

Do Homelessness Prevention Programs Prevent Homelessness?*

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William Evans
University of Notre Dame

James X. Sullivan
University of Notre Dame

Melanie Wallskog
University of Notre Dame

Abstract

Each year millions of Americans experience homelessness and many more are brought to the brink of homelessness. The public and private costs of unstable housing are very high. In recent years, policy makers have given greater attention to programs that provide services for individuals before they become homeless. Throughout the country, local governments and nonprofit organizations provide financial assistance to those facing imminent homelessness. Despite the prevalence of these efforts, there is very little evidence on the extent to which they actually prevent homelessness. This paper exploits quasi-random variation in the allocation of assistance in Chicago to determine the impact of providing temporary financial assistance. The Homelessness Prevention Call Center in Chicago (HPCC) connects those at risk of homelessness with such assistance, but the availability of funding varies unpredictably on a day-to-day basis. Consequently, we can determine the impact of the program on homelessness by comparing outcomes for those whose first call is when funds are available to those whose first call is when no funds are available. Our results show that eligible callers seeking rent assistance on a day when funding is available are 1.3 percentage points less likely to enter a shelter within 3 or 6 months than someone who calls when no funding is available, a reduction of more 60 percent. The impact of financial assistance is largest for those calling during winter months and for low-income callers. We estimate the per-person cost of averting a new case of homelessness through emergency assistance to be about \$16,000. While this estimate exceeds the average cost of providing shelter for individuals who become homeless, if private costs and other social costs are sufficiently high, preventing homelessness through emergency financial assistance could be cost effective.

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I. Introduction

Millions of individuals across the United States lack stable housing. Over the course of a year, this includes more than 2.3 million people who experience homelessness (National Coalition, 2009), 7.4 million people who live “doubled up” with friends or family for economic reasons (Batko, 2013), and countless others who are on the brink of homelessness. The prevalence of homelessness is of particular concern given its strong association with many negative outcomes. Homeless adults have four times the age-adjusted mortality rate of the general population (Barrow et al., 1999), have much higher use of acute care medical care (e.g., hospitalizations and emergency department visits) and much lower prescription drug compliance than the US population (Kushel, Vittinghoff and Haas, 2001). Homelessness is particularly devastating for children. One fifth of homeless children have been separated from their families, and one quarter suffers from depression. They are twice as likely to have a learning disability and to repeat a grade. Frequent moving is associated with lower test scores and reduced educational attainment after controlling for other factors (Haveman, Wolfe and Spaulding, 1991). Furthermore, homelessness is very costly to society. Spellman et al. (2010) estimate an average cost of providing shelter for individuals who enter homelessness for the first time of about \$2,400, and Flaming et al. (2015), estimate the public costs (including health care, police and incarceration, and welfare programs such as food stamps) of the overall homeless in Los Angeles to be \$5,148 annually. The costs for providing housing and supportive services to the chronically homeless are considerably higher, topping \$50,000 annually (Moulton, 2013).

Policies to reduce homelessness and promote more stable housing are varied. Historically, these initiatives have focused on providing housing services to those who are already homeless through emergency shelters or transitional housing. More recently, there has been a “fundamental redirection in the nation’s homelessness assistance policies” (Culhane et al., 2011) as policy makers have focused on homelessness prevention efforts. The 2008 American Recovery and Reinvestment Act included \$1.5 billion through the Homelessness Prevention and Rapid Re-housing Program (HPRP) for homelessness prevention activities (ARRA, 2009). The nature of prevention efforts vary broadly and include: vouchers designed to make housing more affordable; interventions that provide temporary rent assistance to prevent people from entering homelessness; programs to quickly house those who recently entered homelessness; and efforts to place those who are chronically homeless in permanent supportive housing. The latter two

interventions are typically described as prevention efforts because they are designed to prevent future homelessness (Burt, 2005).

One common homelessness prevention strategy is to provide emergency financial assistance to people facing eviction in order to keep them in their place of residence. Throughout the country, local governments and nonprofit organizations provide this assistance to qualifying individuals and families. Despite the prevalence of these efforts, there is very little evidence on the extent to which they actually prevent homelessness. In fact, in the broader literature on the effects of housing assistance and homelessness prevention programs, homelessness is rarely used as an outcome.

We examine the effectiveness of emergency financial assistance using data from the Homelessness Prevention Call Center (HPCC) in Chicago, which processes about 75,000 calls annually from city residents at risk of becoming homeless. The HPCC refers eligible callers to agencies that provide temporary financial assistance to help families pay for rent, utility arrears, or security deposits for new accommodations. There are two key features of the HPCC that allow us to examine the impact of emergency financial assistance on homelessness through a quasi-experimental design. First, the call center collects descriptive information on all callers to determine eligibility before informing the callers about whether any funds are currently available. Second, the availability of funding for financial assistance varies unpredictably on a day-to-day basis. Consequently, those who receive assistance are effectively a random subset of eligible households, once you condition on a small set of observable characteristics that affect access to funds for certain funding agencies. To verify that the availability of emergency assistance funds is functionally random, we compare the observable characteristics of those who call when funds are available to those who call when no funds are available. These analyses show that after controlling for factors that might affect availability to certain funds, the observable characteristics are very similar across the two groups.

