).*

*Source: Authors*

The conclusion is drawn that the null hypothesis asserting no change in real estate value with respect to proximity to Complete Streets is not supported. Indeed, one can conclude further that proximity to Complete Streets makes a difference in influencing multifamily residential rents in expected ways.

These results and those from previous sections lead to the concluding discussion on implications for Complete Street policy and land use planning.

## **Outcome Assessments, Leveraging Complete Street Value Added, and the Redevelopment Role**

The research suggests that Complete Streets are associated with attracting jobs and people, improving the jobs-housing balance, reducing dependency on automobiles for commuting, and increasing multifamily rents with respect to proximity to the Complete Streets. This concluding section summarizes key findings and assesses the role of Complete Streets in meeting market needs. The section then frames the role of Complete Streets in advancing the jobs-housing balance (JHB) as a desirable outcome of attracting jobs and households and identifying associated benefits.

The discussion continues with the potential for capturing the value added from Complete Streets and reinvesting that value into expanding the supply of them. This section also discusses how the return on investment in Complete Streets compares with economic development efforts. This discussion is followed by identifying potential gentrification concerns and policy options to mitigate adverse outcomes, including the role of value-added capture to do so. The article closes with a call to expand Complete Streets, in part by leveraging the benefits that value-added Complete Streets generate to the local economy and fiscal base.

## **Outcome Assessments**

This article presents the first comprehensive assessment of whether Complete Streets can be a redevelopment strategy. Statistical analysis is applied to 26 Complete Streets in 16 central counties of their respective metropolitan areas. The authors estimate that these Complete Streets total 47.9 kilometers in length. Complete Street corridors were initially defined as 100 meters, but they also include all census blocks using LEHD data or census block groups using ACS data within or touching that distance. The LEHD study area was 15.8 square kilometers, or 0.1 percent of the total urbanized area of central counties, whereas the ACS study area was 97.1 square kilometers, or 0.6 percent of central counties. In other words, with respect to jobs, the Complete Street study area excluded 99.9 percent of their central counties, whereas, for people, households, income, and commuting, it excluded 99.4 percent of their central counties.

What follows is a summary of outcomes in terms of the extent to which Complete Streets attract jobs and households in a manner that improves the jobs-housing balance, with the potential for gentrification, reducing dependency on automobiles in the commute to work, and increasing the attractiveness of Complete Street proximity to multifamily rental housing. This discussion is followed by an expanded policy discussion of the role of Complete Streets in improving jobs-housing balance and how capturing the value added by Complete Streets helps mitigate adverse outcomes, especially those related to gentrification.

### **Complete Streets as a Redevelopment Strategy to Attract Jobs**

With respect to associations between Complete Streets and changes in jobs and jobs by wage group, on the basis of LEHD data at the census block level compared with central counties between 2013 and 2019, these highlights are offered:

- Overall, Complete Streets accounted for about 3.13 percent of the change in central county jobs despite making up just 0.1 percent of the urban land area based on census blocks, which accounts for about 31 times the proportionate share of growth in the central counties. This statistic is impressive because, nearly by definition, Complete Streets serve substantially built-out urban places. The implication is that Complete Streets are an important source of infill and redevelopment for employment expansion.
- Perhaps confirming the role of Complete Streets as places of improved accessibility and amenities, they added jobs in the office economic group at a much faster pace than central counties, increasing 21.56 percent compared with 12.20 percent. Followup is needed to

establish whether and to what extent offices located along Complete Streets have been more resilient to the pandemic shock than offices in other locations. Thus, a collateral area of future research could explore the extent to which Complete Streets are more economically resilient than other areas (see Nelson, Stoker, and Hibberd, 2019).

- Perhaps also confirming the role of Complete Streets as places of amenities, jobs in the leisure economic group grew by 13.12 percent, compared with 11.62 percent for central counties.
- Complete Streets also added jobs in the industrial economic group at a healthy pace of 7.44 percent, compared with 8.21 percent for central counties.
- On the whole, Complete Streets lost jobs in the institutional economic group. One may surmise that the reason is that development in this group requires large areas of land for buildings, campuses, and parking.

Although no explicit expectations are indicated about the kinds of jobs by lower-, middle-, and upper-wage categories that would be attracted to Complete Streets, research found that both Complete Streets and central counties lost lower-wage jobs, perhaps because they migrated to suburban areas outside central counties. On the other hand, middle-wage jobs accounted for 59 percent of the share of job growth along Complete Street corridors, compared with 72 percent for central counties. Upper-wage jobs accounted for 41 percent of the share of job growth, compared with 28 percent in central counties.

Complete Streets in the sample added jobs in most economic groups at a faster pace than in their central counties despite being in areas already substantially built out and where infill and redevelopment are often more expensive and time consuming than conventional development elsewhere in the central county. Research provides evidence that Complete Streets can be an effective redevelopment strategy.

### **Complete Streets as a Redevelopment Strategy to Attract People and Households, with Some Evidence of Gentrification**

Using 2013 and 2019 5-year ACS data (covering the periods 2009–2013 and 2015–2019, respectively), analysis shows the following associations between the presence of Complete Streets and changes in people, households, tenure, and income compared with central counties.

- Between 2013 and 2019, Complete Streets added population at a faster pace of 16.89 percent, compared with 9.38 percent for their central counties. The share of the minority population along Complete Streets also grew 26.28 percent, faster than the 16.52-percent growth in their central counties.
- Between 2013 and 2019, the number of households along Complete Street corridors grew 16.68 percent, more than twice the 8.10-percent rate for central counties.
- Households with children along Complete Street corridors grew at a rate more than double that of central counties: 7.14 percent compared with 3.41 percent. Consistent with expectations,

Complete Streets attracted single-person households at more than twice the rate of central counties: 13.78 percent compared with 6.61 percent. Somewhat surprising, however, is that growth among households without children (excluding single persons) substantially outpaced that of central counties, increasing 18.39 percent compared with 10.29 percent.

- By contrast with central counties, which lost 14.11 percent of householders younger than 25 years of age, Complete Streets added them at a rate of 5.01 percent. At the other end of the age spectrum, Complete Streets added householders older than 65 years of age at about the same pace as central counties, 25.93 percent compared with 24.67 percent. The findings were surprising, however, in that the growth rate along Complete Streets among householders between 45 and 64 years of age was about twice that of central counties: 9.06 percent compared with 5.44 percent. The rate of growth along Complete Streets among householders between 25 and 44 years of age was also surprising, growing nearly four times faster than in central counties: 21.32 percent compared with 5.35 percent.
- Although the number of homeowners living along Complete Street corridors increased by 6.59 percent during the study period—about the same rate as central counties, at 6.21 percent—the share of homeowners went down by 8.65 percent, in contrast to central counties, where the reduction was 1.74 percent. Moreover, the homeownership rate along Complete Streets fell from 36.5 percent in 2013 to 33.3 percent in 2019. Rent households increased by 22.47 percent along Complete Streets, compared with less than one-half that rate, at 10.94 percent, for central counties.
- Finally, although the median household income along Complete Streets rose at a higher rate than in central counties, 19.65 percent compared with 11.24 percent (adjusted for inflation), median household incomes along Complete Streets remain lower than in central counties. On the other hand, growth in households implies that the average income of new households located along Complete Streets is substantially greater than that of existing households, perhaps as much as twice the income.
- Inasmuch as Complete Streets attracted 2.05 percent of all new households in their host central counties on only 0.6 percent of the urban land area, they attracted 3.4 times more households than what was proportionate to their land area.

The evidence suggests that Complete Streets are an effective strategy to increase population and households. Although Complete Streets added proportionately more minorities and households with children, homeownership rates fell, and median household income remained below that of central counties. Yet median housing incomes are rising faster along Complete Streets than for central counties as a whole, which indicates that some level of gentrification is occurring. The solutions to moderating adverse gentrification include increasing supply to meet market demand, increasing the supply of subsidized housing, and preserving existing lower-income housing stock, perhaps through public/private/nonprofit housing and community land trusts. That topic is discussed later in this article.

## Complete Streets as a Redevelopment Strategy to Improve Jobs-Housing Balance

This subsection highlights the analysis mentioned previously relating to associations between Complete Streets and change in jobs-housing balance with respect to central counties. The 5-year ACS samples for 2013 and 2019 are used for analysis.

In 2013, the United States had about 144 million employed workers<sup>12</sup> living in about 122 million households,<sup>13</sup> representing a national jobs-housing balance ratio of 1.18. As seen previously, the central counties in the sample had a JHB ratio of 1.50 in 2013, indicating that they were relatively job-rich compared with the nation. This conclusion is sensible because central counties are the economic centers of regions. For their part, Complete Streets had a JHB ratio of 5.53 in 2013, indicating that they were even more job-rich than central counties.

During the study period, 2013–19, the JHB for central counties increased to 1.56, indicating that they had become more job-rich. By comparison, the JHB for Complete Streets fell 7.14 percent to 5.13. Although Complete Streets remained job-rich, they attracted proportionately more households than jobs. Implications of this finding are elaborated later in this article.

## Complete Streets as a Strategy to Change Commuting Patterns

As discussed previously, this study uses ACS data to assess the association between Complete Streets and changes in commuting patterns over the period 2013–19 with respect to central counties. Key findings include the following:

- Although the number of people in households living along Complete Street corridors who were working increased 23.01 percent, those who commuted to work via automobiles increased by considerably less, at 15.64 percent. By contrast, the increase in central county workers (14.97 percent) roughly matched the increase in those commuting via automobiles (14.39 percent).
- The use of transit by workers living along Complete Street corridors increased 25.05 percent, compared with 15.39 percent for central counties.
- Even more dramatic, the number of workers walking or biking to work who lived along Complete Street corridors increased 42.17 percent, twice the 20.15-percent increase for central counties.
- Even before the pandemic, the number of people working from home was increasing. Between 2013 and 2019, the number of workers in central counties increased 41.71 percent, but the increase for Complete Streets was 64.06 percent.
- Overall, 40.30 percent of the change in workers living along Complete Streets did not drive to work, compared with 26.94 percent in central counties.

---

<sup>12</sup> See <https://www.bls.gov/opub/mlr/2014/article/unemployment-continued-its-downward-trend-in-2013.htm>.

<sup>13</sup> See <https://www.census.gov/data/tables/2013/demo/families/cps-2013.html>.

- Finally, whereas the number of central county households without any vehicles increased by only 0.60 percent, that attribute was an order of magnitude higher at 11.41 percent for households living along Complete Streets, and they accounted for 64.06 percent of the entire change in the number of central county households without vehicles.

The implications of changes in commuting patterns in the context of Complete Streets to advance jobs-housing balance are offered later.

### **Complete Street Proximity as a Positive Influence on Multifamily Residential Rents**

One of the promises of Complete Streets is improving real estate value along and near them. Evidence of this benefit is assessed by evaluating the variation in multifamily rents with respect to Complete Street proximity. A previous section of this article indicated that for properties within 30 meters of Complete Streets, the rent premium is 16.4 percent. For properties between 30 and 100 meters of Complete Streets, the rent premium is 11.8 percent, controlling for other factors. Adding the urban milieu increases the rent premium considerably. Where Complete Streets have high mixed-use/accessibility features, rent premiums with respect to Complete Street proximity increase another 12.7 percent. The implications of this finding are provided in the value-added discussion later.

### **Assessing the Attraction of Jobs and Households Through the Jobs-Housing Balance Lens**

The literature on Complete Streets is devoid of any connection to the jobs-housing balance literature and research. This omission is a mistake because Complete Streets are a critical element of advancing jobs-housing balance policies, and jobs-housing balance is also an objective of urban redevelopment efforts.

The JHB findings, presented earlier in this article, have important policy implications. The analysis of commuting modes indicated that Complete Streets fared much better than their central counties with respect to increasing use of transit, walking, biking, and even working at home. Could it be that once job-rich Complete Streets become safer and more attractive and that households who work in or near Complete Streets move to them? This topic is an area in need of future research.

For the most part, Complete Streets do not appear to be gentrifying much in the popularly construed sense (see Hwang and Lin, 2016), at least not yet. Instead, homeownership rates have declined (as rates increased in central counties), new residents are mostly minorities, and incomes have remained below the average of central counties. But median household incomes are inching up, and multifamily rents are rising, so these factors may be indicators of impending gentrification. Some approaches to minimizing gentrification outcomes were discussed previously, and this section will explore them more in the context of value-added capture.

The jobs-housing balance benefits of Complete Streets are missing from the research literature. This subject should be another area of future research. Blumenberg and King (2021) and Blumenberg and Siddiq (2023), for instance, worry that the lack of affordable housing may push households

away from job-rich urban areas into areas where housing is cheaper, making commuting to work more expensive. In the view of those researchers, one solution is to advance policies and investments that increase the supply of housing in job-rich areas. Research indicates that Complete Streets could be such an opportunity. Although the challenge is to match job skills with housing prices, research suggests that it might already be occurring, at least among the sample of Complete Streets.

Another consideration is that households living along Complete Street corridors tend to save on transportation costs. In the United States, the typical household spends about 20 percent of its budget on transportation and 30 percent on housing, for a total of about 50 percent. Much of that cost is owning and maintaining cars. But if living along Complete Streets means no or fewer cars need to be owned and commuting via other modes occurs at a higher rate than elsewhere in central counties, transportation costs are lower, perhaps significantly lower. These savings can be used to buy or rent larger homes or in other ways improve the economic well-being of households. To the extent that households moving into Complete Street corridors save on their transportation costs—Complete Streets accounted for 39.05 percent of the entire change in central county households without a car—their economic well-being likely improves. This topic is another area in need of further research.

The preceding findings have important planning implications. Local efforts are needed to increase land use diversity, especially in terms of broadening allowable residential land uses. One of the authors of this article (Nelson) has been a land use planner spanning 6 decades, from the 1970s into the 2020s. Over this period, he has found that most land use plans he reviewed allocate more land for commercial and industrial development than the market needs. Much of the oversupply of office and retail land is found along commercial corridors, where multifamily residential uses are not allowed. Oversupplied commercial land and undersupplied multifamily residential land are the consequences. Values fall because of oversupplied commercial land, which leads to reduced property tax revenues. Unfortunately, some local governments have a sinister reason for undersupplying multifamily zoning along commercial corridors and elsewhere in the community: to use zoning to socially engineer the demographic composition of cities. The authors' review of Complete Streets literature, however, shows that this was not the case because commercial and residential zoning are prevalent. It also found that most of these commercial corridors already have transit or are transit-ready for new or expanded transit services. Once residential development occurs, new residents increase the local demand for retail and offices, thereby absorbing some of the otherwise oversupplied commercially zoned land (Nelson and Hibberd, 2019a). This trend leads to more walking and biking between different land use types (Koschinsky and Talen, 2015) and more transit use. Moreover, with a mix of commercial and residential uses along a walkable or bikeable corridor with transit, Complete Streets attract people who choose to work from home or work in “third places,” such as coffee shops, further reducing automobile dependency.

This leads to a key conclusion of this article that the value added from Complete Street investments should be used to help mitigate adverse outcomes and expand their supply to meet market demand.

## Value-Added Capture to Invest in New Complete Streets to Meet the Market Demand

This article has asserted that Complete Streets are an important redevelopment strategy. The introduction showed that the market demand is high for living where stores and restaurants are accessible by walking and where the commute to work is shorter. Surveys by the National Association of REALTORS® (NAR) show that roughly one-half of America's urban households want these benefits, but only 13 percent or so enjoy them now. Subsequent sections of this article showed that Complete Streets are associated with attracting jobs and people. Although gentrification may become a concern, adverse impacts can be addressed. Indeed, expanding the supply of Complete Streets can also moderate gentrification pressures. This article later indicated that Complete Streets are associated with improving the jobs-housing balance and that they reduce automobile dependency. The article further showed that renters are willing to pay more to live near Complete Streets, perhaps about one-quarter more when part of a mixed-use/accessible urban milieu. Indeed, the NAR survey reviewed previously revealed that about three-quarters of households would be willing to pay more for accessibility to the kinds of opportunities that Complete Streets offer.

Given how the market responds to the presence of Complete Streets, one can surmise that the market needs more of them. But how can they be paid for? This concluding discussion explores how value-added benefits associated with Complete Streets can be used to leverage more redevelopment along new Complete Streets and, at the same time, help moderate potential adverse effects associated with gentrification.

A large body of literature shows how the value added from public investments can be calculated and then captured to expand infrastructure, mitigate impacts, invest in new ventures, and so forth (see summary by Germán and Bernstein, 2018). The authors' research suggests that new jobs and new households along the sample of Complete Streets generate about \$6 billion in new property value. The calculation follows. With about 44,000 new jobs at 35 square meters per job and a construction cost of about \$1,300 per square meter,<sup>14</sup> excluding land, new nonresidential development along Complete Streets is estimated to have cost about \$2 billion in 2023 dollars; adding 25 percent for land brings the cost to \$2.5 billion. On the residential side, 16,000 new households living in attached units averaging 100 square meters at \$1,000 per square meter<sup>15</sup> are estimated to cost about \$1.6 billion; adding 25 percent for land brings the cost to \$2 billion. These figures exclude mark-up to market value. Adding one-third for profit and overhead to the \$4.5 billion total to estimate market value results in a \$6 billion value added to Complete Streets. If one assumes a 1.6-percent average annual effective property tax rate to this value,<sup>16</sup> the value-added development generates about \$100 million in new property tax revenue annually.

---

<sup>14</sup> Estimated from <https://www.buildingjournal.com/construction-estimating.html>: national average in 2023 for four- to seven-floor office buildings of 50,000 square feet, of moderate quality, with conversion into square meters.

<sup>15</sup> Estimated from <https://www.buildingjournal.com/construction-estimating.html>: national average in 2023 for four- to seven-floor apartments of 50,000 square feet, of moderate quality, with conversion into square meters.

<sup>16</sup> This is a rounded average of all urban properties included in an analysis by the Lincoln Institute of Land Policy in its *50-State Property Tax Comparison Study*.



An economic value is added as well. At an average wage of \$60,000 per year,<sup>17</sup> the 44,000 new jobs located along Complete Streets increased wages along them by \$2.6 billion annually. Of the 16,000 new households, household incomes rose by about \$1.2 billion annually along Complete Streets. Census data do not reveal how many workers at these new jobs live in the new households, so one cannot know the net increase in new jobs and households along Complete Streets. One also cannot know how many of those jobs or households would have located elsewhere; thus, one cannot know how many of them are attributable purely to Complete Streets. Future research can build from these research findings to tease out these refinements.

What is the cost? Using cost data from the NCSC (2021) adjusted to 2023, the authors estimated that the Complete Streets in the sample cost about \$600 million to build.<sup>18</sup> The value-added benefit to cost ratio is thus 10:1 (\$6 billion value-added benefit compared with \$600 million cost).<sup>19</sup> These outcomes reflect only the period 2013–19. One could extrapolate results many decades into the future to estimate the total potential magnitude of people and jobs that could be attracted to them over a planning horizon. This calculation excludes the extent to which Complete Streets leverage new investments outside the corridor, such as along feeder routes leading to them. These are areas in need of formalized economic analysis.

To the extent that redevelopment can be viewed as a form of economic development, how does the sample of Complete Streets returns compare with economic development investments? Economic development analysis often uses return on investment as a performance metric. As applied previously, it is defined as the ratio of total returns over time to initial costs incurred. Ratios of more than 1.0 indicate that returns exceed costs, returns of 1.0 indicate a break-even investment, and returns of less than 1.0 indicate that costs exceed benefits. This calculation is different from rate-of-return metrics that measure the average annualized return of investments over time, such as internal rate of return and capitalization rates (Nelson, 2014). How does the return on investment among the Complete Streets compare with other economic development efforts? An example comes from Florida, where returns to several economic development investments were compared, such as the Capital Investment Tax Credit (CITC), Qualified Target Industry Tax Refund (QTI), Brownfield Redevelopment Bonus Tax Refund (BFRD), and Enterprise Zone (EZ) Program.<sup>20</sup> Of these investments, the QTI generated a return on investment of more than 6.0, whereas the CITC ratio was about 2.0. Among the redevelopment programs, BFRD generated a return of 4.0, whereas the EZ program showed negative returns. Although this is just one set of comparisons from one large, rapidly growing state, the implication is that the return on investment from the Complete Streets in the sample compares favorably.

According to Shapard and Cole (2013), Complete Streets do not cost appreciably more than the cost that would be incurred to upgrade “incomplete” streets during their normal facility life cycle reinvestment process. From this perspective, a local government could sequence the conversion of

---

<sup>17</sup> Forbes uses the figure \$59,428 for early 2023, which is rounded to the next \$10,000 as a reasonable estimate for average U.S. wages at the end of 2023. See <https://www.forbes.com/advisor/business/average-salary-by-state/>.

<sup>18</sup> Cost data are provided for about one-half of the Complete Streets used in this study. The figure is based on the 2023 cost per kilometer and then multiplied by the total kilometers in the sample to estimate the total cost.

<sup>19</sup> Although investment and cost figures are rounded, the 10-to-1 ratio calculation is circumstantial.

<sup>20</sup> See <http://edr.state.fl.us/content/returnoninvestment/ROI-SelectEconDevIncentives.pdf>.

selected incomplete streets for redevelopment into Complete Streets during the normal rehabilitation and upgrade process with only modest incremental costs. This action could raise the value-added benefit-cost ratio even higher because value-added investments along those new Complete Street corridors would be mostly net of public investment that would have occurred anyway.

## Addressing Potential Gentrification Concerns

Finally, the authors addressed implications for gentrification along with some ways in which to mitigate adverse outcomes. First, existing residents and new, lower-income ones benefit from the cost-of-living advantages of living along Complete Street corridors.<sup>21</sup> These advantages include transportation cost savings and lower housing costs, at least until market demand exceeds supply and pushes housing costs up. The principal danger of gentrification is that existing lower-income households would be pushed out of their homes and replaced by higher-income households. This circumstance can occur if existing housing stock is bought by investors and repurposed for higher-income households or demolished altogether and replaced with more expensive housing.

Second, lower-income residents provide much of the ridership that transit needs to be financially feasible. This observation is important because nearly all Complete Streets in the sample are served by buses, bus rapid transit (BRT), light rail, and streetcars. Typically, as household income increases, the use of public transit falls. Research is needed to determine the extent to which new residents along transit-served Complete Streets use transit compared with existing residents with respect to income.

Complete Streets raise supply and income concerns. The supply side includes the need to expand the number of Complete Streets and expand the housing supply along them. As previously noted, expanding the Complete Street supply can occur substantially through the normal cycle of street reinvestment (see Shapard and Cole, 2013). Expanding housing for lower-income market segments may be more challenging, but there are important options, including, but not limited to, the following:

- Instituting inclusionary zoning policies such that new residential development would be required to add housing that is dedicated to lower-income households.<sup>22</sup>
- Encouraging housing agencies to give additional weight to applications for Low-Income Housing Tax Credits (LIHTC) that are located along Complete Streets.<sup>23</sup> An example would be

---

<sup>21</sup> Several perspectives of Boarnet et al. (2017) are applied here.

<sup>22</sup> For a review of inclusionary housing generally and a suite of effective examples, see [https://www.lincolnst.edu/sites/default/files/pubfiles/inclusionary-housing-full\\_0.pdf](https://www.lincolnst.edu/sites/default/files/pubfiles/inclusionary-housing-full_0.pdf).

<sup>23</sup> For details about how LIHTCs work, see <https://www.huduser.gov/portal/datasets/lihtc.html>. Generally, each state receives an annual tax credit allotment. These allotments are used to leverage other private and nonprofit funds to build affordable housing. Because tax credits are in demand, many housing agencies cannot fund all proposals. Indeed, some states give additional or preferential points to projects located near transit stations. The same concept can be adapted to Complete Streets.

giving extra points for LIHTC projects located along, say, HUD-approved<sup>24</sup> Complete Streets, thereby increasing the odds that those projects would be built.

- Expanding local public, private, nonprofit, and philanthropic lower-income housing efforts into Complete Streets. Because the Complete Street concept is relatively new and its benefits are unknown, until such research as reported in this article becomes known, many existing lower-income housing providers might not know how Complete Streets can advance their mission.
- Leveraging Community Reinvestment Act (CRA) resources to expand housing supply along Complete Streets. The CRA requires federally chartered financial institutions to use a portion of their revenue to improve local communities.<sup>25</sup> These institutions could be made aware of Complete Street benefits to target populations, allowing them to leverage other funds to expand housing supply along them.
- Adjusting local fee structures to reflect cost savings associated with Complete Street development. For instance, transportation impact fees<sup>26</sup> are among the highest. They are often based on regional highway needs serving distant suburban communities. However, closer-in areas already have the transportation capacity needed to serve new development, or new development's impact on transportation facilities is reduced because of such multimodal facilities as Complete Streets. Impact fees should be adjusted accordingly. Likewise, more compact developments, such as those found along Complete Streets, do not have the same water and wastewater impact as lower-density development, meaning that those impact fees can be reduced.

Demand-side approaches are also an option, principally increasing the income of target households living along or near Complete Streets, thereby enabling them to afford to live there. These approaches include but are not limited to the following:

- Creating rental housing subsidies in which participating landlords receive supplemental income from the local community for renting to qualifying households along Complete Streets. The authors suggested earlier that Complete Streets may generate new tax revenue, part of which can be used for the rental supplement. These rental subsidies are a form of income supplement for tenants.
- Exempting qualifying housing from property taxes. Under certain conditions, nonprofit housing providers in some states are exempt from local property taxes. Inasmuch as property taxes are often the single largest budget item for rental housing, exemptions enable local housing agencies to serve more households. The reduced rent effectively increases tenant income.
- Considering applications of the basic income concept.<sup>27</sup> Conceptually, qualifying households receive a supplement to their incomes, without strings attached, to be used as they wish. The

---

<sup>24</sup> This approval would be done through a rule-making process linking what would be considered a qualifying Complete Street for HUD purposes with the LIHTC program, which is managed by the U.S. Department of the Treasury.

<sup>25</sup> See [https://www.federalreserve.gov/consumerscommunities/cra\\_about.htm](https://www.federalreserve.gov/consumerscommunities/cra_about.htm).

<sup>26</sup> For a review of impact fee theory, practice, law, and applications, see Nelson et al., 2023.

<sup>27</sup> See <https://basicincome.stanford.edu/about/what-is-ubi/>.

concept is not broadly used but is gaining support among local governments and, in one case, the state of California.<sup>28</sup> For instance, Cambridge, Massachusetts, pays qualifying households \$500 per month.<sup>29</sup> Its program is applied citywide. A version of this concept can be applied to targeted Complete Streets in a community, perhaps financed in part from new taxes generated from Complete Streets.

To the extent that gentrification may be a concern along particular Complete Streets, the preceding offers several approaches to address it. No one approach will be appropriate for all situations, and some situations will likely require new approaches. Where gentrification may be a concern, perhaps programs can be created in advance so that potential adverse outcomes can be addressed before becoming a crisis.

## Complete Streets as a Redevelopment Strategy

In review, accounting for only 0.1 to 0.6 percent of central county urbanized land areas, based on LEHD census block and ACS census block group study areas, respectively, between 2013 and 2019 (after the Great Recession but before the COVID-19 pandemic), the research shows that Complete Streets account for disproportionately large shares of central county growth in jobs, people, and households. Complete Streets also improved local jobs-housing balance, reduced automobile dependence, and increased property values, as reflected in multifamily rents, albeit with some potential for gentrification outcomes that may need to be addressed in the ways outlined above. A key to their success is that Complete Streets help meet the unmet demand for walkable communities with multi-mobility options. Although the Complete Streets in the sample cost about \$600 million to build—much of which would have been spent anyway in the normal course of street upgrading—research indicates that they leveraged about \$6 billion in total redevelopment investments. As also noted, few economic development programs match this return on investment. It is difficult to imagine a more cost-effective redevelopment investment than Complete Streets.

## Acknowledgments

The authors are indebted to Ken Dueker, emeritus professor of urban studies and planning at Portland State University, for reviews of earlier drafts. The authors are also indebted to Eric Carlson for using Google Earth to plot Complete Street routes in KML. The authors are especially indebted to an anonymous reviewer who provided an extensive, constructive review that helped refine the analysis. The authors also acknowledge Laura Jensen for editorial assistance. The authors remain responsible for the content. Lastly, the authors also acknowledge the assistance of the National Institute for Transportation and Communities through funding from the U.S. Department of Transportation and the University of Arizona. The views presented herein do not necessarily represent those of the sponsors.

---

<sup>28</sup> See <https://www.cdss.ca.gov/inforesources/guaranteed-basic-income-projects>.

<sup>29</sup> See <https://www.cambridgema.gov/riseup>.

## Authors

Arthur C. Nelson is emeritus professor of urban planning and real estate development at the University of Arizona as well as emeritus presidential professor of city and metropolitan planning at the University of Utah. Robert Hibberd is a doctoral candidate in geography at the University of Arizona.

## References

- AAA Foundation for Traffic Safety (FTS). 2011. "Impact Speed and a Pedestrian's Risk of Severe Injury or Death." <https://www.nar.realtor/reports/nar-community-and-transportation-preferences-surveys>.
- Alonso, William. 1964. *Location and Land Use: Toward a General Theory of Land Rent*. Cambridge, MA: Harvard University Press.
- Anderson, Geoff, and Laura Searfoss. 2015. *Safer Streets, Stronger Economies*. Washington, DC: Smart Growth America and National Complete Street Coalition.
- Bas, Javier, Mohammad B. Al-Khasawneh, Sevgi Erdogan, and Cinzia Cirillo. 2023. "How the Design of Complete Streets Affects Mode Choice: Understanding the Behavioral Responses to the Level of Traffic Stress," *Transportation Research Part A* 173: 103698.
- Berg, Claudia N., Uwe Deichmann, Yishen Liu, and Harris Selod. 2015. Transport Policies and Development. World Bank Policy Research Working Paper No. 7366, World Bank, Washington, DC. <https://ssrn.com/abstract=2630818>.
- Bian, Ruijie, and Tara Tolford. 2023. "Evaluating the Implementation of the Complete Streets Policy in Louisiana: A Review of Practices and Projects in the Last 10 Years," *Transportation Research Record* 2677 (3): 505–20. <https://doi.org/10.1177/03611981221115726>.
- Blaesser, Brian W., and Thomas P. Cody, eds. 2008. *Redevelopment: Planning, Law, and Project Implementation—A Guide for Practitioners*. Chicago: American Bar Association.
- Blumenberg, Evelyn, and Hannah King. 2021. "Jobs-Housing Balance Re-Re-Visited," *Journal of the American Planning Association* 87 (4): 484–96. <https://doi.org/10.1080/01944363.2021.1880961>.
- Blumenberg, Evelyn, and Fariba Siddiq. 2023. "Commute Distance and Jobs-Housing Fit," *Transportation* 50 (3): 869–91. <https://doi.org/10.1007/s11116-022-10264-1>.
- Boarnet, Marlon G., Raphael Bostic, Danielle Williams, Raul Santiago-Bartolomei, Seva Rodnyansky, and Andy Eisenlohr. 2017. *Affordable Housing in Transit-Oriented Developments: Impacts on Driving and Policy Approaches*. Los Angeles: University of Southern California, National Center for Sustainable Transportation Research.
- Bourne, Larry S. 1967. *Private Redevelopment of the Central City: Spatial Processes of Structural Change in the City of Toronto*. Chicago: University of Chicago, Dept. of Geography.

- Brenman, Marc, and Thomas W. Sanchez. 2012. *Planning as if People Mattered*. Washington, DC: Island Press.
- Cervero, Robert. 1989. "Jobs-Housing Balancing and Regional Mobility," *Journal of the American Planning Association* 55 (2): 136–50.
- Chapple, Karen, and Anastasia Loukaitou-Sideris. 2019. *Transit-Oriented Displacement or Community Dividends? Understanding the Effects of Smarter Growth on Communities*. Cambridge MA: MIT Press.
- Congress for the New Urbanism. 2013. "Lancaster Boulevard: Lancaster, California." <https://www.cnu.org/what-we-do/build-great-places/lancaster-boulevard>.
- Culver, Gregg. 2017. "Mobility and the Making of the Neoliberal 'Creative City': The Streetcar as a Creative City Project?" *Journal of Transport Geography* 58: 22–30.
- Dawkins, Casey, and Ralph Buehler. 2010. *Promoting Affordable Housing Near Public Transit: The Role of Planning*. Policy Paper 3. Arlington, VA: Urban Affairs and Planning, Virginia Tech.
- Dawkins, Casey, and Rolf Moeckel. 2016. "Transit-Induced Gentrification: Who Will Stay, and Who Will Go?" *Housing Policy Debate* 26 (4–5): 801–18. <https://doi.org/10.1080/10511482.2016.1138986>.
- Delmelle, Elizabeth C., Isabelle Nilsson, and Alexander Bryant. 2021. "Investigating Transit-Induced Displacement Using Eviction Data," *Housing Policy Debate* 31 (2): 326–41.
- Ewing, Reid, Keith Bartholomew, Steve Winkelman, Jerry Walters, and Don Chen. 2008. *Growing Cooler: The Evidence on Urban Development and Climate Change*. Washington, DC: Urban Land Institute.
- Ewing, Reid, William Schroeder, and William Greene. 2004. "School Location and Student Travel: Analysis of Factors Affecting Mode Choice," *Transportation Research Record* 1895 (1): 55–63.
- Ewing, Reid, Guang Tian, and Torrey Lyons. 2017. *Does Compact Development Increase or Reduce Traffic Congestion?* NITC-RR-1020. Portland, OR: Transportation Research and Education Center (TREC). <https://doi.org/10.15760/trec.187>.
- Federal Highway Administration (FHWA). n.d. "Road Diets (Roadway Configuration)." <https://highways.dot.gov/safety/proven-safety-countermeasures/road-diets-roadway-configuration>.
- . 2017. 2017 National Household Travel Survey. Washington, DC: U.S. Department of Transportation. <https://nhts.ornl.gov>.
- . 2022. *Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges*. Washington, DC: US Department of Transportation. <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-03/Complete%20Streets%20Report%20to%20Congress.pdf>.
- Germán, Lourdes, and Allison Ehrich Bernstein. 2018. *Land Value Capture: Tools to Finance Our Urban Future*. Cambridge, MA: Lincoln Institute of Land Policy.

Giuliano, Genevieve. 1991. "Is Jobs-Housing Balance a Transportation Issue?" *Transportation Research Record* 1305: 305–12.

Global Designing Cities Initiative. 2016. *Global Street Design Guide*. Washington, DC: Island Press.

Guerra, Erick, Robert Cervero, and Daniel Tischler. 2012. "The Half-Mile Circle: Does It Best Represent Transit Station Catchments?" *Transportation Research Record* 2276: 101–109

Hajrasouliha, Amir H., and Shima Hamidi. 2017. "The Typology of the American Metropolis: Monocentricity, Polycentricity, or Generalized Dispersion?" *Urban Geography* 38 (3): 420–44.

Hanson, Alex, and Nisha Botchwey. 2017. Measuring the Impact of Complete Streets Projects on Bicyclist and Pedestrian Safety in Sacramento County, California. Research paper. Atlanta: Georgia Institute of Technology.

Hanson, Christopher S., Robert B. Noland, and Charles Brown, 2013. "The Severity of Pedestrian Crashes: An Analysis Using Google Street View Imagery," *Journal of Transport Geography* 33: 42–53.

Higgins, Christopher D., and Pavlos S. Kanaroglou. 2016. "Forty Years of Modelling Rapid Transit's Land Value Uplift in North America: Moving Beyond the Tip of the Iceberg," *Transport Reviews* 36 (5): 610–34. <https://doi.org/10.1080/01441647.2016.1174748>.

Howard, Ebenezer. 1902. *Garden Cities of Tomorrow*. London, 1902.

Hutchinson, T.P. 2018. *Road Safety Theory*. <https://static1.squarespace.com/static/5abac9a62487fdd534e4c3af/5bea2506562fa70ff06c2b9e/1542071574742/RoadSafetyTheory.pdf>.

Hwang, Jackelyn, and Jeffrey Lin. 2016. "What Have We Learned About the Causes of Recent Gentrification?" *Cityscape* 18 (3): 9–26.

Jordan, Samuel W., and Stephanie Ivey. 2021. "Complete Streets: Promises and Proof," *Journal of Urban Planning and Development* 147 (2): 04021011.

Keith, Ladd, Marilyn Taylor, Zelalem Adefris, Janice Barnes, Matthijs Bouw, Dennis Carlberg, Justin Chapman, Tracy Gabriel, Mariane Jang, John Macomber, Molly McCabe, Cynthia McHale, Christine Morris, Jim Murley, Josh Murphy, Phil Payne, Katherine Burgess, Leah Sheppard, and Erica Ellis. 2018. *Ten Principles for Building Resilience*. Washington, DC: Urban Land Institute. <https://doi.org/10.13140/RG.2.2.12653.95203>.

Koschinsky, Julia, and Emily Talen. 2015. "Affordable Housing and Walkable Neighborhoods: A National Urban Analysis," *Cityscape* 17 (2): 13–56.

Kwoka, Gregory J., E. Eric Boschmann, and Andrew R. Goetz. 2015. "The Impact of Transit Station Areas on the Travel Behaviors of Workers in Denver, Colorado," *Transportation Research Part A: Policy and Practice* 80 (C): 277–87.

Leinberger, Christopher B., and Patrick Lynch. 2015. *Foot Traffic Ahead*. Washington, DC: Smart Growth America.

Li, Mingche M., and H. James Brown. 1980. "Micro-Neighborhood Externalities and Hedonic Housing Prices," *Land Economics* 56 (2): 125–41.

Litman, Todd. 2015. *Evaluating Complete Streets: The Value of Designing Roads For Diverse Modes, Users and Activities*. Victoria, BC: Victoria Transport Policy Institute.

Liu, Jenny H., and Wei Shi. 2020. *Understanding Economic and Business Impacts of Street Improvements for Bicycle and Pedestrian Mobility—A Multicity Multi-Approach Exploration*. Report No. NITC-RR-1031/1161. Portland, OR: Transportation Research and Education Center (TREC). <https://doi.org/10.15760/trec.248>.

McCann, Barbara. 2010. *Happy Anniversary, Complete Streets!* Washington DC: Smart Growth America. <https://smartgrowthamerica.org/happy-anniversary-complete-streets/>.

McCann, Barbara, Anthony Boutros, and Anna Biton. 2023. "Complete Streets: Prioritizing Safety for All Road Users," *Public Roads* 86: 4 (Winter). <https://highways.dot.gov/public-roads/winter-2023/complete-streets-prioritizing-safety-all-road-users>.

Mehdipanah, Roshanak, Giulia Marra, Giulia Melis, and Elena Gelormino. 2017. "Urban Renewal, Gentrification and Health Equity: A Realist Perspective," *European Journal of Public Health* 28 (2): 243–48. doi: 10.1093/eurpub/ckx202. PMID: 29149276.

