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## What do we know about housing choice vouchers?

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## A B S T R A C T

The Housing Choice Voucher Program provides assistance to approximately 2.2 million households each year, making it the largest low-income housing subsidy program managed by the U.S. Department of Housing and Urban Development (HUD). This paper reviews what we know about the program. In brief, experimental research shows that vouchers help to reduce the rent burdens of low-income households, allow them to live in less crowded homes, and minimize the risk of homelessness. Research also shows, however, that the program has been far less successful in getting recipients to better neighborhoods and schools. And perhaps the greatest disappointment of the program is its limited reach. Families typically wait for years to receive a voucher, and only one in four households eligible for a voucher nationally receives any federal rental housing assistance. Another issue is that a significant share of households who receive vouchers never use them, in part because of the difficulty of finding willing landlords with acceptable units. Thus, as effective as the program is, there is still room for improvement.

Congress created the Section 8 Existing Housing Certificate program (now the Housing Choice Voucher Program) in 1974. Unlike previous federal programs that subsidized the creation of place-based affordable housing, the Section 8 program provided vouchers to households to rent units on the private market. Four decades later, the Housing Choice Voucher Program is now the largest low-income housing subsidy program managed by the Department of Housing and Urban Development (HUD). Research shows that vouchers reduce the rent burdens of low-income households, allow them to live in less crowded homes, and help them to avoid homelessness. The program has been less successful, however, in getting recipients to better neighborhoods and schools, and perhaps the greatest disappointment of the program is its limited reach. Families wait for years in most places to receive a voucher, and only one in four households eligible for a voucher nationally receives any federal housing assistance. Further, a significant minority of households who receive vouchers never use them, in part because of the difficulty of finding willing landlords with acceptable units. Thus, as effective as the program is, there is still much to learn about its operation and how we might improve it.

## 1. Voucher program overview

While slightly different variants of the voucher program have emerged over its more than four-decade existence, the basic structure has remained the same. Recipients use vouchers to help pay for housing units that they rent on the private market. They pay 30 percent of their income towards rent, while the federal government covers the rest of the rent, up to the local maximum payment standard set between 90 and 110 percent

of the Fair Market Rent (FMR), which is defined as either the 40<sup>th</sup> or 50<sup>th</sup> percentile of rents in the metropolitan area, depending on market conditions. Voucher holders are allowed to rent units with rents above the payment standard, but they must fully pay any amount that exceeds the payment standard. As a result, voucher holders can face rent burdens above 30 percent, and many do in tight markets. When voucher holders first move into a new unit, however, their rent burden may not exceed 40 percent of income.

To receive a voucher, households apply to a local Public Housing Authority (PHA), which certifies that their income is below the eligibility threshold of 80 percent of the area median income (AMI). In practice, most voucher holders have far lower incomes, typically at or below the poverty line, as PHAs are required to set aside 75 percent of the vouchers they award each year for households whose incomes are at or below 30 percent of AMI. After receiving a voucher, households have a limited time period in which they must use it (which must be at least 60 days). Households must find units that are of the appropriate size, meet federal housing quality standards, and charge a rent that the local housing authority deems reasonable given the local market. They must also find a willing landlord, as not all landlords accept tenants with vouchers. Thirteen states and a number of localities have now passed source of income discrimination laws that prohibit landlords from discriminating against voucher holders ([Poverty and Race Research Action Council, 2005](#), updated 2018), but enforcement is generally weak ([Tighe et al., 2017](#)). A number of local audit studies have found evidence that landlords discriminate against voucher holders even in the presence of such laws ([Chicago Lawyers' Committee, 2014](#); [Equal Rights Center, 2013](#); [Lawyers' Committee for Better Housing, 2002](#)).

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Households receiving a voucher can remain in their same unit as long as that unit meets the voucher program's quality standards. While households "leasing in place" receive less than the maximum housing subsidy if they live in units with monthly rents below the voucher's payment standard, around 20 percent of newly issued voucher holders use the voucher to lease their previous unit (Finkel and Buron, 2001), perhaps reflecting inertia or the challenge of finding willing landlords and acceptable units in the specified time period.

The federal government now spends close to 18 billion dollars annually to provide assistance to over 5 million people in approximately 2.2 million households (Center for Budget and Policy Priorities, 2017). On average, voucher holders receive an effective subsidy of approximately \$8000 per year.