To measure the impact of emergency assistance for this population, we link the call center information to administrative data on entries to and exits from homeless shelters in Chicago. Our results show that eligible callers seeking rent assistance on a day when funding is available are 1.3 percentage points less likely to enter a shelter within 3 months than someone who calls when no funding is available, a reduction of more than 60 percent, and this effect persists—the impact on shelter entry within 12 months after the call is only slightly smaller than

the impact within 3 months. We also find that access to rent assistance results in a significant reduction in the unconditional number of days spent in a shelter, but most of this effect can be explained by the effect on the extensive margin. We find similar, though not statistically significant results for clients seeking assistance with security deposits, a result suggestive of a Type II error due to smaller sample sizes. Analyses for various demographic groups indicate that the effect of access to rent assistance is most noticeable for males, those calling in the winter months and for the lower income individuals; for this last group eligible callers who contact the HPCC on a day when funding is available are 2.1 percentage points less likely to enter a homeless shelter—a reduction of over 90 percent.

A common criticism of emergency financial assistance programs is that they tend to be poorly targeted, because it is very difficult to identify those who truly are facing an imminent risk of homelessness (Shinn et al., 2001; Burt, 2005; Culhane et al., 2010). Consequently, many of those who receive assistance would not have become homeless even without the assistance, suggesting that the temporary financial assistance is, in large part, crowding out other resources that may be used to avoid becoming homeless. We estimate the per-person cost of averting a new case of homelessness through emergency assistance to be about \$16,000. While this estimate exceeds the average cost of providing shelter for individuals who become homeless, if private costs and other social costs are sufficiently high, preventing homelessness through emergency financial assistance could be cost effective.

The outline of this paper is as follows. In the following section we describe homelessness treatment and prevention policies in the U.S., including the provision of temporary financial assistance, which is the focus of this study. In Section 3 we summarize the limited body of research that examines homelessness prevention interventions that target people on the brink of homelessness. In Section 4, we explain the intake process at the HPCC that allows us to evaluate the impact of this program using a quasi-experimental design. In Section 5, we describe our call center and homeless shelter data. In Section 6, we explain our empirical strategy for identifying the effect of emergency assistance on homelessness, and we consider the validity of key assumptions. We present our main results in Section 7; and those for subgroups and alternative specifications in Section 8. We discuss the costs of reducing homelessness through emergency financial assistance in Section 9 and offer conclusions in Section 10.

II. Homelessness Treatment and Prevention Policies

Homelessness policy can be broadly divided into two categories: treatment and prevention. Historically, American homelessness policy focused on treatment, emphasizing "continuums of care," by providing case management and continued emergency and transitional shelter for people who are already homeless. The McKinney-Vento Homeless Assistance Act¹ of 1987 was the first major coordinated federal effort to deal with the problem of homelessness. Although amended many times over the past two and half decades, the legislation primarily provided federal money for homeless shelter programs for those who are already homeless. This focus on treatment rather than prevention has run into considerable criticism. The National Coalition for the Homeless notes in their history of the McKinney-Vento acts and its amendments that its "greatest weakness is its focus on emergency measures-- it responds to the symptoms of homelessness, not its causes."²

The most common examples of initiatives to treat and manage the homeless are emergency and transitional shelters. Emergency shelters are intended for short-term crises, usually providing a place to sleep for less than 12 hours as well as food and supportive services. Transitional housing shelters provide rooms or apartments for several years with the intention of transitioning residents into permanent, affordable housing. As of 2014, across the country there were 249,000 beds in emergency shelters and 173,000 beds in transitional housing (HUD, 2014a).

In more recent years, the policy focus has moved away from treating those who are already homeless towards homelessness prevention initiatives. President Obama in the preface to the 2010 federal *Open Doors* initiative by the U.S. Interagency Council on Homelessness noted that "Instead of simply responding once a family or a person becomes homeless, prevention and innovation must be at the forefront of our efforts" (USICH, 2010). Changes in the most recent reauthorization of the McKinney-Vento Act and the appropriation of \$1.5 billion through HPRP for homelessness prevention activities demonstrate a "fundamental redirection in the nation's homelessness assistance policies" (Culhane et al., 2011).

The term "homelessness prevention" is used to refer to a broad set of policies that includes initiatives to prevent those who are currently housed from becoming homeless, to

¹ Pub. L. 100-77, July 22, 1987.