Mills, Edwin S. 1967. "An Aggregative Model of Resource Allocation in a Metropolitan Area," *The American Economic Review, Papers and Proceedings* 57 (2): 197–210.

Mofolasayo, Adekunle. 2020. "Complete Street Concept, and Ensuring Safety of Vulnerable Road Users," *Transportation Research Procedia* 48: 1142–65.

Mumford, Lewis, 1968. *The Urban Prospect*. New York: Harcourt, Brace, and World.

Muth, Richard F. 1969. *Cities and Housing: The Spatial Pattern of Urban Residential Land Use*. Third Series: Studies in Business and Society. London: London University of Chicago Press.

Namatovu Stellah, Bonny Enock Balugaba, Kennedy Muni, Albert Ningwa, Linda Nsabagwa, Frederick Oporia, Arthur Kiconco, Patrick Kyamanywa, Milton Mutto, Jimmy Osuret, Eva Rehfuss, Jacob Burns, and Olive Kobusingye. 2022. "Interventions To Reduce Pedestrian Road Traffic Injuries: A Systematic Review of Randomized Controlled Trials, Cluster Randomized Controlled Trials, Interrupted Time-Series, and Controlled Before-After Studies," *PLOS ONE* 17 (1): e0262681. <https://doi.org/10.1371/journal.pone.0262681>.

National Association of City Transportation Officials (NACTO). 2012. *Urban Street Design Guide*. Washington, DC: NACTO.

National Association of REALTORS®. 2017. *Community and Transportation Preferences Survey*. <https://www.nar.realtor/reports/nar-community-and-transportation-preference-surveys>.

———. 2023. *Community and Transportation Preferences Survey*. <https://www.nar.realtor/reports/nar-community-and-transportation-preference-surveys>.



National Complete Streets Coalition (NCSC). 2016a. *Complete Streets Help Create Livable Communities*. [https://livewellsiouxfalls.org/images/uploads/main/cs-livable\\_community.pdf](https://livewellsiouxfalls.org/images/uploads/main/cs-livable_community.pdf).

———. 2016b. *Complete Streets Stimulate the Local Economy*. <https://static1.squarespace.com/static/5898fb16579fb3651b5f836c/t/5b40d22e352f532eea92c8b9/1530974768969/cs-economic.pdf>.

———. 2018. *The Elements of a Complete Streets Policy*. <https://smartgrowthamerica.org/wp-content/uploads/2018/02/CS-Policy-Elements.pdf>.

———. 2021. *Complete Streets Smart Growth America Report Summary*. Washington, DC: National Complete Streets Coalition.

Nelson, Arthur C. 1992. “Effects of Heavy-Rail Transit Stations on House Prices With Respect to Neighborhood Income,” *Transportation Research Record* 1359: 127–32.

———. 2012. “The Mass Market for Suburban Low-Density Development Is Over,” *The Urban Lawyer* 44 (4): 811–26.

———. 2013. *Reshaping Metropolitan America*. Washington, DC: Island Press.

———. 2014. *Foundations of Real Estate Development Financing: A Guide for Public-Private Partnerships*. Washington, DC: Island Press.

———. 2017. “Transit and Real Estate Rents,” *Transportation Research Record* 2651 (1): 22–30. <https://doi.org/10.3141/2651-03>.

———. 2020. “The Great Senior Short-Sale or Why Policy Inertia Will Short Change Millions of America’s Seniors,” *Journal of Comparative Urban Law and Policy* 4 (1): 473–528.

Nelson, Arthur C., Geoff Anderson, Keith Bartholomew, Pamela Perlich, and Thomas W. Sanchez. 2009. *The Best Stimulus for the Money: Briefing Papers on the Economics of Transportation Spending*. Washington, DC: Smart Growth America.

Nelson, Arthur C., Bruce Appleyard, Shyam Kannan, Reid Ewing, Matt Miller, and Dejan Eskic. 2013. “Bus Rapid Transit and Economic Development: Case Study of the Eugene-Springfield BRT System,” *Journal of Public Transportation* 16 (3): 41–57.

Nelson, Arthur C., Dejan Eskic, Shima Hamidi, Reid Ewing, Susan J. Petheram, and Jenny H. Liu. 2015. “Office Rent Premiums with Respect to Light Rail Transit Stations: Case Study of Dallas with Implications for TOD Planning,” *Transportation Research Record* 2500 (1): 100–115.

Nelson, Arthur C., and Joanna Ganning. 2015. *National Study of BRT Development Outcomes*. Portland, OR: National Institute of Transportation and Communities, Portland State University.

Nelson, Arthur C., and Robert Hibberd. 2019a. *The Link Between Transit Station Proximity and Real Estate Rents, Jobs, People and Housing with Transit and Land Use Planning Implications*. Report No. NITC-RR-1103. Portland, OR: Transportation Research and Education Center (TREC). <https://doi.org/10.15760/trec.235>.

———. 2019b. “Streetcars and Real Estate Rents With Implications for Transit and Land Use Planning,” *Transportation Research Record* 2673 (10): 714–25. <https://doi.org/10.1177/0361198119849916>.

Nelson, Arthur C., Robert Hibberd, Kristina Marie Currans, and Nicole Iroz-Elardo. 2021. *Transit Impacts on Jobs, People and Real Estate*. Report No. NITC-RR-1253. Portland, OR: Transportation Research and Education Center (TREC).

Nelson, Arthur C., and S.J. McClesky. 1990. “Elevated Rapid Rail Station Impacts on Single-Family House Values,” *Transportation Research Record* 1266: 173–80.

Nelson, Arthur C., Matt Miller, Dejan Eskic, Keuntae Kim, Joanna P. Ganning, Reid Ewing, Jenny Liu, Matt Berggren, and Zakari Mumuni. 2015. *Do TODs Make a Difference?* Portland, OR: Portland State University, National Institute of Transportation and Communities.

Nelson, Arthur C., James C. Nicholas, Julian Conrad Juergensmeyer, and Clancy Mullen. 2023. *Proportionate-Share Impact Fees and Development Mitigation*. New York: Routledge.

Nelson, Arthur C., Philip Anthony Stoker, and Robert Hibberd. 2019. “Light Rail Transit and Economic Recovery: A Case of Resilience or Transformation?” *Research in Transportation Economics* 74: 2–9. <https://doi.org/10.1016/j.retrec.2018.11.003>.

New York City Department of Transportation. 2013. *The Economic Benefits of Complete Streets*. New York City: New York City Department of Transportation.

New York State Department of Transportation (NYSDOT). n.d. “Best Practices for Complete Streets.” <https://www.dot.ny.gov/programs/completestreets/best-practices>.

Olesen, Kristian. 2020. “Infrastructure Imaginaries: The Politics of Light Rail Projects in the Age of Neoliberalism,” *Urban Studies* 57 (9): 1811–26.

Padeiro, Miguel, Ana Louro, and Nuno Marques da Costa. 2019. “Transit-Oriented Development and Gentrification: A Systematic Review,” *Transport Reviews* 39 (6): 733–54.

Parolek, Daniel G., and Arthur C. Nelson. 2020. *Missing Middle Housing: Thinking Big and Building Small to Respond to Today’s Housing Crisis*. Washington, DC: Island Press.

Porter, Jamila M., Stephen L Rathbun, Shenée J. Bryan, Katie Arseniadis, Lauren P. Caldwell, Phaedra S. Corso, Joel M. Lee, and Marsha Davis. 2018. “Law Accommodating Nonmotorized Road Users and Pedestrian Fatalities in Florida, 1975 to 2013,” *American Journal of Public Health* 108 (4): 525–31.

Project for Public Spaces. n.d. “Prospect Park West: Overcoming Controversy to Improve Safety and Mobility in Brooklyn.” <https://www.pps.org/article/prospect-park-west-overcoming-controversy-to-create-safety-and-mobility-benefits-in-brooklyn>.

Purdom, Charles Benjamin. 1921. *Town Theory and Practice*. London: Benn Brothers, Limited.

Rayle, Lisa. 2015. “Investigating the Connection Between Transit-Oriented Development and Displacement: Four Hypotheses,” *Housing Policy Debate* 25 (3): 531–48.

Renne, John L. 2009. "From Transit-Adjacent to Transit-Oriented Development," *Local Environment* 14 (1): 1–15. <https://doi.org/10.1080/13549830802522376>.

Rennert, Lindiwe. 2022. "A Meta-Analysis of the Impact of Rail Stations on Property Values: Applying a Transit Planning Lens," *Transportation Research Part A: Policy and Practice* 163: 165–80.

Rodriguez, Michael A., and Christopher B. Leinberger. 2023. *Foot Traffic Ahead*. Washington, DC: Smart Growth America.

Sanchez, Thomas W., and Marc Brenman. 2008. "The Right to Transportation," *Planning* 74 (1): 44–47.

Schlossberg, Mark, John Rowell, Dave Amos, and Kelly Sanford. 2013. *Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations*. Eugene, OR: University of Oregon, Sustainable Cities Institute.

Schneider, Robert J. 2018. "Complete Streets' Policies and Eliminating Pedestrian Fatalities," *American Journal of Public Health* 108 (4): 431–33. <https://doi.org/10.2105/AJPH.2018.304317>. PMID: 29513584; PMCID: PMC5844420.

Shapard, James, and Mark Cole. 2013. "Do Complete Streets Cost More than Incomplete Streets?" *Transportation Research Record* 2393 (1): 134–38. <https://doi.org/10.3141/2393-15>.

Smart Growth America and National Complete Streets Coalition (NCSC). n.d. "Complete Streets." <https://smartgrowthamerica.org/what-are-complete-streets/>.

———. 2022. *Dangerous by Design 2022*. Washington, DC: Smart Growth America. <https://smartgrowthamerica.org/wp-content/uploads/2022/07/Dangerous-By-Design-2022-v3.pdf>.

Statistical Data Services. 2018. *Interpreting Log Transformations in a Linear Model*. Charlottesville, VA: University of Virginia. <https://library.virginia.edu/data/articles/interpreting-log-transformations-in-a-linear-model>.

Stoker, Philip, and Reid Ewing. 2014. "Job–Worker Balance and Income Match in the United States," *Housing Policy Debate* 24 (2): 485–97.

Vandegrift, Donald, and Nicholas Zanoni. 2018. "An Economic Analysis of Complete Streets Policies," *Landscape & Urban Planning* 171: 88–97.

Wu, Qian, Ming Zhang, and Daniel Yang. 2015. "Jobs-Housing Balance: The Right Ratio for the Right Place." In *Recent Developments in Chinese Urban Planning: Selected Papers from the 8th International Association for China Planning Conference, Guangzhou, China, June 21 - 22, 2014*, edited by Qisheng Pan and Jason Cao. New York: Springer International Publishing: 311–33. <http://dx.doi.org/10.1007/978-3-319-18470-8>.

Xiao, Yang. 2016. "Hedonic Housing Price Theory Review." In *Urban Morphology and Housing Market*. New York: Springer: 11–40.

Yu, Chai-Yuan, Minjie Xu, Samuel D. Towne, and Sara Iman. 2018. "Assessing the Economic Benefits and Resilience of Complete Streets in Orlando, FL: A Natural Experimental Design Approach," *Journal of Transport & Health* 8: 169–78.

Zuk, Miriam, Ariel H. Bierbaum, Karren Chapple, Karolina Gorska, and Anastasia Loukaitou-Sideris. 2018. "Gentrification, Displacement, and the Role of Public Investment," *Journal of Planning Literature* 33 (1): 31–44.

# Departments

*In this issue—*

- *Data Shop*
- *Foreign Exchange*
- *Industrial Revolution*
- *Policy Briefs*

---

## Data Shop

*Data Shop, a department of Cityscape, presents short articles or notes on the uses of data in housing and urban research. Through this department, the Office of Policy Development and Research introduces readers to new and overlooked data sources and to improved techniques in using well-known data. The emphasis is on sources and methods that analysts can use in their own work. Researchers often run into knotty data problems involving data interpretation or manipulation that must be solved before a project can proceed, but they seldom get to focus in detail on the solutions to such problems. If you have an idea for an applied, data-centric note of no more than 3,000 words, please send a one-paragraph abstract to [datashop@hud.gov](mailto:datashop@hud.gov) for consideration.*

---

# Improving Equitable Representation in Program Eligibility Data

**Tracey Farrigan**

U.S. Department of Agriculture, Economic Research Service

**Mariya Shcheglovitova**

U.S. Department of Housing and Urban Development, Office of Policy Development and Research

*The views expressed in this article are those of the authors and do not represent the official positions or policies of the Economic Research Service, the U.S. Department of Agriculture, the Office of Policy Development and Research, the U.S. Department of Housing and Urban Development, or the U.S. Government.*

---

## Abstract

*Persistent poverty is used as an indicator across federal agencies for designating areas as eligible for programs serving regions of embedded poverty. This article tests various methods for incorporating margins of error (MOEs) in the designation of persistent poverty areas and evaluates the outcomes of including MOEs in eligibility metrics for the U.S. Department of Housing and Urban Development's Distressed Cities and Persistent Poverty Technical Assistance program. The study finds that when MOEs are used in persistent poverty metrics to exclude census tracts with low MOE reliability, there is no substantial change in counties and incorporated census places that serve persistent poverty census tracts. However, when MOEs are used as an inclusive metric for measuring persistent poverty, there is an increase in low-population areas included in program eligibility. Furthermore, the study finds that using MOEs to include areas in program eligibility increases the representation of underserved populations as defined by race, ethnicity, and poverty status.*

## Introduction

Executive Orders 13985 and 14091 (“Advancing” and “Further Advancing” racial equity and support for underserved communities through the federal government) provide guidance for federal agencies to implement and support comprehensive mission and service delivery strategies to yield equitable outcomes for all Americans, including underserved communities and others that have been adversely affected by structural inequality. This guidance involves monitoring activities and promoting accountability to ensure that agencies undertake measurable steps to deliver equitable outcomes through their policies and programs.

A data-based component of this effort defines equity spatially, often relying upon areawide poverty indicators and related demographic, socioeconomic, and geographic characteristics, such as racial and ethnic diversity, employment and disability status, educational attainment, and rurality (Farrigan and Crowe, 2023). These and other aspects of equity can be explored using U.S. Census Bureau survey data (U.S. Census Bureau, 2023). A spatial equity metric that is commonly derived from these data is persistent poverty area status, which has increasingly been relied upon to implement and monitor federal grants and programs (for example, U.S. Congress, 2020).

This article describes how margins of error (MOEs) for Census survey data can be incorporated into persistent poverty area estimation to boost eligibility inclusivity for federal programs. The Department of Housing and Urban Development (HUD) Distressed Cities and Persistent Poverty Technical Assistance (DCTA) program serves as the test case, but the methodology can be applied broadly to other programs that rely on survey data (for example, U.S. Department of Agriculture’s Rural Development Programs; U.S. Economic Development Administration’s Public Works Program; U.S. Department of the Treasury’s Community Development Financial Institutions and Regulatory Improvement Fund, the Comprehensive Environmental Response, Compensation, and Liability Act, and National Infrastructure and Investments; and Thriving Communities programs as defined in U.S. Congress, 2022).

## The Use of Persistent Poverty Area Measures in Federal Program Eligibility

Persistent poverty refers to longstanding geographic concentrations of people living in poverty. It is typically defined by consistent high poverty area status over 3 to 4 decades and most often at the county level of analysis. The majority of persistent poverty counties are in Appalachia, the Black Belt, the Mississippi Delta, the Ozarks, and the Southwest (U.S. Department of Agriculture, Economic Research Service, 2023). The spatial clustering of persistent poverty has led practitioners and policymakers to implement place-based policies with the aim of improving local amenities and infrastructure, building human capital, stimulating local economies, and alleviating multi-generational poverty (Parker, Tach, and Robertson, 2022).

Census tracts can supply a more geographically precise view of persistent poverty than counties (Benson, Bishaw, and Glassman, 2023). Census tract geography is increasingly being integrated into federal policies and programming, often in combination with counties. The HUD DCTA



program uses persistent poverty at the census tract level to classify counties and incorporated census places for program eligibility.

## The Distressed Cities and Persistent Poverty Technical Assistance Program

The DCTA program was established in 2018 to build capacity of relatively small local governments that may not otherwise have direct access to HUD programs and technical assistance resources (HUD, 2023). Local governments (for example, counties, cities, or Tribal governments) serving communities with populations under 50,000 that meet either economic distress or persistent poverty criteria are eligible to receive assistance under the program (exhibit 1).

### Exhibit 1

DCTA Program Eligibility for the 50 States and Puerto Rico\*

Geography	Economic Distress		Persistent Poverty		Both	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
County	967	43.8	668	30.2	477	21.6
Place	9,804	52.4	1,944	10.4	1,506	8.0

\*By number and share of counties and places (or equivalents) for the data period ending in 2021.

Note: Percents represent the proportion of all counties and places with a population below 50,000.

Sources: Economic distress eligibility—2007–2011 and 2017–2021 American Community Survey (ACS) 5-year estimates; persistent poverty eligibility—2000 Census and 2007–2011 and 2017–2021 ACS 5-year estimates

Economic distress criteria include an unemployment rate of 8.95 percent or more, a poverty rate of 19.95 percent or more among individuals not enrolled in higher education, or a population loss of 4.95 percent or more over 10 years. In addition, a local government is eligible for DCTA if it serves one or more persistent poverty census tracts. This article examines only the persistent poverty area measure included in the DCTA program; it does not evaluate incorporating MOEs in designating program eligibility using unemployment, non-college poverty rate, or population loss.

Within the DCTA program, a census tract is considered to be in persistent poverty when the poverty rate is 19.95 percent or higher over a 30-year period. For this study, census tract level persistent poverty is calculated using poverty rate estimates from the 2000 Decennial Census and the 2007–2011 and 2017–2021 American Community Survey (ACS) 5-year estimates. Census tracts with a poverty rate of 19.95 or greater in 2000 and the 5-year periods ending in 2011 and 2021 are considered to be persistently poor in the DCTA program. Counties and places that intersect with, contain, or are contained by persistent poverty census tracts are eligible for the program.

## Integrating Margins of Error into Persistent Poverty Area Estimation

The Census Bureau supplies calculated MOEs for all ACS estimates and Census geographies. The MOE is a statistical measure that captures the amount of random sampling errors in a survey's

results. It can be used to evaluate the extent to which the Census Bureau is confident that the reported estimates are the “true” value for the whole population. For example, the degree of confidence represented by the MOE can be expressed as a confidence interval, which is a range of values bounded by  $\pm$  the MOE (lower bound = estimate – MOE; upper bound = estimate + MOE). The larger the MOE, the greater the degree of uncertainty of the estimate. MOEs tend to be larger for smaller geographies and populations, such as those applicable to the DCTA program.

The Census Bureau encourages the use of MOEs in decisionmaking (U.S. Census Bureau, 2022); however, there is no standard practice on how to incorporate this information in program eligibility calculations. When developing poverty area measures, one choice is to use the confidence interval to determine if the MOE impacts the high poverty status of a given area. For example, the true value of a census tract with a poverty rate estimated at 17.90 and an MOE of  $\pm$  6.20 is understood to lie somewhere between 11.70 and 24.10 percent. If the estimate is taken at face value, then that census tract would not be counted as having high poverty according to the DCTA 19.95 percent cutoff. This estimate could contribute to the exclusion of a poor community from program eligibility because the true value is potentially well above 19.95 percent. In such cases where the MOE pushes the poverty rate above or below the program cutoff, decisionmakers are faced with erring on the side of inclusivity or exclusivity.

When MOEs are incorporated in persistent poverty area designation, they are often used as an exclusionary measure to reduce the uncertainty of data by choosing not to include cases considered unreliable. The rest of this article describes an additional methodology in which MOEs are used for the purpose of inclusion with respect to DCTA program eligibility. Summary geographic and demographic results are provided, including an assessment of racial equity impacts.

## Methodology

This study evaluates an inclusive MOE decision process that can be used to expand eligibility measures for low-population places, potentially increasing the areas that meet program eligibility criteria beyond a measure that does not include MOEs. The inclusive MOE criterion uses the upper bound of the confidence interval for the 2017–21 poverty rate estimate in the determination of persistent poverty. That is, a census tract is defined as persistently poor if the poverty rate estimates for 2000 and 2007–11 and the poverty rate estimate for 2017–21 plus its margin of error are all equal to or greater than 19.95 percent. For comparison, the eligibility impact of an exclusive MOE approach is also evaluated.

The exclusive MOE is defined by two criteria (Farrigan and Sanders, forthcoming). The first is based on a measure of reliability created from the coefficient of variation (CV), which is generated from the MOE of the estimate. The poverty rate estimate is calculated as the total number of people with a household income below the official poverty level divided by the total population for whom poverty status was determined multiplied by 100. The margins of error of the poverty rates for each census tract are derived using Equation 1. The coefficients of variation at the 90-percent significance level are generated from the derived margins of error using Equation 2. Poverty rate estimates for 2017–21 are defined as having low reliability if the CV is greater than 40 percent.

**Equation 1. Derived Margin of Error**

$$MOE(\hat{Q}) = 100 \times \left[ \frac{1}{\hat{Y}} \sqrt{[MOE(\hat{X})]^2 - (\hat{P}^2 \times [MOE(\hat{Y})]^2)} \right]$$

**Equation 2. Coefficient of Variation**

$$CV = \frac{\left[ \frac{MOE(\hat{Q})}{1.645} \right]}{\hat{Q}} \times 100$$

Notes:  $\hat{Q}$  is the derived poverty rate estimate.  $\hat{X}$  is the American Community Survey (ACS) estimate of the number of people with a household income below the official poverty level.  $\hat{Y}$  is the ACS estimate of the number of people in the poverty universe for an area.  $\hat{P}$  is the ratio of the number of people with household income below the poverty level to the number of people in the poverty universe in that area.

The second criterion for defining the exclusive MOE takes the confidence interval (CI) into consideration by adjusting the poverty rate estimates by the bounds of the CI. If a census tract is determined to have a low reliability poverty rate estimate based on the CV, and the poverty rate estimate plus or minus its margin of error (upper and lower bound poverty rate values) would change the tract’s high poverty status for 2017–21, the census tract is excluded from persistent poverty area determination.

All analyses were performed using R Statistical Software (v4.3.2; R Core Team, 2023) and SPSS (IBM Corporation, 2020). The population weighted interpolation function in R’s tidycensus package was used to transform census tracts in consistent geographies for comparison of poverty rates across time (Walker and Herman, 2023). Counties and places that intersect with, contain, or are contained by persistent poverty census tracts were identified using spatial join functions in R’s sf package (Pebesma, 2018). Data are aggregated by HUD regions (exhibit 2) and states to convey spatial variation in counties and places eligible for DCTA using each of the MOE criteria.

**Exhibit 2**

HUD Regions		
HUD Region Name	HUD Region Number	States
Great Plains	VII	Kansas, Iowa, Missouri, Nebraska
Mid-Atlantic	III	Pennsylvania, Virginia, West Virginia, Maryland, Delaware, District of Columbia
Midwest	V	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
New England	I	Connecticut, Vermont, Massachusetts, Maine, New Hampshire, Rhode Island
New York/New Jersey	II	New York, New Jersey
Northwest/Alaska	X	Washington, Alaska, Idaho, Oregon
Pacific/Hawaii	IX	California, Arizona, Hawaii, Nevada
Rocky Mountain	VIII	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
Southeast/Caribbean	IV	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, U.S. Virgin Islands
Southwest	VI	Arkansas, Louisiana, New Mexico, Oklahoma, Texas

Source: Regions as defined by the U.S. Department of Housing and Urban Development <https://www.hud.gov/localoffices/regions>

## Inclusive and Exclusive MOE Results

The census tract level analysis shows a predictable change, with the inclusive MOE criterion increasing the number of persistent poverty census tracts and the exclusive MOE criterion decreasing the number of tracts (exhibit 3). Under each, approximately 1 percent of all census tracts are excluded due to missing poverty data in 2000, 2007–11, or 2017–21. Furthermore, 5 percent of census tracts are excluded due to low-reliability margins of error when applying the exclusive MOE criterion.

### Exhibit 3

Change in Persistent Poverty Census Tract Designation

MOE Group	Persistently Poor		Not Persistently Poor		No Data		Low Reliability MOE	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
No MOE	10,282	12.0	73,917	86.6	1,196	1.4		
Inclusive MOE	12,267	14.4	71,932	84.3	1,196	1.4		
Exclusive MOE	10,048	11.8	69,686	81.6	1,196	1.4	4,465	5.2

MOE = margin of error.

Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 American Community Survey 5-year data

When examining counties and Census-designated places (or equivalents) that intersect with, contain, or are contained by persistent poverty census tracts, the largest differences are observed using the inclusive MOE criterion (exhibit 4). The observed trends are nearly identical when no MOE is used and when the exclusive MOE criterion is used. At the regional level, using an inclusive MOE criterion adds eligible counties and places primarily in HUD's Southeast/Caribbean and Southwest regions (exhibit 5).

### Exhibit 4

Counties and Incorporated Places that Serve Persistent Poverty Census Tracts

Geography	Without MOE				Inclusive MOE				Exclusive MOE			
	All		Population Below 50,000		All		Population Below 50,000		All		Population Below 50,000	
	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
County	1,342	41.8	670	30.2	1,461	45.5	760	34.4	1,341	41.8	669	30.3
Place	2,417	12.4	1,944	10.4	2,833	14.5	2,333	12.5	2,404	12.3	1,932	10.3

MOE = margin of error.

Note: A county or place is considered to serve a persistent poverty census tract if it contains, overlaps with, or is contained by the census tract.

Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 American Community Survey 5-year data

**Exhibit 5**

Counties and Incorporated Places that Serve Persistent Poverty Census Tracts by HUD Region

HUD Region Name	County			Place		
	Without MOE (%)	Inclusive MOE (%)	Exclusive MOE (%)	Without MOE (%)	Inclusive MOE (%)	Exclusive MOE (%)
Great Plains	1.5	1.7 (+0.2)	1.5	0.4	0.5 (+0.1)	0.4
Mid-Atlantic	1.7	2.0 (+0.3)	1.7	0.9	1.0 (+0.1)	0.9
Midwest	1.4	1.8 (+0.4)	1.4	0.9	1.1 (+0.2)	0.9
New England	0.1	0.1	0.1	0.1	0.1	0.1
New York/New Jersey	0.1	0.1	0.1	0.3	0.3	0.3
Northwest/Alaska	0.6	1.0 (+0.4)	0.6	0.6	0.7 (+0.1)	0.6
Pacific/Hawaii	0.3	0.3	0.3	0.4	0.5 (+0.1)	0.4
Rocky Mountain	12.0	12.0	12.0	12.0	12.0	12.0
Southeast/Caribbean	12.0	12.0	12.0	12.0	12.0	12.0
Southwest	12.0	12.0	12.0	12.0	12.0	12.0

MOE = margin of error.

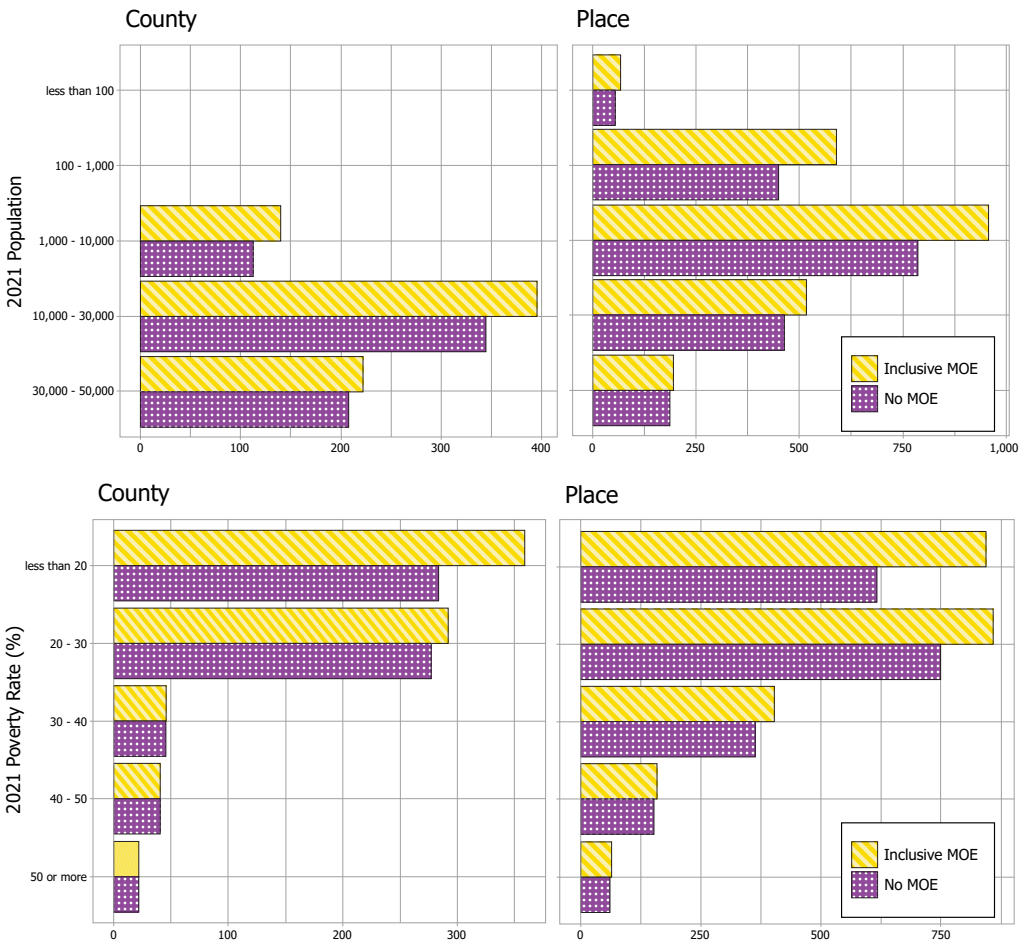
Notes: A county or place is considered to serve a persistent poverty census tract if it contains, overlaps with, or is contained by the census tract. Percents represent the proportion of all counties and places with a population below 50,000. When there is a change from not using MOEs and the inclusive or exclusive MOE criteria, it is represented in parentheses.

Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 American Community Survey 5-year data

The study finds that, at the census place and county levels, the use of an inclusive MOE criterion increases the representation of lower population areas as eligible for DCTA (exhibit 6). Although a greater inclusion of high (20 percent or more) and extreme (40 percent or more) poverty counties and places was expected when using the inclusive MOE criterion, results show that it primarily increases the inclusion of counties and places with a poverty rate under 30 percent (exhibit 5). This outcome is likely due to the use of census tract level poverty estimates in persistent poverty calculations; when a place or county with an overall poverty rate below 20 percent serves a persistent poverty census tract, this tract can represent distinct concentrations of communities living in poverty within counties and places.

**Exhibit 6**

Distribution of Population and Poverty Rate for Counties and Incorporated Places by MOE Criterion



MOE = margin of error.

Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 American Community Survey 5-year data

## Racial and Ethnic Equity Impact Assessment

A racial and ethnic equity impact assessment is an examination of how different racial and ethnic groups may be affected by a proposed action or decision (Keleher, 2009). This study considers the equity impacts that could result from incorporating the inclusive MOE criterion into the DCTA persistent poverty eligibility determination process. The first step is to determine what are perceived as desirable outcomes in the context of racial and ethnic equity. Generally, this includes greater representation of historically marginalized populations and racially/ethnically diverse communities in the pool of eligible areas. The next step is to generate and interpret related outcome indicators. Indicators were selected that focus on poverty concentration, geography, and population.

This article examines representative changes in high poverty areas, where high poverty status is characterized by individual or diverse racial/ethnic populations. High poverty areas are defined here as counties or places with a poverty rate of 19.95 percent or more using data from the 2017–2021 ACS 5-year estimates. Of the areas with a population below 50,000, about 25 percent are high poverty. The high poverty areas are classified by the extent to which their poverty reflects the low income of select racial and ethnic groups. This classification is based on two conditions (Beale, 2004): (1) over one-half of the people living in poverty in the area represent one race or ethnicity, and (2) over one-half of the people living in poverty identify as non-Hispanic White, but the high poverty rate of a different racial or ethnic group pushes the area’s poverty rate over 19.95 percent.

The study finds that at the census place and county levels, the use of an inclusive MOE criterion for persistent poverty determination increases the representation of historically marginalized populations among those eligible for DCTA (exhibits 7 and 8). This is particularly true at the place level of analysis, in which the percent change is greatest for high poverty places characterized by the poverty of the resident Black or African American and Hispanic populations.

**Exhibit 7**

Counties by Racial and Ethnic High Poverty Area Type that are Eligible for DCTA when an Inclusive MOE is Applied to Persistent Poverty Determination

High Poverty Concentration by Race and Ethnicity	Total Counties		Persistent Poverty Eligible Counties					
			Without MOE		Inclusive MOE		Change	
	Count	Percent (%)	Number Eligible	Percent of Total (%)	Number Eligible	Percent of Total (%)	Number Eligible	Percent of Total (%)
Not high poverty in the current period (2017–2021)	1,692	76.2	243	14.4	317	18.7	74	4.4
Black or African American	143	6.4	123	86.0	128	89.5	5	3.5
American Indian or Alaska Native	34	1.5	26	76.5	26	76.5	0	0.0
Asian	0	0.0	0	0.0	0	0.0	0	0.0
Native Hawaiian or other Pacific Islander	1	0.0	0	0.0	0	0.0	0	0.0
Hispanic, any race	108	4.9	97	89.8	100	92.6	3	2.8
White Non-Hispanic	147	6.6	102	69.4	109	74.1	7	4.8
High poverty not defined by a single race or ethnicity	96	4.3	77	80.2	78	81.3	1	1.0

MOE = margin of error.

Notes: Only counties with a population below 50, 000 are included in the analysis. High poverty is defined as a poverty rate above 19.95 percent. Persons in each racial category include those who reported belonging to a single racial group (alone) in the 2017–2021 American Community Survey (ACS).

Source: Authors’ analysis of 2000 Census and 2007–2011 and 2017–2021 ACS 5-year data

**Exhibit 8**

Places by Racial and Ethnic High Poverty Area Type That are Eligible for DCTA When an Inclusive MOE is Applied to Persistent Poverty Determination

High Poverty Concentration by Race and Ethnicity	Total Places		Persistent Poverty Eligible Places					
			Without MOE		Inclusive MOE		Change	
	Count	Percent (%)	Number Eligible	Percent of Total (%)	Number Eligible	Percent of Total (%)	Number Eligible	Percent of Total (%)
Not high poverty in the current period (2017–2021)	13,727	73.3	538	3.9	741	5.4	203	1.5
Black or African American	985	5.3	524	53.2	594	60.3	70	7.1
American Indian or Alaska Native	135	0.7	84	62.2	87	64.4	3	2.2
Asian	20	0.1	0	0.0	0	0.0	0	0.0
Native Hawaiian or other Pacific Islander	2	0.0	0	0.0	0	0.0	0	0.0
Hispanic, any race	530	2.8	168	31.7	198	37.4	30	5.7
White Non-Hispanic	2,646	14.1	426	16.1	489	18.5	63	2.4
High poverty not defined by a single race or ethnicity	680	3.6	204	30.0	224	32.9	20	2.9

MOE = margin of error.

Notes: Only incorporated places with a population below 50,000 are included in the analysis. High poverty is defined as a poverty rate above 19.95 percent. Persons in each racial category include those who reported belonging to a single racial group (alone) in the 2017–2021 American Community Survey (ACS).

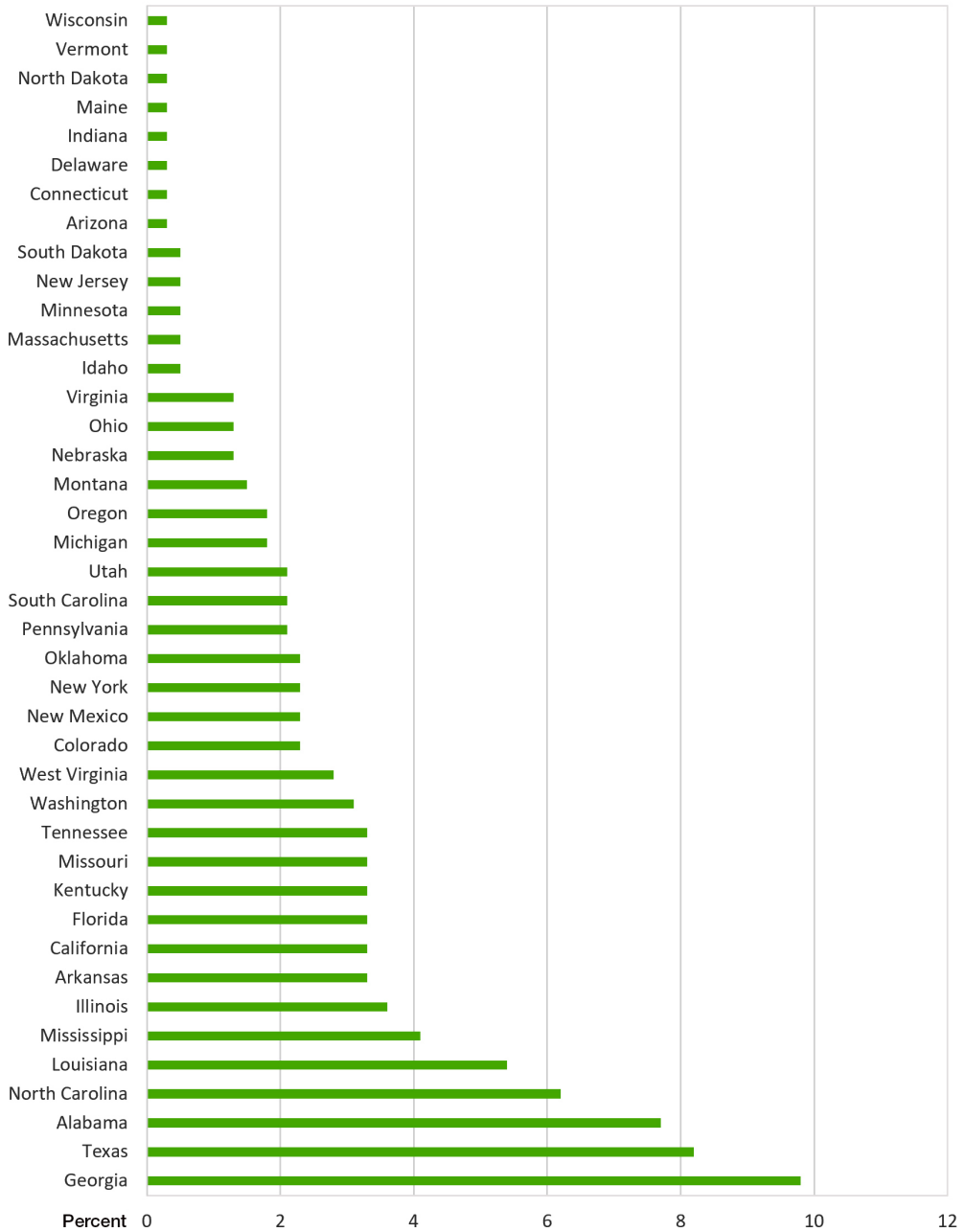
Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 ACS 5-year data

The high poverty places included in DCTA eligibility when an inclusive MOE criterion is used reflect historic geographic concentrations of Black or African American and Hispanic households in areas of chronic poverty (exhibit 9). The greatest representation is in the Black Belt region that primarily runs from southern North Carolina through Georgia, Alabama, Mississippi, and Louisiana to Texas. Also, among the most represented places are established (for example, Texas) and newer areas (for example, Georgia and Florida) of Hispanic population concentrations and distinct areas of concentrated White, Non-Hispanic poverty in the extended Southern Highlands region (for example, Arkansas, Kentucky, Missouri, and West Virginia).