## 2. What do we know about the effectiveness of vouchers?

A number of excellent studies have explored different aspects of the voucher program over the past 40 years. This brief paper can't do justice to the full set of existing studies, but it aims to highlight some of the key lessons we have learned about the program, focusing on experimental and quasi-experimental studies.

### 2.1. Effects on housing outcomes of recipients

A set of recent, experimental studies provide strong evidence that vouchers reduce rent burdens and improve affordability. First, the HUD-sponsored Welfare-to-Work voucher experiment, through which eligible households were randomly assigned to receive vouchers in six cities between 2000 and 2004, found that voucher recipients spent \$211 per month less on rent and utilities as compared to control group members and spent significantly more on food (Mills et al., 2006, Exhibit 5.3, p. 139). Second, Jacob and Ludwig's study of a voucher lottery in Chicago found that voucher receipt enables families to reduce their spending on rent from about 58 percent of their reported income to about 27 percent (Jacob and Ludwig, 2012).

Vouchers also appear to significantly reduce homelessness. The Welfare-to-Work experiment showed that vouchers reduced the probability of a homelessness spell from 45 to 9 percentage points. Similarly, a third experimental study, HUD's Family Options Study, showed that vouchers reduce homelessness among an even more vulnerable population. The study randomly assigned families in emergency shelters in multiple cities to receive vouchers and found that after three years, vouchers reduced the probability of having been homeless or doubled up in the past six months by 18 percentage points and increased the probability of living in one's home by 16 percentage points, as compared to families receiving the usual care provided to families in emergency shelters (Gubits et al., 2016).

There is also evidence that vouchers are not simply providing an income effect, or at least that voucher holders are using some of their new effective income to improve their housing conditions. HUD's welfare-to-work voucher study found that housing vouchers lead to increases in housing unit size and reductions in the incidence of crowding (Mills et al., 2006). Drawing on non-experimental data, Carlson et al. (2012) similarly found that households receiving vouchers report having fewer adult members than a matched control group of welfare recipients. Researchers generally have few reliable measures of structural quality, but Schwartz et al. (2017) find that families who receive vouchers in New York City move into buildings with significantly fewer units and fewer code violations after they receive their vouchers.

As for neighborhood quality, one of the original motivations for establishing the voucher program was its potential to help low-income families reach neighborhoods that offer better schools and greater opportunities for economic advancement. Research shows that vouchers have had limited success in achieving this potential. To be sure, voucher holders generally live in less disadvantaged neighborhoods than the residents of public or other HUD-assisted housing (Hartung and Henig,

1997; Newman and Schnare, 2017; Kingsley et al., 2003; Pendall, 2000; Devine et al., 2003; Lens et al., 2011) and also in slightly less disadvantaged neighborhoods than the average poor household (Pendall, 2000; Wood et al., 2008; Galvez, 2011). There is also some evidence that voucher holders move to slightly better neighborhoods over time (Eriksen and Ross, 2013; Feins and Patterson, 2005), and that voucher holders with children just reaching school age are especially likely to move to neighborhoods with better schools, especially in looser housing markets (Ellen et al., 2016).

That said, voucher holders still live in very disadvantaged neighborhoods, with higher poverty rates than the neighborhoods surrounding developments subsidized through the Low-Income Housing Tax Credit, now the largest federal vehicle for low-income housing production (McClure, 2006). Further, families with vouchers live near to schools that are lower-performing than those close to other poor families (Ellen et al., 2014).

It is unclear why voucher holders don't get to better neighborhoods. Part of the issue may be search costs or a lack of information (Rosen, 2014). Another issue is that voucher holders are unlikely to find as many units with rents below the local, metropolitan area-wide payment standard in better neighborhoods, which tend to be more expensive. For example, Collinson and Ganong (2016) report that vouchers generally cover the cost of 68 percent of units in the lowest-rent neighborhoods but only 15 percent of rental homes in higher-rent neighborhoods. Landlords in higher rent areas are generally less willing to house voucher holders (Lawyer's Committee for Better Housing, 2002). Social ties also appear to play a role in potentially limiting the neighborhoods considered by voucher recipients (Ellen et al., 2017). If people choose to locate near family and friends, and disadvantaged individuals tend to have disadvantaged social networks located in higher poverty neighborhoods, then this may restrict where voucher families look for housing.