² <http://www.nationalhomeless.org/publications/facts/McKinney.pdf>.

provide housing quickly for those who have become homeless, and to offer permanent housing for the chronically homeless. The U.S. Department of Housing and Urban Development (HUD) classifies homelessness prevention initiatives into three types: primary, secondary and tertiary (Burt et al., 2005). Primary homelessness prevention initiatives target individuals and families that are not currently homeless. Examples include making housing more affordable through public and subsidized housing, increasing household incomes, helping transition people exiting institutions such as mental hospitals and jails into stable housing, and providing financial or other assistance to those facing imminent risk of homelessness, which is the focus of this study.

Throughout the country, local governments and nonprofit organizations provide financial assistance to qualifying individuals and families in an effort to prevent homelessness. Support for these efforts come from Federal, state and local funding as well support from community foundations and other private foundations. For example, many providers receive support for financial assistance programs through formula grants from the Emergency Solutions Grants (ESG) Program. In 2014, the ESG allocated \$250 million to state and local governments, who then allocated these funds to local agencies. Each ESG grant must be matched nearly 100 percent by funds at the state or local level (HUD 2014c).

The most common way that those in need connect with agencies providing financial assistance is through call-center referral networks. For example, the 2-1-1 network, in collaboration with United Way and the Alliance of Information & Referral Services (AIRS), operates call centers throughout the United States that process more than 15 million calls annually (211.org, 2015b). As of February 2015, the 2-1-1 network operates regional information and referral call centers that are accessible by 93 percent of the American population; this coverage includes parts of all 50 states, Washington, D.C., and Puerto Rico, with only 11 states having less than 100 percent coverage (211.org, 2015a).

Secondary prevention initiatives aim to intervene during the early stages of a spell of homelessness by providing temporary housing assistance to avoid the harmful effects that accumulate while one is homeless. This focus on quickly re-housing the homeless is a relatively new model that has recently received growing attention at the federal level. In 2008, the federal government allocated \$25 million to launch the Rapid Re-Housing Demonstration Program to support local efforts to move the homeless into permanent housing as quickly as possible. A year later, HPRP was created, providing additional support for the rapid re-housing model, and the

Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act of 2009, which reauthorized the McKinney-Vento Act, emphasized rapid re-housing as a newly eligible prevention initiative (National Alliance to End Homelessness, 2014; HUD, 2014b).

Tertiary prevention aims to intervene in the cases of long-term, frequently chronic, homelessness, thereby preventing prolonged spells of homelessness (Burt, 2005). Often, these efforts entail providing permanent housing coupled with supportive services for individuals and families who are chronically homeless, or for those with substance abuse or other health problems. The national inventory count of homeless shelter beds in 2014 included 300,000 beds in permanent supportive housing (HUD, 2014a).

III. Prior Homeless Prevention Research

While there is a large literature that examines the effects of other primary prevention policies such as housing subsidies or public housing (see Collinson et al., forthcoming for a review), this literature rarely examines homelessness as an outcome. A primary reason for the lack of evidence for this key outcome is that the homeless population is typically not included in the sampling frame for large, national surveys, and administrative data on homelessness is difficult to come by. A recent exception is the HUD Family Options Study, a randomized controlled trial study that examined the impact three different housing interventions—transitional housing, rapid re-housing, and permanent housing subsidies—on homelessness and other outcomes (Gubits et al. 2015).

The focus of this study is on primary homelessness prevention initiatives, in particular those that provide financial assistance to at-risk individuals and families in order to keep them in their homes. There is very little research on the impact of these financial assistance programs despite the fact that such programs are widespread. As far as we know our study represents the first large-scale, quasi-experimental study of the impact of emergency financial assistance on homelessness. Other studies that have examined emergency financial assistance programs are primarily descriptive.

Rent Assistance to Families in Transition (RAFT) is a Massachusetts program that provided financial assistance to poor families on the brink of homelessness. During fiscal year 2006, the program received 6,933 applications in total, 42% of which were approved. A descriptive study of RAFT found that 79% of families facing imminent homelessness who

applied for and were given financial assistance did not become homeless within the following year (Friedman et al., 2007). Among the families who applied for but were denied financial assistance, 71% did not become homeless within the following year. Although the difference between these rates might suggest that the program reduces the likelihood of becoming homeless, it is difficult to determine whether this difference is due to the funding or the fact that accepted applicants were different from the rejected applicants.

In a meta-analysis of descriptive studies, Burt et al. (2005) examine several homelessness prevention programs across the U.S. that provide financial assistance to families and individuals facing eviction due to a short-term financial crises. The authors note that across several programs about 2 to 5 percent of families receiving assistance subsequently became homeless. They compare these homeless rates to data from New York City, which shows that 20% of families facing eviction actually became homeless (Shinn, Baumohl, and Hopper 2001). Because those who receive financial assistance are likely to be very different from a sample of residents facing eviction, it is difficult to determine whether the financial assistance had a direct effect on homelessness.

