Measuring and Explaining the Decline in Housing Voucher Take-up: New Evidence from Administrative Data

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March 2025

The Housing Choice Voucher program is the largest source of rental assistance in the country, helping nearly 2.3 million low-income households to afford their rent in an environment where households increasingly struggle to find safe and affordable housing. Vouchers have been shown to deliver substantial benefits to households who use them, including decreasing rent burdens, homelessness, and overcrowding, and improving children's performance in school (Ellen and Torrats-Espinosa, 2020; Jacob and Ludwig, 2012; Mills et al., 2006; Wood et al., 2008; Schwartz et al., 2020).

The voucher program leverages the existing rental housing stock, as participants find and rent their own housing on the private rental market. While the program was designed to open up more choices to low-income, assisted households, households who are issued vouchers face significant hurdles in finding homes where they can use them. Specifically, voucher recipients must find units that pass quality inspections, charge rents that fall within the program's rent ceilings, and are owned by landlords who are willing to accept vouchers and participate in the program.

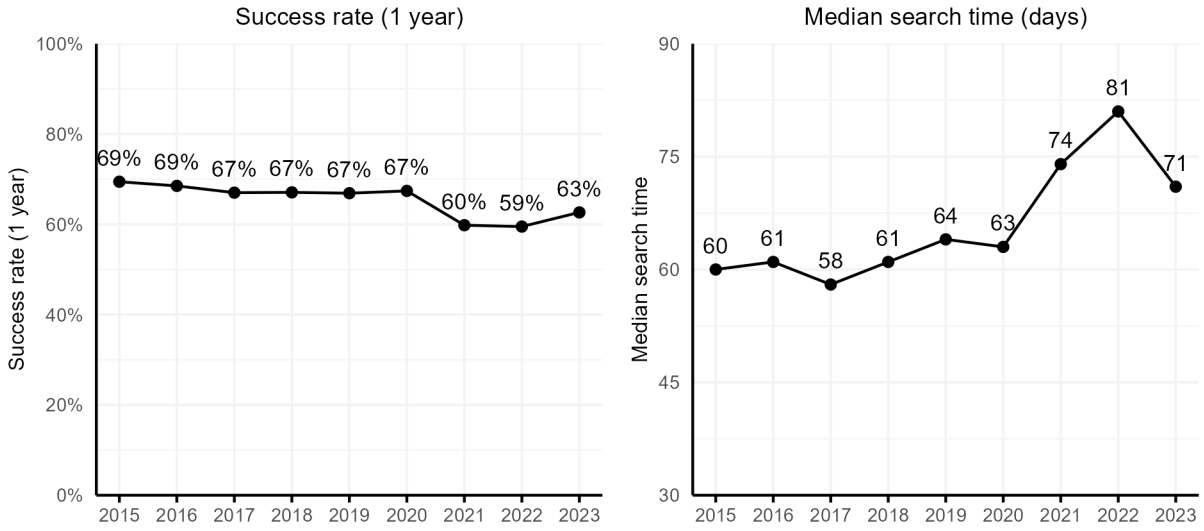
Despite this potential take-up challenge, there is almost no work studying temporal or spatial variation in the share of voucher recipients who succeed in using their voucher ('success rates'). The primary reason is that no timely measures of success rates are available. In this paper, we apply a new method that relies solely on administrative data from the U.S. Department of Housing and Urban Development (HUD) that permits, for the first time, timely estimates of voucher success rates for the majority of housing agencies across the country (covering roughly three quarters of voucher holders[1]). We can also use these data

[1]Our sample for this paper includes over 1.7 million new voucher recipients between 2015–2023, from 1,042 of the over 2,000 housing authorities that administer vouchers.

to calculate how long it takes successful households to lease homes with their vouchers.

Using this method, we document a striking decline in voucher success rates in the post-pandemic period. As shown in Figure 1, between 2020 and 2021, the share of households nationally who were able to use their vouchers dropped 7 percentage points from 67 to 60 percent. Success rates remained low in 2022, and have since ticked up to 63 percent in 2023, remaining substantially lower than pre-pandemic levels. Search times increased sharply during the same time period. In 2020, it took the median household 62 days to use their voucher; by 2022, that had increased by over 25 percent, to 78 days. In 2023, search times dropped to 71 days.