**Exhibit 9**

**Geography of Newly Eligible Places When the Inclusive MOE Criterion is Used for Persistent Poverty Determination**



MOE = margin of error.

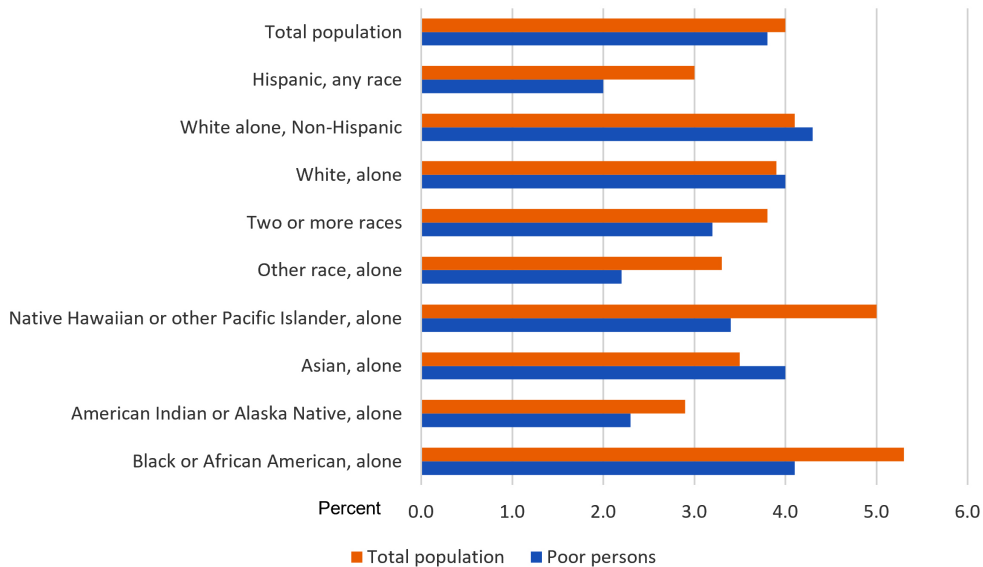
Note: Percent distribution by state.

Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 American Community Survey 5-year data

Considering representative change in the total population and the population living in poverty by race and ethnicity for the 2017–21 data period shows a statistically significant increase for all groups when the inclusive MOE criterion is applied to persistent poverty determination (exhibits 10 and 11). The largest increases at the county level of analysis are for total population identifying as Black or African American and as Native Hawaiian or other Pacific Islander. At the place level of analysis, the change in the total population identifying as Native Hawaiian or other Pacific Islander stands out, as do increases in both the total population and the population living in poverty for individuals identifying as Hispanic (any race) and other race (alone). These findings suggest that in total, the inclusive MOE contributes to greater racial and ethnic diversity across the persistent poverty eligible areas for the DCTA program.

**Exhibit 10**

Percent Change in Racial and Ethnic Group Representation Within DCTA Persistent Poverty Eligible Counties due to Inclusive MOE



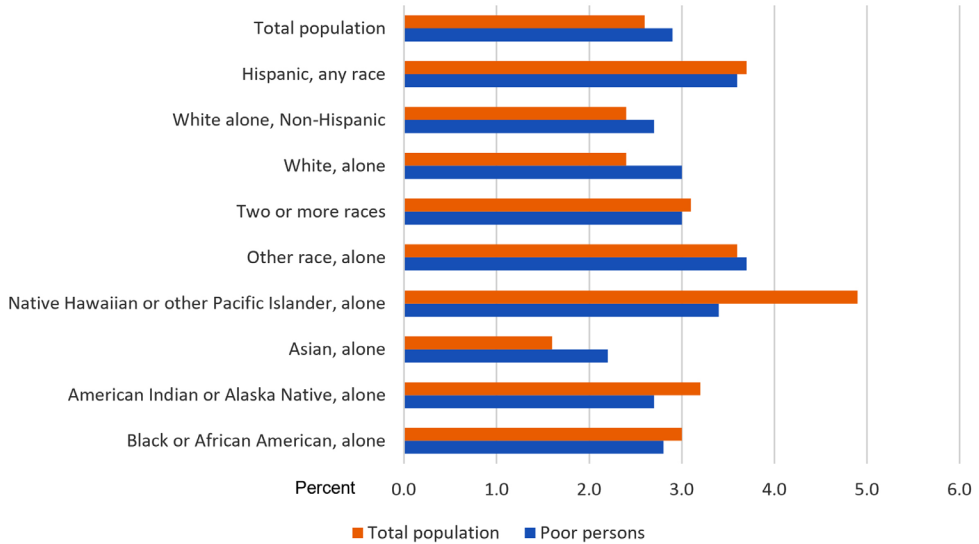
MOE = margin of error.

Note: Data are displayed for the total population and the population living in poverty.

Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 American Community Survey 5-year data

**Exhibit 11**

**Percent Change in Racial and Ethnic Group Representation Within DCTA Persistent Poverty Eligible Places Due to Inclusive MOE**



MOE = margin of error.

Note: Data are displayed for the total population and the population living in poverty.

Source: Authors' analysis of 2000 Census and 2007–2011 and 2017–2021 American Community Survey 5-year data

**Conclusions**

This study found that applying an inclusive MOE criterion to the persistent poverty determination process increases the number of places and counties that are eligible for the DCTA program. This results in greater representation of underserved communities, including smaller population areas and those characterized by poverty among historically marginalized populations. In contrast, the use of MOEs to exclude census tracts due to low reliability data did not substantively change the eligibility outcomes in comparison to the program standard of not using MOEs. When using persistent poverty area designations to determine federal program eligibility, the use of MOEs to expand program eligibility can help contribute to better representation of marginalized areas and populations.

However, limitations to using MOEs to expand program eligibility are particularly associated with technical expertise and the time and resources necessary for program implementation. Notably, the incorporation of an inclusive MOE approach is most useful with sub-county geography. That is, at a geographic scale where MOEs tend to be larger, there is a greater likelihood that an inclusive MOE will significantly impact the eligibility outcome. In cases where the eligibility outcome of using MOEs is insignificant, incorporating MOEs into the eligibility determination process may not be worth the added methodological complexity and program resources (for example, staff time). In addition, using MOEs for inclusivity presents potential for false positives—a particular consideration for competitive grant programs where expanding program eligibility to areas with a

wide confidence interval around poverty estimates may lead to awards being made in regions with low-reliability poverty measures. In the case of competitive grant programs, an exclusive MOE approach may be more appropriate. Furthermore, beyond refining the calculation of eligibility metrics, it is important to consider the broader context of eligible areas when implementing technical assistance programs, particularly areas with very low populations that may lack the staff and capacity to participate in technical assistance programs fully.

## Acknowledgments

The authors would like to thank the *Cityscape* Datashop editor for providing comments which helped improve this paper and U.S. Department of Agriculture colleagues for providing internal reviews.

## Authors

Tracey Farrigan is a geographer at the U.S. Department of Agriculture, Economic Research Service. Mariya Shcheglovitova is a social science analyst at the U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

## References

- Beale, Calvin L. 2004. "Anatomy of Nonmetro High Poverty Areas: Common in Plight, Distinctive in Nature," *Amber Waves: The Economics of Food, Farming, Natural Resources, and Rural America*. U.S. Department of Agriculture, Economic Research Service.
- Benson, Craig, Alemayehu Bishaw, and Brian Glassman. 2023. Persistent Poverty in Counties and Census Tracts. Report number ACS-51. U.S. Census Bureau.
- Executive Order No 13985, 86 Federal Register 7009. 2021. *E.O. Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. Executive Office of the President.
- Executive Order No 14091, 88 Federal Register 10825. 2023. *E.O. Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*. Executive Office of the President.
- Farrigan, Tracey, and Jessica Crowe. 2023. "Analyzing Persistent Poverty Areas Using Federal Data," *FCSM Equitable Data Toolkit: A Toolkit for Strengthening Federal Data to Analyze Historically Underserved Populations*. Washington, DC: Federal Committee on Statistical Methodology.
- Farrigan, Tracey, and Austin Sanders. Forthcoming. *The Poverty Area Measures Technical Bulletin*. U.S. Department of Agriculture, Economic Research Service.
- IBM Corporation. 2020. IBM SPSS Statistics for Windows, version 27.0.
- Keleher, Terry. 2009. "Racial Equity Impact Assessment." Race Forward: The Center for Racial Justice Innovation. [https://www.raceforward.org/sites/default/files/RacialJusticeImpactAssessment\\_v5.pdf](https://www.raceforward.org/sites/default/files/RacialJusticeImpactAssessment_v5.pdf).

- Parker, Emily, Laura Tach, and Cassandra Robertson. 2022. "Do Federal Place-Based Policies Improve Economic Opportunity in Rural Communities?" *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8 (4): 125–154.
- Pebesma, Edzer. 2018. "Simple Features for R: Standardized Support for Spatial Vector Data," *The R Journal* 10 (1): 439–446. <https://journal.r-project.org/archive/2018/RJ-2018-009/RJ-2018-009.pdf>.
- R Core Team. 2023. "R: A Language and Environment for Statistical Computing." Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- U.S. Census Bureau. 2022. "Increased Margins of Error in the 5-year Estimates Containing Data Collected in 2020." <https://www.census.gov/programs-surveys/acs/technical-documentation/user-notes/2022-04.html>.
- . 2023. "Advancing Equity With Data." <https://www.census.gov/about/what/data-equity.html>.
- U.S. Congress. 2020. The Consolidated Appropriations Act of 2021. Public Law 116-260. <https://www.congress.gov/116/plaws/publ260/PLAW-116publ260.pdf>.
- . 2022. The Consolidated Appropriations Act of 2023. Public Law 117-328. <https://www.congress.gov/117/plaws/publ328/PLAW-117publ328.pdf>.
- U.S. Department of Agriculture, Economic Research Service. 2023. "Poverty Area Measures Data Product, Descriptions and Maps, High Poverty Areas Over Time." <https://www.ers.usda.gov/data-products/poverty-area-measures/descriptions-and-maps/>.
- U.S. Department of Housing and Urban Development (HUD). 2023. "Distressed Cities and Persistent Poverty Technical Assistance Program." [https://www.hud.gov/program\\_offices/comm\\_planning/cpdta/dcta](https://www.hud.gov/program_offices/comm_planning/cpdta/dcta).
- Walker, Kyle, and Matt Herman. 2023. "tidycensus: Load US Census Boundary and Attribute Data as 'tidyverse' and 'sf'-Ready Data Frames." R package version 1.5. <https://walker-data.com/tidycensus/>.

---

# Calculating County-Level Housing Choice Voucher Gaps: A Methodology

Shane Dabney  
Florida State University

---

## Abstract

*This article presents a methodology for calculating county-level housing choice voucher gaps, leveraging IPUMS-obtained 5-year American Community Survey (ACS) data. Using Florida as a case study, the approach builds on existing methodologies to offer a fine-grained calculation that can be readily adapted to other states, providing a more precise quantification of voucher needs. Such precision is essential for informing local, state, and federal housing policies and enhancing the accuracy of research relying on precise counts of voucher eligibility at the local level. The methodology utilizes custom Python algorithms to prepare the ACS data by imputing missing county values and accounting for relevant factors, such as multifamily households and incarcerated persons, in the final eligibility determination (Dabney, 2024). Applying this methodology to Florida reveals significantly wider voucher gaps than common national estimates suggest, indicating a more substantial discrepancy between the number of families in need and those currently receiving vouchers than previously recognized.*

## Introduction

The number of Housing Choice Vouchers (HCVs) distributed nationally is considerably less than the number of voucher-eligible households. This disparity between eligible families and available aid is known as the *voucher gap*. Accurately measuring the scale of this gap is crucial for policymakers to evaluate the voucher program's coverage and effectiveness.

Although the national and state-level voucher gaps are often discussed, more fine-grained gap calculations, such as at the county level, are rare. However, such estimates have many potential uses. For policymakers, more granular voucher gap data can enable precise comparative analysis, offering insights into regional disparities within a state. For program practitioners, accurate estimates of these gaps can aid program calibration or demonstrate the need for higher levels of funding.

No standardized methodology currently exists for calculating voucher gaps, especially at localized levels. A widely cited national estimate is that only about one in four eligible households receive vouchers. However, this baseline figure glosses over geographic variability and methodological limitations. Developing a more rigorous approach is critical as local public housing authorities make decisions about voucher allotments and eligibility requirements.

This article introduces a refined methodology for calculating voucher gaps at the county level. The approach utilizes custom Python algorithms to prepare IPUMS-obtained American Community Survey (ACS) data, imputing missing county values and accounting for various household compositions, including multifamily households and incarcerated persons (Dabney, 2024; IPUMS, n.d.). Although the methodology is applied specifically to Florida, the framework is generalizable and should be applicable to other states with only minor required variations. The approach promises a more precise gap estimate, helping policymakers to pinpoint priority areas for additional vouchers or eligibility adjustments.

The results of this calculation in Florida starkly illustrate the inadequacy of current voucher allocations relative to need. Across the state, no county reaches the often-cited 25 percent national allocation rate. In fact, the highest county allocation rate in Florida barely approaches 10 percent, with several counties languishing at a mere 1 percent. This significant discrepancy underscores the urgent need for policymakers to address the vast disparity between the availability of vouchers and the actual demand for housing assistance.

## Data Sources and Methodology Overview<sup>1</sup>

1. IPUMS-obtained 5-year ACS data were used to determine county, income, family size, and various household characteristics useful for additional research (Ruggles et al., 2023).
2. Several ACS records lacked county values. Nonetheless, because all records contained Public Use Microdata Area (PUMA) values, these were used to fill in the missing county values. This was achieved using crosswalk data obtained from Geocorr 2018: Geographic Correspondence Engine (MCDC, 2018).
3. A custom algorithm then checked and cleaned income data, accounting for distinct family incomes in multifamily households.
4. Multifamily households were then split into separate households. This step allows eligibility determinations at the family level rather than at the household level for multifamily households. This step necessitates a recalculation of the household weight (HHWT) variable.
5. An aggregation algorithm was then used to flatten households into a single row and aggregate various family characteristics. This step is optional because these family characteristics are not strictly needed to calculate voucher gaps.

---

<sup>1</sup> It should be noted that although some important adjustments have been made, this methodology was inspired by and closely follows the voucher gap calculation methodology detailed in The Housing Initiative at Penn's report (Reina, Aiken, and Epstein, 2021).



6. Eligibility was then calculated by comparing each household's income and family size with U.S. Department of Housing and Urban Development (HUD) income limits for the relevant areas (HUD, n.d.a.).
7. Because ACS data include incarcerated persons, these individuals were removed from the final eligibility count. This step involved importing prisoner data from the Florida Department of Corrections and the Federal Bureau of Prisons.
8. Finally, voucher gaps and allocation rates were determined by comparing each county's final eligibility count with the number of vouchers allocated for those counties. These data are from HUD's Picture of Subsidized Households (HUD, n.d.b.).

## Methodology

### Imputation of Missing County Data

Approximately 20 percent of the 2021 ACS Florida records were missing county data. Dropping such a substantial percentage of rows was not a viable option. Fortunately, no records were missing PUMA values, which could be cross-referenced to county values using Geocorr 2018: Geographic Correspondence Engine (MCDC, 2018). After creating a data frame to match PUMA codes to counties, a merge function was used to impute the missing county data in the ACS dataset.

Unfortunately, some PUMAs cover more than one county. Even so, given the absence of a more granular geographic variable in the dataset that did not present similar overlap issues, PUMA values were used to perform the crosswalk. The relevant counties were combined into larger geographic county groups to address the overlap, which was necessary for several Florida counties. This approach retained county-level granularity to the greatest extent possible, although it introduced some ambiguity because specific households within overlapping PUMAs could not be pinpointed to a single county.

Alternatively, weights could be applied to allocate households within overlapping PUMAs to individual counties without combining them. This option remains viable for researchers seeking to maintain these county-level distinctions.

### Family Size and Income Variables Cleaning

The IPUMS ACS data identifies households by unique serial numbers assigned to each family, the *CBSERIAL* variable. The variable *FTOTINC* represents family income, and *HHINCOME* denotes household income. Discrepancies between these variables can arise in multifamily households—identified when the number of families (*NUMFAMS*) is more than one—when distinct families have separate incomes.

An accurate voucher gap calculation requires correcting any anomalies in the data with respect to these variables. For instance, Family size (*FAMSIZE*) should reflect realistic family sizes that are neither negative nor implausibly high. Similarly, income variables should be checked thoroughly. Because the dataset was too large to check manually, it needed to be reviewed and cleaned algorithmically.

Each household's HHINCOME value was compared to the other available income variables for the household members: income from investments (designated with the IPUMS variable INCINVST), retirement (INCRETIR), welfare (INCWELFR), Social Security (INCSS), and Supplemental Security Income (INCSUPP). The total income of each individual within a household is also reported (INCWAGE). All these variables were used to confirm the correct HHINCOME value for each household, which was done with a custom algorithm that summed all relevant individual income values for a given person and cross-checked against the total income recorded in the INCWAGE variable, flagging any anomalies for review. Then, the individual total incomes for each person assigned to the same CBSERIAL were summed and checked against the HHINCOME value. Again, any anomalies were flagged for manual review.

### **Multifamily Household Split and Income Cleaning<sup>2</sup>**

HCVs can be allocated to any household meeting the eligibility criteria. However, it is not uncommon for a household to be comprised of several families living together in the same housing unit. Accounting for these *multifamily* households (NFAMS)—when there is more than one family in a household—is essential for getting an accurate HCV eligibility count because although their combined income might surpass eligibility thresholds, the individual families, if considered separately, could each qualify for a voucher. Similarly, a household eligible as a single entity might actually consist of multiple families, each of which could qualify on their own if assessed independently. Therefore, to avoid undercounting, multifamily households should be split into distinct families and assessed separately.

The ways to split multifamily households into distinct family-level households are numerous. This methodology assigned a new unique serial number to each family. This was done by using the original CBSERIAL value assigned to the household in conjunction with the family unit (FAMUNIT) variable. This FAMUNIT variable identifies the family unit to which a given person in a household belongs. Within single-family households, all individuals have FAMUNIT = 1. For multifamily households with three families, for example, all members of each family are assigned a 1, 2, or 3 in this column. Combining CBSERIAL with the given FAMUNIT value produces a unique family-level (rather than household-level) serial number named FAMILYNUMBER by the algorithm. A final income check was then performed to ensure that the total household income value was not inadvertently used in the eligibility calculation.

This methodological step ensures that independently eligible families in multifamily households are not overlooked. As such, it estimates the total number of voucher-eligible families irrespective of housing composition. It should be noted that, in some cases, multifamily households might choose to continue living together in the same housing unit despite being independently eligible. In these cases, such households would be eligible for only one voucher. This methodology does not account for this possibility, which should be kept in mind when interpreting the voucher gap estimates.

---

<sup>2</sup> The inspiration for this methodological step comes from The Housing Initiative at Penn's report (Reina, Aiken, and Epstein, 2021).

## Household Weight Adjustment

The HHWT variable adjusts for sampling disparities in the ACS data and ensures that each household's data reflects its proportionate presence in the larger population. Correctly applying these weights is essential for producing accurate figures. Per IPUMS' (n.d.) description, "HHWT must be used to obtain nationally representative statistics for household-level analyses of any sample other than [unweighted IPUMS samples]."

It should be noted that algorithmically splitting multifamily households into disparate unit restructures households in a way that is not accounted for in the ACS-assigned weights. If the original household weights are applied to the resulting family-level restructured households, the weights inadvertently will be applied multiple times. To see why, consider a 3-family multifamily household (NFAMS = 3) with a household weight of 15. This household represents 15 other households in the population. However, if the household were to be split and the original household weight preserved, the 3 resulting family-level households would each represent 15 other households, misleadingly suggesting that 45 similar households exist in the population.

Although this increase is appropriate with respect to eligibility determination, it artificially inflates the number of households in the population. For this reason, the household weight of split multifamily households was divided. Specifically, for each split multifamily household, the original HHWT was divided by the relevant NFAMS variable number, effectively dividing the weight equally among the resulting family-level households. In the previous example, each resulting family-level household would have been assigned a new household weight of 5.

$$ADJUSTED\ HHWT = \frac{ORIGINAL\ HHWT}{NFAMS}$$

## Optional Aggregation and Flattening

A custom algorithm then aggregated various family characteristic variables and ultimately condensed the data into one row per family. This step was done with the aim of simplifying the data, enhancing its readability, and streamlining subsequent analyses and calculations.

This aggregation grouped data by each unique family unit, summarizing information within these groups. Depending on the data type, the algorithm either took the first value from each group (for consistent family characteristics) or summed values (for relevant quantifiable data). This procedure resulted in a streamlined dataset with each row representing an individual family unit, retaining crucial information in a more manageable form.

Although not strictly necessary for voucher gap calculations, which require only family income and family size data, maintaining detailed fine-grained household characteristics alongside voucher eligibility can be useful for researchers. For example, it allows one to compare voucher-eligible-family characteristics like race with the ineligible population. Likewise, it allows one to compare the demographic characteristics of eligible families with those of actual voucher recipients.

## Eligibility Determination

Determining eligibility was then a fairly straightforward process. Each household's location, family income, and family size were matched to HUD's published income limits for the relevant geographic area. These income limits are accessible through HUD's website or its application programming interface (API), with an access token required for the latter (HUD, n.d.a). Although income thresholds for eligibility can technically vary by public housing authority, the general income limit is 50 percent of the Area Median Income (AMI) and, as such, was the one used. Eligibility counts for each county were then compiled into a data frame.<sup>3,4</sup>

## Removing Incarcerated Individuals via Stratified Selection

A final consideration involved the housing status of incarcerated individuals in Florida. Incarcerated individuals typically have incomes well below the single-person household limit. Therefore, they will be counted as HCV-eligible by default. However, incarcerated individuals are already housed and not eligible for housing subsidies. Therefore, their eligibility status was adjusted in the dataset.

The ACS data include incarcerated individuals under the group quarters (GQTYPE) variable. Unfortunately, a more specific group quarters type designation was absent from the data than either institutional group quarters (GQTYPE = 1), which includes more than just prisoners, or noninstitutional group quarters (GQTYPE = 5). Without this direct identifier in the ACS data, inmate counts had to be obtained from the Florida Department of Corrections and the Federal Bureau of Prisons, which detailed prisoner counts by facility and county and some basic demographic information, such as race. Similar data may be elsewhere.

The adjustment would be straightforward for a simple eligibility count, only requiring reducing the eligibility count by the number of prisoners in each area; however, attempting to preserve the previously aggregated household characteristics to the greatest possible extent complicated this process. It required rows corresponding to inmates to be identified and selected among the institutional group quarters records.

A county-specific stratified selection technique was employed to approximate this selection. The algorithm targeted rows designated as households in institutional group quarters (GQTYPE = 1) within each county, selecting them to reflect the racial proportions in the incarceration statistics using the RACE variable. The algorithm kept a running total of the adjusted household weight (REALHHWT) during the selection process,<sup>5</sup> which was conducted iteratively until closely aligning with the actual prisoner count for each county. Subsequently, the algorithm updated the relevant eligibility status in the dataset, switching from eligible (1) to ineligible (0) across the income-threshold variables for the relevant rows.

---

<sup>3</sup> Note that, in some cases, counties assigned to the same county group had different income limits. To address this disparity, the algorithm considered eligibility at both the lowest and highest income limits within the group.

<sup>4</sup> Also, note that some voucher gap calculation methodologies, such as Reina, Aiken, and Epstein (2021), drop homeowners from the final count, which is likely because the HCV program provides rental subsidies, and dropping homeowners aligns with this policy. However, because housing tenure does not affect eligibility according to the Code of Federal Regulations (24 CFR § 982.201), homeowners were retained in this methodology.

<sup>5</sup> The REALHHWT variable name was assigned to the HHWT after the multifamily split and adjustment.

Overall, this approach offered a practical solution given the constraints of the data, but it is important to acknowledge its limitations. Although it preserved the correct racial proportion of HCV-eligible records, it risked slightly skewing other household characteristics. Although preserving the racial proportions was the primary concern here, the technique should be adjusted to reflect the aims of other researchers.<sup>6</sup>

## Results

Finalized eligibility counts were compared with the voucher allocation data from HUD's Picture of Subsidized Households and adjusted to reflect the combined county areas (HUD, n.d.c.). The voucher gap in each area is the difference between the calculated eligibility count and the actual subsidy count from HUD. The allocation rate is the percentage of eligible households for which an HCV is actually available (exhibit 1).

### Exhibit 1

Florida's County Level Voucher Gaps (1 of 2)

Florida County	Voucher Gap	Allocation Rate (%)
Alachua	54,527	5.3
Brevard	62,518	4.7
Broward	248,899	4.6
Charlotte	18,851	1.7
Citrus	16,520	1.7
Clay	17,674	1.1
Collier	43,395	1.1
County Group 1	19,891	2.4
Duval	123,297	5.7
Escambia	46,527	4.7
Flagler	11,862	2.2
Hernando	25,118	1.7
County Group 2	32,107	0.5
Hillsborough	165,885	6.4
Indian River	15,882	2.5
Jackson	17,845	0.8
Lee	78,230	3.6
Leon	63,964	4.3
Manatee	41,569	4.4
Marion	35,481	4.0
Martin	17,322	0.5
Miami-Dade	406,567	6.8
Monroe	16,156	2.9
County Group 3	9,859	2.2
Okaloosa	24,214	4.2
Orange	173,820	3.1

<sup>6</sup> Alternative approaches focusing only on households or individuals renting a home (OWNERSHP = 2) would inherently exclude incarcerated individuals, obviating the need for this step. However, such an approach risks significantly undercounting eligible households because it does not align with federal eligibility requirements, which do not consider housing tenure.

**Exhibit 1**

Florida’s County Level Voucher Gaps (2 of 2)

Florida County	Voucher Gap	Allocation Rate (%)
Osceola	35,020	0.8
Palm Beach	186,175	4.5
Pasco	66,030	2.7
Pinellas	114,462	7.4
Polk	70,781	3.0
County Group 4	12,999	3.9
Santa Rosa	13,156	2.6
Sarasota	45,817	3.6
Seminole	45,816	1.8
St. Johns	15,219	0.7
St. Lucie	36,254	2.3
County Group 5	62,456	0.8
County Group 6	11,405	2.9
Volusia	65,711	5.2
County Group 7	25,627	6.5
<b>Florida</b>	<b>2,594,908</b>	<b>4.6</b>

*Notes: This summary table uses the 50 percent of the Area Median Income threshold, set at the minimum for county groups—County Group 1: Columbia, Levy, Bradford, Gilchrist, Dixie, and Union; County Group 2: Highlands, DeSoto, Hardee, Okeechobee, Hendry, and Glades; County Group 3: Nassau and Baker; County Group 4: Putnam and St. Johns; County Group 5: Sumter and Lake; County Group 6: Suwannee, Taylor, Madison, Hamilton, and Lafayette; and County Group 7: Walton, Washington, Holmes, and Bay. The full dataset with all household characteristic variables is available on request.  
Sources: HUD’s Picture of Subsidized Households; American Housing Survey*

Exhibit 1 results reveal that far fewer than one in four of Florida’s eligible households receives a voucher. Statewide, the calculations show that less than 5 percent of eligible households receive subsidies at the standard eligibility income threshold of 50 percent of the AMI. Moreover, the coverage varies significantly between counties. In several Florida counties, the coverage hovers near 1 percent. Even counties with the highest rates of coverage are below 10 percent. Overall, the statewide voucher gap in Florida is approximately 2.5 million households.

These findings highlight significant disparities in voucher availability across Florida and demonstrate that the actual gaps are much greater than one might believe, given the standardly reported national allocation rate of 25 percent. Hopefully, this methodology can serve as a guide to other fine-grained voucher gap calculations, shed light on the reality of wide voucher gaps, and enable more nuanced discussions of this issue at the local, state, and national levels.

**Conclusion**

Large voucher gaps represent not only statistics but also families likely struggling to secure affordable housing. The current allocation rates of approximately 5 percent statewide and less than 1 percent in several Florida counties signal a critical failure in meeting the housing needs of Floridians. This situation demands immediate and robust policy interventions at local, state, and national levels. These interventions could include increased federal appropriations for HCVs alongside strategies aimed at enhancing the program’s efficacy, such as various landlord participation incentives, efforts to streamline bureaucratic processes, and increased program transparency.

Researchers are encouraged to apply the methodology presented here to calculate county-level voucher gaps across other states or on a national scale to extend this analysis beyond its initial scope. The methodology should be applicable to most other states, requiring only the acquisition of relevant state data, including, for example, county-level inmate counts and crosswalk data to address any missing county information. All data cleaning and calculation scripts are accessible via the GitHub repository, which researchers are invited to clone and modify according to their specific needs (Dabney, 2024).

In addition to the wide voucher gaps that this calculation revealed, an initial data review also showed a significant incongruence between the demographic profiles of households receiving vouchers and those eligible for them. This discrepancy raises questions about possible sociocultural explanations for this result or even systemic issues present in the voucher allocation process. Future research should focus on understanding the root causes of this phenomenon. In addition, examining whether similar patterns exist in other states could be valuable. Such investigations could contribute to a broader understanding of equity issues in voucher allocation and identify targeted interventions to address them.

Policy reforms are urgently needed to meet the demand for affordable housing. Through a combination of research and proactive policy initiatives, it may be possible to bridge the voucher gap and make affordable housing accessible for all who need it.

## **Acknowledgments**

The author would like to express gratitude to the DeVoe L. Moore Center for providing resources and support that made this research possible and, in particular, to Dr. Samuel Staley and Dr. Crystal Taylor for their invaluable insights and guidance throughout the research process.

Special thanks are also extended to research assistants Elizabeth Miller, Eliza Terziev, and Gabriel Valvassori for their dedicated efforts in data collection, research tasks, and valuable input that significantly contributed to the completion of this work.

## **Author**

Shane Dabney is a Ph.D. candidate in philosophy and the Housing Affordability Research Team manager at the DeVoe L. Moore Center at Florida State University.

## **References**

Dabney, Shane. 2024. "sdabney5 / HCVGAPS" GitHub repository. <https://github.com/sdabney5/HCVGAPS>.

IPUMS. n.d. "HHWT: Household Weight, Technical Variables List, Description." IPUMS USA. [https://usa.ipums.org/usa-action/variables/HHWT#description\\_section](https://usa.ipums.org/usa-action/variables/HHWT#description_section).

Missouri Census Data Center (MCDC). n.d. "Geocorr 2018: Geographic Correspondence Engine." University of Missouri Center for Health Policy. <https://mcdc.missouri.edu/applications/geocorr2018.html>.

Reina, Vincent, Claudia Aiken, and Jenna Epstein. 2021. *Exploring a Universal Housing Voucher*. The Housing Initiative at Penn. Philadelphia, PA: University of Pennsylvania. <https://www.housinginitiative.org/universal-voucher.html>.

Ruggles, Steven, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rogers, and Megan Schouweiler. 2024. "IPUMS USA: Version 15.0, 2017–2021 5-Year American Community Survey." Minneapolis, MN: IPUMS. <https://doi.org/10.18128/D010.V15.0>.

———. 2023. "IPUMS USA: Version 14.0, 2021 5-Year American Community Survey." IPUMS. <https://doi.org/10.18128/D010.V14.0>.

U.S. Department of Housing and Urban Development (HUD). n.d.a. "Income Limits." <https://www.huduser.gov/portal/datasets/il.html#year2021>.

———. n.d.b. "Dataset/Assisted Housing: National and Local." <https://www.huduser.gov/portal/datasets/assthsg.html>.

———. n.d.c. "A Picture of Subsidized Households General Description of the Data and Bibliography." <https://www.huduser.gov/portal/datasets/assthsg/statedata98/descript.html>.

## Additional Reading

DeLuca, Stefanie, Philip M.E. Garboden, and Peter Rosenblatt. 2013. "Segregating Shelter: How Housing Policies Shape the Residential Locations of Low-Income Minority Families," *The ANNALS of the American Academy of Political and Social Science* 647 (1): 268–299.

Ellen, Ingrid Gould. 2015. "Housing Low-Income Households: Lessons from the Sharing Economy?" *Housing Policy Debate* 25 (4): 783–784.

Graves, Erin. 2016. "Rooms for Improvement: A Qualitative Metasynthesis of the Housing Choice Voucher Program," *Housing Policy Debate* 26 (2): 346–361.

Joint Center for Housing Studies (JCHS). 2017. *America's Rental Housing 2017*. Cambridge, MA: Harvard University. [https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard\\_jchs\\_americas\\_rental\\_housing\\_2017\\_0.pdf](https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard_jchs_americas_rental_housing_2017_0.pdf).

Keene, Danya E., Linda Niccolai, Alana Rosenberg, Penelope Schlesinger, and Kim M. Blankenship. 2020. "Rental Assistance and Adult Self-Rated Health," *Journal of Health Care for the Poor and Underserved* 31 (1): 325–339.

Kim, Huiyun. 2022. "Failing the Least Advantaged: An Unintended Consequence of Local Implementation of the Housing Choice Voucher Program," *Housing Policy Debate* 32 (2): 369–385.



Leopold, Josh. 2012. "The Housing Needs of Rental Assistance Applicants," *Cityscape* 14 (2): 275–298.

Sard, Barbara, and Thyria Alvarez-Sanchez. 2011. *Large Majority of Housing Voucher Recipients Work, Are Elderly, or Have Disabilities*. Washington, DC: Center on Budget and Policy Priorities.

Shinn, Marybeth, Scott R. Brown, Brooke E. Spellman, Michelle Wood, Daniel Gubits, and Jill Khadduri. 2017. "Mismatch Between Homeless Families and the Homelessness Service System," *Cityscape* 19 (3): 293–307.

Watson, Nicole Elsasser, Barry L. Steffen, Marge Martin, and David A. Vandenbroucke. 2017. *Worst Case Housing Needs: 2017 Report to Congress*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/publications/Worst-Case-Housing-Needs.html>.

---

## Foreign Exchange

*Foreign Exchange, a department of Cityscape, reports on what the U.S. Department of Housing and Urban Development's International and Philanthropic Affairs Division has learned about new departures in housing and development policy in cities and suburbs throughout the world that might have value if applied in U.S. communities. If you have a recent research report or article of fewer than 2,000 words to share in a forthcoming issue of Cityscape, please send a one-paragraph abstract to [Bradley.A.Weaver@hud.gov](mailto:Bradley.A.Weaver@hud.gov).*

---

# Causes and Consequences of Zoning Reform in Auckland

Ryan Greenaway-McGrevy  
The University of Auckland

---

## Abstract

*In 2016, the city of Auckland, New Zealand, upzoned approximately three-quarters of residential land to support medium- and high-density housing. This article describes the antecedents to this widespread zoning reform, details the extent of the reform, and presents evidence of its subsequent impacts on the city's housing market. The amalgamation of municipal governments into a single jurisdiction was an important precursor to the reform. Subsequent increases in housing starts indicate that the upzoning had a substantial impact on housing construction, while changes in rents suggest that it significantly decelerated increases in housing costs.*

## Introduction

Housing has become increasingly unaffordable in many cities around the world, leading a growing chorus of researchers to call for widespread zoning reform as a means to redress housing shortages and relieve upward pressure on housing costs (Glaeser and Gyourko, 2003; Freeman and Schuetz, 2017; Been et al., 2019; Manville et al., 2020). Proponents argue that binding land use regulations constrain supply in areas of high demand, pushing housing costs up and people out. The corollary is that relaxing those restrictions will allow housing supply to meet demand, thereby alleviating cost pressures and allowing more households to access the opportunities available in prosperous cities.

Scant empirical examples complement these theoretical arguments, however, because up until very recently, few cities have pursued widespread zoning reform (Schill, 2005; Freeman and Schuetz, 2017; Freemark, 2019).<sup>1</sup> However, in 2016, the city of Auckland, New Zealand, upzoned approximately three-quarters of its residential-zoned land to varying degrees (Greenaway-McGrevy and Jones, 2023). The city therefore provides a unique case study for policymakers seeking to redress housing shortages and tackle unaffordable housing in other parts of the world. This article describes the events preceding the reform, details the extent of the reform, and presents evidence of its subsequent impacts on housing outcomes.<sup>2</sup>

The amalgamation of several municipal authorities into a single jurisdiction for the entire metropolitan region was an important antecedent to the reform, particularly when viewed through the lens of canonical theories of urban political economy. Development has concentrated costs and diffuse benefits that lead homeowners to oppose local development (Fischel, 2001), encouraging low-density sprawl in metropolitan regions with fractured governance structures (Fischel, 2008). Centralization of planning decisions to the metropolitan level ensures that the relevant negative and positive externalities of development are internalized.

Housing market outcomes after the reform are consistent with upzoning increasing the supply and reducing the cost of housing. As anticipated by proponents of upzoning, housing construction has boomed subsequent to the reform, and rental price increases have decelerated, growing by substantially less in Auckland than in other cities in New Zealand. Studies by the author and collaborators that apply modern econometric policy evaluation methods suggest that these effects are causal, meaning that they can be attributed to the reform rather than some concurrent confounding event or policy change.

The remainder of the article is organized as follows. The next section describes the institutional background leading up to the reforms, showing that centralization of decisionmaking featured prominently in the institutional changes that preceded the reform. The third section summarizes the scale and extent of the reform, and the fourth section describes changes in various housing outcomes before and after the reform. The fifth section concludes.

## **Institutional Background and Antecedents to Zoning Reform**

### **Auckland**

Auckland is the largest metropolitan area in New Zealand, with an estimated resident population of 1.7 million as of June 2023. Centered on a long isthmus between two harbors, the city accounts for 38 percent of gross domestic product (GDP) and about one-third of the total population of the country.<sup>3</sup>

---

<sup>1</sup> Houston is an exception, having implemented widespread reform in 1998 (Gray, 2022).