### 2.2. Effects on non-housing outcomes of recipients

There is some evidence (albeit mixed) that vouchers improve outcomes beyond housing as well. Using self-reported data from parents, the Welfare to Work Voucher study found that children with vouchers are more likely to repeat a grade in school, but less likely to miss school due to health, financial or disciplinary problems (Mills et al., 2006). Drawing on the Chicago voucher lottery and administrative data from the city's school system, Jacob et al. (2015) found that housing vouchers have no effect on graduation rates and no effects on a child's reading and math scores, with the exception of boys under age six who see improvements. By contrast, Schwartz et al. (2017) found that voucher receipt boosts test scores among children in New York City.

There is more consistent evidence about the *long-term* benefits children glean from receiving vouchers. Andersson et al (2016) examined children raised in assisted housing around the country between 1997 and 2005 and found positive effects of voucher receipt on long run earnings and incarceration rates. Similarly, the Moving to Opportunity (MTO) Demonstration program found that the young children whose families received unrestricted vouchers through the experiment saw a 15 percent boost to income in their mid-twenties. The young children whose families received vouchers that they were required to use in low-poverty neighborhoods saw even greater benefits, enjoying a 31 percent boost to earnings as young adults (Chetty et al., 2015). Importantly, the MTO research assessed the impact of voucher receipt as compared to living in public housing, so to the extent that the benefits come through income effects, it may be a lower bound on the impacts of receiving a voucher for households who do not already have another form of housing subsidy.<sup>1</sup>

Vouchers could also affect the employment of earnings of adults. On

<sup>1</sup> If the effects of vouchers come primarily through neighborhood, then MTO unrestricted voucher impacts may be an upper bound, as MTO households started out in very high poverty communities.

the one hand, the housing stability afforded by vouchers could enable adults to focus more on building skills and finding work. On the other hand, the housing subsidy might reduce pressure to find work, especially given that voucher holders must generally pay 30 percent of any additional earnings towards rent.<sup>2</sup> Researchers generally find reduced work effort in the short-run, but the evidence on long-run outcomes is mixed. [Jacob and Ludwig \(2012\)](#) found sustained reductions in earnings among voucher holders in Chicago. By contrast, the Welfare-to-Work study found that voucher holders in a larger set of cities initially saw reduced earnings but this effect disappeared after the first year in the program. The Family Options Study offered mixed findings. They found that a smaller share of the homeless adults randomly assigned to receive vouchers performed any work for pay in the three years since random assignment as compared to those receiving the usual care. But the researchers found no significant difference in the share of family heads working for pay or the share receiving public assistance at the actual time of the 37-month survey. Notably, families assigned to receive vouchers were generally in a better financial position as compared to the families receiving usual care, with fewer reporting food insecurity or economic stress.

### 2.3. Effects on communities

Potential neighbors often express concern that an increase in voucher use will reduce property values and increase crime in their communities. The few studies that have explored how vouchers affect the communities where they are used find little support for these fears. [Ellen et al. \(2012\)](#) analyzed neighborhood-level data on crime and voucher use in 10 cities and found no evidence that an increase in households using vouchers results in increased crime in a neighborhood. Rather, their analysis showed that households with vouchers tend to settle in areas where crime is already high. As for property values, [Santiago et al. \(2001\)](#) found that voucher use was positively associated with property values in Denver's higher-valued, appreciating census tracts. However, in census tracts with low and declining property values, a high concentration of voucher holders was associated with reductions in nearby prices.

Another potential concern is that vouchers may increase rents for the three out of four low-income households that don't have rental subsidies, at least in tight markets, though these effects are hard to identify. [Susin \(2002\)](#) found that increased demand from voucher recipients significantly increases the price of rental housing for unsubsidized households in low-income neighborhoods. More recently, however, [Eriksen and Ross \(2015\)](#) found little evidence of such rent increases. That said, they found that increases in the number of housing vouchers appear to increase rents for units with rents near the maximum voucher payment standard. Further, they find rent effects are greatest in the cities with inelastic housing supply. This last finding highlights the importance of tailoring housing policies to local market conditions.