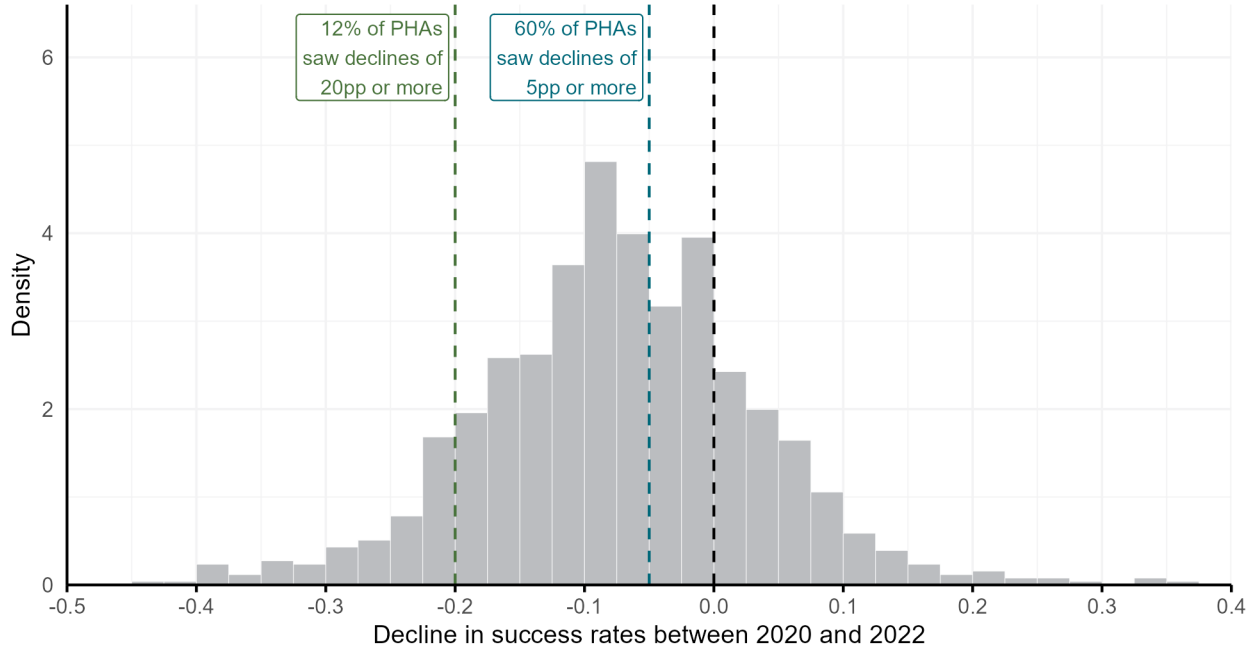
Figure 1: Success rates and search times, 2015–2023



We show that the decline in success rates in the post-pandemic era was widespread, though not universal (see Figure 2). Around 60 percent of housing authorities that administer vouchers saw a decline of at least 5 percentage points, with 12 percent of housing authorities seeing declines of over 20 percentage points. Additionally, the decline was consistent across all racial and ethnic groups, and across household composition categories. The only demographic group that seems to have avoided a large decline in success rates is households with heads over 65.

The heart of the paper examines the factors that explain the recent changes in voucher success rates, and their variation across places. One key factor is local housing market conditions. We leverage the high frequency of our measures and broad coverage of our sample to examine how changes in various measures of local housing market conditions at the county level affect voucher success rates and search times at six-month intervals. First,

Figure 2: Distribution of the decline in success rates between 2020 and 2022 across housing authorities



using data on asking rents from Zillow and restricted use data from HUD and the United States Postal Service (USPS) on vacancy rates[2], we examine the association between different measures of local market tightness and outcomes for voucher holders. We also draw on the Wharton Residential Land Use Regulatory Index (WRLURI) on regulatory barriers and data on the size and composition of the rental stock to test whether and how these conditions may affect variation in success rates and changes in those rates over time (Gyourko et al., 2021).