<sup>2</sup> This article draws on various published and working papers by the author and his colleagues, including Greenaway-McGrevy and Phillips (2023), Greenaway-McGrevy and Jones (2023), Greenaway-McGrevy (2023), and Greenaway-McGrevy and So (2024).

<sup>3</sup> See <https://www.stats.govt.nz/information-releases/regional-gross-domestic-product-year-ended-march-2022/>.

Like much of New Zealand, Auckland experienced rapid population growth in the years preceding the reform. Between the 2006 and 2018 national censuses, the usually resident population of the region increased by 20.4 percent. However, housing supply failed to keep up with demand. Occupied dwellings increased by only 13.7 percent over the same period,<sup>4</sup> representing a shortfall of almost 7 percent, and the average number of people per dwelling increased from 2.98 to 3.15. The median age increased from 33 to 34.7 years, suggesting that the increase in people per dwelling was not driven by demographic or compositional shifts toward larger or more families.<sup>5</sup>

## **Amalgamation Into a Single Jurisdiction**

Prior to 2010, the Auckland region consisted of seven district and city councils, each responsible for designing and implementing zoning regulations within its jurisdiction, and one regional council.<sup>6</sup> These councils were amalgamated in November 2010 into a single authority, the Auckland Council, by an Act of Parliament.<sup>7</sup> Reasons for amalgamation included the need for a cohesive strategic direction for the region and, later, cost efficiencies from the centralization of local government services and administration. Asquith, McNeill, and Stockley (2020) provide a comprehensive discussion of the rationale and processes underpinning amalgamation.<sup>8</sup>

The newly formed Auckland Council was statutorily required to produce a strategic spatial plan for the region and to produce a consistent set of land use regulations. The “Auckland Plan” was released in 2012.<sup>9</sup> Motivated in part by sustainable development, this strategic plan called for a transition toward a more compact form of urban growth, directing the majority of population growth to be housed within the existing urban area. The plan set a specific target of 60 to 70 percent of new dwellings to be built within the existing “metropolitan urban limit” that delineated residential from rural areas.<sup>10</sup> The spatial plan was followed by the draft version of the Auckland Unitary Plan (AUP), which included widespread relaxation of land use regulations to achieve the strategic target.

---

<sup>4</sup> Source: Author’s calculations based on data from Table 2 and Table 13 here: <https://www.stats.govt.nz/assets/Uploads/2018-Census-population-and-dwelling-counts/Download-data/2018-census-population-and-dwelling-counts-amended-5-3-2020.xlsx>.

<sup>5</sup> Sources: <https://statsnz.contentdm.oclc.org/digital/collection/p20045coll20/id/75/> and <https://www.stats.govt.nz/tools/2018-census-place-summaries/auckland-region>.

<sup>6</sup> An earlier consolidation had combined 29 local authorities into the seven councils in 1989.

<sup>7</sup> The Local Government (Auckland Council) Act 2009. <https://www.legislation.govt.nz/act/public/2009/0032/latest/DLM2044909.html>.

<sup>8</sup> The 2011 Rugby World Cup, hosted by New Zealand, was an important catalyst. The government established a Royal Commission on Auckland Governance after the Minister for the Rugby World Cup failed to attain agreement among the various councils on a new and largely central government-funded stadium (Asquith, McNeill, and Stockley, 2020). The commission recommended amalgamation.

<sup>9</sup> <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/Documents/auckland-plan-2012-full-document.pdf>.

<sup>10</sup> The Auckland Plan 2012, paragraph 88, pp. 36–37, and p.48, paragraphs 124–129.

## The Auckland Unitary Plan

The draft version of the plan was publicly released in March 2013 and was followed by 11 weeks of public consultation and feedback. Auckland Council then released the Proposed Auckland Unitary Plan (PAUP) in September.

However, prior to public notification of the PAUP, Auckland Council proposed that the central government appoint an Independent Hearings Panel (IHP) to take public submissions and recommend changes to the PAUP. The additional front-end community engagement would substitute for limited rights of appeal to IHP recommendations, thereby accelerating implementation by avoiding lengthy litigation (Blakeley, 2015). The central government agreed to the request and amended the facilitating legislation.<sup>11</sup>

The IHP held hearings between April 2014 and May 2016 before releasing recommended changes to the PAUP on July 22, 2016. The IHP recommendations included further relaxation of restrictions to enable medium- and high-density housing, such as the abolition of minimum lot and dwelling sizes.

Auckland Council then voted on IHP recommendations over the next 20 working days, maintaining the abolition of minimum lot sizes but voting down the recommended removal of minimum dwelling sizes. The Council subsequently released the “decisions” version of the AUP in August. This release was followed by a 20-day period for the public to lodge appeals in the Environment Court. Appeals to the High Court were only permitted if based on points of law. The AUP then became operative in part on November 15, 2016.<sup>12</sup>

Each step in the process was highly transparent. Spatial plans for each version of the AUP could be viewed online by the public, along with the new regulations that would potentially change restrictions on permissible site development. This transparency meant that any interested member of the public could assess how zoning might affect what could be built on any given parcel under the proposed zoning changes.

## The Auckland Housing Accord

Although the AUP became operative in November 2016, an interim agreement between Auckland Council and the central government allowed developers to access the relaxed land use regulations of the PAUP soon after its notification.

In September 2013, the central government passed inclusionary housing legislation that offered developers an accelerated building approval process in return for the provision of affordable housing within the development.<sup>13</sup> These developments were called Special Housing Areas (SHAs).

---

<sup>11</sup> Local Government (Auckland Transitional Provisions) Amendment Act 2013. <https://www.legislation.govt.nz/act/public/2013/0064/latest/DLM5464006.html>.

<sup>12</sup> Only two elements were not operative at this time: (a) any parts that remained subject to the Environment Court and High Court; and (b) the regional coastal plan of the Proposed AUP that required Minister of Conservation approval.

<sup>13</sup> The “Housing Accords and Special Housing Areas Act 2013” (HASHAA). See <https://www.legislation.govt.nz/act/public/2013/0072/latest/DLM5369001.html>.

To qualify for the program, developers were required to allocate 10 percent of dwellings to affordable housing.<sup>14</sup>

At the same time, Auckland Council and the central government also entered into the Auckland Housing Accord (AHA), an agreement that allowed SHA developments in Auckland to be built according to the more relaxed regulations of the PAUP.<sup>15</sup> The Accord stipulated that the program would expire once the AUP became operative. By the time the program ended, more than 150 SHAs had been approved in Auckland.<sup>16</sup>

The total number of dwellings generated under the program was comparatively small.<sup>17</sup> Nonetheless, the policy likely had an impact on state-developed housing, which began to increase substantially from 2013 onward. Fernandez et al. (2021) present evidence that the SHA program in Auckland largely failed to meet affordable housing requirements, partly because of a lack of enforcement mechanisms.

### **Antecedents to Reform**

The amalgamation of the seven city and district councils in 2010 was likely a critical antecedent to the widespread zoning reform that would follow. Political theories of urban development, such as Fischel's "homevoter hypothesis," posit that urban development has concentrated costs but diffused benefits, leading homeowners to oppose nearby development (Fischel, 2001) and causing regions with more fractured governance structures to have tighter restrictions on housing supply (Fischel, 2008). Amalgamation into a single authority for an entire metropolitan area presents a potential solution to optimally balance the externalities of development because it centralizes planning decisions to the level where the relevant costs and benefits are internalized. Empirical evidence from other contexts supports this reasoning. For example, Tricaud (2021) finds that fractured regions in France that were forced to integrate subsequently experienced increases in housing construction.

Centralization of planning decisions also features prominently in the implementation of Auckland's zoning reform through Auckland Council asking the central government to appoint the Independent Hearings Panel. Although motivated by a desire for streamlined implementation, this further removed planning decisions from the policymakers adjacent to local politics.

However, although amalgamation may have proven a sufficient antecedent to reform, sufficiency does not imply necessity. Alternative options exist.

---

<sup>14</sup> *Affordable housing* was defined as housing meeting at least one of two criteria. First, the dwelling price did not exceed 75 percent of the Auckland region median house price. Second, the dwelling was (a) sold or rented to a household earning up to 120 percent of the median household income for Auckland and (b) sold or rented at or below a price at which the household spent no more than 30 percent of its gross household income on rent or mortgage payments. In addition, purchasers were also asked to occupy the affordable house exclusively as their residence for no less than 3 years and to be a first-time homebuyer. Developments had to have a minimum of 14 units to qualify. See Fernandez et al. (2021).

<sup>15</sup> [https://www.beehive.govt.nz/sites/default/files/Auckland\\_Housing\\_Accord.pdf](https://www.beehive.govt.nz/sites/default/files/Auckland_Housing_Accord.pdf).

<sup>16</sup> An exhaustive list of SHAs is available at [https://infocouncil.aucklandcouncil.govt.nz/Open/2017/10/PLA\\_20171010\\_AGN\\_6726\\_AT\\_files/PLA\\_20171010\\_AGN\\_6726\\_AT\\_Attachment\\_55947\\_1.PDF](https://infocouncil.aucklandcouncil.govt.nz/Open/2017/10/PLA_20171010_AGN_6726_AT_files/PLA_20171010_AGN_6726_AT_Attachment_55947_1.PDF).

<sup>17</sup> Monitoring reports subsequently kept track of the number of new dwelling permits issued. The *Auckland Housing Accord Third Quarterly Report for Third Accord Year* estimated that 2,208 permits had been issued in SHAs between October 2013 and June 2016. See <https://www.beehive.govt.nz/sites/default/files/Auckland%20Housing%20Accord%20Monitoring%20Report.pdf>.

Upzoning may be more politically acceptable if neighborhoods are allowed to collectively opt out, which occurred in Houston (Martin, 2023). Direct monetary incentives from a central or state government to construct dwellings could help overcome municipal opposition (Ehrlich, Hilber, and Schöni, 2018). Reforming land use institutions to facilitate bargaining between developers and neighborhoods would enable residents to be compensated for bearing the negative externalities of development (Foster and Warren, 2022). Finally, adopting a more active and representative community consultation process may help redress self-selection biases inherent to voluntary community consultation. Lower Hutt, a municipal government within the Wellington metropolitan region of New Zealand, features consultation with a representative citizens' panel in its decision-making process. Two-thirds of panel members supported medium-density reforms (Maltman and Greenaway-McGrevy, 2024).

## Zoning Changes

The Auckland Unitary Plan introduced four new zones for residential areas.<sup>18</sup> Listed in decreasing order of permissible site development, these zones are Terrace Housing and Apartment Buildings (THA), Mixed Housing Urban (MHU), Mixed Housing Suburban (MHS), and Single House (SH). Exhibit A-1 in the appendix summarizes the various regulations for each zone, including site coverage ratios, height restrictions, setbacks, and recession planes. Five to seven stories and a maximum site coverage ratio of 50 percent are allowed in THA, three stories and a coverage ratio of 45 percent are allowed in MHU, and two stories and a coverage ratio of 40 percent are allowed in MHS. Up to three dwellings per parcel are allowed in MHS and MHU, with no restriction applying to THA. Meanwhile, the Single House zone is reserved for conventional low-density detached housing, allowing one dwelling per parcel, two stories, and a maximum site coverage ratio of 35 percent. The THA, MHU, and MHS zones cover 7.3, 22.6, and 45.1 percent of residential parcels, respectively, with the remaining 25 percent allocated to SH.<sup>19</sup>

Prior to the zoning reform, approximately 95 percent of residential-zoned land had restrictions similar to that of the Single House zone.<sup>20</sup> Changes in floor-area ratios implied by height and site coverage restrictions indicate that approximately three-quarters of residential land was upzoned (Greenaway-McGrevy and Jones, 2023).

Exhibit 1 depicts the geographic distribution of upzoned residential areas by zone. The plan allowed more intensive development around access points to public and private transit networks. Many of the inner suburbs immediately surrounding the central business district were zoned Single House and were protected by special character “overlays” that prevent teardown and replacement of the houses. These suburbs largely consist of houses constructed in the late 19th and early 20th centuries.

---

<sup>18</sup> The AUP also includes two additional zones that were described as “residential” that were applied to peri-urban areas or small settlements distant to the CBD: “Large Lot” and “Rural and Coastal Settlement.” Regulations in these zones restrict development to a very low intensity, and connection to water and sewerage infrastructure is frequently lacking.

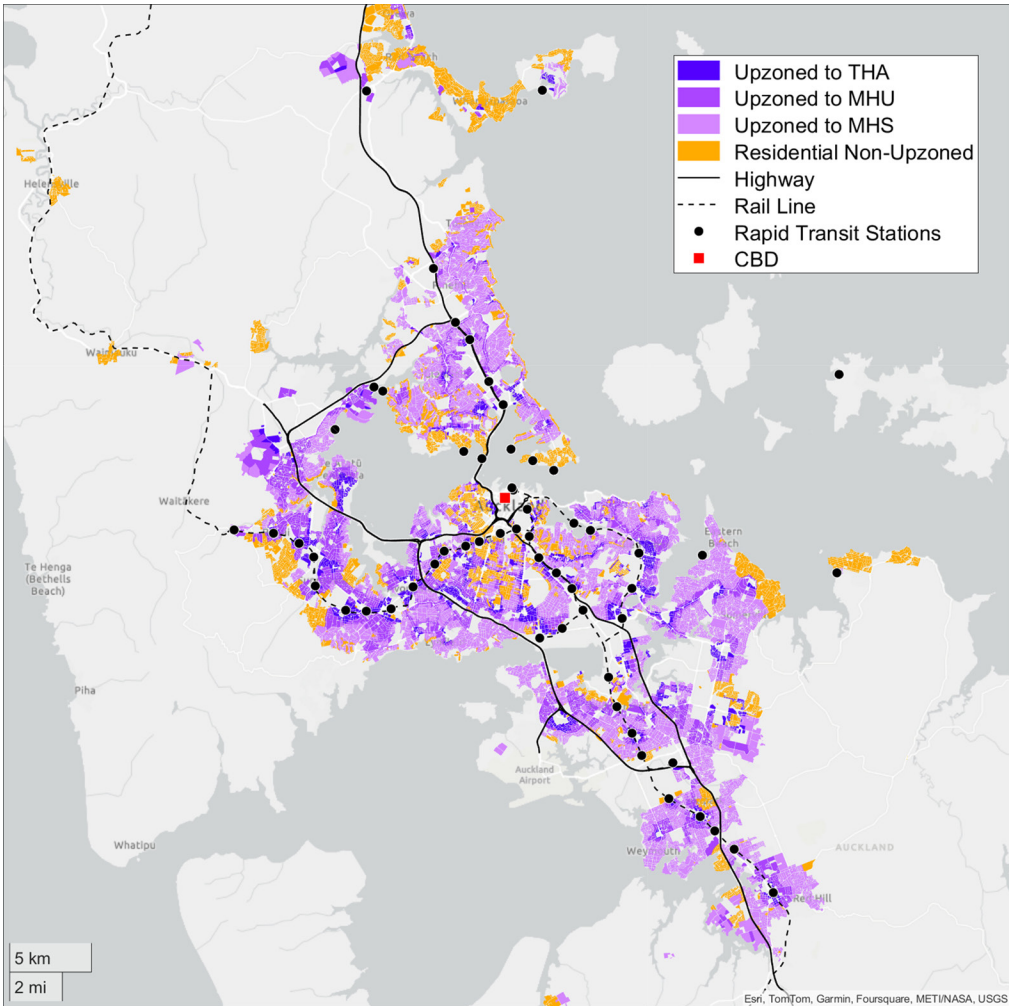
<sup>19</sup> Source: Author's calculations based on Table 1 of Greenaway-McGrevy and Jones (2023).

<sup>20</sup> Prior to the AUP, there were more than 100 different residential zones across the seven city and district councils. Medium- and high-density housing in residential areas was restricted to small pockets. See Table 1 in Greenaway-McGrevy and Jones (2023).



**Exhibit 1**

Upzoned and Non-Upzoned Residential Areas of Auckland



Notes: CBD = central business district. MHS = Mixed Housing Suburban. MHU = Mixed Housing Urban. THA = Terrace Housing and Apartment Buildings. Rapid Transit stations include heavy rail stations, dedicated busway stations, and ferry terminals. The CBD marker is centered on the iconic "Sky Tower" skyscraper in the central business district. Water is shown in gray. Residential areas upzoned to business and rural areas upzoned to residential or business are excluded for visual clarity. See Greenaway-McGrevy and Jones (2023) for tabulations of land conversion between zones.

Source: Greenaway-McGrevy and Jones, 2023

## Policy Effects

Subsequent changes in housing construction and housing costs indicate that the zoning reform had a substantial effect on the quantity and price of housing in the region.

## Housing Construction

In New Zealand, the building process begins with an application for a building consent—similar to a building permit in the United States or a building approval in Australia. Consent is the primary measure of construction activity used in the country. Historically, between 90 and 95 percent of all issued consents result in finished dwellings.<sup>21</sup> Hereafter, this article will use the North American term, *permit*.

Since the reform became operative in late 2016, Auckland has issued permits for approximately 112,000 new dwellings over the subsequent 7 years (2017 through 2023). To put that figure in context, Statistics New Zealand estimates that Auckland's housing stock totaled 530,000 dwellings by the end of 2016. Thus, within 7 years, Auckland issued permits equivalent to more than one-fifth (21 percent) of its existing housing stock.<sup>22</sup>

Exhibit 2 shows annual permits issued for new dwellings in the Auckland region between 1991, when the available data begin, and 2023. Dwelling permits reached record highs subsequent to the reform in both absolute and per capita terms.

Prior to notification of the Proposed AUP in 2013, annual permits peaked in 2002 at 12,200 dwellings, or 9.7 permits per thousand residents. This early 2000s boom was driven in part by construction of apartment buildings in the central business district (Productivity Commission, 2015). The abrupt end of the boom in 2005 coincided with a downzoning that imposed minimum dwelling sizes on apartments.

Construction activity continued to decrease through the period spanning the global financial crisis (GFC) and the associated global recession. Permits per thousand residents reached a low of 2.5 in 2009, thereafter recovering slightly.

Permits increased each year from 2013 through to 2022, first reaching a new record of 12,800 units in 2019, just 3 years after the reform became operative. In per capita terms, a new record of 9.7 permits per thousand residents was also attained in 2019, followed by further increases in 2021 and 2022, when it reached a record high of 12.6.

---

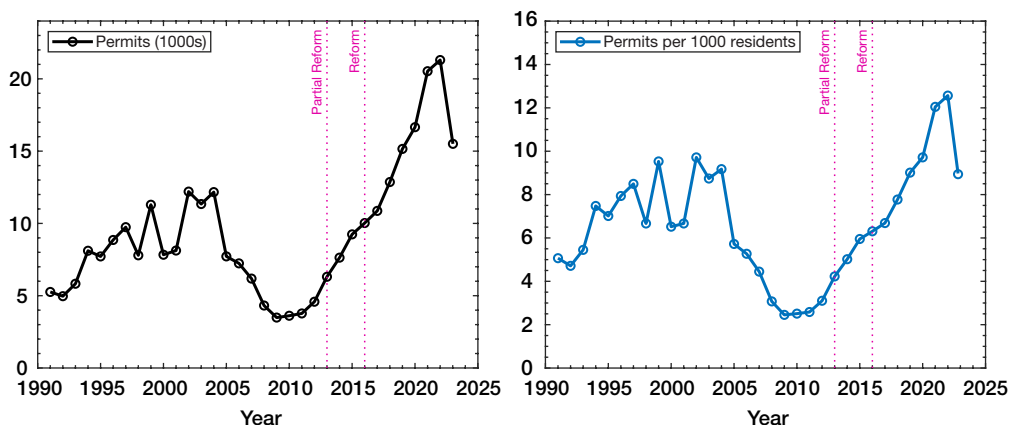
<sup>21</sup> “Code of compliance certification” (CCC) is commonly used as a measure of building completions in New Zealand. CCCs indicate that the building works have been satisfactorily inspected by the local council to certify that the work has been completed to the required local and national building codes and regulations. Experimental estimates of completion rates for New Zealand as a whole produced by Statistics New Zealand (SNZ) exceed 90 percent. For example, using CCC issuance as completion results in a 91.2 percent completion rate for permits issued over the 10 years to December 2018. However, dwellings can be inhabited without a CCC. Final inspection provides another measure of completion because it occurs after the dwelling is completed to a habitable standard, with the interior wall linings, plumbing, and fixtures in place. Using final building inspection results in a completion rate of 92.9 percent over the 10 years to December 2018. For further information on SNZ experimental estimates, see <https://www.stats.govt.nz/experimental/experimental-building-indicators-march-2022-quarter>.

<sup>22</sup> This number is not the net increase in the housing stock, due to teardowns and uncompleted dwellings; it nonetheless serves to illustrate the size of the supply response.

Permits then fell between 2022 and 2023, following an unprecedented rise in interest rates and a technical recession.<sup>23</sup> Despite the unfavorable macroeconomic conditions, over 15,000 permits were issued in 2023, far exceeding the peak of the previous cycle in 2002.

**Exhibit 2**

New Dwelling Permits in Auckland, 1991 through 2023



Notes: "Partial Reform" refers to the Auckland Housing Accord, which was enacted in October 2013 and allowed developers to build under the relaxed regulations of the Proposed Auckland Unitary Plan in exchange for a 10-percent affordable housing provision. "Reform" refers to when the Auckland Unitary Plan was made operative in November 2016.

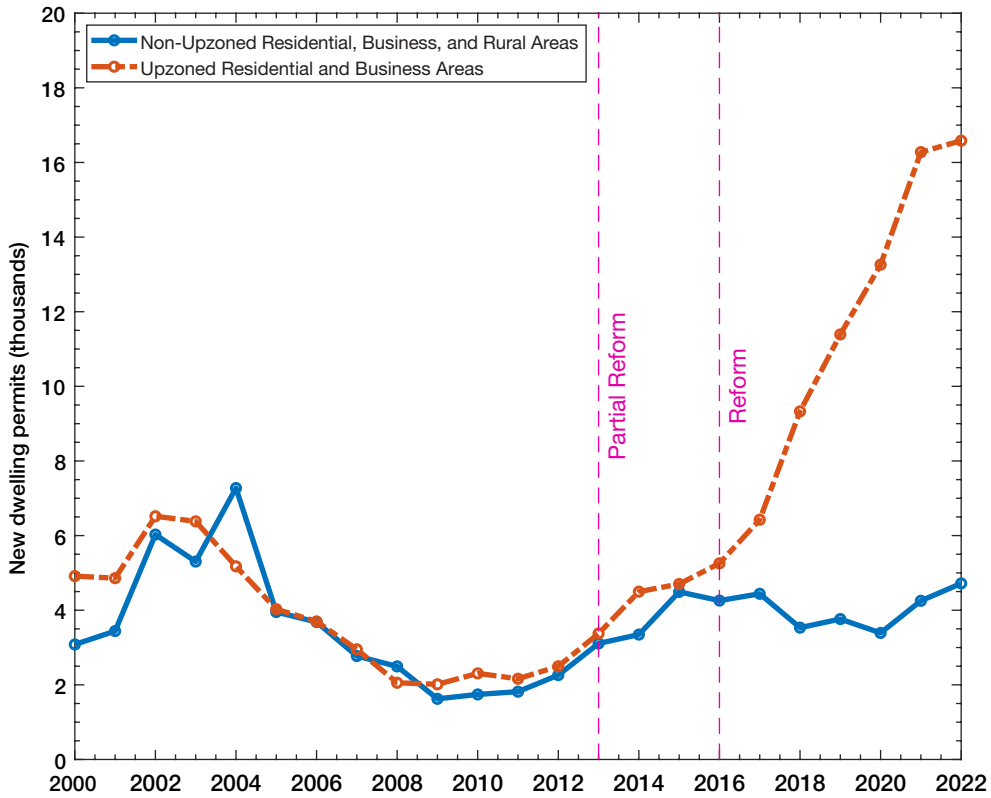
Source: Statistics New Zealand

If the observed increases in permits subsequent to the reform were driven by upzoning, housing construction should have occurred in upzoned areas of the city. Individual permit data maintained by Auckland Council are geocoded so that they can be mapped to upzoned and non-upzoned areas. Exhibit 3 demonstrates that the increase in housing starts from about 2015 onward is driven exclusively by permits issued in upzoned areas, whereas permits in non-upzoned areas are relatively stable from 2015 through 2022.

<sup>23</sup> The Research Bank of New Zealand (the country's central bank) increased the official cash rate from 0.25 percent in September 2021 to 5.5 percent by May 2023. Meanwhile, national GDP growth was negative in the December 2022, March 2023, and September 2023 quarters. At the time of writing, GDP growth for the December 2023 quarter had not been released.

**Exhibit 3**

Permits by Upzoned and Non-Upzoned Areas of Auckland, 2000 through 2022



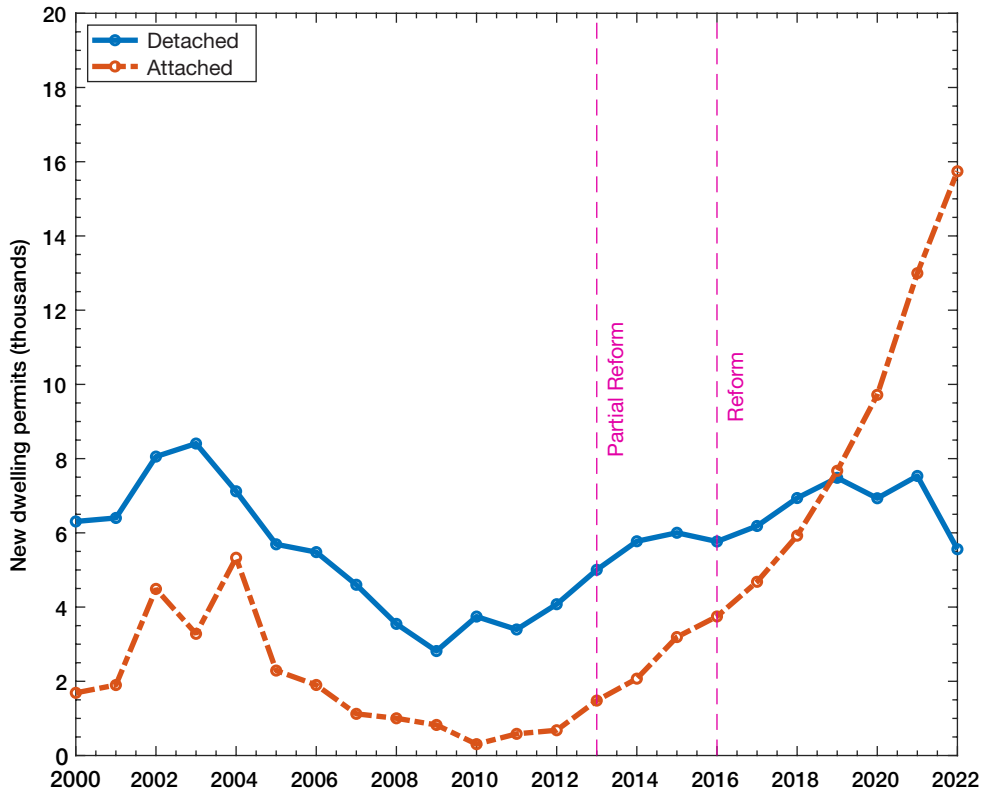
Notes: "Partial Reform" refers to the Auckland Housing Accord, which was enacted in October 2013 and allowed developers to build under the relaxed regulations of the Proposed Auckland Unitary Plan in exchange for a 10-percent affordable housing provision. "Reform" refers to when the Auckland Unitary Plan was made operative in November 2016.

Source: Greenaway-McGrevy, 2023

Meanwhile, housing construction has shifted away from predominantly detached housing to attached housing that medium- and high-density zones encourage. Exhibit 4 shows that, from 2019 on, more permits were issued for attached housing than for detached housing in the Auckland region.

## Exhibit 4

## Permits by Attached and Detached Housing, 2000 through 2022



Notes: "Partial Reform" refers to the Auckland Housing Accord, which was enacted in October 2013 and allowed developers to build under the relaxed regulations of the Proposed Auckland Unitary Plan in exchange for a 10-percent affordable housing provision. "Reform" refers to when the Auckland Unitary Plan was made operative in November 2016. Attached housing includes apartments, rowhouses, and plexes.

Source: Greenaway-McGrevy and Jones, 2023

Since the reform was implemented, housing construction in Auckland has also outperformed that of other large cities in New Zealand. Exhibit 5 plots permits per thousand residents (or the "permitting rate") in Auckland against other urban areas of the country that are large enough to be classified as "metropolitan" by Statistics New Zealand.<sup>24</sup>

Auckland exhibited a comparatively low permitting rate in the aftermath of the global financial crisis (GFC), from 2008 to 2010, when permits per thousand residents bottomed out at 2.5 in 2009. A significant increase occurred between 2012 and 2013, when the partial upzoning under the Auckland Housing Accord took place, followed by further increases every year thereafter

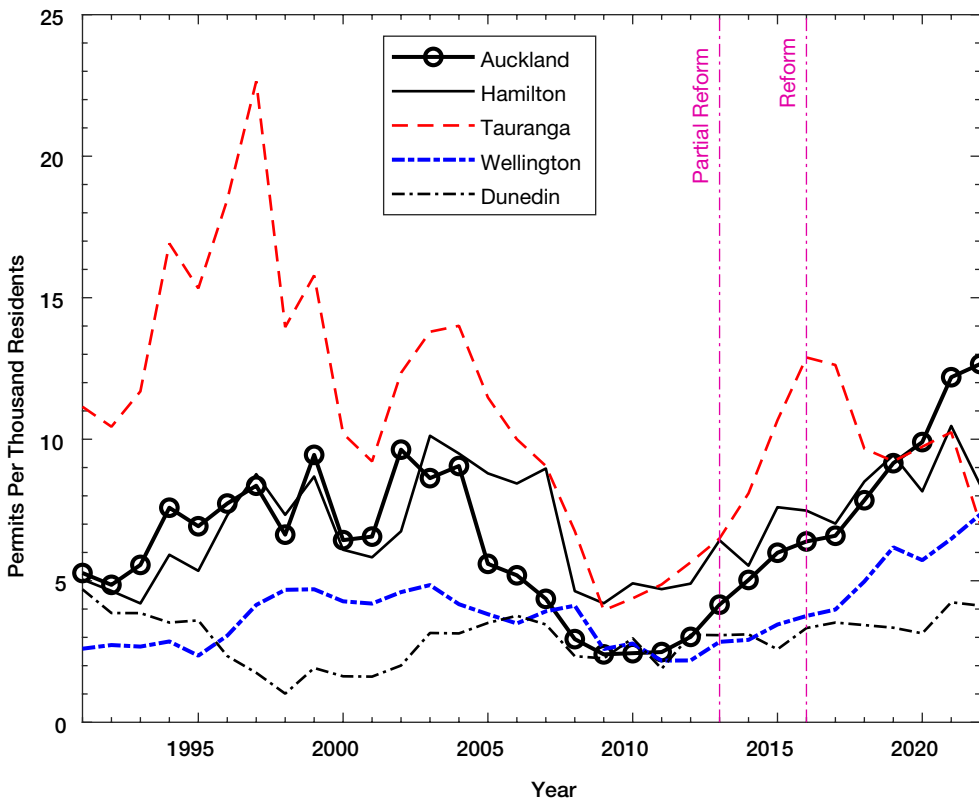
<sup>24</sup> This article uses "functional urban areas" (FUAs) as the geographic unit of analysis to facilitate comparisons between different cities, because administrative boundaries do not encompass metropolitan areas in cities other than Auckland. FUAs are defined by Statistics New Zealand (SNZ) based on commuting patterns and are equivalent to commuting zones as defined by the OECD. The metropolitan area of Christchurch is omitted as a relevant comparator because it experienced a large and destructive earthquake in 2011 that had a significant impact on subsequent housing construction due to the need to replace the loss in the housing stock.

through 2022, when the permitting rate reached the record high of 12.6 permits per thousand residents. Auckland’s permitting rate surpassed that of Tauranga in 2019, which had previously exhibited the highest permitting rate among the five metropolitan areas.

Auckland continues to outperform the Wellington urban area despite one of the constituent municipalities within the metropolitan area, Lower Hutt, implementing a sequence of widespread zoning reforms in the late 2010s. Beginning in 2016, Lower Hutt enacted a series of zoning changes to enable medium-density housing. However, Maltman and Greenaway-McGrevy (2024) show that these zoning changes increased permits per capita in Lower Hutt to levels comparable to those in Auckland.

**Exhibit 5**

Auckland’s Permits per 1,000 Residents Versus Other Cities in New Zealand, 1991 through 2022



Notes: “Partial Reform” refers to the Auckland Housing Accord, which was enacted in October 2013 and allowed developers to build under the relaxed regulations of the Proposed Auckland Unitary Plan in exchange for a 10-percent affordable housing provision. “Reform” refers to when the Auckland Unitary Plan was made operative in November 2016.

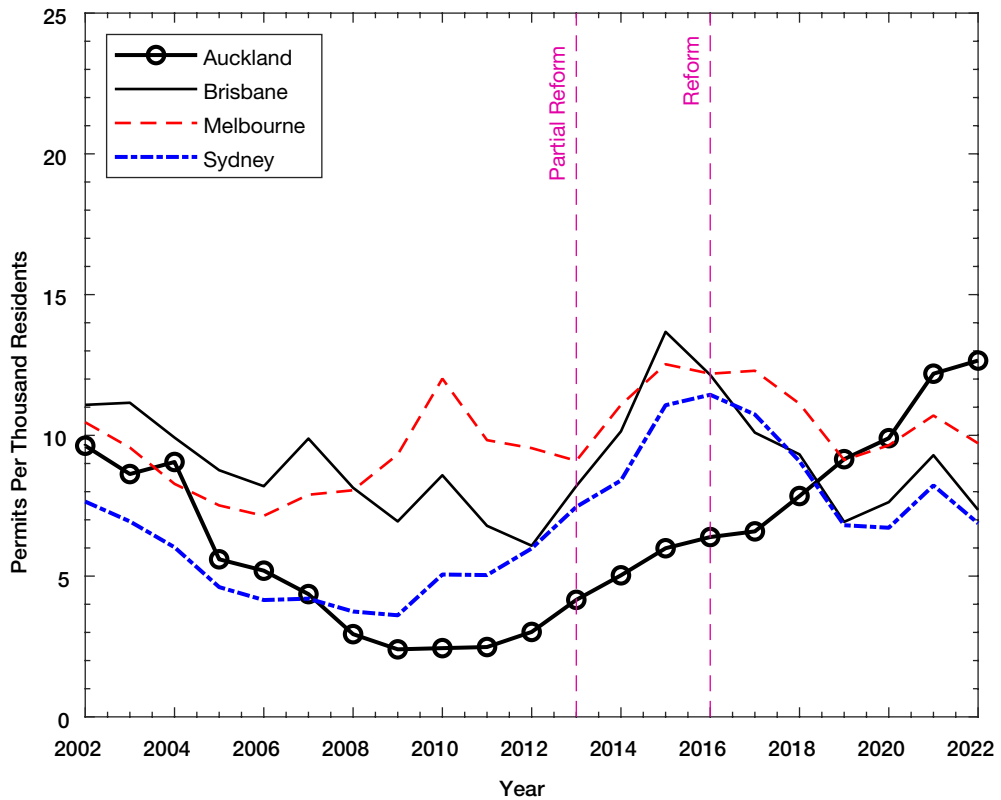
Source: Greenaway-McGrevy, 2023

By 2021, the number of permits per capita in Auckland also surpassed that of large Australian cities. Exhibit 6 compares Auckland’s permitting rate to that of Sydney, Melbourne, and Brisbane. These three Australian cities exhibited far higher construction rates than Auckland after the latter’s

2005 downzoning and the GFC. By 2019, Auckland’s permitting rate exceeded that of Sydney and Brisbane. By 2021, it surpassed that of Melbourne.

**Exhibit 6**

Auckland’s Permits per 1,000 Residents Versus Large Cities in Australia, 2002 through 2022



Notes: "Partial Reform" refers to the Auckland Housing Accord, which was enacted in October 2013 and allowed developers to build under the relaxed regulations of the Proposed Auckland Unitary Plan in exchange for a 10-percent affordable housing provision. "Reform" refers to when the Auckland Unitary Plan was made operative in November 2016.

Source: Greenaway-McGrevy, 2023

**Causal Effects**

The evidence presented in exhibits 2 through 5 appears consistent with widespread upzoning having a large and significant impact on housing starts. Since passing the reform in late 2016—

1. Approximately 112,000 new dwelling permits have been issued over the subsequent 7 years (2017 through 2023), equivalent to 21 percent of the prereform housing stock.
2. Dwelling permits issued per year have reached record highs in both absolute and per capita terms.
3. The increase in permits has been located exclusively in upzoned areas of the city.

4. Attached housing accounts for the majority of new dwelling permits.
5. The number of permits per capita in Auckland has exceeded that of comparable cities elsewhere in New Zealand and Australia.

However, evaluating the impact of the reform requires a counterfactual scenario that tells us what would have happened if the policy had not been implemented. Quasi-experimental methods are commonly employed to specify a counterfactual and measure policy effects. In the zoning literature, quasi-experimental methods have been applied to study the effects of zoning changes in Chicago (Freemark, 2019), Portland (Dong, 2021), and Minneapolis.<sup>25</sup>

Synthetic controls provide one such quasi-experimental method. Under this approach, the counterfactual is constructed from a weighted average of outcomes from comparable cities; the weights are selected via a statistical algorithm to ensure that the weighted average (or synthetic unit) has outcomes that resemble those of the treated unit prior to the policy change or intervention. The synthetic unit then provides the policy counterfactual to the unit that received the treatment. The synthetic control method has been applied to evaluate numerous policies and was recently described by Susan Athey and Nobel Memorial Laureate Guido Imbens as “arguably the most important innovation in the policy evaluation literature in the last 15 years” (Athey and Imbens, 2017). The Minneapolis Federal Reserve Bank uses the method to assess the effects of the Minneapolis 2040 Plan, which relaxed regulations to allow up to three dwellings per parcel.<sup>26</sup> See Abadie (2021) for a comprehensive description of the method.

Greenaway-McGrevy (2023) applies the synthetic control method to the Auckland zoning reform, finding that it roughly doubled the permitting rate within 5 years of the reform becoming operative and generated an approximate 80-percent increase in permits issued over the following 6 years.

Another commonly used quasi-experimental policy evaluation method is difference-in-differences. In this approach, changes in outcomes in treated units after a policy intervention are compared with changes in outcomes in units that did not receive the treatment. Untreated units are a “control” that serves as the policy counterfactual for the treated group. Freemark (2019) uses this method to evaluate transit-oriented upzoning in Chicago, comparing housing outcomes between upzoned and non-upzoned areas of the city.