### 2.4. Program costs

Deriving reliable empirical evidence on the relative cost effectiveness of vouchers is challenging. Research generally suggests vouchers cost less than production programs ([Shroder and Reiger, 2000](#); [Olsen, 2003](#)). But the best evidence is quite dated, coming from the Pittsburgh and Phoenix sites of the Experimental Housing Allowance Program (EHAP), a large demonstration project from the 1970s. [Mayo et al. \(1980\)](#) estimated ratios of total costs to market rent for demand and supply side programs and found the tenant-based subsidy was able to produce a housing unit of a given quality level at a significantly lower cost. Using more recent data, [DiPasquale et al. \(2003\)](#) also find that vouchers are more cost-effective than production programs, but that the difference in costs is smaller

than suggested in earlier literature and diminish for larger units. Notably, these analyses all ignore potential spillovers on surrounding communities.

### 3. Recent developments

In recent years, agencies have experimented with a number of reforms to the voucher program. Perhaps most notably, since 1998, HUD has designated a few public housing agencies as Moving to Work (MTW) agencies and allowed them to bypass certain HUD rules. Several housing agencies have used their flexibility to reform their voucher programs, including simplifying housing quality inspections, reducing income recertification frequency, and changing rent formulas, with an eye towards encouraging self-sufficiency and reducing administrative burdens ([Cadik and Nogic, 2010](#)). Research has yet to evaluate these changes.

With an eye to encouraging voucher holders to move to better neighborhoods, HUD launched a Small Area FMR demonstration program in 2011 ([Kahn and Newton, 2013](#)). The idea was to set voucher payment standards at the zip code level, which would expand the number of neighborhoods with units renting below the FMR. Moving to small area FMRs effectively increases the maximum voucher subsidy in high-rent neighborhoods and lowers the maximum subsidy in low-rent neighborhoods. HUD selected five PHAs for the demonstration: the Housing Authority of the City of Laredo, the Town of Mamaroneck Housing Authority, the Chattanooga Housing Authority, the Housing Authority of Cook County, and the City of Long Beach Housing Authority. In addition, PHAs in the Dallas metro area have been using Small Area FMRs since 2011 as a result of a legal settlement. Early evidence from Dallas suggests that Small Area FMRs can help more households reach low-poverty neighborhoods at little additional cost. [Collinson and Ganong \(2016\)](#) found that relative to voucher holders in neighboring Fort-Worth, Dallas movers reached neighborhoods about 0.23 SD higher on a composite measure of quality three years after the policy change with little net costs to the government. They found the greatest improvements for safety.

Interim findings from a HUD Fair Market Rent Demonstration Program, which studied the short-term effects of the implementation of Small Area FMRs in five additional public housing authorities, confirm that Small Area FMRs operate as expected and increase the pool of units potentially available to housing choice voucher holders in high-opportunity neighborhoods and decrease the number available in low-opportunity neighborhoods ([Finkel et al., 2017](#)). Further, the study showed that among voucher holders who move, the share locating in ZIP Codes with relatively high rents increased by 10 percentage points after the introduction of Small Area FMRs, whereas no such change was observed in a set of comparison jurisdictions. And we find these effects are achieved at no additional cost to the government.

In November of 2016, HUD issued a final rule to expand the use of Small Area FMRs. Specifically, HUD announced that any housing authority could voluntarily adopt Small Area FMRs, and it would require their use in place of the higher FMRs (set at 50<sup>th</sup> rather than 40<sup>th</sup> percentile of rents) it had permitted since 2001 for 24 large metropolitan areas where voucher holders were concentrated in a small set of census tracts and vacancy rates were above 4 percent ([Federal Register, 2016](#)).<sup>3</sup> In addition, any housing authority is free to adopt them voluntarily.

### 4. Outstanding challenges

As effective as the voucher program is, HUD and local housing authorities should continue to work to improve the functioning of the program. The key outstanding challenges include increasing the lease-up

<sup>2</sup> See [Collinson et al. \(2016\)](#) for a discussion of how the voucher and public housing rent subsidy structures interact with the Earned Income Tax Credit.

<sup>3</sup> On August 11th, 2017, HUD suspended the mandatory implementation of Small Area FMRs, but a U.S. District Court judge ordered the agency to reinstate the rule in December of 2017.

rate, encouraging more voucher holders to move to high opportunity neighborhoods, designing fairer and more efficient selection systems, and expanding the program's reach.