Second, we also look specifically at housing availability at the low-end of the rent distribution. Drawing on recent work that estimates housing agency service areas (Tauber et al., 2024), we calculate vacancy rates specific to the voucher-eligible stock for each agency's catchment area to see if they are more correlated with voucher outcomes than overall rental vacancy rates.

We will also consider changes in the stock of "voucher-friendly units," or homes that are eligible under the program's guidelines, owned by landlords who are willing to participate in the program, and have been occupied by voucher holders in the past. In 2020 and 2021, there was a pronounced decline in both the share of voucher households exiting the program and

[2]Specifically, we use the monthly Zillow Observed Rent Index (ZORI) at the county level to look at rent increases. HUD/USPS vacancy rate data is available on a quarterly basis at the census tract level; we use this source to calculate county level vacancy rates.

the share moving homes, which meant that fewer voucher-friendly units became available each month. We leverage our expansive sample, which covers over 1,000 housing authorities, to assess how the availability of voucher-friendly units relates to search experiences for new voucher recipients.

Beyond exploring the relationships between local market conditions and voucher success rates, we exploit policy variation across different quasi-experimental designs to measure how different policy interventions either contributed to or curtailed the 2020-2022 decline and the subsequent, partial recovery in 2023. First, we test a change HUD made in the second half of 2022 to it's methodology used to calculate Fair Market Rents (FMRs), which determine rent ceilings in the program. While FMRs have always been updated annually, the methodological changes aimed to correct the lag between the maximum rents for the program and actual market rents that can occur in places where rents rise rapidly. We employ a dosage event study design to determine if sudden and large increases in rent ceilings helped to boost success rates (or mitigate continued declines).

A second source of policy variation arises from temporal and cross-sectional variation in eviction moratoria in the pandemic and post-pandemic era. If eviction bans reduced the level of turnover in the voucher-affordable segment of the housing stock, this could directly impact the ability of new voucher recipients to find homes and use their vouchers. Following several recent papers on pandemic-era eviction moratoria (Sandoval-Olascoaga et al., 2021; Leifheit et al., 2021; Andre et al., 2023), we use a staggered differences-in-differences approach to estimate how these moratoria may have affected voucher turnover, and ultimately, success rates for new voucher recipients.

Our paper makes several contributions. First, we use a new methodology and unique administrative data to measure and document large, recent declines in take-up rates in one of our largest forms of housing assistance, contributing to a small but growing literature on housing voucher success rates that has typically focused on a smaller set of housing authorities (Ellen et al., 2024; Chyn et al., 2019; Finkel and Buron, 2001). Second, this study is the first to use more accurate and geographically granular measures of rents, vacancy rates, and housing market turnover to better understand how market conditions shape voucher program outcomes. Third, we use a quasi-experimental approach to understand how programmatic changes to the voucher program (specifically, changes in how HUD measures and calculates rent ceilings), can affect the ability of households to use their vouchers amid changing rental market conditions. Additionally, our unique data and context allow us to systematically and comparably measure search time within the voucher program; this is a both an important measure of search costs for low-income households, and a valuable metric for monitoring housing market conditions.

We also contribute to the existing literature on how housing market conditions can shape access to affordable and high-quality housing for low-income households. We add to work that documents how increasing prices can disproportionately affect low-income households (Albouy et al., 2016; Gyourko et al., 2013). Several papers also document the relationship between housing prices and homelessness (Honig and Filer, 1993; Quigley et al., 2001; O'Flaherty, 2004; Hanratty, 2017; Colburn and Aldern, 2022). Given that housing vouchers are one of the primary tools to fight homelessness, this paper fills an important gap in understanding how the voucher program operates during periods of rising rents. Finally, we add to the literature on how broader housing policies, like eviction bans and land use regulations, can affect the affordability and conditions for low-income households, perhaps unintentionally (Albouy and Ehrlich, 2018; Molloy et al., 2022; An et al., 2022; Stacy et al., 2023; Song, 2025), by showing the degree to which more stringent regulation and slower growth in the housing stock may affect housing voucher success rates.

Acknowledgments

This work was supported by the US Department of Housing and Urban Development's Research Partnership Program (Cooperative Agreement #RP-21-NY-004) and the Wells Fargo Foundation (grant number #22974939). The authors have no financial relationships or other potential conflicts of interest to declare.

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