Greenaway-McGrevy and Phillips (2023) use difference-in-differences to examine the effects of the Auckland upzoning, comparing permits issued in upzoned residential areas of the city to permits in non-upzoned residential areas. However, one potential problem of applying the difference-in-differences approach is that housing construction in upzoned areas may have displaced construction that would have otherwise occurred in non-upzoned areas of the city under the policy counterfactual. Permits in non-upzoned areas of the city would be biased downward as a policy counterfactual, which then generates an upward bias in any estimated policy effects.

---

<sup>25</sup> The Minneapolis Federal Reserve Bank tracks the impacts of the Minneapolis 2040 plan. See <https://minneapolisfed.shinyapps.io/Minneapolis-Indicators/>.

<sup>26</sup> See <https://minneapolisfed.shinyapps.io/Minneapolis-Indicators/> and <https://www.minneapolisfed.org/~media/assets/articles/2021/new-fed-tool-will-measure-zoning-reforms-impacts-on-housing-affordability-in-minneapolis/minneapolis-housing-indicators-technical-appendix.pdf>.



The authors address this problem by using pre-policy intervention trends in permits in non-upzoned areas to specify a *set* of counterfactual scenarios. Their approach repurposes the method proposed by Rambachan and Roth (2023) to address another problem commonly encountered in applications of difference-in-differences.<sup>27</sup> Under this approach, exact estimates of policy effects cannot be obtained because observed outcomes in treated areas are compared to a set of counterfactual outcomes. Nonetheless, the statistical significance of policy impacts can still be tested conditional on the set of counterfactual outcomes.

Greenaway-McGrevy and Phillips (2023) find that, had Auckland not upzoned, the trend rate of housing construction in non-upzoned areas of the city would have had to increase four-fold for policy impacts to be statistically insignificant. They argue that no feasible concurrent policy change could have generated such a significant increase in housing construction.<sup>28</sup>

## Changes in the Housing Stock

Although housing starts are indicative of how the housing stock is changing over time, they do not directly translate into increases in the housing stock, for two reasons.

First, not every permit results in a completed dwelling. Although accurate data for Auckland over the complete pre- and post-reform periods are lacking, the available data suggest that between 90 and 95 percent of permits result in a completion, depending on how a completion is defined.<sup>29</sup>

Second, many housing developments tear down and replace existing dwellings. Unfortunately, direct estimates of the gross reduction in the housing stock from teardowns are not available.<sup>30</sup>

Motivated by this issue, Jones, Greenaway-McGrevy, and Crow (2024) estimate the net change in Auckland's housing stock based on district valuation rolls. These administrative records are kept by local governments throughout New Zealand for the purpose of levying property taxes. Through to February 2024, their estimates show that the housing stock had increased by approximately 80,000 dwellings, or 15 percent, since the AUP became operative.<sup>31</sup>

---

<sup>27</sup> Namely, violation of the parallel trends assumption.

<sup>28</sup> Greenaway-McGrevy and Phillips (2023) also produce estimates of policy effects by restricting the counterfactual sets to a linear trend, resulting in an estimate of 21,808 additional permits between 2017 and 2021. However, they warn that such a restriction is subject to strict specification assumptions.

<sup>29</sup> "Code of compliance certification" (CCC) is commonly used as a measure of completion, although dwellings can be inhabited without a CCC. Greenaway-McGrevy and Jones (2023) explain that matching CCCs to building permits in Auckland only became feasible from July 2017 onward because this is when a unique identifier was applied to permits and subsequent building inspections in the administrative records. Over 91 percent of permits have a CCC issued within 4 years, while over 93 percent have a final inspection. In addition, more than 95 percent of permits have a first inspection within 2 years, indicating that construction has commenced. Permits expire after 1 year, but developers can apply for a 1-year extension.

<sup>30</sup> Demolitions for dwellings of fewer than three stories do not require a permit in Auckland.

<sup>31</sup> Many of these net additions were likely to have been permitted before the AUP became operative but after it began to have an effect through the partial upzoning under the Auckland Housing Accord program. It is difficult to ascertain how many gross additions were originally consented under the new regulations due to the lack of a unique identifier matching permits to dwellings in the district valuation roll.

## Government-Developed Housing

Like many countries, New Zealand has long had government-run or -controlled organizations that construct housing. The nation's primary government developer, Kāinga Ora, builds houses for a variety of purposes, including tenanted housing for low-income households, affordable housing, and market-priced housing.

Upzoning helps government developers build more housing because it allows them to fit more housing onto the land they own or must otherwise acquire. Public developers in New Zealand have consequently been highly supportive of zoning reform. Kāinga Ora has made multiple submissions to local governments in New Zealand in support of widespread upzoning (Greenaway-McGrevy, 2024). Housing New Zealand (a predecessor to Kāinga Ora) credits the AUP with enabling it to meet housing demand in Auckland, stating that the additional capacity of its land holdings increased from 3,000 homes to close to 30,000.<sup>32</sup>

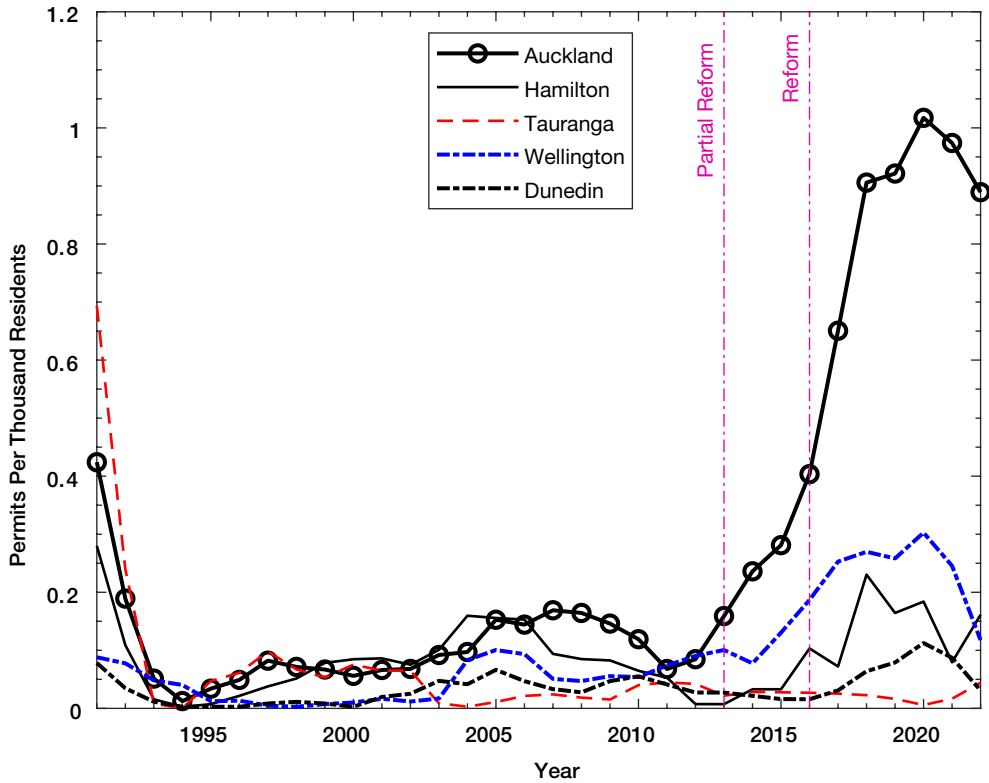
The data support this reasoning. The AUP precipitated significant increases in government-developed housing in Auckland. Exhibit 7 shows the number of permits issued to government-controlled institutions per 1,000 residents, illustrating that there has been a substantial increase in Auckland since 2013, when government developers took up the development opportunities enabled under the Auckland Housing Accord. Moreover, government housing development in Auckland far exceeds that in other metropolitan cities in New Zealand. These patterns suggest that zoning reform can enable governments to supply more housing, including affordable housing and subsidized public rentals.

---

<sup>32</sup> See page 30 of its "Briefing for Incoming Minister Responsible for Housing New Zealand": <https://kaingaora.govt.nz/assets/Publications/Briefing-to-the-Incoming-Minister/briefing-for-the-incoming-minister-2016.pdf>.

**Exhibit 7**

State-Developed Housing in Auckland Versus Other Cities in New Zealand, 1991–2022



Notes: "Partial Reform" refers to the Auckland Housing Accord, which was enacted in October 2013 and allowed developers to build under the relaxed regulations of the Proposed Auckland Unitary Plan in exchange for a 10-percent affordable housing provision. "Reform" refers to when the Auckland Unitary Plan was made operative in November 2016.

Source: Greenaway-McGrevy, 2024

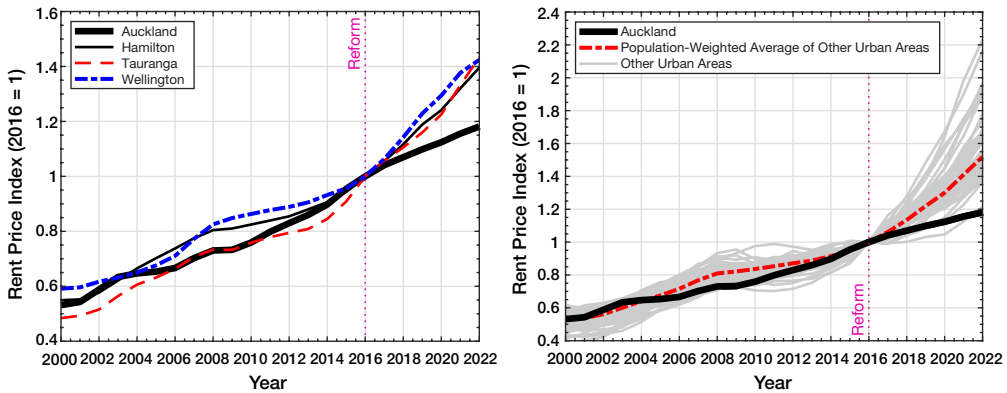
**Rents**

Proponents of upzoning suggest that it will not only redress housing shortages but will relieve pressure on housing costs. Exhibit 8 presents rental price indexes constructed from new tenancies in Auckland and comparable cities, showing that nominal rents in Auckland have increased at a substantially slower rate than almost every other urban area in the country.<sup>33</sup>

<sup>33</sup> Inflation-adjusted rents in Auckland actually decreased between 2016 and 2022. The Consumer Price Index increased by 21 percent between Q4 2016 and Q4 2022. Source: <https://www.rbnz.govt.nz/monetary-policy/about-monetary-policy/inflation-calculator>.

## Exhibit 8

### Rental Price Indexes in Auckland and Other Urban Areas of New Zealand, 2000–2022



Note: "Reform" refers to when the Auckland Unitary Plan was made operative in 2016.

Source: Greenaway-McGrevy and So, 2024

Rents provide a clearer picture of housing affordability than house prices because of the heterogeneous impacts of upzoning on the latter. Housing is a bundle of land and structure. Because upzoning can increase the price of upzoned land, its immediate impact can be to increase the value of land-intensive properties, such as small or dilapidated detached houses on large parcels.<sup>34</sup> Consistent with this outcome, Greenaway-McGrevy, Pacheco, and Sorensen (2021) showed that Auckland's upzoning increased the price of land-intensive properties relative to capital-intensive properties.

Greenaway-McGrevy and So (2024) apply the synthetic control method to rental price indexes, finding that rents would have been 28 percent higher 6 years after the reform if Auckland had not upzoned. Nonetheless, housing costs in the city remain highly unaffordable when measured by either the proportion of disposable income spent on housing or house prices relative to incomes. Auckland's zoning reform is therefore unlikely to be a panacea, and additional policy tools and further reforms may be required to bring the cost of housing to affordable levels.

## Concluding Remarks

Widespread upzoning is increasingly advocated to redress housing shortages and alleviate rising housing costs in many cities around the world. Until recently, proponents have had few empirical case studies to complement the theoretical arguments underpinning this policy intervention because few cities had pursued widespread zoning reform.

Auckland demonstrates that these arguments are no longer theoretical. Subsequent to its 2016 reform, housing construction has boomed, while rental price increases have significantly decelerated.

<sup>34</sup> Note that this does not imply that upzoning erodes housing affordability. Upzoning encourages affordability by directly reducing the quantity of land required per dwelling—not the price of land. Land costs of development decrease if the reduction in quantity is proportionately greater than any increase in land price. Increases in land prices are smaller when upzoning is widespread because development opportunities are more abundant (Phillips, 2022).

Auckland is no longer unique in this regard, either globally or within New Zealand. Lower Hutt, a municipality within the Wellington metropolitan area in New Zealand, implemented a sequence of reforms in the late 2010s that have had a substantial impact on housing starts (Maltman and Greenaway-McGrevy, 2024). In North America, the cities of Arlington, Minneapolis, and Victoria have enacted widespread zoning changes, and the province of British Columbia and the states of California and Oregon have implemented regulatory changes to encourage intensification.

In many cases, it is too early to tell whether the policies have had a substantive impact. In others, construction booms do not seem to have followed reforms (Garcia and Alameldin, 2023). The results from New Zealand hold promise that zoning reform can help redress housing shortages and ease pressure on housing costs. Collectively, these case studies form an important evidence base that can inform the design of upzoning policies elsewhere to enhance housing supply. Understanding why zoning reform has such a significant impact under some circumstances but not others remains an important topic for future research.

## Appendix

### Exhibit A-1

Summary of Land Use Regulations by Residential Zone Under the Auckland Unitary Plan

Regulation	Terraced Housing and Apartments	Mixed Housing Urban	Mixed Housing Suburban	Single House
Maximum Height	16m (5–7 stories)	11–12m (3 stories)	8–9m (2 stories)	8–9m (2 stories)
Height in Relation to Boundary	3m + 45% recession plane	3m + 45% recession plane	2.5m + 45% recession plane	2.5m + 45% recession plane
Setback (side and rear)	0m	1m	1m	1m
Maximum Site Coverage	50%	45%	40%	35%
Maximum Impervious Area	70%	60%	60%	60%
Minimum Dwelling Size	45m <sup>2</sup>	45m <sup>2</sup>	45m <sup>2</sup>	NA
Maximum Dwellings per Site	NA	3	3	1
Minimum Lot Size (subdivision)	1,200m <sup>2</sup>	300m <sup>2</sup>	400m <sup>2</sup>	600m <sup>2</sup>

NA = not applicable

Notes: Restrictions are "as of right." Number of stories (in parentheses) are obtained from the purpose of the height restriction as stated in the zoning regulations. Height in relation to boundary restrictions applies to side and rear boundaries. Less restrictive height in relation to boundary rules than those tabulated applies to side and rear boundaries within 20m of site frontage. Impervious surfaces include roofs, paved areas, and compacted metal roads. Maximum dwellings per site are permitted as of right. Minimum lot sizes do not apply to extant residential parcels. Tabulated restrictions are not exhaustive.

Source: Greenaway-McGrevy and Jones, 2023

## Acknowledgments

I thank the editor for feedback on a previous draft.

## Author

Ryan Greenaway-McGrevy is an associate professor at The University of Auckland.

## References

- Abadie, Alberto. 2021. "Using Synthetic Controls: Feasibility, Data Requirements, and Methodological Aspects," *Journal of Economic Literature* 59 (2): 391–425.
- Asquith, Andy, Jeffrey McNeill, and Elizabeth Stockley. 2020. "Amalgamation and Auckland City: A New Zealand Success Story?" *Australian Journal of Public Administration* 80 (4): 977–986.
- Athey, Susan, and Guido W. Imbens. 2017. "The State of Applied Econometrics: Causality and Policy Evaluation," *Journal of Economic Perspectives* 31 (2): 3–32.
- Been, V., I.G. Ellen, and K. O'Regan. 2019. "Supply Skepticism: Housing Supply and Affordability," *Housing Policy Debate* 29 (1): 25–40. <https://doi.org/10.1080/10511482.2018.1476899>.
- Blakeley, Roger. 2015. "The Planning Framework for Auckland 'Super City': An Insider's View," *Policy Quarterly* 11 (4): 3–14. <http://dx.doi.org/10.26686/pqv11i4.4572>.
- Dong, Hongwei. 2021. "Exploring the Impacts of Zoning and Upzoning on Housing Development: A Quasi-Experimental Analysis at the Parcel Level," *Journal of Planning Education and Research* 44 (1): 403–415. <http://dx.doi.org/10.1177/0739456X21990728>.
- Ehrlich, Maximillian V., Christian A. Hilber, and Oliver Schöni. 2018. "Institutional Settings and Urban Sprawl: Evidence from Europe," *Journal of Housing Economics* 42: 4–18. <https://doi.org/10.1016/j.jhe.2017.12.002>.
- Fernandez, M.A., G.E. Sánchez, and S. Bucaram. 2021. "Price Effects of the Special Housing Areas in Auckland," *New Zealand Economic Papers* 55 (1): 141–154. <https://doi.org/10.1080/00779954.2019.1588916>.
- Fischel, William A. 2001. *The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies*. Cambridge, MA: Harvard University Press. <https://www.hup.harvard.edu/books/9780674015951>.
- . 2008. "Political Structure and Exclusionary Zoning: Are Small Suburbs the Big Problem?" In *Fiscal Decentralization and Land Policies*, edited by Gregory K. Ingram and Yu-Hung Hong. Cambridge, MA: Lincoln Institute of Land Policy: 111–136.
- Foster, David, and Joseph Warren. 2022. "The NIMBY Problem," *Journal of Theoretical Politics* 34 (1): 145–172. <http://dx.doi.org/10.1177/09516298211044852>.
- Freeman, Lance, and Jenny Schuetz. 2017. "Producing Affordable Housing in Rising Markets: What Works?" *Cityscape* 19 (1): 217–236.
- Freemark, Yonah. 2019. "Upzoning Chicago: Impacts of a Zoning Reform on Property Values and Housing Construction," *Urban Affairs Review* 56 (3): 758–789.

Garcia, David, and Muhammad Alameldin. 2023. "California's HOME Act Turns One: Data and Insights From the First Year of Senate Bill 9." <https://ternercenter.berkeley.edu/research-and-policy/sb-9-turns-one-applications/>.

Glaeser, Edward L., and Joseph Gyourko. 2003. "The Impact of Building Restrictions on Housing Affordability," *Economic Policy Review* June: 21–39.

Gray, M. Nolan. 2022. *Arbitrary Lines: How Zoning Broke the American City and How to Fix It*. Washington, DC: Island Press.

Greenaway-McGrevy, Ryan. 2024. Zoning Reform and State-Developed Housing in Auckland. Working paper 019. Auckland, NZ: University of Auckland, Economic Policy Centre. <https://www.auckland.ac.nz/assets/business/our-research/docs/economic-policy-centre/EPC-WP-019-zoning-reform-and-state-developed-housing-in-auckland.pdf>.

———. 2023. Can Zoning Reform Increase Housing Construction? Evidence from Auckland. Working paper 017. Auckland, NZ: University of Auckland, Economic Policy Centre. <https://www.auckland.ac.nz/assets/business/our-research/docs/economic-policy-centre/Working%20paper%2017.pdf>.

Greenaway-McGrevy, Ryan, and James Allen Jones. 2023. Can Zoning Reform Change Urban Development Patterns? Evidence from Auckland. Working paper 012. Auckland, NZ: University of Auckland, Economic Policy Centre. <https://www.auckland.ac.nz/assets/business/012WP.pdf>.

Greenaway-McGrevy, Ryan, and Peter C.B. Phillips. 2023. "The Impact of Upzoning on Housing Construction in Auckland," *Journal of Urban Economics* 136: 103555. <https://doi.org/10.1016/j.jue.2023.103555>.

Greenaway-McGrevy, Ryan, and Yun So. 2024. Can Zoning Reform Reduce Housing Costs? Evidence From Rents in Auckland. Working paper 016. Auckland, NZ: University of Auckland, Economic Policy Centre. <https://www.auckland.ac.nz/assets/business/our-research/docs/economic-policy-centre/EPC-WP-016.pdf>.

Greenaway-McGrevy, Ryan, Gail Pacheco, and Kade Sorensen. 2021. "The Effect of Upzoning on House Prices and Redevelopment Premiums in Auckland, New Zealand," *Urban Studies* 58 (5): 959–976.

Jones, James Allen, Ryan Greenaway-McGrevy, and Chris Crow. 2024. *Using Council Valuation Records to Estimate Auckland's Housing Stock*. Urban and Spatial Economics Hub Policy Paper No. 002. Auckland, NZ: University of Auckland, Economic Policy Centre. <https://www.auckland.ac.nz/assets/business/our-research/docs/economic-policy-centre/urban-and-spatial-economics/Using%20Council%20Valuation%20Records%20to%20Estimate%20Auckland%27s%20Housing%20Stock.pdf>.

Maltman, Matthew, and Ryan Greenaway-McGrevy. 2024. Going It Alone: The Impact of Upzoning on Housing Construction in Lower Hutt. Working paper 018. Auckland, NZ: University of Auckland, Economic Policy Centre. <https://www.auckland.ac.nz/assets/business/our-research/docs/economic-policy-centre/EPC-WP-018-going-it-alone-the-impact-of-upzoning-on-housing-construction-in-lower-hutt.pdf>.

Manville, M., P. Monkkonen, and M. Lens. 2020. "It's Time to End Single-Family Zoning," *Journal of the American Planning Association* 86 (1): 106–112.

Martin, Anya. 2023. "Houston, We Have a Solution," *Works in Progress* 12, September 7. <https://worksinprogress.co/issue/houston-we-have-a-solution/>.

New Zealand Productivity Commission. 2015. *Using Land for Housing*. Wellington, NZ: New Zealand Productivity Commission. <https://www.productivity.govt.nz/assets/Documents/6a110935ad/using-land-for-housing-final-report.pdf>.

Phillips, Shane. 2022. *Building Up the "Zoning Buffer": Using Broad Upzones to Increase Housing Capacity Without Increasing Land Values*. UCLA Reports. <https://escholarship.org/uc/item/0r53h7pw>.

Rambachan, Ashesh, and Jonathan Roth. 2023. "A More Credible Approach to Parallel Trends," *The Review of Economic Studies* 90 (5): 2555–2591.

Schill, Michael H. 2005. "Regulations and Housing Development: What We Know." In *The Affordable Housing Reader*, edited by J. Rosie Tighe and Elizabeth J. Mueller. London: Routledge.

Tricaud, C. 2021. *Better Alone? Evidence on the Costs of Intermunicipal Cooperation*. CEPR Discussion Paper No. DP15999.



# Learning From German Publicly Led Development Strategies to Create Mixed-Income, Mixed-Use Development Projects

Yonah Freemark  
Urban Institute

Tarsi Dunlop  
German Marshall Fund of the United States

---

## Abstract

*This article explores several key tools German cities use to undertake large development projects featuring thousands of new housing units apiece. Evidence from Berlin, Frankfurt, and Munich shows how these cities leverage federal rules that freeze land costs, publicly owned land, and neighborhood-scale master planning integrated with transportation investments to make way for projects. These tools enable cities to ensure a mix of development uses—spanning schools, transportation, and housing—through a unified urban design. This form of publicly led development has helped each of these cities respond to their respective housing needs.*

## Introduction

Communities across the United States and Europe face a housing crisis, both in affordability and supply. Even as housing costs have increased as a share of income, construction levels have declined (Wetzstein, 2017). Despite the broad agreement among policymakers at many governmental levels about the need to address this problem, successful approaches to resolving the challenge during the long term remain largely theoretical. Although evidence shows that additional housing supply can help reduce costs (Been, Ellen, and O'Regan, 2023), macroeconomic conditions like migration and investment trends (Rodríguez-Pose and Storper, 2020) influence housing costs for families with low incomes, and generating more housing is easier said than done, especially within already developed neighborhoods.

The causes of the housing crisis are multifarious. One problem is that many local governments have enforced strict local regulations that make it difficult to build new housing, such as rules preventing anything larger than single-family homes from being built. Building and fire codes—sometimes implemented by city, state, and national governments in the interest of promoting safety and well-being—also play a role in hindering construction because they can increase housing costs if they are needlessly complicated (Listokin and Hattis, 2005; McFarlane, Li, and Hollar, 2021).

These rules often constrain development most in sought-after areas where costs are already high, and local policymakers have used exclusionary tactics to prevent lower-income residents from moving in (Freemark, Lo, and Bronin, 2023; Freemark and Steil, 2022; Monkkonen, Lens, and Manville, 2020; Quigley and Raphael, 2005). Although such rules rarely ban publicly subsidized or other affordable housing explicitly, they often have the de facto effect of preventing their construction. Competition for a limited number of units increases over time, further boosting housing costs (Kendall and Tulip, 2018; Zabel and Dalton, 2011).

Some U.S. cities and states have become more accommodating of new construction in recent years, suggesting a shift on this measure of late (Manji et al., 2023; Pendall, Lo, and Wegmann, 2022). Evidence suggests that during the long term, more accommodating zoning could result in increasing housing construction and a reduction in housing prices (Freemark, 2023; Freemark et al., 2023; Wassmer and Williams, 2021), but the effects of rezoning to encourage construction could take years to manifest, and such reforms may have only marginal benefits in terms of reduced housing costs (Stacy et al., 2023).

Moreover, a second problem is that regulatory policies like zoning are only one part of the complicated equation of city building. The pace of privately financed construction largely reflects whether the private sector demands new investment in the first place. Many poor communities throughout the United States failed to increase their housing stock at all during the past 2 decades, not because of exclusionary zoning but because they simply cannot attract investors that want to undertake new projects therein (Freemark, 2022). Furthermore, federal support for housing affordable to households with low incomes has declined in recent decades (Vale and Freemark, 2012).

Finally, localities face systemic barriers related to building resident support for new development, maintaining political commitment to the cause in the face of continuous electoral pressure, and assembling resources across governmental levels. They also struggle to fund housing affordable for families with low and moderate incomes. Together, these obstacles reinforce the overall housing crisis.

## **An Opportunity to Expand Access to Housing Through Publicly Led Development**

Public management of large projects was common throughout many Western democracies in the postwar period, often in the form of urban renewal. This trend typically meant demolishing existing neighborhoods and replacing them with modernist new construction—in some cases, with embedded affordable housing. This approach declined in popularity in the face of public

resistance, reductions in public funding, and a broader neoliberal turn in favor of regulation over direct management of urbanism (Klemek, 2011; Teaford, 2000). As such, the planning function of local governments—especially in the United States—took on a reduced role, shifting the focus to regulating private-sector investments on individual parcels, although public management of district planning never fully disappeared and public engagement is a key element of the planning process (Slotterback and Lauria, 2019).

However, the aforementioned housing crisis has demonstrated the inadequacies of this planning approach. Some local governments are now reviving interest in directly managing development through land ownership, financing, and detailed planning across whole districts, although these approaches also involve private-sector investment. American cities like Atlanta have recently created new development corporations designed to support publicly led projects on public land, but these approaches remain nascent. German cities have had greater experience leading projects of this sort. As such, this article focuses on case studies from Germany, with the goal of identifying what approaches may be most useful in encouraging successful publicly led projects that prioritize housing supply and affordability.

## **Methods**

Interested in promoting transatlantic learning and exchange, staff at the German Marshall Fund (GMF) and its partners in Germany—including the Federal Ministry for Housing, Urban Development and Building, and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)—sought out cities in the United States and Germany with active efforts to manage publicly led projects. They identified six case-study cities: Berlin, Frankfurt am Main (hereafter referred to as Frankfurt), and Munich in Germany and Atlanta, St. Louis, and Seattle in the United States. These cities each face challenges of access to and availability of affordable housing, have a strong commitment by city leadership to address the problem, and had interest in participating in an international research project. Staff from those cities selected development sites for evaluation (GMF refers to these as “living lab” sites). GMF also assembled a team from each city that included the local public-sector affordable housing lead, another person working in the city government, and a cross-sector partner not working for the city government.

This article details findings about German strategies to promote mixed-income, mixed-use publicly led projects, but it is one element of a larger research program designed to identify the major impediments and potential best practices for public entities to add housing supply, particularly units affordable for families with low and moderate incomes (Freemark, 2024). Although this project’s broader program of transatlantic cooperation involved investigating several themes, the research in this article focuses on city developments because they prioritize housing investment, integrate housing development into broader community programming (such as access to transit and parks), and are led by local governments, rather than private investors.

Project data and site plan information about each case study were collected, and the general conditions of both the cities and project sites were assessed. Two dozen interviews were conducted with individuals participating in the program. These interviews were open-ended in character and covered several themes, including general development goals, the relationship between federal and

local governments on housing policy, and the potential for housing development integrated with other needs, like transportation and social services. The group conducted site visits of projects in Atlanta, Berlin, and Frankfurt. These visits aligned with all-day convenings in each city organized by GMF and GIZ, which provided formal and informal opportunities to learn about approaches officials are taking to publicly led projects. The U.S. work, led by one of this article's authors, was associated with the research a separate but collaborative German team led involving consulting group Thomas Stellmach Planning and Architecture (TSPA) and Stefan Heinig. They produced a series of reports reflecting their findings that further inform conditions in the German cities.

The authors used an iterative approach to developing findings for this article. By bringing together the variety of data sources, reviewing scholarship, and coding interviews and learnings from the convenings, the authors describe recent development efforts in Germany and identify some of the best practices cities use to surmount the housing crisis.

This work is limited in several ways. The cities and their projects are not necessarily representative of their respective countries. They were preselected in the context of developing a transatlantic process and may not fully reflect current barriers and opportunities in housing development. Further research, moreover, is necessary to understand the private sector's approach to projects. Private developers continue to develop most new housing in the United States and Germany on parcels not part of a broader publicly led planning process. These private entities likely face other difficulties and opportunities than the public sector.

Finally, although leveraging learnings from Germany can inform potential best practices in the United States, the two countries differ tremendously. Germany and the United States have vastly different histories, economies, and politics, all which inform the implementation of projects in the two countries. Translating policies from one country to the next may be difficult or even impossible.

Despite these limitations, this research offers new insight into how urban development works in Germany. Stakeholders from each city in this article—like many of their peers globally—share the goal of providing more housing and ensuring that housing is affordable. This comparison can help provide new examples for stakeholders to consider as they undertake projects.

## **The German Development Environment**

Local German governments manage land-use policy much like their U.S. counterparts. They do so through a required land-use plan (known as an FNP) similar to a comprehensive plan in the United States. The FNP establishes the zones intended for development and is designed to apply during the course of 10 to 15 years. The FNP must follow rules established in the federal Spatial Planning Act, which coordinates planning and development policy across the country (Enssle, Martens-Neumann, and Heinig, 2023). The FNP is nested within regional, state, and national plans, which set aside guiding principles (Enssle et al., 2023). The FNP, in turn, is associated with a binding urban land use plan—similar, but not identical to, form-based zoning—for individual sites (B-Plan) that must follow rules established by the federal government (Hirt, 2012).

In their planning approaches, local governments in Germany must follow the national building code, BauGB, and the German Land Use Ordinance, BauNVO (Enssle et al., 2023). The building code explicitly provides local governments a set of legally binding policies to advance projects. It includes specific provisions for localities to designate mixed and urban areas, for example, within land-use plans. By comparison, the U.S. Government has no standard zoning requirements (although some states do). The fact that Germany does have standard zoning rules may ease the ability of developers to invest in new housing projects, although this question is not assessed as it is outside the scope of this research.

## **The Publicly Led Case-Study Projects**

All the case-study projects profiled in this article share key characteristics: (1) the projects prioritize housing development, particularly affordable housing, as a key goal; (2) city agencies lead their development, which involves a considerable share of publicly owned land; and (3) they attempt to integrate the new housing into broader urban development plans. The following sections profile three German case studies.

### **Berlin's Buch Am Sandhaus**

This 57-hectare site, on the north side of Berlin, encompasses an abandoned state security (secret service) hospital and forested areas, all proximate to a regional rail station. The city's development plan proposes the construction of up to 3,000 new housing units (including the conversion of the former hospital into homes), daycare centers, and schools surrounded by maintained forested areas. The city's planners propose that buildings be arrayed along a major new street oriented toward public transport biking and walking paths and replete with retail, restaurants, and other venues (Entwicklungsstadt Berlin, 2023).

Berlin's project has met some resistance. A group of nearby residents argue that it would reduce access to green space and require the destruction of large sections of forested areas in which endangered species now live. They argue that the federally required land compensation plan for the project—which mandates that land to be reserved for natural uses in exchange for the development of this land (Baganz and Baganz, 2023)—is inadequate.

### **Frankfurt Northwest**

Frankfurt is proposing development in its Northwest quadrant, land on the city's border with suburban jurisdictions that is currently mainly used for agricultural purposes (Stadtplanungsamt—Frankfurt am Main, 2023). The project will involve the development of two sub-zones, keeping the remainder of the surrounding site primarily agricultural. The development zones are large enough to accommodate up to 6,800 housing units, of which at least 30 percent would be affordable under German social housing rules, and up to 7,000 jobs (McCarthy, 2019). The project would also include parks, schools, shops, and leisure uses.

The project is being planned for an area adjacent to a neighborhood mostly developed in the postwar period, Northweststadt. This neighborhood has a high share of immigrant households and

a general lack of access to effective public services, according to local planners. The new project is associated with an extension of the city's U7 light rail line and the S-Bahn regional rail service. Project planners have had to work closely with the national government in project development because it involves plans to move a major electric power line and negotiations about the future of the motorway to ensure the development project and road can coexist.

### **Munich's Werksviertel-Mitte**

Munich's 39-acre Werksviertel-Mitte is near the city center and includes the former site of a Pfanni food production factory. It is within several blocks of the Ostbahnhof rail station, which hundreds of intercity and regional trains serve a day, and frequent subway and light rail service. The district was underused, and its former industrial buildings were partly abandoned for several years, leading to the area becoming known for its dancing clubs and other nightlife uses. Although the site remains largely privately owned, the city has led planning and investment in a redevelopment of the community. The project is expected to produce 1,150 housing units (of which about 30 percent will be social housing) and up to 7,000 jobs, and it will incorporate a mix of lofts, art studios, restaurants, and green spaces (Werksviertel-Mitte, 2023).

The city government conceptualizes the neighborhood as an active, vibrant area, not simply a residential community. This approach matches the project's location near relatively high-density areas. Unlike the other case-study projects profiled here, the Munich project is at an advanced stage of development. Much of the project planning was completed about a decade ago.

## **Germany's Suite of Housing-Promoting Development Mechanisms**

To undertake their publicly led development projects, the three German cities were able to command a series of mechanisms to encourage the construction of ample and affordable housing that stand apart from those available to most U.S. localities. The following examples show how these approaches have been used.

### **Effective Regulatory Tools**

The Urban Development Measure (§ 165-171 BauGB) allows German cities to define specific districts, whether currently built up or not, for publicly led development. This measure, which German city staff describe as the "sharpest sword" in their toolkit, immediately freezes land prices at their assessed level once cities define the district, assuming that the city government can demonstrate that the project is in the public interest. This action prevents private investors from taking advantage of planned zoning changes or land purchasing plans by increasing how much they will charge to sell their land. Thus, the city can expropriate the land for public use at a more reasonable cost.

The Urban Development Contract (§ 11 BauGB) tool allows German cities to enforce a binding contract on private landowners through a site-by-site negotiation over project elements and funding. In some cases, landowners sign agreements that two-thirds of increased land values

produced by changes to zoning requirements are redirected to infrastructure, which can be implemented by public or private entities. Cities or city-chartered agencies can use these tools to act as master developers, leveraging long-term ground leases with private investors on individual lots. Profits from development can then be used to finance the project's infrastructure and social elements like daycares, schools, and green spaces.

Frankfurt's project is being developed under BauGB and the Urban Development Measure and Contract, which enables the city to use eminent domain for land assembly at reasonable costs. The city can then sell or lease land to private entities once plans have been finalized and infrastructure improvements have been made. These sales and leases provide the funds to support investment in the social infrastructure that accompanies the project, including schools and daycare facilities.

### **Leveraging Publicly Owned Land**

Publicly owned land can reduce housing development costs and allow housing to be integrated with other land uses—from retail to schools, parks, social service centers, and employment (Théry et al., 2016). Even so, assembling and using publicly owned land may be difficult because of limited public resources and competition with private market investors. Interviewees in each community engaged in this research project emphasized repeatedly that they see public land as an opportunity not to be necessarily sold off, but rather to generate leverage over development plans, create equity to support future projects, and increase opportunities for housing affordability.

In Germany, the case-study cities leverage public land continuously as the preferred approach to undertake new housing projects. Using regulatory tools that the national government has provided, especially the Urban Development Measure, cities identify key land they plan to develop and then expropriate it at prices that speculation has not inflated, before leasing it to private entities. In Berlin, the city has focused “not only on housing and social housing, but a mixed social situation,” according to an attendee at a project convening. This is made possible by integrating the city's social housing developer into plans and ensuring that they develop some of the project sites, made feasible because of the low-cost public land. City staff work to ensure that projects include a full mix of neighborhood amenities, such as grocery stores and green space, within an easily walkable distance.

In Munich, the city's Sozialgerechte Bodennutzung, or SoBoN, policy requires developers constructing on city-owned land to provide a minimum share of new units as affordable. Developers respond to city invitations to present project ideas and then are judged based on the quality of their proposals before they are chosen to engage in a long-term ground lease (projects that better meet public goals through the planned provision of public amenities are more likely to win). Private developers involved in projects on public land also contribute to the costs of infrastructure in the neighborhood, further enabling new construction.

### **Competitive Urban Design Planning Process**

In Germany, the B-Plans local governments develop must incorporate public participation, with the processes determined by federal law. In some cases, development proposals incite significant resident protest, occasionally resulting in project cancellation (Enssle et al., 2023). In recent years, projects in German cities have begun to engage residents more concretely through co-creation of

development plans. This multistep process may ease the process of housing development by better integrating residents into policymaking.

Berlin's plan was developed through a multi-month public engagement process in which the city paid three teams of urban designers to offer ideas for the site. These designers presented their proposals to a city-hired jury of urban planning experts and one representative of the community. The jury provided feedback to each team, which then refined plans two more times before the final plan was selected for implementation. The city plans to develop the project through long-term leases after it has implemented basic infrastructure, such as the east-west street at the center of the project. Developers—including both private real-estate investors and the city public housing agency—will have to follow city-determined development principles (such as affordable housing and design requirements). Despite this process, it is worth noting that some local resistance to the project remains. Even so, local planners say it helped them build more of a consensus about project planning overall.

As in Berlin, Frankfurt's project was also developed using a three-stage resident engagement process and an eight-member appointed jury that provided technical feedback about the project's elements. This panel helped refine project elements, specifically improving the links between the existing nearby neighborhood and the green spaces planned for the heart of the new development.