Rolston et al. (2013) is one of the rare studies that considers the direct causal impact of a primary prevention program on homelessness. This randomized controlled trial study examined the impact of the New York Homebase Community Prevention program. Like emergency financial assistance programs, Homebase is designed to prevent homelessness by keeping an at-risk population in their homes, but Homebase is a much more comprehensive intervention. The clients in the treatment group of the Homebase study were enrolled in a program that provided case management services, referrals to other services, as well as limited financial assistance. The study, which was small ($N = 295$) and limited to families with children, showed that families assigned to the treatment group were 6.5 percentage points less likely to enter a shelter (p -value = 0.05) and they spent 23 fewer nights in a shelter (p -value = 0.08).³

³ The Homebase study sample was also more disadvantaged than the HPCC callers that are included in our analysis—for example, in the Homebase sample only 48 percent were currently employed, as compared to 74 percent for families with children in our analysis sample. For quasi-experimental studies of Homebase see Messeri, O’Flaherty, and Goodman (2012) and Goodman, Messeri, and O’Flaherty (2014).

IV. The Homeless Prevention Call Center

Chicago residents who are at risk of becoming homeless can call 3-1-1 (the city's services and information hotline) to request temporary financial assistance for rent, security deposits, or utility bills. These callers are then routed to the HPCC, which processes about 75,000 calls annually. The HPCC does not provide financial assistance directly. Rather, it connects eligible callers with local funding agencies that provide resources to help address their crisis. There are two key features of the HPCC that allow us to examine the impact of emergency financial assistance on homelessness through a quasi-experimental design. First, the call center collects descriptive information on all callers to determine eligibility before informing the callers about whether any funds are currently available. Second, the availability of financial assistance from funding agencies varies unpredictably on a day-to-day basis. Consequently, those who receive assistance are effectively a random subset of eligible households, once you condition on a small set of observable characteristics that affect access to funds for certain funding agencies.

The Intake Process

At the beginning of each call routed to the HPCC, Information & Referral (I&R) Specialists collect detailed information in order to determine whether the client is eligible for financial assistance. General eligibility is determined based on 4 criteria: First, the client must be able to demonstrate self-sufficiency; their monthly income must be high enough to cover monthly housing expenses after he or she receives the temporary financial assistance. This income could come from earnings, transfers, or other sources. Second, the client must have an eligible crisis that has led to the need for assistance. This crisis may be loss of job, a salary cut, a loss of benefits, a medical emergency, crime victimization, forced displacement, or a natural disaster. Some funding agencies require documentation of the crisis that was beyond the control of the client and caused the need. Third, the client must face imminent risk of homelessness or utility shut-off. Typically the client can satisfy this requirement by presenting a five or ten day eviction notice from their landlords or a notice of utility disconnection. Fourth, the current crises must be solvable by the financial assistance. In other words, the financial assistance must cover the entire debt remaining after taking into account all other sources of assistance that have already been secured. So, for example, if the maximum amount of assistance any funding agency that is currently offering funding will provide is \$1,500, then a caller whose total outstanding

need exceeds \$1,500 would be deemed ineligible even if he or she satisfies all the other eligibility criteria.

At any given time the HPCC will have many different funding agencies to which it can refer eligible callers for assistance. These funding agencies have additional fund-specific restrictions beyond those imposed by the general eligibility rules. These fund-specific restrictions are important for our analysis because they mean that the observable characteristics of eligible callers can affect the likelihood of receiving assistance. For example, the maximum amount of assistance varies across funding sources, frequently \$300, \$900, \$1,200, or \$1,500. Thus, a caller whose final need amount is \$900 is more likely to be referred to funds than an otherwise similar eligible caller whose need is \$901 because the latter person has a need amount that exceeds the cap for more funds. The two most important factors that affect an eligible caller's access to funding are the request type (rent, mortgage, security deposits, and heating, gas, electric, and water bills) and the final need amount. Other fund specific factors include veteran status (a few funds are restricted to veterans) and receipt of housing subsidies (some funds due not allow those who receive Section 8 vouchers to receive assistance).

Not all eligible callers are "referred to funds," because funding may not be available. The availability of funding for financial assistance varies day-to-day unpredictably. New funds are coming online and existing funds are shutting down on occasion throughout the year. In addition, currently operating funds do not provide assistance continuously. The availability of funds depends on many factors such as the limited number of interview slots a funding agency might have or the amount of state funding sources that are present. For example, some funds require that clients meet with a financial counselor before funds are dispersed. This requires scheduling an appointment in advance with a counselor, and there are only a fixed numbers of appointments available each month. Some funds are supported by local utilities on a sporadic basis, resulting in an unpredictable funding stream for this need.