One basic challenge with the program is the fact that many voucher recipients never successfully rent homes with their vouchers. The latest national study of success rates found that three out of every 10 households that received a voucher in 2000 failed to rent a unit in the time-frame allowed by the program. In tight markets, the failure rate was four in ten (Finkel and Buron, 2001). But there is considerable variation across housing authorities, even in tight markets, suggesting that policy reforms could help to boost the success rate and the administrative efficiency of the program. The national study from 2000 found that the frequency of landlord outreach was associated with higher success rates. Enactment and enforcement of source of income discrimination laws might help to boost success rates, as might other reforms to make the program easier to use.

Boosting landlord outreach and simplifying program rules could also potentially help voucher households reach a broader set of neighborhoods. Housing authorities wishing to expand the set of neighborhoods available to voucher holders should experiment with new approaches to landlord recruitment in addition to trying to provide information to voucher holders about local neighborhoods and schools, circulating more representative lists of available units, and offering financial incentives. And they should work with researchers to rigorously evaluate such reforms.

It is also important for housing authorities to continue to refine their allocation systems, given that only one in four eligible households actually receives a federal housing subsidy. Almost all housing authorities use waiting lists to allocate vouchers. PHAs can establish local preferences for selecting applicants from its waiting list, such as preferences for homeless families, victims of domestic violence and those who are involuntary displaced. But even families facing such dire situations typically face long waits to receive vouchers. Reliable estimates of average waitlist times are difficult to find, but it is not uncommon for housing voucher waitlists to exceed two years and in many cases much longer (Collinson et al., 2016).

This system is problematic for many reasons. First, the households who have lingered the longest on a waitlist may not necessarily be the neediest. Further, the first-come, first-served approach is counter-productive for PHAs who want to privilege families with young children. By the time families are offered a voucher, their children are typically older and are often embedded in schools and friendship networks that they don't want to leave (Ellen et al., 2016). While the local preferences that housing authorities establish are designed to provide assistance more quickly to households with the greatest needs, they may not be effective in identifying tenants who will benefit the most from housing subsidies, and as noted, waits are often quite long even for the households who qualify for local preference.<sup>4</sup>

There is also an efficiency issue: by the time households reach the top of a waitlist, their contact information is likely to be outdated and they may no longer be eligible. Despite huge levels of need, it can thus take housing authorities a while to find an eligible voucher recipient from their waiting lists. One possibility is that housing authorities switch to annual lotteries, which a few currently use. Annual lotteries would arguably be more fair, avoid distorting behaviors, and help to ensure that contact information is fresh. This is an area ripe for experimentation and market design research more generally.

As for expanding program reach, federal housing assistance falls woefully short of needs. As noted, fewer than one in four eligible households receive subsidies through HUD programs. In addition to leaving many literally out in the cold, this also makes the program ill-suited to address the problem of income volatility. Households experiencing sudden income loss rarely receive timely federal housing

assistance that could help them avoid eviction. To expand reach, the program could potentially provide either smaller or more time-limited subsidies to a larger share of income-eligible households than currently receive housing help from the government. These options are naturally controversial. We currently have little evidence about the impacts of such shallow or time-limited subsidies, though HUD's recent Family Options Study suggests that longer-term vouchers are better able to help homeless families avoid future spells of homelessness, remain in stable housing situations and live independently. But understanding more about the effects of short-term support is critical.

## 5. Conclusion

In short, we have learned a lot about the voucher program over its more than 40-year history. There is strong evidence that the program is highly effective in addressing the housing issue that most challenges low-income households in U.S. cities today: affordability. It stabilizes families, protects them from homelessness and reduces the amount they must pay each month for rent. To be sure, vouchers may need to be supplemented with supply-side interventions in tight markets, and housing agencies should continue to experiment with new ways to improve the administration of the program in order both to serve existing families better and to expand the number of families that can be served given a set level of resources. Researchers should evaluate these efforts to identify those that are most effective and scalable.