### **Integrating Financing and Development Planning for Housing, Transit, and Other Investments Simultaneously**

Transit-oriented development has come to dominate as a mechanism to plan for future development in both German and U.S. cities because it can encourage neighborhoods that support lower resident transportation costs, less use of greenfield land for new construction, and lower pollution (Ibraeva et al., 2020). Simultaneously, cities have expanded interest in transit investment. Frankfurt has approved an expansion of its light rail network, and Berlin's government plans new subway lines in the coming decades. These investments offer an opportunity for integrated planning linking transportation access with new housing-rich neighborhoods (Pojani and Stead, 2018).

Building housing in a way that capitalizes on transit can be difficult, in part because of the differing timelines between the two types of investments. Transit projects can take decades from idea to completion, whereas new housing may be built far more quickly. Conducting joint planning between the two requires intentional collaboration across municipal agencies. The focus on linking housing construction with transportation investments is particularly a factor in Germany.

In Berlin and Munich, officials chose a site for redevelopment adjacent to existing, high-quality transit services. Residents of the case-study project sites will be able to travel throughout the region quickly thanks to these connections. Berlin is also planning a frequent, dedicated bus rapid transit line linking the regional rail line to the full breadth of the new district. This project is being implemented along the major east-west corridor that will cross the neighborhood at the same time as the new housing is being built. Profits from the new development will help finance the bus line. As such, the project will be fully accessible by public transportation from the start.



In Frankfurt, the new Northwest neighborhood is being explicitly linked with the extension of transit options to serve the site. City council policies that fund both projects simultaneously have enabled this extension. Thus, the city government is ensuring that the thousands of new residents at the development will get transit access as the housing comes online. These joint investments will guarantee that the neighborhood meets the city's goal of adding housing density without adding street traffic.

### **Limitations to the Success of German Cities in Housing Development**

Highly vocal and sometimes politically influential residents often oppose change in their communities—sometimes because of worries about disrupting the status quo, sometimes because of concerns about hurting the local environment, and sometimes because of conflicts about appropriate land uses for specific sites. Such opposition can delay project implementation because of long review periods and changes in project design that sometimes reduce density. Both Berlin and Frankfurt's projects have struggled with local opposition despite their efforts at community engagement, which has resulted in project scope being reduced over time.

Moreover, although each of the German cities is promoting new housing construction through their case-study projects, they likely will need additional types of housing investment to address their overall housing goals. German planners shared that development continued to be a challenge in other neighborhoods in each of their respective cities, in part because of difficulties acquiring land for public ownership, important to reduce costs to make way for affordable housing. Cities are increasingly competing with private investors for limited urban land. Furthermore, in Germany, as in the United States, subsidies for housing affordable to families with low and moderate incomes remain limited.

### **Learning From German Cities in Promoting Publicly Led Housing Development**

Faced with decades of inadequate housing supply and high housing costs, cities across the United States are now developing new approaches to encouraging housing investment. Beyond just regulatory approaches, such as upzonings to spur higher-density new construction, several cities are now considering the potential for publicly led development districts. These projects can concentrate hundreds of thousands of new housing units in small areas and include high levels of housing affordability. However, they are only now taking the first steps in this direction.

The German case studies in this article offer potential best practices for U.S. cities to consider as they pursue publicly led development schemes. Several key mechanisms that Berlin, Frankfurt, and Munich have used may be particularly useful.

First, those cities are strategically leveraging publicly owned land to reduce the cost of providing affordable housing and to plan for a mix of uses from the start of project development. Public land can reduce development costs and provide local government stakeholders with the ability to plan in the public's interest. One approach both Berlin and Frankfurt used and now being considered in cities like Atlanta is signing long-term leases of such land in exchange for permanent affordable housing guarantees.

Second, German cities have expertly integrated housing and transportation investments from the start of project planning. With the right level of coordination between local policymakers—such as practitioners working in both the housing and transportation departments—cities can integrate financing and development planning for housing, transit, and other public investments simultaneously. Rather than approaching projects from only one perspective, cities can co-plan to create more vibrant, connected communities, which can ensure, for example, that new community residents also have access to excellent public transportation from the start. The federal government can play a key role as a partner here by encouraging recipients of federal transit expansion funds to plan for affordable housing on surrounding land.

Third, U.S. cities may consider adopting the type of multistage resident engagement processes that German cities have recently undertaken. These approaches may help enable plans to meet resident expectations. Rather than subject new development plans to years of attempts to garner public buy-in through endless review processes, cities can call on a well-defined, competitive planning process that, from the start, identifies public priorities related to not just housing but fully integrated projects and leverages those priorities throughout the development timeline.

Finally, states may consider broadening the legal authority U.S. local governments hold in promoting publicly led projects. The German cities, in particular, leveraged federally authorized policy that allowed them to freeze land prices once an area was identified for development. Although this type of sweeping approach may be difficult to implement in the U.S. context, it has been extremely effective in creating the groundwork for the major new projects this article profiles.

## Acknowledgments

The authors thank staff from TSPA, participant city governments, and the U.S. Department of Housing and Urban Development for their review of this and related material for this project. They thank Bella Enssle in particular for her review of this manuscript. In addition, they thank Sarah Phalen for her research assistance, Joshua Chamberlin for his logistical support, and Steven Bosacker and Paul Costello for their work conceptualizing the project.

## Authors

Yonah Freemark is the lead of the Practice Area on Fair Housing, Land Use, and Transportation at the Urban Institute. Tarsi Dunlop is a senior program officer on the Cities team at the German Marshall Fund of the United States.

## References

Baganz, Gösta F.M., and Daniela Baganz. 2023. “Compensating for Loss of Nature and Landscape in a Growing City—Berlin Case Study,” *Land* 12 (3): 1–18.

Been, Vicki, Ingrid Gould Ellen, and Katherine M. O'Regan. 2023. *Supply Skepticism Revisited*, NYU Law and Economics Research Paper No. 24-12. New York: New York University.

Enssle, Isabell, Laura Martens-Neumann, and Stefan Heinig. 2023. *Federal and Local Level in Spatial Planning in Germany*. San Francisco, CA: Thomas Stellmach Planning and Architecture.

Enssle, Isabell, Natalia Perez-Bobadilla, Stefan Heining, Lea Steinhoff, Karl Eckert, and Laura Martens-Neumann. 2023. *Instrument Catalogue*. Bonn, Germany: Federal Institute for Research on Building, Urban Affairs and Spatial Development.

Entwicklungsstadt Berlin. 2023. "Rahmenplan für 2.700 Neue Wohnungen in Pankow Festgelegt." <https://entwicklungsstadt.de/rahmenplan-fuer-2-700-neue-wohnungen-in-pankow-festgelegt/>.

Freemark, Yonah. 2024. *Breaking Barriers to Affordable and Abundant Housing*. Washington, DC: German Marshall Fund.

———. 2023. "Zoning Change," *Journal of Planning Literature* 38 (4): 548–570.

———. 2022. *Homing In*. Washington, DC: Urban Institute.

Freemark, Yonah, Lydia Lo, and Sara C. Bronin. 2023. *Bringing Zoning into Focus*. Washington, DC: Urban Institute.

Freemark, Yonah, Lydia Lo, Olivia Fiol, Gabe Samuels, and Andrew Trueblood. 2023. *Making Room for Housing Near Transit*. Washington, DC: Urban Institute.

Freemark, Yonah, and Justin Steil. 2022. "Local Power and the Location of Subsidized Renters in Comparative Perspective," *Housing Studies* 37 (10): 1753–1781.

Hirt, Sonia. 2012. "Mixed Use by Default," *Journal of Planning Literature* 24 (4): 375–393.

Ibraeva, Anna, Gonçalo Homem de Almeida Correia, Cecília Silva, and António Pais Antunes. 2020. "Transit-Oriented Development," *Transportation Research Part A* 132: 110–130.

Kendall, Ross, and Peter Tulip. 2018. *The Effect of Zoning on Housing Prices*. Research discussion paper 2018–03. Sydney, Australia: Reserve Bank of Australia.

Klemek, Christopher. 2011. *The Transatlantic Collapse of Urban Renewal*. Chicago, IL: University of Chicago Press.

Listokin, David, and David B. Hattis. 2005. "Building Codes and Housing," *Cityscape* 8 (1): 27–67.

Manji, Shazia, Truman Braslaw, Chae Kim, Elizabeth Kneebone, Carolina Reid, and Yonah Freemark. 2023. *Incentivizing Housing Production*. Berkeley, CA: University of California, Berkeley, Turner Center for Housing Innovation.

McCarthy, Niall. 2019. "The State of Social Housing Across Germany." *Statista*. <https://www.statista.com/chart/17605/number-of-social-apartments-per-1000-inhabitants-by-federal-state/>.

- McFarlane, Alastair, Janet Li, and Michael Hollar. 2021. "Building Codes: What Are They Good For?" *Cityscape* 23 (1): 101–132.
- Monkkonen, Paavo, Michael Lens, and Michael Manville. 2020. *Built-Out Cities?* Berkeley, CA: University of California, Berkeley, Turner Center for Housing Innovation.
- Quigley, John M., and Steven Raphael. 2005. "Regulation and the High Cost of Housing in California," *American Economic Review* 95 (2): 323–328.
- Pendall, Rolf, Lydia Lo, and Jake Wegmann. 2022. "Shifts Toward the Extremes," *Journal of the American Planning Association* 88 (1): 55–66.
- Pojani, Dorina, and Dominic Stead. 2018. "Past, Present and Future of Transit-Oriented Development in Three European Capital City-Regions," *Advances in Transport Policy and Planning* 1: 93–118.
- Rodríguez-Pose, Andrés, and Michael Storper. 2020. "Housing, Urban Growth and Inequalities," *Urban Studies* 57 (2): 223–248.
- Slotterback, Carissa Schively, and Mickey Lauria. 2019. "Building a Foundation for Public Engagement in Planning," *Journal of the American Planning Association* 85 (3): 183–187.
- Stacy, Christina, Chris Davis, Yonah Freemark, Lydia Lo, Graham MacDonald, Vivian Zheng, and Rolf Pendall. 2023. "Land-Use Reforms and Housing Costs," *Urban Studies* 60 (14): 2919–2940.
- Stadtplanungsamt—Frankfurt am Main. 2023. "Frankfurt Nordwest—Neuer Stadtteil der Quartiere." [https://www.stadtplanungsamt-frankfurt.de/frankfurt\\_nordwest\\_neuer\\_stadtteil\\_der\\_quartiere\\_18798.html](https://www.stadtplanungsamt-frankfurt.de/frankfurt_nordwest_neuer_stadtteil_der_quartiere_18798.html).
- Teaford, Jon C. 2000. "Urban Renewal and Its Aftermath," *Housing Policy Debate* 11 (2): 443–465.
- Théry, Laurent, Christian Devilliers, Finn Geipel, and David Mangin, eds. 2016. *Le metropole par le projet*. Paris, France: Parenthèses.
- Vale, Lawrence J., and Yonah Freemark. 2012. "From Public Housing to Public-Private Housing," *Journal of the American Planning Association* 78 (4): 379–402.
- Wassmer, Robert W., and Joshua A. Williams. 2021. "The Influence of Regulation on Residential Land Prices in United States Metropolitan Areas," *Cityscape* 23 (1): 9–36.
- Werksviertel-Mitte. 2023. "Ausstellung Zum Deutschen Städtebaupreis." <https://werksviertel-mitte.de/>.
- Wetzstein, Steffen. 2017. "The Global Urban Housing Affordability Crisis," *Urban Studies* 54 (14): 3159–3177.
- Zabel, Jeffrey, and Maurice Dalton. 2011. "The Impact of Minimum Lot Size Regulations on House Prices in Eastern Massachusetts," *Regional Science and Urban Economics* 41 (6): 571–583.

## **Industrial Revolution**

*Every home that is built is a representation of compromises made between different and often competing goals: comfort, convenience, durability, energy consumption, maintenance, construction costs, appearance, strength, community acceptance, and resale value. Consumers and developers tend to make tradeoffs among these goals with incomplete information which increases risks and slows the process of innovation in the housing industry. The slowing of innovation, in turn, negatively affects productivity, quality, performance, and value. This department features a few promising improvements to the U.S. housing stock, illustrating how advancements in housing technologies can play a vital role in transforming the industry in important ways.*

---

# **Mass Timber: A Sustainable Building Solution**

**Jackson Morrill**  
American Wood Council

---

## **Abstract**

*Architects, designers, and developers are exploring designs using new products like cross-laminated and glued-laminated timber. These new mass timber products provide a significantly lower carbon footprint and store carbon in the building for its lifetime. The advent of new building code provisions allowing for the use of mass timber products to construct larger structures that go up faster than those made with alternative materials like concrete and steel can help address the affordable housing crisis more quickly and in a sustainable manner.*

## **Introduction**

A public and private partnership set out to test a possible solution to affordable housing shortages in Seattle and turned to mass timber, a category of wood products that includes cross-laminated timber (CLT), glued-laminated (glulam) timber, and other structural composite lumber products. To form these products, wood boards are combined to create large, premanufactured, multilayered, solid wood panels to be used in constructing walls, beams, roofs, and floors.

In April 2022, on a former surface parking lot in the city's Capitol Hill neighborhood, construction commenced on what is now known as the Heartwood. The eight-story, 67,000-square-foot structure built with CLT ceilings and glulam columns provides 126 housing units for residents with an income level between 60 and 100 percent of the city's median income. At the time, Heartwood was the first mass timber construction (also known as Type IV-C construction) workforce housing building up to nine stories, or 85 feet, permitted in the United States.

However, another mass timber affordable housing project is underway on the other side of the country. Earlier this year, developers broke ground in New Haven, Connecticut, on the nation's second affordable housing project that incorporates mass timber instead of only steel and concrete. The 340+ Dixwell, designed for 70 units, is being built in a neighborhood that once served as a stop along the Underground Railroad and will use mass timber from the ground up, including CLT for walls and in elevator and stair core walls.

Using mass timber panels can speed up construction time by at least 15 to 20 percent compared with concrete and steel construction (Pacheco, 2018), and it avoids using those same carbon-intensive materials by substituting in wood products that store carbon for the life of the building. The Brock Commons Tallwood House on the campus of the University of British Columbia in Vancouver, one of the tallest mass timber hybrid buildings in the world, stores 1,753 metric tons of carbon dioxide (CO<sub>2</sub>)-equivalent carbon and avoided an additional 679 metric tons of CO<sub>2</sub> emissions by using structural wood for a total CO<sub>2</sub> benefit of 2,432 metric tons. One building using mass timber is equivalent to taking 511 cars off the road for a year (FPAC, 2017).

Both the Heartwood and 340+ Dixwell are recipients of Wood Innovations Grants (Spiritos and Fernholz, 2021; University of Washington, 2019), a U.S. Department of Agriculture program designed to expand wood construction and new markets for wood products.

## Background

Traditional construction elements used in taller structures, such as steel and concrete, are labor-intensive, nonrenewable, and carbon-emitting. On the other hand, mass timber construction uses wood products that are renewable and carbon-capturing.

Two of the most used types of mass timber products are CLT and glulam. CLT panels are made of layered timber stacked crosswise at 90-degree angles. The boards are then glued in place using a structural adhesive. The alternating directions of the boards serve to strengthen the CLT panels, allowing them to be used for load-bearing floors, walls, and roofs (exhibit 1).

Glulam is similar to CLT, except instead of being glued crosswise, glulam is composed of boards with parallel grains. Glulam is structurally sound and stronger than steel and can be used to form beams, columns, trusses, and more. Glulam is also known for its aesthetic attributes and often used as an exposed structural element for ceilings and walls.

## Exhibit 1

Stack of Cross-Laminated Timber Panels Showing the Cross Section of Three Layers to Each Panel

---



*Panels are most often three, five, seven, or nine layers. Photo credit: naturally:wood (n.d.)*

## Why Mass Timber?

Now that the International Code Council-developed model building codes include mass timber construction types up to 18 stories (van de Lindt, Koliou, and Bahmani, 2023), architects, engineers, and designers are exploring designs using new products like CLT and glulam that can create an aesthetically warm living space by giving residents a closer connection to nature.

Mass timber buildings are constructed with large, premanufactured, multilayered, solid wood panels, resulting in solid timber floors and walls typically ranging from 5 to 12 inches in thickness (exhibit 2). Typical mass timber products include CLT, nail-laminated timber, glulam, and structural composite lumber—all renewable and sustainable engineered wood products.

Using prefabricated wood panels makes for efficient construction and renovation and enables end-of-life disassembly and material repurposing. Again, using the Brock Commons mass timber building in Vancouver as an example, the prefabricated mass timber construction generated 65 percent less waste than tall concrete and steel construction (Acton Ostry Architects Inc., 2017).

**Exhibit 2**

Apex Clean Energy Headquarters in Charlottesville, VA, Boasts a Potential Carbon Benefit of 3,000 Metric Tons

---



*A mass timber panel is lifted into place during construction. Apex Plaza, n.d. Photo credit: American Wood Council (2022).*

Using prefabricated mass timber panels also speeds up construction time by at least 15 to 20 percent compared with conventional construction (Pacheco, 2018).

Although mass timber products may still cost the same or more than traditional materials, the cost savings related to speed of construction can ultimately lower the overall project cost by shortening the project's duration up to 25 percent compared with traditional concrete and steel construction (DLR Group et al., 2018).



## **Mass Timber Health and Welfare Benefits**

Key federal initiatives addressing affordable housing—such as tax credits to build or rehabilitate affordable housing, American Rescue Plan funds for investments in housing, and the U.S. Department of Housing and Urban Development’s (HUD) Community Development Block Grant program—primarily address barriers in supply only. What is not addressed are approaches that go beyond supply barriers and structural quality to consider the health, mental health, and well-being that a building’s materials can offer.

A growing body of science focuses on the health benefits of living in spaces that connect us to the natural world. Known as biophilic design, using mass timber makes a connection with nature even in the most urban of settings. Emerging research suggests that natural building products like wood can have significant mental and physical health benefits for inhabitants.

Researchers at John Hopkins Medicine (2019) and many other institutions have concluded for decades that environmental stresses take a serious toll on heart health. Left untreated, those kinds of conditions can lead to medical emergencies such as heart attacks or high blood pressure, which can exacerbate the existing issues of those already living in affordable housing. A comprehensive study from the University of British Columbia indicates that the biophilic benefits of being near wood products lower blood pressure and heart rate while also increasing parasympathetic nervous system activation to achieve greater learning outcomes (Fell, 2010).

## **Mass Timber as Solution for Carbon Reductions**

Wood is a climate-friendly building material. Wood products can reduce greenhouse gas emissions by storing carbon and displacing emissions from conventional carbon-intensive building materials like concrete and steel. Using mass timber can reduce construction phase emissions relative to these materials by 69 percent, especially when sourced from sustainably managed forests (Himes and Busby, 2020). These climate benefits are particularly strong for structural wood products used in the built environment, which results in long-lasting carbon storage during the life of the building and during the end-of-life phase of those materials decades in the future. Wood products like glulam and CLT offer fire resistance and structural strength in addition to natural carbon sequestration and, thus, present a promising alternative to building materials with high greenhouse gas footprints, like concrete and steel for large-scale commercial affordable housing and rapidly constructed modular homes.

Pierobon et al. (2019) conducted a life-cycle assessment of an eight-story, above-grade, nonresidential structure with three stories of below-grade parking in the Pacific Northwest. Three construction material scenarios were evaluated—a traditional reinforced concrete building and two using CLT and glulam, with one using gypsum wallboard and one using exposed wood for fire resistance. The study considered harvesting and extraction, transportation, manufacturing, and construction transportation and installation. The study found an average reduction of 26.5 percent in global warming potential in the two CLT-glulam scenarios, excluding the benefit of stored carbon, and determined that using nonrenewable fossil energy was 8 percent less in the CLT-glulam scenarios. Furthermore, an additional 1,556 to 2,567 tons of carbon dioxide equivalent (CO<sub>2</sub>e) biogenic carbon was stored in the structure of the CLT-glulam building scenarios with and

without gypsum wallboard protection, respectively. CO<sub>2</sub>e measures the carbon emissions with the same global warming potential as 1 metric ton of another greenhouse gas. Biogenic carbon emissions are defined by the U.S. Environmental Protection Agency (2014) as CO<sub>2</sub> emissions related to the natural carbon cycle.

The wood sourced to make these products in the United States comes from sustainably managed forests that are constantly replanted on carefully planned rotations to provide a host of additional benefits beyond just carbon sequestration. These forests provide better water quality, wildlife management, and recreational benefits for our citizens.

### **Mass Timber and Managing Wildfire Risk**

Mass timber can also form part of our country's effort to address the devastating wildfires that have increased in recent years. Mass timber products can be manufactured from smaller-diameter trees and other lower-value forest resources, creating new market incentives for forest thinning and incentives for harvesting forest resources that the industry has typically overlooked. Wildfire prevention strategies often remove small-diameter trees and underbrush and leave the larger, more fire-resistant trees in place (Manke, 2021). Initial research on CLT and glulam manufactured from low-value, small-diameter Ponderosa pine shows these products perform as well as those produced using bigger-diameter trees of traditional lumber species (Lee, 2022).

In the summer of 2023, residents across the Midwest and East Coast experienced challenges and health complications from intense exposure to wildfire smoke—a seasonal reality that residents of Western states have been forced to live with in recent years as climate change has sparked wildfires in greater number and intensity. Smoke from historic blazes in Canada moved south and east, shrouding cities in smoke and particulate and creating health risks for millions of Americans with respiratory issues. Evidence of the smoke's breadth and scope was evident during HUD's Innovative Housing Showcase, held this past June on the National Mall, which featured two modular mass timber structures temporarily built on site and shrouded in smoke from Canadian wildfires.

Studies show climate change has a significant effect on wildfires, such as heat and drought, creating perfect conditions for the kind of catastrophic wildfires that ignited across the West in recent years and in Canada this summer. Decades of forest management practices, including fire suppression and policies that have enabled dense undergrowth, have also maximized flammable materials that contribute to rapid spread and intensity of wildfire. Combined, these factors and conditions provide another critical selling point for mass timber and its potential to contribute to overall forest health and reduce the risk of wildfires in forests across the West.

The forest health argument is motivating states like Washington, Oregon, and California to advance policies and incentives to accelerate markets and new opportunities for the mass timber sector (Cover, 2018).

### **Mass Timber as a Solution**

America's housing stock is failing to keep up with the need for affordable housing for its workforce. National Low Income Housing Coalition-collected data estimate a shortage of 7 million affordable

and available rental homes for extremely low renters (NLIHC, n.d.). In addition, new multifamily units are renting at prices well out of reach for middle- and low-income renters (Hoyt, 2020). Nearly two-thirds of renters across the country say they cannot afford to buy a home and that saving for a down payment is unrealistic in the current economic climate, considering home prices are rising at twice the rate of wage growth (Sisson, Andrews, and Bazeley, 2020).

Using mass timber modular, factory-built components for the structure and building envelope can speed up the assembly and construction schedule while also requiring smaller crews than conventional materials to complete the project (Hicks, 2021). Given the significant affordable housing shortfall, a sense of urgency should exist, and mass timber can help to speed up delivery. It also provides a host of other benefits to both residents and the environment, as enumerated previously, making it a compelling new option for consideration in affordable housing projects across the country.

## Acknowledgments

The author thanks Heather Stegner for her significant contributions to this article.

## Author

Jackson Morrill is president and chief executive officer of the American Wood Council (AWC), providing overall executive management. He comes to AWC with more than 20 years of experience working on environmental, sustainability, industry standards and testing, and other issues as a lawyer and trade association representative. Prior to AWC, he was the President of the Composite Panel Association, worked at the American Chemistry Council, practiced environmental law at Beveridge & Diamond, and served as an environmental law consultant at the World Bank. He is a graduate of the University of Virginia and Tulane Law School and is admitted to the Maryland and District of Columbia bars.

## References

- Acton Ostry Architects Inc. 2017. "Brock Commons Tallwood House: Extraordinarily Ordinary."
- Apex Plaza. n.d.. "Hourigan." <https://www.hourigan.group/project/apex-plaza/>.
- Cover, Jennifer. 2018. "Mass Timber: Part of an Effective Wildfire Reduction Strategy," *Western Forester* 63 (4). <https://forestry.org/wp-content/uploads/2022/07/WFOctNovDec2018.pdf>.
- DLR Group, Martha Schwartz Partners, Fast+Epp, Swinerton, Heartland, and WoodWorks. 2018. "Tall With Timber: A Seattle Mass Timber Tower Case Study." <https://www.woodworks.org/resources/tall-with-timber-a-seattle-mass-timber-tower-case-study/>.

- Fell, David R. 2010. "Wood in the Human Environment: Restorative Properties of Wood in the Built Indoor Environment." Ph.D. diss., Faculty of Forestry, University of British Columbia. <https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0071305>.
- Forest Products Association of Canada (FPAC). 2017. "Tackle Climate Change, Use Wood (Canadian Edition)." <https://cwc.ca/wp-content/uploads/sustainability-Tackle-Climate-Change-Use-Wood.pdf>.
- Hicks, Sarah. 2021. "Mass Timber: A Solution for Rapid, Affordable Housing." Wood Industry. <https://woodindustry.ca/mass-timber-a-solution-for-rapid-affordable-housing/>.
- Himes, Austin, and Gwen Busby. 2020. "Wood Buildings as a Climate Solution," *Developments in the Built Environment* 4 (100030): 1–7. <https://doi.org/10.1016/j.dibe.2020.100030>.
- Hoyt, Hannah. 2020. *More for Less? An Inquiry into Design and Construction Strategies for Addressing Multifamily Housing Costs*. Cambridge, MA: Harvard University, Joint Center for Housing Studies. [https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard\\_jchs\\_gramlich\\_design\\_and\\_construction\\_strategies\\_multifamily\\_hoyt\\_2020\\_3.pdf](https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard_jchs_gramlich_design_and_construction_strategies_multifamily_hoyt_2020_3.pdf).
- John Hopkins Medicine. 2019. "Risk Factors for Heart Disease: Don't Underestimate Stress." <https://www.hopkinsmedicine.org/health/wellness-and-prevention/risk-factors-for-heart-disease-dont-underestimate-stress>.
- Lee, Lydia. 2022. "How Mass Timber Could Help Reduce Wildfire Risk." *Metropolis*. <https://metropolismag.com/viewpoints/mass-timber-wildfire/>.
- Manke, Kara. 2021. "Want to Limit Carbon and Curb Wildfire? Create a Market for Small Trees," *Berkeley News*, December 13. <https://news.berkeley.edu/2021/12/13/want-to-limit-carbon-and-curb-wildfire-create-a-market-for-small-trees>.
- National Low Income Housing Coalition (NLIHC). n.d. "The Gap: A Shortage of Affordable Rental Homes." <https://nlihc.org/gap>.
- naturally:wood. n.d. "What is Cross-Laminated Timber (CLT)?" <https://www.naturallywood.com/products/cross-laminated-timber>.
- Pacheco, Antonio. 2018. "Can Mass Timber Help California Build its Way out of the Housing Crisis?" *The Architect's Newspaper*, March 8. <https://www.archpaper.com/2018/03/can-mass-timber-help-california-build-way-housing-crisis/>.
- Pierobon, Francesca, Monia Huang, Kathrina Simonen, and Indroneil Ganguly. 2019. "Environmental Benefits of Using Hybrid CLT Structure in Midrise Non-Residential Construction: An LCA Based Comparative Case Study in the US PNW," *Journal of Building Engineering* 26: 100862.
- Sisson, Patrick, Jeff Andrews, and Alex Bazeley. 2020. "The Affordable Housing Crisis, Explained: Blame Policy, Demographics, and Market Forces," *Affordable Housing*, March 2. <https://archive.curbed.com/2019/5/15/18617763/affordable-housing-policy-rent-real-estate-apartment>.

Spiritos, Jeff, and Kathryn Fernholz. 2021. *Creating Affordable Housing Opportunities With Mass Timber*. Minneapolis, MN: Dovetail Partners. <https://dovetailinc.org/upload/tmp/1616011215.pdf>.

U.S. Environmental Protection Agency, Office of Air and Radiation Office of Atmospheric Programs, Climate Change Division. 2014. *Framework for Assessing Biogenic CO<sub>2</sub> Emissions from Stationary Sources*. U.S. Environmental Protection Agency. [https://www3.epa.gov/climatechange/Downloads/Framework-for-Assessing-Biogenic-CO<sub>2</sub>-Emissions.pdf](https://www3.epa.gov/climatechange/Downloads/Framework-for-Assessing-Biogenic-CO2-Emissions.pdf).

University of Washington. 2019. “atelierjones Awarded Wood Innovation Grants.” Department of Architecture. <https://arch.be.uw.edu/atelierjones-awarded-wood-innovation-grants/>.

van de Lindt, John W., Maria Koliou, and Pouria Bahmani. 2023. “Getting Cross-Laminated Timber Into U.S. Design Codes: A Must for Affordable and Sustainable Multifamily Housing,” *Cityscape* 25 (1): 57–69.

## Additional Reading

American Wood Council. 2022. “Mass Timber in Housing.” [https://www.youtube.com/watch?v=KNDbV\\_Yky3M](https://www.youtube.com/watch?v=KNDbV_Yky3M).

Bergman, Richard, Maureen Puettmann, Adam Taylor, and Kenneth E. Skog. 2014. “The Carbon Impacts of Wood Products,” *Forest Products Journal* 64 (7–8): 220–231. <https://doi.org/10.13073/FPJ-D-14-00047>.

Dovetail Partners. 2021. “Affordable Housing Opportunities with Mass Timber.” <https://www.dovetailinc.org/portfoliodetail.php?id=60525fce7bf85>.

Lehmann, Steffen. 2013. “Low Carbon Construction Systems Using Prefabricated Engineered Solid Wood Panels for Urban Infill to Significantly Reduce Greenhouse Gas Emissions,” *Sustainable Cities and Society* 6: 57–67.

Think Wood. n.d. “How Prefab Wood Can Make Housing More Affordable.” <https://www.thinkwood.com/blog/how-prefab-wood-can-make-housing-more-affordable>.

Wood Products Council. n.d. “Heartwood Workforce Housing.” <https://www.woodworksinnovationnetwork.org/projects/heartwood>.

---

## Policy Briefs

The Policy Briefs department summarizes new, emerging, or overlooked topics in housing and community development from a neutral point of view. If you have a submission or proposal, please contact the editor at [David.L.Hardiman@hud.gov](mailto:David.L.Hardiman@hud.gov).

# National Scan and Narrative Review of Landlord Engagement Activities in the United States

**Jack Tsai**

University of Texas Health Science Center at Houston School of Public Health

Yale University School of Medicine

United States Department of Veterans Affairs National Center on Homelessness among Veterans

**Victoria Solis**

University of Texas Health Science Center at Houston School of Public Health

## Abstract

*This article reviews activities involving landlord engagement, as defined by activities and incentives intended to facilitate participation in supportive housing or tenant assistance programs, for which voluntary participation by private landlords, property owners, and/or property managers is needed for these programs to operate effectively. Although landlords and property owners are key stakeholders in efforts to address housing instability and homelessness, little research has examined the strategies and incentives that exist to engage them in supporting low-income tenants. This article describes a national scan of landlord engagement activities in the United States. The authors conducted a preliminary national scan of reports and websites from government agencies, nonprofit organizations, and other grey literature published from 2000 to 2023; they also conducted a literature search of academic research databases. Different landlord engagement activities were categorized and described. A total of 46 housing programs offering landlord engagement activities were found across the country, categorized into landlord financial rewards activities (n= 12), landlord financial assistance activities (n= 27), and landlord development support activities (n= 7). Financial incentives involved offerings such as cash bonuses, grants, and tax credits to landlords, and financial assistance typically encompassed risk mitigation funds, security deposit guarantees, and reimbursement for rent arrears on behalf of tenants. Developmental support activities provided training, education, and legal guidance and fostered relationships between landlords, tenants, and communities. Few empirical studies have assessed the effectiveness of any landlord engagement initiatives. Results of this study show there are many diverse types of landlord*

---

## Abstract (continued)

*engagement activities across the United States, but limited research has been published on their overall effectiveness or effective components. Opportunities exist for more rigorous research and implementation science to fully develop these programs to improve outcomes for tenants and their landlords.*

## Introduction

Stable and safe housing is recognized as an important social determinant of health (Bambra et al., 2010; Swope and Hernández, 2019). Housing instability and homelessness are major public health problems in the United States (Donovan and Shinseki, 2013; Tsai, O'Toole, and Kearney, 2017), and a variety of service models have been developed and tested to help individuals and families obtain and sustain rental housing (Bassuk et al., 2014; Leff et al., 2009; Tsai, 2020). Many of these service models rely on federal funding, including supported housing and other major rental assistance programs, such as the U.S. Department of Housing and Urban Development (HUD) Housing Choice Voucher (HCV) program, homeless programs, and the U.S. Department of the Treasury Emergency Rental Assistance (ERA) program implemented during the COVID-19 pandemic. These federally funded rental assistance programs rely on the voluntary participation of private owners, landlords, and property managers, and there has been a growing awareness of the need to engage these private stakeholders and an expansion of efforts and activities toward this end. These *landlord engagement* efforts often seek to facilitate participation in rental assistance programs. A growing number of federal, state, local, and private efforts have addressed the needs, concerns, and administrative or other difficulties sometimes facing private owners/landlords. Although the number of programs, program features, and incentives have increased, especially in recent years, research and evaluation efforts have not kept up, and much of the research has neglected the experience of landlords. This article serves as an introduction to the complex topic of landlord engagement.

Many landlords/property owners have expressed wanting to help solve homelessness in their communities and are willing to rent to individuals experiencing homelessness. For example, 15–22 percent of landlords expressed altruistic motivations in renting to tenants, although they would consider the individual's background, finances, and rental history (Garboden et al., 2018a; Greenlee, 2014; Rosen and Garboden, 2022; Walters et al., 2021). The lack of available research on landlords has created gaps in understanding how to engage landlords in finding solutions for homelessness and housing instability in their communities. Landlords should be considered key stakeholders in addressing these issues because they are ultimately the individuals or entities making decisions about to whom to rent. This article uses the term *landlord* broadly to include property owners and managers who are decisionmakers in renting to tenants. It is the most recognizable term and was used in the program search for this study, but the study team also recognizes valid arguments to use more contemporary, non-adversarial terms such as *lessors* or *property hosts*, particularly in engaging with all housing stakeholders (Tsai, 2023).



A HUD report sheds light on landlords' considerations regarding renting to individuals with housing vouchers, including financial stability and the ease of the process and paperwork required (Garboden et al., 2018b). HUD, public housing agencies, and state and local governments have implemented numerous strategies to increase landlords' participation in the HCV program, which has a \$20 billion annual budget. However, research on the different types of landlord activities that exist and how landlords can be treated as stakeholders in programs and services for tenants has been limited. (Bengtsson-Tops and Hansson, 2014; Collins et al., 2022; Greif, 2018; Kloos et al., 2002; Kunstler and Tsai, 2020; Tsai et al., 2022). For this article, the study team conducted an initial review of the types of programs that exist, the different components of such programs, and any evidence of their effectiveness in supporting tenants.

This article defines *landlord engagement*, in line with the National League of Cities (National League of Cities, 2023), as activities and incentives offered by government entities, nonprofit agencies, and other organizations to facilitate participation in supportive housing or tenant assistance programs. These activities often are not provided as standalone landlord engagement programs, but rather as part of a larger housing program. Many large housing subsidy programs cover landlord engagement as eligible activities. For example, the HCV program offers administrative fees to public housing authorities (PHAs) that can be used for security deposits and other landlord-related activities. The Moving to Work (MTW) program offers flexible use of funds to PHAs to help with repair costs. The HOME Investment Partnerships Program (HOME) can fund rehab for rental properties and be provided in exchange for offering units available to the HCV program.

Landlord engagement has been conducted in various ways, and these approaches have been implemented in different ways in regions across the United States to be mutually beneficial for landlords and tenants. The objective is to facilitate and promote the accessibility of affordable housing by cultivating enduring relationships between community partners, tenants, and landlords. When landlord engagement activities are successful, landlords can secure stable rental income and provide affordable housing, and tenants are able to achieve stable housing and work collaboratively with their landlords as part of their support system. This article examines privately or publicly funded programs that have a formal landlord engagement component or strategy as described in source materials.

The study team did not focus on eviction prevention programs because they are centered on a specific housing issue and have already been reviewed by others (Treskon et al., 2021). However, eviction protection programs are worth mentioning because evictions illustrate the importance of constructive relationships between landlords, tenants, and other stakeholders. Evictions became a salient issue during the COVID-19 pandemic (Tsai, 2021; Tsai et al., 2022). Evictions affect millions of tenants annually, and engaged landlords can work with tenants to address issues before they escalate to evictions, as suggested by reports from the field (Goplerud and Pollack, 2021; Kloos et al., 2002; Nisar et al., 2018). Landlord engagement programs may be able to help landlords and their tenants in various other ways to obtain and sustain housing, which is the focus of this article.

The study team conducted a national scan of existing landlord engagement programs and a literature search of peer-reviewed publications on such programs. This narrative review aimed

to (1) categorize and catalogue the various landlord engagement programs that exist, including partnerships, incentives, and strategies, and (2) describe any empirical evidence on the effectiveness of these programs. This article describes the different types of landlord engagement programs and incentives that exist in the United States. The findings can inform landlord engagement approaches and their impacts and pave paths to future research to examine these programs in various outcome domains.

## Methods

The team conducted a preliminary national search by asking subject matter experts and searching online sources (for example, city and county websites, legal aid websites, broad internet searches) to gather information about existing low-income housing programs and their incorporation of landlord engagement initiatives—strategies aiming to encourage landlords to rent to individuals within low-income housing programs—in the United States from 2000 to 2023. In addition, the team conducted a literature search in the following electronic academic databases: PubMed, PsycInfo, Texas Health Science Libraries, and Google Scholar. The team employed Boolean operators and specific keywords, such as “landlord,” “engagement,” “incentives,” “support,” “eviction,” “prevention,” “diversion,” “tenant,” “housing,” “providers,” and “landlord-tenant,” in both the online and academic database searches. Quantitative data on outcomes reported during the scan and literature search were collected and incorporated into the narrative review. Grey literature, including content from online websites, research reports, and other written resources, was also incorporated. The content reviewed included descriptions of low-income housing programs incorporating landlord engagement activities, supportive programs, and services for landlords promoting housing stability and landlord engagement strategies.