The HPCC has a preset order of funds to which it refers callers. The I&R Specialist will work its way through this list until it comes to a fund for which the eligible caller satisfies all the restrictions and the fund is currently taking referrals. In this case the caller is referred to that agency for financial assistance. For some agencies the I&R Specialist will provide the caller with the contact information for the funding agency, but other agencies prefer to contact the client themselves. In this case the HPCC provides the contact information for the eligible client directly

to the funding agency. If no agency currently has funds available for a particular eligible caller, the HPCC refers the caller to non-financial support services. Ineligible callers are also referred to these support services.

From the perspective of the client, the availability of funds is difficult to predict. Resource availability varies within a given day and across days and months. It is HPCC policy not to provide any information about when a program will have funds again. HPCC script guidelines include instructions for I&R Specialists to say they do not have information on when funds will be available, and not to recommend the best time to call back. For example, the I&R Specialists are provided the following instructions (HPCC 2013):

If anyone asks, “when will a fund be available?” please respond the following:

“I do not have information on when funds will be available. Unfortunately, there are not enough funds for everyone who needs assistance and availability is sporadic.”

If anyone asks, “should I call back?” please reply:

“That is up to you.”

If anyone asks, “but what is the best time to call?” please reply:

“There is no ‘best time’ to call. The need is so high in <Chicago/the Suburbs>, there are so many people trying to get access to the limited number of grants.”

All calls are recorded. The I&R Specialists typically do not have specific information on future fund availability, and even when they do, they have little incentive to deviate from the guidelines by providing this information to callers. Nevertheless, some callers may have information on the best times to call. For the purposes of our analyses, the concern is that those who call on days when funds are available might be different from those who call when funds are not available in ways that affect the likelihood that they end up homeless. We address this concern in detail in Section VI.

V. Call Center and Homeless Shelter Data

HPCC Data

Electronic records for all calls that are routed to the HPCC are entered into a proprietary database. This database is part of the broader Homeless Management Information System (HMIS) for the city of Chicago and as a result, each caller is assigned a unique ID that is also used if they receive other housing services. These HPCC records include the call date, demographic information (such as name, date of birth, address, last four digits of Social Security Number, age, and gender), request type (for rent, security deposit, or utilities), other information gathered to determine general eligibility (such as income, type of crises, whether they have an eviction notice), and information to determine whether they satisfy fund-specific restrictions (such as need amount, veteran status, and receipt of housing subsidies).

Because we have the zip code for each caller's residence at the time of the call, we can merge in data on the characteristics of the caller's neighborhood from the American Community Survey (ACS), which is implemented by the U.S. Census Bureau and is the largest household survey in the United States. In particular, for each zip code in the HPCC, we use the ACS to calculate the percentage of people with at least a high school degree, who are below the poverty line, who are participating in the labor force, and who are unemployed; the median age, monthly housing cost, and household income; and the percentage of people who are white, black, Asian, or of another race.

HMIS Data

Our measure of homelessness comes from administrative data on entries into and exits from housing facilities for the homeless in the City of Chicago. When an individual or family receives housing services, such as admission to an emergency or transitional shelter, a safe haven, permanent supportive housing, or rapid re-housing (all services that are only available to those who are already homeless), they are entered into HMIS. If the individual or family is already in the system, which would be the case if they had called the HPCC in the past, then their shelter intake information is assigned to the same unique ID that was assigned when they called the HPCC. The HMIS data for housing services for the homeless is managed by All Chicago, who provided us with the unique HMIS IDs for all shelter entries in the system between January 2010 and June 2013, which allowed us to link these data to the call center data to determine

which callers subsequently enter a homeless shelter. The HMIS data also include information on shelter entry date, shelter exit date, exit destination, family structure, age, gender, ethnicity and race of the head, name of the shelter, prior living situation, veteran status, and whether or not the client had any income last month.

While the shelter population does not capture the entire homeless population, it does reflect the majority of the homeless, particularly during the winter—point in time estimates for January 2014 indicate that about 70 percent of the homeless are in a shelter (HUD 2014). For Chicago, close to 80 percent of the homeless are in a shelter. The unsheltered homeless refer to those who stay in places not meant for human habitation, such as the streets, abandoned buildings, vehicles, or parks. We might also miss some homeless spells because the HMIS data only include homeless shelters that enter their intake information into HMIS. To get a sense of the extent to which the HMIS data will capture homelessness, we compared the list of shelters that appear in the HMIS data with the list of shelters that appear in the Housing Inventory Count (HIC) for Chicago, a dataset that contains bed counts for shelters as well as designations for each homelessness treatment program type. The HIC is a HUD report generated using required housing inventory counts for each jurisdiction.

Table 1 compares the bed counts from both the HIC and HMIS in 2012. This comparison suggests that the HMIS data does indeed capture the majority of shelter beds in the City of Chicago. According to the HIC, there were 16,084 shelter beds in the Chicago area in 2012. Of these beds, 10,637 (66 %) are also in the HMIS data, and this is likely to be a lower-bound estimate of the coverage of homeless shelters in the HMIS data.⁴ To determine whether the HMIS tends to miss beds from a particular type of shelter, we compare bed counts across shelter types. The HIC classifies shelters using both HUD and Continuum of Care designations (see Appendix A for more details). According to the HUD designations, the shelters most likely to be missed in the HMIS data include emergency (overnight) shelters (51%) and permanent supportive housing (61%).