## References

- Andersson, Fredrik, John, Haltiwanger, Mark, Kutzbach, Palloni, Giordano, Pollakowski, Henry, Weinberg, Daniel H., 2016. Childhood Housing and Adult Earnings: a Between-siblings Analysis of Housing Vouchers and Public Housing. NBER Working Paper No. 22721. Cambridge, MA, National Bureau of Economic Research.
- Cadik, Emily, Nogie, Amanda, 2010. Moving to Work: Interim Policy Applications and the Future of the Demonstration. Report to Congress. U.S. Department of Housing and Urban Development.
- Carlson, Deven, Haveman, Robert, Kaplan, Thomas, Wolfe, Barbara, 2012. Long-term effects of public low-income housing vouchers on neighborhood quality and household composition. *J. Hous. Econ.* 2, 101–120. June 21.
- Chetty, Raj, Hendren, Nathaniel, Katz, Lawrence F., 2016. The effects of exposure to better neighborhoods on children: new evidence from the Moving to Opportunity experiment. *Am. Econ. Rev.* 106 (4), 855–902.
- Center for Budget and Policy Priorities, 2017. Housing Choice Voucher Fact Sheets. <https://www.cbpp.org/housing-choice-voucher-fact-sheets>.
- Chicago Lawyers' Committee for Civil Rights Under Law, Inc, 2014. Fair Housing Testing and Survey Project: Final Report. Chicago Housing Authority. Accessed March 30, 2016. <http://cafa.net/wp-content/uploads/2014/02/CLCCRUL-CHA-testing-report.pdf>.
- Collinson, Robert A., Gould Ellen, Ingrid, Ludwig, Jens, 2016. Low-income housing policy. In: Moffitt U, Robert A. (Ed.), *Economics of Means-tested Transfer Programs in the United States*, vol. II. Chicago Press.
- Collinson, Robert A., Ganong, Peter, 2016. The Incidence of Housing Voucher Generosity. Working Paper. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2255799](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2255799).
- Devine, D.J., Gray, R.W., Rubin, L., Taghavi, L.B., 2003. Housing Choice Voucher Location Patterns: Implications for Participant and Neighborhood Welfare. U.S. Department of Housing and Urban Development, Washington, DC.
- DiPasquale, Denise, Fricke, Dennis, Garcia-Diaz, Daniel, 2003. Comparing the costs of federal housing assistance programs. *Econ. Policy Rev.* 9 (2).
- Ellen, Ingrid Gould, Lens, Michael, O'Regan, Katherine, 2012. American murder mystery revisited: do housing voucher households cause crime? *Hous. Policy Debate* 22 (4), 551–572.
- Ellen, Ingrid Gould, Horn, Keren M., Schwartz, Amy E., 2016. Why Don't housing choice voucher holders live near better Schools? Insights from big data. *J. Pol. Anal. Manag.* 35 (4), 884–905.
- Ellen, Ingrid Gould, Suher, Michael, Torrats-Espinosa, Gerard, 2017. Neighbors and networks: the role of social interactions on the residential choices of housing choice voucher holders. *J. Hous. Econ.* forthcoming.
- Eriksen, Michael D., Ross, Amanda, 2013. The impact of housing vouchers on mobility and neighborhood attributes. *R. Estate Econ.* 41, 255–277.
- Eriksen, Michael D., Ross, Amanda, 2015. "Housing vouchers and the price of rental housing. *Am. Econ. J. Econ. Pol.* 7 (3), 154–176.
- Equal Rights Center, 2013. Will You Take My Voucher?: an Update on Housing Choice Voucher Discrimination in the District of Columbia. The Equal Rights Center, Washington, DC.
- Federal Register, 2016. Small Area Fair Market Rents in Housing Choice Voucher Program Values for Selection Criteria and Metropolitan Areas Subject to Small Area Fair Market Rents, vol. 81. No. 221/Wednesday, November 16, 2016.

<sup>4</sup> Specifying preferences can also potentially pose moral hazard concerns.