In the course of this review, the study team confronted challenges related to the definition of *landlord engagement program* versus initiatives within larger formal programs that involved landlord participation in some capacity. In addition, certain regions rebranded federal or state-funded programs as local programs, contributing to the overall confusion. The team’s categorization relied on initiatives self-identifying as programs and being described as such in the public data sources. Defining and categorizing programs was difficult, primarily in pinpointing their funding sources. Although some programs labeled themselves as state or local initiatives, a significant portion was funded by HUD (GAO, 2015). Both the HOME program and Housing Trust Fund (HTF) require a state or local match. The mingling of funds, particularly between HOME and the HTF, contributes to the intricate landscape, often resulting in blended initiatives being labeled as local programs. The team attempted to identify funding sources for the programs outlined in exhibits 1–4 but encountered challenges due to the intricate funding structure. These challenges have been described before, as noted by the U.S. Government Accountability Office (GAO, 2015) and the National Low Income Housing Coalition (NLIHC, 2023). In addition, the team observed that although most public websites provided application information, they often lacked the necessary level of detail to ascertain funding sources. Challenges arose in determining funding sources and discerning local, state, or federal administration of these programs (GAO, 2015). Nonetheless, the team made efforts to categorize and catalog the content based on the following three specific program activities.

## **Landlord Financial Rewards**

This activity category includes housing programs extending financial rewards to landlords. Such incentives often include grants or cash bonuses tied to specific landlord achievements, such as securing initial leases, entering new lease agreements, or referring new low-income tenants to affordable housing programs (for example, HCV-Section 8). These financial rewards are mostly focused on encouraging leasing up and tenant intake. Some housing programs also provide customized tax credits/breaks to address individual landlord circumstances. Overall, these rewards are designed to cater to diverse landlord profiles and increase the availability of rental units for individuals who are experiencing or at risk of homelessness.

## **Landlord Financial Assistance (Without Financial Rewards)**

This activity category includes housing programs that support landlords through general financial assistance without offering any specific financial rewards. Unlike the previous category, the financial aid provided in this context is contingent on the tenant's actions and is mostly focused on risk management and/or matching assistance for housing rehabilitation. In many of these programs, landlords can apply for reimbursement on behalf of their tenants for various expenses, such as rent arrears, move-in costs, security deposits, vacancy loss, and damages or repair costs caused by tenants. In addition, some funds may be allocated to landlords on behalf of tenants for housing maintenance, energy efficiency improvements, and housing renovations. Some of these programs assist tenants by offering landlords payment flexibility options in their lease terms, such as direct deposits, regular monthly payments, or lump-sum payments. Specific programs in this category were funded during the COVID-19 pandemic, such as part of the ERA program, and were examined separately. Overall, these housing programs actively involve and encourage landlords to rent to tenants by providing continuous financial support throughout the lease period. The overall goal is to ensure housing stability for tenants while supporting landlords in situations where tenants may face challenges meeting their financial responsibilities.

## **Landlord Development Support**

This activity category includes housing programs focused on offering developmental resources to help landlords establish partnerships, foster positive tenant-landlord relationships, and gain necessary training and education to serve diverse tenants. These programs provide workshops and training sessions to educate landlords about rental assistance programs and complex tenant-landlord laws. They also provide conflict resolution services to mediate disputes and prevent issues from escalating to eviction. Employing a holistic approach, these housing programs tackle housing challenges by guiding landlords in taking an initiative approach to collaborate with tenants, avoiding evictions. Finally, they emphasize strategies to build a robust resource network for landlords and tenants in need.

## **Results**

The team's national search identified a total of 46 housing programs that involve or implement landlord engagement strategies across 27 states. These programs offer financial rewards, financial

assistance, and development support to landlords, with the goal of promoting the implementation of affordable housing initiatives, especially for low-income tenants. The team distinguished the programs based on specific program activities.

### **Housing Programs With Landlord Financial Rewards**

Exhibit 1 provides details on 12 housing programs providing financial rewards to landlords. Supported by state and federal government grants, these programs have employed various methods to provide financial benefits to landlords. These methods include cash bonuses, tax deductions, and tax credits awarded directly to landlords upon securing new leases with low-income tenants, upon subsequent renewal leases with low-income tenants, or for referring low-income tenants to affordable housing programs. Eligibility for these financial incentives varies and often requires landlords to rent to tenants at specific income levels, comply with fair housing laws, offer particular amenities, and make necessary property improvements. For instance, the Office of Homeless Services Landlord Engagement program in Philadelphia, Pennsylvania, offers eligible landlords tax credits and discounts on city services to promote safety in housing and foster collaboration between landlords and city agencies. Another example is the Communities of Opportunity (Landlord) Tax Credit in the state of Virginia, which targets landlords and house providers who lease to residents in areas with poverty rates below 10 percent, as indicated by recent U.S. Census data. It offers a 10-percent annual tax credit based on fair market rent to reward those who agree to participate in the HCV program in these low-poverty areas. In addition, the Virginia Livable Home Tax Credit provides landlords with tax credits reaching up to \$6,500 for the purchase or construction of new accessible residences and covering up to 50 percent of the costs for retrofitting existing units. Other programs—like the Nashville Homeless Impact Divisions Landlords Engagement Program in Nashville, Tennessee, the Landlord Engagement and Assistance Program in California, and the Landlord Partnership Program in Rhode Island—provide cash bonuses up to \$1,000 or more to incentivize landlords for new lease sign-ups. In essence, the incorporation of landlords' rewards allows for these housing programs to not only provide immediate benefits for landlords, but also work to create a more stable and sustainable housing ecosystem for low-income housing communities.

## Exhibit 1

### Examples of Landlord Financial Reward Activities (1 of 5)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Landlord Mitigation Program (wa.gov)</a>	State's Housing Trust Fund (HUD)	Washington	Landlord Financial Rewards Risk Mitigation Fund Landlord Support	<p>Landlords sign-on bonus of \$1,000 for the first unit rented.</p> <p>Up to \$5,000 per unit for damages incurred by tenants.</p> <p>Landlord-tenant case management services.</p> <p>Resources and support services for landlords and tenants for long-term partnership.</p>	The Landlord Mitigation Program is a government initiative by the Washington State Department of Commerce that provides funding to landlords willing to rent to people experiencing homelessness or housing instability. Landlords can apply for the program on behalf of their tenants, and the assistance is provided as a grant that does not need to be repaid. The program offers a range of methods to reduce the risks and costs for landlords. It aims to reduce the expenses landlords often bear when tenants vacate their units, allowing them to recover faster and rent to individuals who may have challenges with evictions. The program is part of a larger effort to address homelessness and housing insecurity in the state by providing targeted support to those who need it most.
<a href="#">Communities of Opportunity Tax Credit (COTCP)   DHCD (virginia.gov)</a>	State Tax Credit	Virginia	Landlord Tax Relief	Landlords tax credit based on 10-percent annual fair market rent for a specific unit, which is also prorated when units are qualified for less than the full tax year.	The Communities of Opportunity Tax Credit Program in Virginia, established by the 2022 General Assembly, aims to alleviate poverty by aiding low-income Virginians in accessing affordable housing in higher-income areas. It offers income tax credits to participating landlords in eligible census tracts (poverty rates < 10 percent) who accept Housing Choice Vouchers. Landlords can claim credits for multiple units within a tax year, capped at their tax liability. Unused credits can be carried forward for up to 5 years. In 2023, \$250,000 is allocated statewide for tax credits.
<a href="#">Livable Home Tax Credit (LHTC)   DHCD (virginia.gov)</a>	State Tax Credit	Virginia	Landlord Tax Relief	<p>Landlords tax credits for up to \$6,500 for the purchase/ construction of a new accessible residence.</p> <p>Up to 50 percent for the cost of retrofitting existing units, not to exceed \$6,500.</p>	The Virginia Livable Home Tax Credit program offers state tax credits to individuals or licensed contractors in Virginia for constructing new residential units with accessibility features or retrofitting existing ones. Eligible activities must meet specific criteria, and costs must be incurred by the applicant. Tax credits are \$6,500 for new construction or 50 percent of retrofitting costs, capped at \$6,500. Excess credits can be carried forward for up to 7 years.

## Exhibit 1

### Examples of Landlord Financial Reward Activities (2 of 5)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">The Landlord Engagement and Assistance Program (LEAP)</a>	HUD Homeless programs	California	Landlord Financial Rewards Risk Mitigation Fund Landlord Support	<p>Pre-inspection that is good for 60 days.</p> <p>Landlord signing bonus of \$500 for the first unit landlord rents to a homeless household and \$250 for each additional unit.</p> <p>A contingency fund to help landlords cover expenses that exceed security deposits.</p> <p>Landlord portal and resources.</p> <p>Up to two times the contract rent in security deposits.</p> <p>An average of \$100 in utility assistance per household.</p>	The Landlord Engagement and Assistance Program (LEAP) in San Diego incentivizes landlords to house individuals experiencing homelessness by offering \$500 for the first unit rented to a homeless household and \$250 for each additional unit, along with security deposits of up to two times the contract rent and an average of \$100 in utility assistance per household. In addition, a contingency fund is available to assist landlords with expenses exceeding security deposits, and dedicated San Diego Housing Commission (SDHC) housing specialists are on hand to address landlord inquiries. LEAP operates as part of Housing First—San Diego, SDHC's comprehensive homelessness action plan, which has facilitated more than 9,300 housing solutions in 5.5 years for those experiencing or at risk of homelessness.
<a href="#">United Way Of Ventura County Landlord Engagement Program</a>	United Way of Ventura County	California	Landlord Financial Rewards Risk Mitigation Fund Landlord Support	<p>New Landlord Appreciation Bonus.</p> <p>Landlord continuity bonus for each household that rents from county's homeless and housing programs.</p> <p>Landlord "No Loss" bonus—a daily proration of the full agreed-upon contract rent to mitigate any move-in delays.</p> <p>Flexible damage mitigation funds.</p> <p>Resources and support services for landlords and tenants for long-term partnership.</p> <p>Consistent rental payments via housing vouchers.</p>	Landlord Engagement Program (LEP) supports individuals prioritized for housing assistance, aiming to prevent and end homelessness. Limited affordable housing and rising rents make accessing homes challenging, worsened by the pandemic's impact. LEP addresses these challenges by engaging landlords, offering responsive customer service, timely payments, assistance with inspection processes, and support for income loss during move-in delays or damages.

## Exhibit 1

### Examples of Landlord Financial Reward Activities (3 of 5)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">City of Tulsa's Gold Star Landlord Program   Housing Solutions Tulsa</a>	Affordable Housing Trust Fund (HUD)	Oklahoma	Landlord Financial Rewards Landlord Support Tenant Rental Assistance	<a href="#">Landlord rewards funded by the Affordable Housing Trust Fund.</a> Landlord networking platforms for advertising and promotion. Resources and support services for landlords and tenants for long-term partnership. Rental and utility assistance.	The City of Tulsa's Gold Star Landlord Program offers incentives for landlords practicing exemplary rental management. This voluntary program, part of the Affordable Housing Strategy, aims to enhance Tulsa's housing opportunities. Requirements include participating in free programs like the Tulsa Health Department's Safe and Healthy Homes, listing units on the Affordable Housing Waitlist website, and joining the Early Settlement Mediation Program. In return, Gold Star Landlords receive recognition, prioritized processing for rental assistance programs, assistance from city staff, and referrals of qualified tenants. These benefits are supported by the Affordable Housing Trust Fund.
<a href="#">Low Barrier Housing Collective- New Landlord Incentive Program</a>	Funds are administered by HUD and operated by MDHA on behalf of the city of Nashville.	Tennessee	Landlord Financial Rewards Risk Mitigation Fund Landlord Support	New landlords sign-on bonuses—up to \$4,000 for the first five units leased through the collective. Existing landlords receive a universal \$1,000 for each move—without limitation. Landlord Emergency Housing Voucher Sign-On Bonus. Landlords receive up to \$2,500 per unit for minor repairs. Resources and support services for landlords and tenants for long-term partnership.	The Low Barrier Housing Collective in Nashville is a collaborative initiative aiming to end homelessness through partnerships with support service providers, landlords, and community members. Offering ongoing membership benefits, the collective ensures successful tenancies by providing sign-on bonuses to new landlords and for each move-in after the initial five units. In addition, landlords in Davidson County participating in the Emergency Housing Voucher program can receive a \$1,000 sign-on bonus per unit, along with additional incentives based on program participation and unit location. Landlords may also receive \$500 (capped at five units per property owner/complex) if they are new to the Section 8 program. Moreover, landlords can access funds of up to \$2,500 per unit for minor repairs, and mediation services are also available for owner-tenant disputes. Finally, individuals will also have access to wrap-around services for housing stability.
<a href="#">Landlord Incentive Pilot Project (LIPP)</a>	NC Housing Finance Agency & the NC Department of Military and Veterans Affairs	North Carolina	Landlord Financial Rewards Risk Mitigation Fund Tenant Rental Assistance	Landlord financial incentives. Landlord Housing Stability Bonus offers a maximum of 25 percent or \$6,250 of the total award. It includes a guideline allowing a maximum reimbursement of \$500 per tenant for lease renewals after one year. Risk mitigation funds supported eligible communities, offering up to \$25,000 for approved expenses. Reimbursement of unpaid tenant rent, eviction costs, and security deposit.	The Landlord Incentive Pilot Project (LIPP) is a joint effort of the NC Housing Finance Agency, the North Carolina Coalition to End Homelessness (NCEH), and Operation Home, aimed at ending Veteran's homelessness. Operating in four North Carolina communities (Asheville, Charlotte, Durham, and Wilmington) from January 16, 2018, to September 30, 2019, LIPP evaluated the impact of risk mitigation and housing stability tools on landlord engagement. It provided financial incentives to landlords renting to families with federally funded vouchers, including a Housing Stability Bonus of up to 25 percent or \$6,250. Risk mitigation funds supported eligible communities with expenses such as unpaid damages, rent portions, late fees, and security deposits, up to \$25,000 per community. Lastly, the NCEH facilitated peer-to-peer calls, addressing questions and sharing strategies throughout the pilot. They also offered one-on-one technical support and training.

## Exhibit 1

## Examples of Landlord Financial Reward Activities (4 of 5)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">OHS Landlord Engagement Program   Programs and Initiatives   City of Philadelphia</a>	The Office of Homeless Services (OHS) in the City of Philadelphia	Pennsylvania	Landlord Tax Relief Risk Mitigation Fund Landlord Support Tenant Rental Assistance	Landlords tax credits. Pre-inspection certification. A contingency fund to help landlords cover expenses that exceed security deposits. Landlord networking platforms for advertising and promotion. Resources and support services for landlords and tenants for long-term partnership.	The OHS Landlord Engagement Program offers incentives for landlords to rent to individuals or families experiencing or at risk of homelessness, with no joining fees. It facilitates quick housing solutions in challenging markets, enhances access to affordable housing, and fosters housing stability. The program encourages participation from BIPOC (Black, Indigenous, and people of color) and MWBE (minority/women-owned enterprise) landlords. Incentives include tax credits for landlords, free online rental listings, prompt rental payments, tenant pre-screening, and education on various topics such as fair housing and financial management. In addition, landlords receive pre-inspection certification, access to a contingency fund for unforeseen expenses, support from landlord liaisons and housing specialists, and mediation services for conflict resolution.
<a href="#">The Landlord Engagement and Assistance Program</a>	BACS (Bay Area Community Services) and Department of Homeless Services & Housing	California	Landlord Financial Rewards Risk Mitigation Fund Landlord Support Tenant Rental Assistance	Landlord signing bonus of \$3,000 for the first unit landlords rent to a homeless household and \$750 for each additional unit. Landlord referral bonus of \$500. A contingency fund of up to \$3,000 to help landlords cover expenses that exceed security deposits. Landlord “No Loss” bonus and vacant unit retention payments. Resources and support services for landlords and tenants for long-term partnership.	The Landlord Engagement and Assistance Program (LEAP) utilizes the “Housing First” approach to facilitate stable housing solutions for those transitioning out of homelessness. Through collaboration with landlords, social service providers, and participants, LEAP efficiently rehuses individuals and families experiencing homelessness. The program actively engages landlords to increase rental unit availability, offering incentives and support services to both participants and landlords. Participants receive assistance in connecting with landlords, financial aid for move-in costs, and ongoing support to maintain housing stability. Landlords benefit from financial incentives, access to vetted tenants, and support resources. LEAP also offers reimbursement for damages, no-loss payments, and assistance with vacancy retention during voucher processing.
<a href="#">Rhode Island Landlord Partnership Program</a>	HUD	Rhode Island	Landlord Financial Reward Risk Mitigation Fund	Pre-inspection certification. Landlord signing bonus of \$2,000 for the first unit landlords rent to a homeless household and \$500 for each additional unit. Landlord referral bonus of \$500. A contingency fund of up to \$2,000 to help landlords cover expenses that exceed security deposits. Free lead paint remediation (both interior and exterior) for landlords.	The Landlord Partnership Program with RIHousing’s Housing Choice Voucher Program incentivizes landlord participation with financial benefits, including a \$2,000 bonus for the first unit rented and \$500 for subsequent units. In addition, landlords can receive reimbursement of up to \$2,000 for necessary repairs and access free lead paint remediation through the LeadSafe Homes Program for units leased for a minimum of 1 year. A courtesy pre-inspection service identifies potential repairs before the formal inspection, ensuring a smooth tenant move-in process. Landlords are responsible for providing safe housing, and tenants must adhere to lease and program requirements. RIHousing administers the program, providing housing assistance payments to landlords and conducting inspections to ensure compliance.



## Exhibit 1

### Examples of Landlord Financial Reward Activities (5 of 5)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="https://thresholdaz.com">Threshold (thresholdaz.com)</a>	Threshold and City of Arizona	Arizona	Landlord Financial Rewards Tenant Rent Assistance Risk Mitigation Funds Landlord Support	<p>Landlord sign-on bonus of 1.5 times the monthly contract rent for initial leases.</p> <p>Landlords can apply for reimbursement for the following on behalf of the tenant:</p> <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Repairs/maintenance issues (three times the monthly contact rent in move-out charges).</li> <li>• Vacancy loss.</li> <li>• Access to 24/7 Landlord Portal.</li> </ul>	<p>The Threshold program supports property owners and managers in running profitable and well-maintained properties while addressing housing needs in the community. By centralizing a range of incentives and providing hands-on support, the program makes it easy for landlords to implement these resources. Threshold complements existing housing voucher programs, strengthening them and optimizing outcomes for property owners and managers. The program streamlines incentive processing alongside move-in expenses, offering incentives equivalent to 1.5 times the monthly contract rent for initial leases leading to new move-ins. These incentives are based on verifiable criteria, including incentives for new property owners or operators and alternate screening criteria. Rental assistance is promptly provided via direct deposit, with tenants contributing a portion of their income toward rent and utilities. Access to the 24/7 Landlord Portal facilitates efficient communication, and move-out charges are reimbursed for damages, including vacancy loss coverage.</p>

Source: Information for these tables were extracted from publicly available sources online.

## Housing Programs With Landlord Financial Assistance

Exhibit 2 provides details on 15 housing programs offering financial assistance to landlords without specific rewards. These programs employ various rental assistance methods to landlords to support them throughout the leasing period of their tenants. These methods include direct rental payments, utility cost coverage, and risk mitigation funds. These housing programs play a crucial role in helping landlords prevent potential financial setbacks by ensuring that rent is covered, even when tenants face financial difficulties. Programs such as the Utah Landlord Housing Assistance Program, the Neighborhood Landlord Rental Program in Louisiana, and the Tacoma Landlord-Tenant Program in Washington offer direct rent and utility payments to landlords on behalf of the tenants. Similarly, other programs, like the Landlord Recruitment and Retention Program and the Housing Choice Landlord Guarantee Program in Oregon, provide direct rental and utility payments along with a combination of risk mitigation funds.

## Exhibit 2

### Examples of Landlord Financial Assistance Activities (1 of 6)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Landlords Opening Doors - Brothers Redevelopment</a>	Colorado Transitions Program	Colorado	Tenant Rental Assistance Landlord Support	Landlords benefit from guaranteed rent payments and homemaker services. Household setup funds.	Brothers Redevelopment in Colorado is enlisting landlords statewide to house individuals transitioning from health-related challenges, with the support from the Colorado Transitions Program (Housing Voucher Program). This initiative facilitates independent living for Colorado's Medicaid clients after institutional care, providing vetted tenants and rent assistance. Landlords benefit from guaranteed rent payments, low turnover rates, household setup funds, and homemaker services. Tenants receive intensive support, including case management and living skills training, ensuring reliable tenancy. In addition, resources are available for landlords to make home modifications to enhance accessibility and safety.
<a href="#">Arizona Public Housing Authority (APHA)</a>	Federal HUD Homeless programs	Arizona	Landlord Financial Rewards Tenant Rental Assistance	Landlord initial incentive and/or retention payment of up to \$1,000 for a 12-month HAP Contract and lease.  Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Security deposits.</li> <li>• Moving expenses.</li> <li>• Utility payments.</li> </ul>	The APHA works with Emergency Housing Voucher recipients for housing. The initiative, awarded by HUD through the Section 8—Housing Choice Voucher Program. Eligible individuals include those who are homeless, at risk of homelessness, fleeing violence, or recently homeless. The application process adheres to HUD guidelines, with verifications finalized by APHA. Approved applicants benefit from resources including a Housing Assistance Payment (HAP) Contract congruent with the lease, adjusted payment standards, and monetary assistance for various needs, such as deposits and moving expenses. In addition, APHA offers an initial incentive and/or retention payment to property owners/landlords for a 12-month HAP Contract and lease.
<a href="#">Long Beach Housing Authority</a>	Federal HUD Homeless programs	California	Tenant Rental Assistance Landlord Support	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Utility payments.</li> <li>• Landlord networking platforms for advertising and promotion.</li> <li>• Landlord portal and educational resources.</li> </ul>	The Long Beach Housing Authority invites property owners/landlords to partner with them in the Housing Choice Voucher program, offering benefits such as steady income, dependable payments, effective marketing assistance, quality assurance through free property inspections, and transparent rent standards. Via this program, property owners retain the right to screen tenants and set rules compliant with California Tenant Law. Property owners can also stay informed through newsletters, monthly orientations, and educational sessions to facilitate the partnership.

## Exhibit 2

### Examples of Landlord Financial Assistance Activities (2 of 6)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">CMHA Housing Choice Voucher Program – Landlords (HCVP)</a>	Federal HUD Homeless programs	Ohio	Tenant Rental Assistance Landlord Support	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Utility payments.</li> <li>Landlord networking platforms for advertising and promotion.</li> <li>Landlord portal and educational resources.</li> </ul>	The CMHA Housing Choice Voucher Program (HCVP) offers benefits for landlords, ensuring guaranteed rent payments and providing free advertising for available properties. Landlords have control over resident selection and lease agreements, with support from CMHA's HCVP staff. The program includes free property management training and technical assistance. Landlords are encouraged to charge rent similar to market rates, and CMHA maintains payment standards based on Fair Market Rents to cover the gap between resident affordability and market rent.
<a href="#">Landlord-Tenant Program – City of Tacoma</a>	Tacoma's Equity and Human Rights Department	Washington	Tenant Rental Assistance Landlord Support	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Utility payments.</li> <li>Repairs/maintenance issues.</li> <li>Landlord-tenant inspection.</li> <li>Educational resources and support services for landlords and tenants for long-term partnership.</li> </ul>	The Tacoma Landlord-Tenant Program, overseen by the city's Equity and Human Rights Department, assists landlords and tenants via various services offered, including assistance with rent, deposits, maintenance issues, building code violations, and landlord-tenant inspections. The program also offers landlords free education and training, covering topics such as fair housing laws, tenant screening, lease agreements, and eviction procedures. Finally, the program provides mediation services to address disputes between landlords and tenants, preventing potential legal conflicts or evictions.
<a href="#">Housing Choice Landlord Guarantee Assistance</a>	Federal HUD Homeless programs	Oregon	Tenant Rental Assistance Risk Mitigation Funds Landlord Support Program	Landlords can apply for reimbursement for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Utility payments.</li> <li>Late or lease-breaker fees.</li> <li>Property damage.</li> <li>Up to 30 days of vacancy loss.</li> <li>Landlord portal and educational resources.</li> </ul>	The Housing Choice Landlord Guarantee Program offers financial assistance to landlords affected by damages caused by Housing Choice Voucher tenants or those rehoused under Executive Order 23-02 addressing homelessness. Landlords can apply for reimbursement of qualifying damages, including unpaid rent, late fees, property damage, and lease violations. Landlords may request assistance for damages between \$500 and \$5,000. Depreciation of certain costs is considered, and reimbursement typically takes up to 45 days. Funds are disbursed via paper check mailed to the landlord's provided address. Landlords can also contact the program for further assistance or questions.

## Exhibit 2

### Examples of Landlord Financial Assistance Activities (3 of 6)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Housing Choice Landlord Guarantee Assistance</a>	Federal HUD Homeless programs	Oregon	Tenant Rental Assistance Risk Mitigation Funds Landlord Support Program	Landlords can apply for reimbursement for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Utility payments.</li> <li>• Late or lease-breaker fees.</li> <li>• Property damage.</li> <li>• Up to 30 days of vacancy loss.</li> <li>• Landlord portal and educational resources.</li> </ul>	The Housing Choice Landlord Guarantee Program offers financial assistance to landlords affected by damages caused by Housing Choice Voucher tenants or those rehoused under Executive Order 23-02 addressing homelessness. Landlords can apply for reimbursement of qualifying damages, including unpaid rent, late fees, property damage, and lease violations. Landlords may request assistance for damages between \$500 and \$5,000. Depreciation of certain costs is considered, and reimbursement typically takes up to 45 days. Funds are disbursed via paper check mailed to the landlord's provided address. Landlords can also contact the program for further assistance or questions.
<a href="#">Indianapolis Housing Choice Voucher</a>	Federal HUD Homeless programs	Indianapolis	Tenant Rental Assistance Landlord Support Program	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments (covers approximately 60–70 percent of the rent).</li> <li>• Utility payments.</li> <li>• Landlord networking platforms for advertising and promotion.</li> <li>• Free annual inspections.</li> </ul>	The Indianapolis Housing Agency serves over 8,000 families, with a substantial waitlist, highlighting the demand for affordable housing. Potential landlords are encouraged to participate in the Section 8 Program, which involves minimal differences from renting to private-market tenants. Benefits include guaranteed rent payments covering a significant portion of the rent, utility payments, free advertising, and annual inspections. Landlords are responsible for maintaining properties up to housing quality standards, screening tenants, and complying with lease agreements and program requirements. Proof of ownership is required, and assistance payments are electronic. Landlords select tenants based on standard procedures and are responsible for setting reasonable rent and security deposit amounts.
<a href="#">Neighborhood Landlord Rental Program Phase 2</a>	Community Development Block Grant Disaster Recovery Program (HUD)	Louisiana	Tenant Rental Assistance Landlord Disaster Recovery Assistance	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Landlords can seek funds to build new rental units or renovate existing ones in qualified projects.</li> </ul>	The Louisiana Housing Corporation introduced the Louisiana Neighborhood Landlord Rental Program (LNLRP Initiative) to help landlords experienced in renting residential properties or developing rental housing in areas affected by the 2016 severe storms and flooding. This initiative offers assistance for constructing new units or renovating existing ones in designated disaster areas. Initially funded with \$36 million through the Community Development Block Grant Disaster Recovery Program, the LNLRP expanded with Phase 2 (LNLRP2), targeting projects with up to four residential units and providing \$9.46 million in loans. Eligible applicants can apply for funding to improve or create rental housing in affected parishes.

## Exhibit 2

### Examples of Landlord Financial Assistance Activities (4 of 6)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">HOM Landlord Program in Arizona</a>	Federal HUD Homeless programs	Arizona	Tenant Rental Assistance Risk Mitigation Funds	Landlords can apply for reimbursement for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Late or lease-breaker fees.</li> <li>• Property damage.</li> <li>• Vacancy loss.</li> <li>• Landlord networking platforms for advertising and promotion.</li> <li>• Landlord portal and educational resources.</li> </ul>	HOM in Arizona works with landlords to end homelessness for individuals and families through rapid housing and permanent housing programs. These activities solicit participation from local landlords throughout the state by helping market properties and providing reimbursement for tenant-caused damages and vacancy loss. With these tools, landlords can streamline their workflow, reduce risk, and improve their overall experience as a property manager.
<a href="#">Arizona Landlord Incentive Project</a>	Federal HUD Homeless programs	Arizona	Tenant Rental Assistance Risk Mitigation Funds Landlord Support	Landlords can apply for reimbursement for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Late or lease-breaker fees.</li> <li>• Property damage.</li> <li>• Vacancy loss.</li> <li>• Landlord portal and educational resources.</li> </ul>	The Arizona Landlord Incentive Project (ALIP) is a program designed to help landlords overcome common barriers to renting to tenants who are experiencing homelessness, have behavioral health challenges, or have been involved with the criminal justice system. ALIP provides financial assistance for unpaid or late rent as well as a range of risk mitigation tools to landlords, such as damage mitigation funds. ALIP also provides supportive services, such as case management, job training, and counseling to tenants, thereby reducing the risk of lease violations and evictions. Finally, it provides property inspections, landlord training, and mediation services. These tools help to protect landlords from potential financial losses.
<a href="#">Landlord Liaison Program (LLP)</a>	Pierce County Funding; Metropolitan Development Council (MDC)	Washington	Tenant Rental Assistance Risk Mitigation Fund Landlord Support	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Property damage.</li> <li>• Lease-breaker fees.</li> <li>• Landlord networking platforms for advertising and promotion.</li> <li>• Landlord portal and support services for landlords and tenants for long-term partnership.</li> </ul>	The Landlord Liaison Program (LLP) seeks to expand rental housing options for individuals experiencing homelessness by collaborating with landlords, property managers, and social service agencies. It offers support services like relaxing screening criteria and providing risk mitigation funds, benefiting both landlords and tenants by reducing turnover and evictions. Funding covers rental assistance, damages costs that exceed security deposits, lease violation fees, program operations (e.g., landlord recruitment and training), and administrative expenses (e.g., program monitoring). In addition, the LLP facilitates dispute resolution and offers educational resources to landlords on tenant screening, lease agreements, and eviction procedures. Pierce County anticipates funding of approximately \$325,000 for the program.

## Exhibit 2

### Examples of Landlord Financial Assistance Activities (5 of 6)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Central Florida Homeless Initiative (CFHI)</a>	Federal HUD Homeless programs	Florida	Tenant Rental Assistance	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Educational resources and support services for landlords and tenants for long-term partnership.</li> </ul>	The Central Florida Homeless Initiative (CFHI) helps landlords by providing guaranteed rent payments. Landlords can enroll in the CFHI Housing First Program, which guarantees up to 12 months of rent payments. This ensures that the landlord receives rent payments on time without any delays, even if the tenant may face financial difficulties. CFHI also conducts property inspections and provides access to a pool of pre-screened homeless individuals and families who are ready to rent housing units. This approach makes the process of finding tenants easier and more efficient for landlords, saving them valuable time and resources.
<a href="#">NM Landlord Collaboration Program</a>	Federal HUD Homeless programs	New Mexico	Risk Mitigation Funds Landlord Support	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Property damage.</li> <li>Vacancy loss.</li> <li>Support services for landlords and tenants for long-term partnership.</li> </ul>	Housing New Mexico's Landlord Collaboration Program has a resolute team of landlords' liaisons who take care of all landlord-related inquiries and needs. This team is well-equipped to provide support to landlords in areas such as marketing, retaining tenants, and resolving property-related issues. The program also provides financial incentives to landlords who participate in the program. In addition, the program provides landlords with screening and background-checking services, making the tenant review process smooth and dependable. Finally, they offer a Landlord Advisory Committee in which landlords can participate and contribute to the development and sustainability of the program.
<a href="#">Landlord Recruitment &amp; Retention Program (LRRP)</a>	Federal HUD Homeless programs	Oregon	Tenant Rental Assistance Risk Mitigation Funds Landlord Support	Landlords can apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Security deposits.</li> <li>Move-in costs.</li> <li>Landlords receive up to \$3,000 of risk mitigation funds.</li> <li>Landlord networking platforms for advertising and promotion.</li> <li>Resources and support services for landlords and tenants for long-term partnership.</li> </ul>	The Landlord Recruitment and Retention Program (LRRP) collaborates with landlords and property managers across the Portland metropolitan area through various avenues. LRRP offers benefits to partner landlords and property managers, such as guaranteed rent and deposit assistance (move-in costs, which include security deposit and first month's rent), pre-screening services, proactive support (ongoing case management), one year of renters' insurance, neutral mediation services, tenant education, and risk mitigation funds of up to \$3,000 per tenant. The program also provides different partnership options, including conventional rental agreements and formal partnership agreements, along with master leases for specific units. Although these arrangements offer unique housing opportunities and benefits, they also come with certain liabilities and financial obligations for both the organization and participating landlords.

## Exhibit 2

### Examples of Landlord Financial Assistance Activities (6 of 6)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Landlords Homeless Services Network of Central Florida</a>	Federal HUD Homeless programs	Florida	Tenant Rental Assistance Risk Mitigation Program	Landlords can apply for reimbursement for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Property damage.</li> <li>• Vacancy loss.</li> </ul>	The Landlords Homeless Services Network of Central Florida was established to tackle the challenges posed by low vacancy rates and wage-cost disparities. It aims to boost landlord recruitment and provide support to tenants with vouchers, especially those facing chronic homelessness and veterans referred through Supportive Services for Veteran Families. The program covers up to 75 percent of damages (after insurance and deposit), with potential reimbursement for claims up to \$300 without inspection. Claims are limited to \$2,000 for single units and \$3,000 for multi-bedroom units, including unpaid rent reimbursement. The program has encouraged landlords to consider renting to individuals in need of affordable housing, and so far, no claims have been filed, indicating that the fund offers peace of mind rather than addressing a pressing financial need for landlords.

Source: Information for these tables were extracted from publicly available sources online.

Risk mitigation funds, also known as *landlord guarantees*, are a notable type of landlord financial aid (United States Interagency Council on Homelessness, 2016). They generally offer extra security to landlords who are open to renting to individuals with low income or unfavorable rental backgrounds. These funds can be used to help address excessive property damage, unpaid rent, or legal expenses that may be incurred by tenants. The predefined reimbursement limits are usually established in advance, and landlords typically file reimbursement claims. Small numbers of claims tend to be filed for risk mitigation funds by landlords, suggesting that these funds offer reassurance rather than providing for actual financial needs (United States Interagency Council on Homelessness, 2016). Several housing programs examined in this review, including the Landlord Liaison Program in Washington state and the Housing New Mexico's Landlord Collaboration Program, provide risk mitigation funds to protect landlords from potential financial losses. Many programs within this category primarily secure funding from federal government grants.

In addition, the study team identified housing programs funded by COVID-19 emergency funds. Exhibit 3 provides details on 12 housing programs that extended financial aid to landlords due to COVID-19-related job loss or income reductions. For instance, the SC Stay Plus program in South Carolina offered a capped amount of \$7,500 directly to landlords for timely rent payments. Similarly, programs like SAFHR Renter and the Texas Rent Relief program offered financial assistance to eligible landlords whose tenants were affected by the COVID-19 pandemic and were grappling with rent and utility payments. Even though these programs provided short-term assistance, they were aimed at preventing homelessness and maintaining housing stability for those facing pandemic-related financial challenges.

### Exhibit 3

#### Examples of Landlord Financial Assistance Activities from COVID-19 Relief Funding (1 of 4)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Texas Rent Relief Home Page</a>	U.S. Department of the Treasury	Texas	Tenant Rental Assistance Landlord Support	Landlords could apply for reimbursement for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Late fees.</li> <li>• Conduct mediations between landlords and tenants.</li> <li>• Educational resources and support services for landlords and tenants for long-term partnership.</li> </ul>	The Texas Rent Relief program extended financial aid to eligible landlords with tenants facing rent payment challenges due to COVID-19-related job loss or income reduction. The program offered up to 15 months of rent reimbursement. Landlords enrolled in the program and input their eligible tenants' details via the online portal. The program facilitated lump-sum payments to landlords for overdue rent and late fees, enabling tenants to stay in their residences. Furthermore, the program offered informational webinars to landlords covering eligibility, documentation requirements, and updates. Via the Texas Access to Justice Foundation, the program collaborated with 10 organizations statewide to offer legal representation for low-income households facing eviction, mediate disputes between tenants and landlords, and provide local housing clinics, both in-person and online, to aid low-income households.
<a href="#">Texas Eviction Diversion Program (TEDP)</a>	U.S. Department of the Treasury	Texas	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Utility payments.</li> <li>• Late or lease-breaker fees.</li> <li>• Landlord-tenant case management services.</li> <li>• Resources and support services for landlords and tenants for long-term partnership.</li> </ul>	The Texas Eviction Diversion Program (TEDP) offered financial aid to eligible tenants and landlords affected by COVID-19 to prevent evictions and homelessness. It incentivized landlords to collaborate with tenants on rent solutions by providing short-term rental assistance and supportive services. Funded by the Texas Department of Housing and Community Affairs, TEDP was administered through local organizations statewide, aiding in eligibility determination and application assistance. By supporting tenants financially, the program ensured landlords continued to receive rent payments and fostered positive tenant-landlord relationships.
<a href="#">Georgia Rental Assistance</a>	U.S. Department of the Treasury-Federal Emergency Rental Assistance Program	Georgia	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Utility payments.</li> <li>• Landlord portal and educational resources.</li> </ul>	The Georgia Rental Assistance Program was established in response to the COVID-19 pandemic to provide financial assistance to landlords and tenants struggling to pay rent due to the economic impact of the pandemic. Landlords applied for rental assistance on behalf of their tenants, and tenants applied directly for assistance. The program covered up to 18 months of rent and utilities, including past due amounts and future payments. Landlords received payments directly from the program for approved amounts. In addition to financial assistance, the program also provided landlord outreach, a landlord portal for registration, a dedicated hotline, and education.



### Exhibit 3

#### Examples of Landlord Financial Assistance Activities from COVID-19 Relief Funding (2 of 4)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Tenant-Landlord Assistance Coalition Program</a>	DeKalb County Emergency Rental Assistance Program	Georgia	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Utility payments.</li> <li>Landlord portal and educational resources.</li> </ul>	The Tenant-Landlord Assistance Coalition program supported landlords facing financial strain due to the COVID-19 pandemic's impact. This initiative offered rental assistance to qualified households in DeKalb County, Georgia, enabling tenants to stay in their residences while ensuring landlords received timely rental payments. Landlords applied for program participation and received direct payments to cover rent and utilities payments owed by eligible tenants, mitigating the risk of eviction proceedings and financial distress from unpaid rent. In addition, the program offered landlord outreach, educational resources, and a registration portal to streamline the process for landlords seeking assistance.
<a href="#">Henry County Emergency Rental Assistance Program</a>	Henry County Emergency Rental Assistance Program	Georgia	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Utility payments.</li> <li>Conduct mediations between landlords and tenants.</li> <li>Educational resources and support services for landlords and tenants for long-term partnership.</li> </ul>	The Henry County Emergency Rental Assistance Program provided assured payments covering rent and utilities. The program facilitated landlord-tenant mediation services to settle disputes and foster constructive relationships. Moreover, the program offered educational resources and training sessions for landlords, covering areas like fair housing regulations and effective property management strategies.
<a href="#">Memphis and Shelby County Emergency Rent and Utility Assistance Program</a>	HUD	Tennessee	Tenant Rental Assistance Landlord Support	Landlords could apply for rental assistance on behalf of the tenant.  Landlord portal and educational resources.	The U.S. Department of the Treasury allocated \$28.2 million to the City of Memphis and Shelby County for the Emergency Rental Assistance program, providing direct financial aid for rent and utilities to residents affected by COVID-19. Eligible households were required to reside in Shelby County, earn below 80 percent of the Area Median Income, and demonstrate financial hardship due to the pandemic. Tenants or landlords applied online or via text and were assisted with documentation submission if needed. A weighted selection process prioritized at-risk tenants, and payments were made directly to landlords or utility providers. Landlords were required to agree not to evict tenants for past-due rent covered by the program and allow unit inspections. The program also offered legal assistance to landlords and tenants facing eviction and evaluated its impact for future rental assistance initiatives.