The incomplete coverage of the HMIS data will not necessarily bias our estimates of program impact, but this limitation does affect how we interpret our results. In particular, in our

⁴ Matching bed counts across these sources is done based on shelter or program name. Often different names are used across these sources. When possible, we tried to account for this, but it is likely that some of the mismatch results from inconsistent names. Also, there are many shelters or programs in the HMIS data that do not appear in the HIC data. See Appendix A for more details on these comparisons.

main analyses we will be examining the impact of being referred to funds on the likelihood of entering a homeless shelter that is in the HMIS data, which is different from the likelihood of checking into any homeless shelter, or for that matter, the likelihood of becoming homeless at all, because our outcome measure does not capture those who are homeless, but not in a shelter. That we do not capture all cases of homelessness in our data will affect our cost-benefit analysis as we discuss in Section IX.

Sample for Analysis

The sample used for this study is drawn from the extract of all calls to the HPCC from January 20, 2010 to April 3, 2013. We will examine a narrower window of calls that occurred between January 20, 2010 and December 4, 2012. This narrower period of calls allows us to observe for the entire sample information on shelter admittance for at least 6 months after the call (our HMIS data goes through June 4, 2013).

We impose a number of sample restrictions on this extract of calls in order to conduct our analysis. Since the natures of both the need and availability of funds differ significantly by request type (rent, security deposit, or utilities) all of our analyses will be done separately by these types. Because the outcome of interest is entry into a shelter, we will restrict our sample to requests for rent or security deposit. Those who call the HPCC seeking assistance with heat, electric, or water bills are extremely unlikely to enter a homeless shelter.⁵ Table 2 shows the effect that each additional restriction has on our sample size. During our sample period the HPCC received 210,764 total calls, 105,880 of which were for rent or security deposit assistance. The HPCC data include a variable specifying whether the caller is eligible for financial assistance based on the criteria described in Section IV. This indicator is calculated by the HPCC based on all intake information. Most callers are not eligible for financial assistance. Restricting the sample to eligible callers for rent and security deposits leaves us with 16,612 calls.

We also restrict the sample to first-time callers, or more specifically, the first call since June 1, 2009.⁶ It is quite common for callers to contact the HPCC multiple times. The concern

⁵ Less than 0.6 percent of eligible callers seeking help with heating bills, and less than 0.2 percent of those calling for help with electricity bills end up in a shelter in the three months following the call.

⁶ The HPCC provided us with limited information on calls going back to June 1, 2009. Restricting the sample to first calls since June 1, 2009 imposes a moving window for the definition of a first call. A call on January 20, 2010, for example, will be the first one in the past 6 months, while a call on December 4, 2012 will be the first one in the past

here is that subsequent calls may not be exogenous—the characteristics associated with these calls may be correlated with both the availability of funds and the likelihood of entering a homeless shelter. For example, the persistence of repeat callers may generate a greater likelihood of receiving assistance but this persistence may also indicate a different propensity to end up in a shelter, regardless of assistance. The only truly exogenous event is the availability of funds after the first call and therefore, this is the focus of our analysis.

Finally, we impose two additional restrictions that have only a minor impact on the sample. We exclude callers who are referred to HPRP programs, which gave assistance to people who would otherwise generally have been deemed ineligible; these callers are always referred to funds when they are deemed eligible, and so they have no comparable clients who are eligible but not referred to funds. We also exclude a fairly small number of callers who are already in a homeless shelter at the time of the call.⁷ Thus, all the callers in our sample have housing that they either rent or own or that belongs to family or friends at the time of the call. Together these restrictions result in a final sample of 4,448 calls, 3,574 of which are for rent and 874 for security deposit. Because funding availability is sporadic, not all eligible callers are referred to funds. In our sample, 66% of those calling for assistance with rent are referred to funds, while 27% of those calling for assistance with a security deposit are referred.

Figures 1 through 3 show the distribution of calls for rent assistance and fund availability across years, months, and days of the week. Call volume for all calls (Figure 1a) was lower in 2012 than in 2010 and 2011. When looking at eligible calls (Figure 1b) and first-time calls (Figure 1c), however, volume is highest in 2010, declines noticeably in 2011 and a bit more in 2012. The volume of eligible calls peaks in the summer months (Figure 2), and the fraction of eligible calls that are referred to funds is lower during these months. This pattern may be related to protocols for enforcing eviction notices. While landlords can evict tenants at any time during the year, the county police will occasionally not enforce evictions during extreme weather conditions (Cook County Sheriff's Office, 2015).⁸ Finally, there is a drop-off in call volume on Fridays but the fraction of eligible callers that are referred to funds is fairly steady over the

three and a half years. We also ran our analysis restricting our sample to first calls in the past 6 months, and, as shown in Table 8, the results do not change noticeably.