- Feins, Judith D., Patterson, Rhiannon, 2005. Geographic mobility in the housing choice voucher program: a study of families entering the program, 1995-2002. *Citiescape* 8 (2), 21–48.
- Finkel, Meryl, Buron, Larry, 2001. Study on Section 8 Voucher Success Rates: Volume I: Quantitative Study of Success Rates in Metropolitan Areas. Abt Associates, Cambridge, MA.
- Finkel, Meryl, Dastrup, Samuel, Burnett, Kimberly, Alvarez, Thyria, Climaco, Carissa, Sousa, Tanya de, 2017. Small Area Fair Market Rent Demonstration Evaluation: Interim Findings. Abt Associates, Cambridge, MA.
- Galvez, M., 2011. Defining “Choice” in the Housing Choice Voucher Program. Dissertation Manuscript.
- Gubits, Daniel, et al., 2016. Family Options Study: Three-year Impacts of Housing and Services Interventions for Homeless Families. U.S. Department of Housing and Urban Development, Washington, DC.
- Hartung, J.M., Henig, J., 1997. Housing vouchers and certificates as a vehicle for deconcentrating the poor: evidence from the Washington, D.C., metropolitan area. *Urban Aff. Rev.* 32, 403–419.
- Jacob, Brian A., Ludwig, Jens, 2012. The effects of housing assistance on labor supply: evidence from a voucher lottery. *Am. Econ. Rev.* 102 (1), 272–304.
- Jacob, Brian A., Kapustin, Max, Ludwig, Jens, 2015. The impact of housing assistance on child outcomes: evidence from a randomized housing lottery. *Q. J. Econ.* 130 (1), 465–506.
- Kahn, Peter, Newton, Geoffrey, 2013. The small area FMR demonstration. *Citiescape* 15 (1), 325–328.
- Kingsley, T.G., Johnson, J., Pettit, K.L.S., 2003. Patterns of section 8 relocation in the HOPE VI program. *J. Urban Aff.* 25, 427–447.
- Lawyers Committee for Better Housing, 2002. Locked Out: Barriers to Choice for Housing Voucher Holders. Lawyers Committee for Better Housing, Chicago, IL. Downloaded from. <http://lcbh.org/sites/default/files/resources/2002-lcbh-housing-voucher-barriers-report.pdf>.
- Lens, M., Ellen, I.G., O'Regan, K., 2011. Do vouchers help low-income households live in safer Neighborhoods? Evidence on the housing choice voucher program. *Citiescape* 13, 135–159.
- Mills, G., Gubits, D., Orr, L., Long, D., Feins, J., Kaul, B., Wood, M., Jones, A., Cloudburst Consulting Associates, the QED group, 2006. The Effects of Housing Vouchers on Welfare Families. U.S. Department of Housing and Urban Development, Office of Policy Development and Research, Washington, DC.
- Mayo, Stephen K., et al., 1980. Housing Allowances and Other Rental Assistance Programs—a Comparison Based on the Housing Allowance Demand Experiment, Part 2: Costs and Efficiency. Abt Associates Inc, Cambridge, MA.
- McClure, Kirk, 2006. The Low Income Housing Tax Credit program goes mainstream and moves to the suburbs. *House Policy Debate* 17, 419–446.
- Newman, J. Sandra, Ann, B. Schnare, 1997. ...'And a suitable living environment': the failure of housing programs to deliver on neighborhood quality. *Hous. Policy Debate* 8, 703–741.
- Olsen, Edgar O., 2003. Housing programs for low-income households. In: Moffitt U, Robert A. (Ed.), *Means-tested Transfer Programs in the United States*. Chicago Press, pp. 365–442.
- Pendall, R., 2000. Why voucher and certificate users live in distressed neighborhoods. *Hous. Policy Debate* 11, 881–909.
- Poverty and Race Research Action Council, 2005. In: *Keeping the Promise: Preserving and Enhancing Housing Mobility in the Section 8 Housing Choice Voucher Program: Final Report of the Third National Conference on Housing Mobility*. Appendix B, Updated 2014.
- Rosen, Eva, 2014. Rigging the rules of the game: how landlords geographically sort low-income renters. *City Community* 13 (4), 310–340.
- Santiago, Anna M., George, C. Galster, Tatian, Peter, 2001. Assessing the property value impacts of the dispersed housing subsidy program in denver. *J. Pol. Anal. Manag.* 20 (1), 65–88.
- Schwartz, Amy, Horn, Keren, Ellen, Ingrid Gould, Cordes, Sarah, 2017. Do housing vouchers improve academic performance: Evidence from New York City. Paper presented at Federal Reserve Bank of Minneapolis.
- Shroder, D. Mark, Reiger, Arthur J., 2000. Vouchers versus Production Revisited. Working paper. U.S. Department of Housing and Urban Development.
- Susin, Scott, 2002. Rent vouchers and the price of low-income housing. *J. Publ. Econ.* 83, 109–152.
- Tighe, Rosie, Hatch, Megan, Mead, Joseph, 2017. Source of income discrimination and fair housing. *J. Plann. Lit.* 32 (1), 3–15.
- Wood, M., Turnham, J., Mills, G., 2008. Housing affordability and family well-being: results from the housing voucher evaluation. *Hous. Policy Debate* 19, 367–412.