### Exhibit 3

#### Examples of Landlord Financial Assistance Activities from COVID-19 Relief Funding (3 of 4)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">SAFHR for Renters and Landlords Program</a>	Emergency Rental Assistance Program	Missouri	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Utility payments.</li> <li>• Resources and support services for landlords and tenants for long-term partnership.</li> </ul>	The Missouri Housing Development Commission's State Assistance for Housing Relief Program (SAFHR) offered temporary emergency assistance in response to COVID-19, utilizing over \$600 million in federal funds over two years. It aided more than 100,000 applicants and prevented eviction for over 75,000 households. Renters and landlords impacted by the pandemic could apply, with renters receiving rent and utility aid and landlords able to apply on behalf of tenants. Both programs covered payments since April 2020 and offered up to 3 months of prepaid assistance. Eligibility criteria included Missouri residency, household income at or below 80 percent of the Area Median Income, and pandemic-related financial hardship.
<a href="#">South Carolina (SC) Stay Plus COVID-19 Housing Assistance</a>	South Carolina Emergency Rental Assistance Program	South Carolina	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Utility payments.</li> <li>• Security deposits.</li> <li>• Landlord networking platforms for advertising and promotion.</li> </ul>	The goal of the SC Stay Plus program was to offer financial aid to qualified South Carolina households impacted by the COVID-19 pandemic, helping them cover rent, mortgage, or utility expenses. It aimed to prevent homelessness and maintain housing stability for those facing pandemic-related financial challenges. Eligible households could receive up to 12 months of assistance, capped at \$7,500, directed to landlords for timely rent payments. This assistance decreased the likelihood of tenant relocation or lease termination due to financial strains, ultimately lowering vacancy rates for landlords and mitigating their financial risks.
<a href="#">Delaware County Emergency Rental Assistance Program Moves into May with Momentum</a>	U.S. Treasury and Commonwealth of Pennsylvania provided Delaware County (ERAP funds)	Delaware	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>• Rent payments.</li> <li>• Utility payments.</li> <li>• Landlord portal and educational resources.</li> </ul>	The Delco Emergency Rental Assistance program aided landlords and tenants affected by COVID-19. A Landlord Participation Campaign was initiated to streamline processing. The program covered up to 12 months of back rent and 3 months of future payments. Funds were paid directly to landlords. Payments were facilitated through the Deluxe eChecks system or by mail. Marketing efforts included social media, online ads, and community outreach, with incentives for landlord participation, streamlined processes, and educational opportunities provided directly to landlords.

### Exhibit 3

Examples of Landlord Financial Assistance Activities from COVID-19 Relief Funding (4 of 4)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Emergency Rental Assistance Program/ Eviction Prevention Pilot Initiative 2.0</a>	Emergency Rental Assistance	New York	Tenant Rental Assistance	Landlords could apply for rent payments on behalf of the tenant.	The Eviction Prevention Pilot Initiative was a program managed by local community organizations, offering direct financial support to landlords or banks for individuals and families struggling with up to 5 months of overdue rent or mortgage payments. The emergency assistance was specifically for those impacted by the COVID-19 pandemic. Monroe County allocated \$6 million in CARES Act funding to this initiative.
<a href="#">Providence Housing Authority   Landlord Outreach Initiative</a>	United Way of Rhode Island	Rhode Island	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Landlord portal and educational resources.</li> </ul>	The Providence Housing Authority (PHA) launched a comprehensive landlord outreach initiative during the COVID-19 pandemic to address pandemic-related issues and gather landlord feedback to strengthen the Housing Choice Voucher (Section 8) program. Part of this outreach included informing landlords about resources like the Safe Harbor Housing Program to support them during the pandemic. PHA also sought input from landlords on topics of interest, hosted virtual meetings, and provided incentives to those leasing rental units to PHA voucher holders in the future.
<a href="#">Landlord Housing Assistance Program (LHAP)</a>	CARES Act Funds	Utah	Tenant Rental Assistance Landlord Support	Landlords could apply for the following on behalf of the tenant: <ul style="list-style-type: none"> <li>Rent payments.</li> <li>Security deposits.</li> <li>Landlord portal and educational resources.</li> </ul>	The Utah Landlord Housing Assistance Program (LHAP) supported landlords willing to rent to individuals or families facing or at risk of homelessness. It offered financial aid, including security deposits and rent support, to landlords renting to low-income families, with rental assistance capped at \$2,000 per month. Landlords were required to apply on behalf of tenants, with payments directed to them. Participation in LHAP connected landlords with prequalified tenants, streamlining the rental process and reducing vacancies. In addition, LHAP provided landlords with resources on tenant-landlord laws and property management, enhancing their knowledge and skills in property management.

Source: Information for these tables were extracted from publicly available sources online.

Overall, it is worth noting that many of the housing programs that provided financial rewards and financial assistance, as described in these sections, went beyond providing financial support by also offering technical assistance, education, and training to landlords to help them expand their client base and strengthen their networks and community relationships. According to reports from the field, the integration of financial incentives, financial assistance, and supportive services has been instrumental in fostering landlord engagement and ensuring stable housing for those in need (Cunningham, 2018; HUD, 2022a; National League of Cities, 2021; Nisar et al., 2018).

### **Housing Programs with Landlord Development Support**

The team found other housing programs that do not involve financial incentives or financial assistance, categorized here as *landlord development support*. These housing programs take a more holistic approach in supporting tenants experiencing housing instability by focusing on relationship-building between landlords and tenants. These programs offer training to landlords to foster positive relationships with tenants, provide resources to offer quality housing, and promote ways to nurture long-term relationships between landlords and tenants.

Exhibit 4 outlines examples of landlord development support activities, although there are likely numerous programs beyond those outlined here because many housing assistance initiatives include landlord workshops and other activities focused on retaining and recruiting landlords. Seattle's Landlord Engagement Project (LEP) in the State of Washington offers training courses and legal assistance to help landlords understand their legal obligations and provide safe and healthy housing for their tenants. LEP also works to help build relationships between landlords and tenants by facilitating open communication and intervening to address issues early before they escalate into disputes. Another example is the Pilot Eviction Mediation Program in Idaho, which organizes events to connect social service agencies, potential tenants, and landlords. Moreover, this program provides mediation services for resolving disputes and conducts training workshops to educate landlords on rent assistance programs, resources, policies, and common housing regulations. The Landlord-Tenant Program in Tacoma and the Steps to Avoid Eviction program in Hawaii similarly provide guidance to landlords on their legal responsibilities in maintaining safe and habitable living conditions for tenants; the programs also help both parties resolve disputes and maintain positive relationships. A common theme among these programs is that they prioritize communication and education between landlords and tenants to establish mutually beneficial relationships. Ultimately, the objective of these programs is to equip landlords with the necessary knowledge and skills to make informed decisions about opportunities to rent to prospective tenants and ways to protect their property.

## Exhibit 4

### Examples of Landlord Development Support Activities (1 of 2)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">Human Services Landlord and Tenant Program (phoenix.gov)</a>	City of Phoenix	Arizona	Landlord Support	Offers landlords the following: <ul style="list-style-type: none"> <li>• Educational services.</li> <li>• Tenant screening tools.</li> <li>• Templates of rental agreement.</li> <li>• Mediation services.</li> </ul>	The Landlord and Tenant Program provides one-on-one counseling and education by telephone and in-person appointments on landlord and tenant laws to help landlords understand their legal rights and obligations. The program also provides access to several resources for tenant screening, including credit checks and criminal background checks, helping landlords make informed decisions about prospective tenants. Finally, the program offers free mediation services for landlords and tenants who have disputes, helping landlords resolve issues with problem tenants without having to go to court.
<a href="#">St. Louis Mediation Project</a>	Federal HUD Homeless programs	Missouri	Landlord Support	Conducts mediations between landlords and tenants.	The St. Louis Mediation Project has been assisting tenants, homeowners, landlords, and lenders in resolving housing disputes for over a decade, providing trained mediators to facilitate discussions and find mutually acceptable solutions. This free program helps prevent negative legal actions, such as eviction or foreclosure, and saves on court costs and attorneys' fees. With mediations conducted via Zoom, participants can address issues confidentially and voluntarily, with the aim of promoting community stability and providing solutions to housing disputes. Notably, in 2019, 75 percent of mediated prose cases reached agreements. A 15-percent decrease in evictions in such mediated cases signifies a significant benefit for all parties involved. Successful mediation not only translates to fewer evictions but also empowers tenants with greater housing control, ensures landlords receive their due payments or premises, promotes neighborhood stability, and reduces the burden on the courts in terms of both time and expenditure.
<a href="#">Good Landlord Program</a>	Rental Housing Association of Utah	Utah	Landlord Support	Offers landlords the following: <ul style="list-style-type: none"> <li>• Educational services.</li> <li>• Tenant screening tools.</li> <li>• Templates of rental agreement.</li> <li>• Mediation services.</li> </ul>	The program offers landlords resources and live monthly sessions on best practices for tenant screening, lease agreements, and property management. Many of these sessions cover essential aspects of being a landlord in Utah, including property management best practices, Fair Housing guidelines, tenant screening, eviction procedures, and deposit management. These sessions provide valuable insights and resources to help landlords navigate their responsibilities effectively.

## Exhibit 4

### Examples of Landlord Development Support Activities (2 of 2)

Source	Funding Source	Program Location	Type of Activity	Program Activities	Program Description
<a href="#">STAE (Steps to Avoid Eviction)</a>	State Efforts	Hawaii	Landlord Support	Offers landlords the educational services on assistance programs and how to avoid eviction.	STAE provides educational information and training on how to avoid eviction, pay rent on time, and get help if facing eviction. It also provides information on how landlords can avoid evictions through an initiative-taking approach. It is a program that helps tenants and landlords work together to avoid eviction.
<a href="#">Idaho's Pilot Eviction Mediation Program Shows Early Signs of Success</a>	State Efforts	Idaho	Landlord Support	Offers landlords online mediation.	The Pilot Eviction Mediation Program is a new pilot program from the Idaho State Supreme Court that allows Ada County tenants and landlords to try and resolve eviction cases via online mediation. For landlords, one of the greatest unknowns of an eviction trial may be the significant loss in back rent payment. For tenants, a trial may result in the fear of losing a home and having a permanent eviction judgment on their record, which may make it difficult to find other housing in the future. This program is designed to help landlords and tenants resolve certain eviction claims.
<a href="#">One-Stop Eviction Diversion Clinics at Housing Court &amp; Neighborhood Centers in Minnesota</a>	The Family Housing Fund and the McKnight Foundation	Minnesota	Landlord Support	Offers landlords the following: <ul style="list-style-type: none"> <li>• Legal assistance.</li> <li>• Financial counseling.</li> <li>• Mediation services.</li> </ul>	Minnesota's One-Stop Clinics initiative supports landlords facing tenant eviction challenges by offering mediation and legal advice. The program's goal is eviction prevention, sparing landlords the costs and stress of the eviction process while aiding tenants in securing stable housing. With a focus on early intervention, it mitigates the negative impact of evictions on tenants' credit and future housing prospects. A successful pilot program in Ramsey County, Minnesota, demonstrated its effectiveness in averting evictions and preserving stable housing for both tenants and landlords. Provides information and resources about initiatives to address the eviction crisis in Minnesota.
<a href="#">Landlord Engagement Project   YWCA</a>	United Way of King County and United Way of Snohomish County	Washington	Landlord Support	Offers landlords the following: <ul style="list-style-type: none"> <li>• Legal assistance.</li> <li>• Conflict resolution.</li> <li>• Education workshops.</li> </ul>	Seattle's Landlord Engagement Project (LEP) facilitates connections between landlords and resources to enhance property quality and tenant satisfaction. LEP conducts workshops and training sessions for landlords on topics like fair housing laws and tenant screening, particularly emphasizing the benefits of renting to low-income tenants. It offers continuous support services for both landlords and tenants to minimize issues and ensure successful tenancies. LEP provides conflict resolution services for dispute resolution and legal assistance for landlords navigating complex tenant-landlord laws in Washington state. It maintains regular communication with landlords while collaborating with housing providers, social service agencies, and local government to build a robust resource network for landlords and tenants in need.

Source: Information for these tables were extracted from publicly available sources online.

## **Data on Outcomes From Landlord Engagement Activities**

Of the different housing programs described in the exhibits in this article, the study team found no reported outcome data specifically on any of the implemented landlord engagement activities. The literature review yielded very few peer-reviewed articles on landlord engagement activities. The team found several concept papers that proposed models for landlord engagement (Kloos et al., 2002), but they did not report systematically collected data.

Five studies reported mostly qualitative data focused on landlord participation in the HCV program (Cunningham, 2018; Garboden et al., 2018a; Greenlee, 2014; Nisar et al., 2018; Varady, Jaroscak, and Kleinhans, 2016). Each of these studies examine facilitators and barriers to landlord participation in the HCV program. Nisar et al. (2018) reported that landlords participated in the HCV program mostly for financial reasons, specifically payment standards, fair market rent conditions, damages and security deposits, and profit motivations. However, administrative or bureaucratic requirements, such as inspection processes or required HUD paperwork, were deterrents of landlord participation. The study also found that landlord attitudes toward tenants with vouchers was the least important factor they found. Cunningham (2018) found that areas with source-of-income protections, higher rent caps, and legal protections had higher landlord participation. In phone tests, landlords were found to generally treat voucher holders equally as nonvoucher holders. Garboden et al. (2018a) found that landlords often weighed the costs and benefits of participating in the HCV program against the counterfactual tenant that a landlord might otherwise rent to in the open market. Similar to other researchers, they suggested improving bureaucratic inefficiency and providing training and education to landlords to encourage landlord participation. Greenlee (2014) reported that many landlords had little contact with public housing agencies and so often held misperceptions about the HCV program. Landlords interested in the program were not only motivated by the economic benefits, but many had a social mission or desire to help those in need. Greenlee (2014) suggested that there is an opportunity for voucher program design to actively involve landlords as providers of support beyond just offering housing. Varady et al. (2017) reported several barriers to landlord participation in the HCV program, including lack of interaction between public housing agencies and landlords, financial burdens, problematic tenants, and limited efforts in landlord outreach focused on poverty deconcentration and high poverty areas.

## **Discussion: Existing and Ongoing Research**

The preliminary national scan conducted for this article revealed a number of different landlord engagement activities that exist across the country, from programs that offer financial rewards and financial aid to landlords to programs that have no financial incentives for landlords but help them develop good relationships with their tenants and communities. Across the housing programs reviewed, diverse landlord strategies and incentives were employed with similarities and differences in program components. Although the study team searched for programs across all states, the team found public descriptions of landlord engagement programs in 27; some states also had more than one landlord engagement program (Twombly et al., 2001). These programs were funded by local, state, and federal governments. The widespread existence of these programs suggests that they are valued by different communities and are serving a need among landlords and tenants.

Although the scan identified many existing landlord engagement activities, the literature search of published peer-reviewed studies revealed a substantial gap in evidence regarding the effectiveness of these initiatives. The literature review highlights the need for more rigorous research, particularly quantitative studies to empirically evaluate the impact of landlord engagement activities on reducing homelessness and enhancing housing stability for vulnerable populations (Collins et al., 2022; Rolfe et al., 2023). Moreover, the review outlined numerous empirical gaps in who uses landlord engagement activities, the effectiveness of such activities in different outcomes, and how outcomes differ by type of landlord engagement strategy used. These areas are ripe for future research and would benefit both landlords and tenants in improving population-level housing stability.

Several studies/evaluations are currently ongoing and were not included in this review, but they are worth mentioning. HUD is funding three ongoing programs related to landlord participation that will be evaluated. One is the Community Choice Demonstration, a significant multi-site trial involving eight PHA sites that is delivering housing mobility-related services to HCV families with children through 2028 (HUD, 2023a). PHAs are playing a pivotal role by covering various aspects of housing mobility support and working to enhance landlord engagement through financial incentives and streamlined leasing processes. Another program being evaluated is the Housing Mobility-Related Services Demo, which is seeking to expand housing options for HCV families with children by enhancing landlord participation and facilitating access to opportunity neighborhoods by offering various services, including pre-move assistance, housing search support, landlord outreach and assistance, post-move support, and financial aid, including security deposit assistance and landlord incentives (HUD, 2023b). The program encourages proactive outreach to opportunity area landlords and offers resources for landlord engagement. A third HUD-funded initiative being evaluated is the Landlord Incentives Cohort, which is part of the MTW program and offers flexibility to state and local PHAs for landlord incentives to bolster their participation in the HCV program (HUD, 2022b). Other evaluations worth noting are the Seattle-King County Creating Moves to Opportunity (CTMO) Demonstration Project, which involved outreach and financial incentives for landlords leasing to CMTO families in opportunity neighborhoods (Hendren et al., 2018), and the Baltimore Housing Mobility Program (DeLuca and Rosenblatt, 2017).

Although limited research has been conducted on the outcomes of landlord engagement activities, various studies have described how landlords can be more engaged and involved in supporting tenants in terms of landlord knowledge, attitudes, and communication. Increasing landlord knowledge about common issues faced by tenants, the rights of tenants, and eviction processes may be important (Aliprantis, Martin, and Phillips, 2022; Bassuk et al., 2014; Collins et al., 2022). Educating landlords to help them avoid any bias or discriminatory attitudes and behaviors toward low-income tenants may ensure more equitable opportunities (Rolfe et al., 2023; Rosen and Garboden, 2022; Walters et al., 2021). Lastly, a crucial element in successful landlord-tenant relationships is skillful communication. Landlords frequently encounter situations requiring conflict resolution, expectation setting, rent negotiations, and building trust with tenants (NAM, 2021; Rolfe et al., 2023). Landlord behaviors and practices can influence tenants' housing choices and selections (DeLuca, Garboden, and Rosenblatt, 2013). Clearly written lease agreements and expectations outlined in a transparent manner along with information about rights and



responsibilities of both tenants and landlords can help avert any misunderstanding. Conversations between landlords and tenants characterized by openness, respect, and empathy may be more likely to lead to mutually agreeable resolutions (Aliprantis et al., 2022; Rolfe et al., 2023).

Although the reviewed literature showcases promising approaches and important considerations in landlord-tenant relationships, more evidence clearly is required to support the implementation and refinement of different landlord engagement activities. Policymakers, researchers, and stakeholders must prioritize investing in further quantitative research to strengthen the evidence base. In addition, there is a need for more centralized reporting, perhaps to HUD, of the funding and activities of different landlord engagement initiatives across the country. Better reporting would not only allow for defining and cataloging federal, state, local, and blended funded programs, but could also allow for better tracking of activities and outcomes. Addressing these knowledge gaps can maximize the potential of landlord engagement initiatives and drive effective solutions to combat homelessness and provide stable housing for those in need.

This review had several limitations, some of which were already stated but are worth reiterating. First, the study team tried to focus on landlord engagement activities, which were often part of larger housing programs instead of standalone programs dedicated to landlord engagement. Programs were heterogeneous not only in design but based on locality because many were locally administered (even if they were federally funded) and had flexibility in how landlord engagement was conducted. Local labeling of federal funds may facilitate implementation but can pose challenges for researchers attempting to identify program types or funding sources. Although each federal program has reporting obligations to the respective agency, these requirements may vary and might not always provide detailed breakdowns of individual program activities. The review focused on engagement activities that targeted landlords and not tenants, which may have indirectly benefited landlords as many rental assistance programs do. Second, categorizing landlord engagement activities was challenging because it was hard to identify their funding source to determine whether they were independently funded, locally funded, federally funded, or a mix. No federal reporting exists for activities funded strictly at the state or local level, necessitating researchers to gather information from public sources or contact each entity individually. Categorizing landlord engagement activities was also challenging because many activities and the housing programs they were part of had multiple financial (for example, rewards) and nonfinancial (for example, technical assistance) components, so at times, it was hard to tease apart and describe specific activities. The study team tried to categorize landlord engagement activities and their respective housing programs based on their core components and as described in public data sources, which is imperfect. Lastly, the team found that very little empirical research has been conducted on landlord engagement programs, and existing studies are all focused on the HCV program. These limitations notwithstanding, this article starts to develop a basic taxonomy of landlord engagement programs that exist across U.S. communities as further refinement is needed. It summarizes the various strategies and elements of these programs and highlights the scarce research and evaluation that exists, which hopefully encourages further work in this area.

## Acknowledgements

The authors thank the editors for their careful reading and review of earlier drafts.

## Authors

Jack Tsai is a Regional Dean and Professor in the School of Public Health at the University of Texas Health Science Center at Houston, and Research Director for the Veterans Affairs National Center on Homelessness among Veterans. Victoria Solis is a Research Assistant in the School of Public Health at the University of Texas Health Science Center at Houston.

## References

- Aliprantis, D., H. Martin, and D. Phillips. 2022. "Landlords and Access to Opportunity," *Journal of Urban Economics* 129: 103420. <https://doi.org/10.1016/j.jue.2021.103420>.
- Bambra, C., M. Gibson, A. Sowden, K. Wright, M. Whitehead, and M. Petticrew. 2010. "Tackling the Wider Social Determinants of Health and Health Inequalities: Evidence From Systematic Reviews," *Journal of Epidemiology and Community Health* 64 (4): 284–291. <https://doi.org/10.1136/jech.2008.082743>.
- Bassuk, E.L., C.J. DeCandia, A. Tsertsvadze, and M.K. Richard. 2014. "The Effectiveness of Housing Interventions and Housing and Service Interventions on Ending Family Homelessness: A Systematic Review," *American Journal of Orthopsychiatry* 84: 457–474. <https://doi.org/10.1037/ort0000020>.
- Bengtsson-Tops, A., and L. Hansson. 2014. "Landlords' Experiences of Housing Tenants Suffering from Severe Mental Illness: A Swedish Empirical Study," *Community Mental Health Journal* 50 (1): 111–119. <https://doi.org/10.1007/s10597-013-9596-4>.
- Collins, D., E. de Vos, J. Evans, M. Severson Mason, J. Anderson-Baron, V. Cruickshank, and K. McDowell. 2022. "When We Do Evict Them, It's a Last Resort': Eviction Prevention in Social and Affordable Housing," *Housing Policy Debate* 32 (3): 473–490. <https://doi.org/10.1080/10511482.2021.1900890>.
- Cunningham, M. 2018. *A Pilot Study of Landlord Acceptance of Housing Choice Vouchers*. Prepared for the U.S. Department of Housing and Urban Development. Washington, DC: Urban Institute.
- DeLuca, S., P.M.E. Garboden, and P. Rosenblatt. 2013. "Segregating Shelter: How Housing Policies Shape the Residential Locations of Low-Income Minority Families," *The Annals of the American Academy of Political and Social Science* 647: 268–299.
- DeLuca, S., and P. Rosenblatt. 2017. "Walking Away From *The Wire*: Housing Mobility and Neighborhood Opportunity in Baltimore," *Housing Policy Debate* 27 (4): 519–546. <https://doi.org/10.1080/10511482.2017.1282884>.

Donovan, S., and E.K. Shinseki. 2013. "Homelessness Is a Public Health Issue," *American Journal of Public Health* 103 (S2): S180–S180. <https://doi.org/10.2105/AJPH.2013.301727>.

Garboden, P.M.E., E. Rosen, S. DeLuca, and K. Edin. 2018a. "Taking Stock: What Drives Landlord Participation in the Housing Choice Voucher Program," *Housing Policy Debate* 28 (6): 979–1003. <https://doi.org/10.1080/10511482.2018.1502202>.

Garboden, P.M.E., E. Rosen, M. Greif, S. DeLuca, and K. Edin. 2018b. *Urban Landlords and the Housing Choice Voucher Program—A Research Report*. Baltimore, MD: The Poverty and Inequality Research Lab Johns Hopkins University.

Goplerud, D., and C. Pollack. 2021. "Prevalence and Impact of Evictions," *Evidence Matters*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://www.huduser.gov/portal/periodicals/em/Summer21/highlight3.html#title>.

U.S. Government Accountability Office (GAO). 2015. *Affordable Rental Housing Assistance Is Provided by Federal, State, and Local Programs, But There Is Incomplete Information on Collective Performance*. Report to Congressional Addressee. <https://www.gao.gov/assets/gao-15-645.pdf>.

Greenlee, A.J. 2014. "More Than Meets the Market? Landlord Agency in the Illinois Housing Choice Voucher Program," *Housing Policy Debate* 24 (3): 500–524. <https://doi.org/10.1080/10511482.2014.913649>.

Greif, M. 2018. "Regulating Landlords: Unintended Consequences for Poor Tenants," *City & Community* 17 (3): 658–674. <https://doi.org/10.1111/cico.12321>.

Hendren, N., P. Bergman, R. Chetty, S. DeLuca, L.F. Katz, and C. Palmer. 2018. *Creating Moves to Opportunity in Seattle and King County Randomized Controlled Trial Pre-Analysis Plan*. [https://www.socialscienceregistry.org/trails/active\\_storage/blobs/eyJfcmFpbHMiOnsibWVzc2FnZSI6IkJBaHBBam9qIiwicXhwIjpuZDVsX2kXlUjibG9iX2lkIn19--2ba2b662dcc18ba239960625413925391ec2d50f/preanalysis\\_plan\\_v8.pdf](https://www.socialscienceregistry.org/trails/active_storage/blobs/eyJfcmFpbHMiOnsibWVzc2FnZSI6IkJBaHBBam9qIiwicXhwIjpuZDVsX2kXlUjibG9iX2lkIn19--2ba2b662dcc18ba239960625413925391ec2d50f/preanalysis_plan_v8.pdf).

Kloos, B., S.O. Zimmerman, K. Scrimenti, and C. Crusto. 2002. "Landlords as Partners for Promoting Success in Supported Housing: 'It Takes More Than a Lease and a Key'," *Psychiatric Rehabilitation Journal* 25: 235–244. <https://doi.org/10.1037/h0095019>.

Kunstler, N., and J. Tsai. 2020. "Understanding Landlord Perspectives on Applicants With Sex Offenses," *Housing, Care and Support* 23 (1): 27–34. <https://doi.org/10.1108/HCS-10-2019-0022>.

Leff, H.S., C.M. Chow, R. Pepin, J. Conley, I.E. Allen, and C.A. Seaman. 2009. "Does One Size Fit All? What We Can and Can't Learn From a Meta-Analysis of Housing Models for Persons With Mental Illness," *Psychiatric Services* 60 (4): 473–482. <https://doi.org/10.1176/ps.2009.60.4.473>.

National Arbitration and Mediation (NAM). 2021. "Landlord/Tenant Disagreements: Reaching A Resolution Through ADR," *JD Supra*, August 16. <https://www.jdsupra.com/legalnews/landlord-tenant-disagreements-reaching-6002412/>.

National League of Cities. 2023. “Landlord Engagement Toolkits.” <https://www.nlc.org/resource/landlord-engagement-toolkit/>.

———. (2021). *Incentivizing Landlords to Advance Eviction Prevention*. Stanford Law School. <https://www.nlc.org/wp-content/uploads/2024/01/INCENTIVIZING-LANDLORDS-TO-ADVANCE-EVICTION-PREVENTION.pdf>.

National Low Income Housing Coalition (NLIHC). 2023. “NLIHC and CBPP Release Updated Rental Housing Programs Database and Report.” Press release. Washington, DC: NLIHC. <https://nlihc.org/news/nlihc-and-cbpp-release-updated-rental-housing-programs-database-and-report>.

Nisar, H., J. Murdoch, E. Dallas, M. Vachon, and C. Horseman. 2018. *Landlord Participation Study*. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research. <https://doi.org/10.2139/ssrn.3615792>.

Rolfe, S., K. McKee, J. Feather, T. Simcock, and J. Hoolachan. 2023. “The Role of Private Landlords in Making a Rented House a Home,” *International Journal of Housing Policy* 23 (1): 113–137. <https://doi.org/10.1080/19491247.2021.2019882>.

Rosen, E., and P.M.E. Garboden. 2022. “Landlord Paternalism: Housing the Poor with a Velvet Glove,” *Social Problems* 69 (2): 470–491. <https://doi.org/10.1093/socpro/spaa037>.

Swope, C.B., and D. Hernández. 2019. “Housing as a Determinant of Health Equity: A Conceptual Model,” *Social Science & Medicine* 243: 112571. <https://doi.org/10.1016/j.socscimed.2019.112571>.

Treskon, M., S. Greene, O. Fiol, and A. Junod. 2021. *Eviction Prevention and Diversion Programs: Early Lessons From the Pandemic*. Washington, DC: Urban Institute. [https://www.urban.org/sites/default/files/publication/104148/eviction-prevention-and-diversion-programs-early-lessons-from-the-pandemic\\_0.pdf](https://www.urban.org/sites/default/files/publication/104148/eviction-prevention-and-diversion-programs-early-lessons-from-the-pandemic_0.pdf).

Tsai, J. 2023. “Is it Time to Antiquate the Term ‘Landlord?’” *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 100 (5): 984–986. <https://doi.org/10.1007/s11524-023-00782-3>.

———. 2021. “Expected and Possible Unexpected Consequences of Ending the Eviction Moratorium,” *The Lancet Regional Health—Americas* 4. <https://doi.org/10.1016/j.lana.2021.100105>

———. 2020. “Is the Housing First Model Effective? Different Evidence for Different Outcomes,” *American Journal of Public Health* 110 (9): 1376–1377. <https://doi.org/10.2105/AJPH.2020.305835>.

Tsai, J., M. Huang, J.R. Blosnich, and E.B. Elbogen. 2022. “Evictions and Tenant-Landlord Relationships During the 2020–2021 Eviction Moratorium in the U.S.,” *American Journal of Community Psychology* 70 (1–2): 117–126. <https://doi.org/10.1002/ajcp.12581>.

Tsai, J., T. O’Toole, and L.K. Kearney. 2017. “Homelessness as a Public Mental Health and Social Problem: New Knowledge and Solutions,” *Psychological Services* 14 (2): 113–117. <https://doi.org/10.1037/ser0000164>.

Twombly, J.G., H. Lawson, C.H Smith, and S. Crowley. 2001. *A Report on State-Funded Rental Assistance Programs: A Patchwork of Small Measures*. Washington, DC: National Low Income Housing Coalition. <https://nlihc.org/sites/default/files/Patchwork-2001.pdf>.

United States Interagency Council on Homelessness. 2016. *Engaging & Supporting Landlords through Risk Mitigation Funds*. Washington, DC: United States Interagency Council on Homelessness. [https://www.usich.gov/sites/default/files/document/Risk\\_mitigation\\_funds\\_community\\_profiles.pdf](https://www.usich.gov/sites/default/files/document/Risk_mitigation_funds_community_profiles.pdf).

U.S. Department of Housing and Urban Development (HUD). 2023a. "Evaluation of the Community Choice Demonstration." <https://www.huduser.gov/portal/community-choice-demonstration.html>.

———. 2023b. "FY 2023 Housing Mobility-Related Services." [https://www.hud.gov/program\\_offices/spm/gmomgmt/grantsinfo/fundingopps/fy23\\_housingmobility](https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy23_housingmobility).

———. 2022a. "HCV Landlord Strategies Guidebook for PHAs." <https://www.hudexchange.info/resource/6314/hcv-landlord-strategies-guidebook-for-phas/>.

———. 2022b. "Moving to Work (MTW) Expansion—Landlord Incentives Cohort." [https://www.hud.gov/program\\_offices/public\\_indian\\_housing/programs/ph/mtw/expansion/landlordincentivescohort](https://www.hud.gov/program_offices/public_indian_housing/programs/ph/mtw/expansion/landlordincentivescohort).

Varady, D.P., J. Jaroscak, and R. Kleinhans. 2016. "How to Attract More Landlords to the Housing Choice Voucher Program: A Case Study of Landlord Outreach Efforts," *Urban Research & Practice* 10 (2): 143–155. <https://doi.org/10.1080/17535069.2016.1175741>.

Walters, J.E., J. Lucero, C. Wever, and A. Post. 2021. "Landlord Perceptions on Homelessness in Northern Utah," *Social Sciences* 10 (11): 443. <https://doi.org/10.3390/socsci10110443>.

---

## *Referees 2023–24*

*The Office of Policy Development and Research gratefully acknowledges the contributions of the following referees and their assistance in making Cityscape worth reading.*

---

Sonya Acosta  
Thyria Alvarez  
Katrin Anaker  
Anna Bailey  
Danielle Bastarache  
Allison Bell  
Nick Bilka  
Dominique Blom  
Joshua Bosshardt  
Uwe Brandes  
Quentin Brummet  
Claire Bufalino  
Calie Carpentier  
George Carter  
Nathaniel Decker  
Richard Duckworth  
Stefano Falcone  
Andrew Fenelon  
Will Fischer

Anne Fletcher  
Emmanuel Fulgence-Drabo  
Elizabeth Fussell  
CJ Gabbe  
Phil Garboden  
Veronica Garrison  
Mandy Griego  
Brendan Goodwin  
Solomon Greene  
Austin Harrison  
Mike Hollar  
Paul Joice  
Ryan Jones  
Peter Kahn  
Nicholas Kelly  
Chun Kuang  
Michael Lacour-Little  
Michael Lens  
Steve Lucas

Brent Mast  
Kirk McClure  
Mike Mei  
Emily Molfino  
Marina Myhre  
Madeleine Parker  
Jenna Prochaska  
Gregory Preston  
Todd Richardson  
Elizabeth Rudd  
Eric Seymour  
Aaron Shroyer  
Teresa Souza  
Carol Star  
Maren Trochmann  
Emily Warren  
Jake Wegmann  
Rea Zaimi

## Symposium

<b>Fifty Years of Tenant-Based Rental Assistance</b> .....	1
Guest Editors: Peggy Bailey and Brian J. McCabe	
Guest Editors' Introduction	
Fifty Years of Tenant-Based Rental Assistance: Introducing a Symposium on the History and Future of the Housing Choice Voucher Program .....	3
The Evolution of Funding Policy in the Housing Choice Voucher Program by <i>Barbara Sard</i> .....	15
Participation, Transition, and Length of Stay in Federal Housing Assistance Programs by <i>Andrew J. Greenlee and Kirk McClure</i> .....	41
Location Patterns of Housing Choice Voucher Households Between 2010 and 2020 by <i>Gretchen Armstrong, Alex Din, Mariya Shcheglovitova, and Rae Winegardner</i> .....	61
Section 8 in the Courts: How Civil Rights Litigation Helped to Shape the Housing Choice Voucher Program by <i>Philip Tegeler and Sam Reece</i> .....	89
Landlords and Housing Vouchers: 50 Years of Feedback by <i>Philip M.E. Garboden, Eva Rosen, and Isaiah Fleming-Klink</i> .....	107
Increasing Residential Opportunity for Housing Choice Voucher Holders: The Importance of Supportive Staff for Families and Landlords by <i>Stefanie DeLuca and Jacqueline Groccia</i> .....	123
Discrimination Against Voucher Holders and the Laws to Prevent It: Reviewing the Evidence on Source of Income Discrimination by <i>Martha Galvez and Brian Knudsen</i> .....	145
Porting to Opportunity: An Analysis of Portability in the Housing Choice Voucher Program by <i>Greg Miller</i> .....	163
Special Purpose Voucher Programs for People With Disabilities: How They've Evolved, What We've Learned, and Where We're Headed by <i>Lisa Sloane, Liz Stewart, and Kevin Martone</i> .....	179
Using Tenant-Based Vouchers To Help People Leave Homelessness: Lessons from Los Angeles by <i>Nichole Fiore, Jill Khadduri, and Sam Dastrup</i> .....	197
The Role of Vouchers in the Low-Income Housing Tax Credit Program by <i>Dan Emmanuel and Andrew Aurand</i> .....	209
Project Basing Housing Choice: What We Know and Need to Know About Project-Based Vouchers by <i>Daniel Teles and Alyse D. Oneto</i> .....	223
Can Rental Markets Absorb a Major Voucher Expansion? by <i>Will Fischer</i> .....	239
Learning from a Crisis: Strategies to Increase Flexibility in Housing Choice Voucher Implementation by <i>Sarah Gallagher, Sophie Siebach-Glover, Alayna Calabro, Victoria Bourret, and Andrew Aurand</i> .....	257
Direct Rental Assistance: Returning to the Roots of Housing Allowances by <i>Paul Joice, Katherine O'Regan, and Ingrid Gould Ellen</i> .....	275
The Future of Rental Assistance: Lessons Learned from Implementing and Evaluating a Direct-to-Tenant Cash Assistance Program, PHLHousing+ by <i>Vincent J. Reina, Matthew Z. Fowle, Sara R. Jaffee, Rachel Mulbry, and Miranda Fortenberry</i> .....	293
<b>Refereed Papers</b> .....	309
Complete Streets as a Redevelopment Strategy by <i>Arthur C. Nelson and Robert Hibberd</i> .....	311
<b>Departments</b> .....	383
<b>Data Shop</b>	
Improving Equitable Representation in Program Eligibility Data by <i>Tracey Farrigan and Mariya Shcheglovitova</i> ....	385
Calculating County-Level Housing Choice Voucher Gaps: A Methodology by <i>Shane Dabney</i> .....	401
<b>Foreign Exchange</b>	
Causes and Consequences of Zoning Reform in Auckland by <i>Ryan Greenaway-McGrevy</i> .....	413
Learning From German Publicly Led Development Strategies to Create Mixed-Income, Mixed-Use Development Projects by <i>Yonah Freemark and Tarsi Dunlop</i> .....	435
<b>Industrial Revolution</b>	
Mass Timber: A Sustainable Building Solution by <i>Jackson Morrill</i> .....	447
<b>Policy Briefs</b>	
National Scan and Narrative Review of Landlord Engagement Activities in the United States by <i>Jack Tsai and Victoria Solis</i> .....	457
<b>Referees 2023–24</b> .....	489