⁷ Specifically, we exclude callers who report to the HPCC that they are currently living in a shelter or who are living in a shelter the day before the call according to the the HMIS data. Callers currently in shelters may be categorized as eligible because a small number of funding agencies, and HPRP, provide funds in these cases.

⁸ That there might be fewer evictions in the winter months was confirmed by the HPCC staff.

course of the week, ranging from 70% on Mondays to 65% on Fridays for our sample of first-time callers (Figure 3b).⁹

VI. Empirical Strategy

If the availability of funds were random, one could determine the impact of financial assistance on homelessness by comparing outcomes for eligible individuals who call the HPCC when funds are available to those for individuals who call when funds are not available.

Specifically, one could estimate:

$$y_i = \alpha_1 + \beta_1 funds_i + \varepsilon_{1,i}, \quad (1)$$

where y_i is the dependent variable of either admittance to a homeless shelter for eligible caller i within 3 or 6 months of the time of the call or the number of days spent in a shelter during the first 6 months after the call, and $funds_i$ is an indicator that equals 1 if funds were available for that particular caller. Because $funds_i$ is a dummy variable, β_1 is simply the difference between the mean outcomes for those who call when funds are available and those who call when they are not.

Table 3 reports the means for our measures of homelessness for both of these groups as well as the difference between these means for our two main samples: eligible callers seeking rent assistance and eligible callers seeking help with security deposit. For the rent assistance sample (panel A), those who call when funds are not available are 1.1 percentage points more likely to end up in a shelter after 3 or 6 months than those who call when funds are available,¹⁰ and these differences are significant at the 5% level.¹¹ A similar pattern is evident for those seeking help with security deposit (panel B), although the estimates of the difference across groups are less precise.

⁹ In separate analyses not reported here, we compared Friday callers to callers earlier in the week, and found little evidence that observable characteristics differ.

¹⁰ Technically speaking “calls when funds are available” (column 3 of Table 3) refers to the sample of eligible callers who are referred to funds. At a given point in time, funding may be available for some eligible callers but not for others because of fund specific restrictions as we discuss above.

¹¹ While checking into a homeless shelter is a fairly uncommon event for our main sample of HPCC callers, their risk of homelessness is far greater than average. As reported in Table 3, 1.4 percent of eligible callers seeking rent assistance and 1.6 percent of eligible callers seeking help with security deposit end up in a shelter within the next 6 months. These shelter entry rates are 7.5 to 8.6 times greater than the overall point-in-time fraction of Chicago residents living in a shelter: 1.9 per 1,000 (HUD 2014a).

The key assumption necessary for unbiased estimation of β_1 is that availability of funds is not correlated with characteristics of the individual or of the call that directly affect the likelihood of entering a homeless shelter, in other words that $Cov(funds_i, \varepsilon_i) = 0$. However, this assumption is not valid in this context, because at a given point in time not all eligible callers have the same likelihood of being referred to funds due to fund-specific restrictions. For example, because funding agencies differ in the maximum amount of assistance they will provide and the HPCC will not refer a caller for assistance if the entire need amount cannot be covered, eligible callers with a high need amount are less likely to be referred for funds. As shown in Table 3, a caller seeking rent assistance who is referred to funds (column 3) is much more likely to have a need amount that is below \$900 than above—71 percent of those who are referred to funds have a need amount of \$900 or less, while 27 percent have a need amount above \$900. For those not referred to funds, these percentages are practically reversed—30 percent have a need amount of \$900 or less, while 69 percent have a need amount above \$900. Panel B of Table 3 shows that need amount is also strongly related to whether one is referred to funds for those seeking assistance with security deposit. Veteran status is another example of a fund specific restriction that is related to fund availability, as a small number of funds only provide assistance for veterans. For both the rent assistance sample and the security deposit sample, those who call when funding is available are more likely to be veterans than those who call when funding is not available, but this difference is only significant for the sample of those seeking assistance with security deposit.

Another concern is that the availability of funds varies over time and this variation may be correlated with caller characteristics that directly impact homelessness. For example, as shown in Figure 3, the fraction of eligible callers that are referred to funds is the greatest on Mondays. If resourceful individuals are more likely to call on Mondays, and this resourcefulness means they are less likely to become homeless, then this would bias our estimates of β_1 .

Fortunately, we can account for these fund-specific and call characteristics. We observe in the call center data the same characteristics that the I&R specialist uses to determine whether eligible callers should be referred to funds, so we can control for factors that affect access to funds. In particular, we can estimate the following model:

$$y_i = \alpha_2 + \beta_2 funds_i + X_i \delta_2 + Z_i \gamma_2 + \varepsilon_{2,i}, \quad (2)$$

where y_i and $funds_i$ are defined the same as in equation 1; X_i is a vector of observable characteristics of the caller (including age, gender, race, ethnicity, income, and receipt of benefits) that should not affect a caller's access to funds, but are included in the model to reduce residual variance; and Z_i is a vector of individual characteristics that affect whether one is eligible for specific funds including need amount, veteran status, and receipt of housing subsidies. To account for patterns in call volume we also include in Z_i measures of call characteristics such as day of the week, month, and time of the month (first five days, last five days, and middle days). The key coefficient of interest is β_2 , which captures the difference in the outcome between those who call when funds are available and those who call when funds are unavailable.

Exogeneity of Fund Availability

The raw differences in the fraction who enter a shelter reported in Table 3 suggest that the availability of funds has an important impact on homelessness. However, these differences are not necessarily the result of fund availability if this availability is correlated with other factors that might be related to entry into a shelter. For example, some callers might have information on the availability of funds and access to this information is correlated with characteristics that might affect shelter entry. To test whether callers might have information on fund availability, we examine the relationship between call volume and past or future funding rates by regressing the log number of calls each day on leads and lags of the fraction of eligible callers that are referred to funds as well as indicators of the timing of the call within a year, month or week. The results from these regressions, which are presented in Table 4, show the same patterns in call volume shown in Figures 2 and 3—volume is greatest early in the week, early in the month, and outside the winter months. But after controlling for these patterns, it does not appear as though call volume rises in response to higher funding rates in the recent past. In fact, for our main sample of first calls (columns 1-3), the signs on the point estimates for the funding rate yesterday, 5 days ago, or 10 days ago are all negative, suggesting high funding rates in the recent past lead to lower call volume today, and only yesterday's funding rate is statistically significant at the 10% level.

There is some evidence that call volume is lower today when tomorrow's funding rate is higher (column 3), suggesting that perhaps individuals are waiting to call when funds are more available. But only the estimate for tomorrow's funding is significant (at the 5% level) and this point estimate is small, suggesting a 10 percentage point increase in the funding rate tomorrow leads to a 1.5 percent reduction in today's call volume. The results are similar for the broader samples of all eligible calls (columns 4-6) and all calls (columns 7-9). Overall, the results in Table 4 provide little evidence that the timing of calls is related to fund availability.

For our empirical strategy, the key assumption is that $Cov(funds_i, \varepsilon_i | Z_i) = 0$, or that the availability of funds is uncorrelated with unobserved factors that affect homelessness once we condition on characteristics that might affect access to certain funds and the timing of the call. If this assumption is valid then we would expect the characteristics of those who call on days when funding is available to look very similar to the characteristics of those who call on days when no funding is available once you control for these factors. We test this by comparing the rich set of characteristics available in the HPCC data across these groups. In particular, we estimate regressions of the following form:

$$x_i = \alpha_3 + \beta_3 funds_i + Z_i \gamma_3 + \varepsilon_{3,i} \quad (3)$$

where x_i represents an observable characteristic for eligible caller i , such as age, gender, race, income, etc. The variable $funds_i$ is our availability of funds indicator, and Z_i is the vector of individual and call characteristics that may affect access to funds.

The results from these analyses are reported in Table 5 for rent assistance and Table 6 for security deposit. Column 1 presents the raw means for observable characteristics for our main sample in the HPCC data. Columns 2 and 3 are the regression-adjusted means for callers not referred and referred to funds, respectively, so the difference between these regression adjusted means is β_3 from equation 3. We report the t-statistic for estimates of β_3 in column 4, clustering at the ZIP code level.

In general, the results in Table 5 indicate that those who call for rent assistance on days when funding is not available are very similar to those who call when funding is available. Looking at characteristics that should not be related to fund availability, in 30 of our 36 cases, we fail to reject the hypothesis that the characteristics are the same at the 5% level, and in all

cases the t-statistics are smaller than 2.65 in absolute value.¹² These differences indicate that those calling when funds are available are more likely to be white, provide “exiting shared housing” as a reason for applying for assistance, and be living in shared housing at the time of the call, while they are less likely to provide “inability to pay bills” as a reason for applying for assistance. Although these rejection rates are typically higher than what we would expect by chance,¹³ the differences are small and they do not clearly indicate that one group might be more likely to end up in a shelter than the other, independent of the availability of funds. For example, for the sample of those who call when no funding is available, whites are more likely to enter a shelter than nonwhites, while those living in own housing or shared housing are less likely to enter a shelter than those who are renters at the time of the call.

Table 6 presents analogous data for security deposit clients. In this case, for 33 of the 36 characteristics that should not be related to fund availability, we fail to reject the hypothesis that they are the same. This rejection rate is a more plausible number and an indication of random variation. With 36 draws and a 0.05 chance of rejection, even with independent variables we would expect 3 or more rejections 25.4% of the time.

VII. Results

Our main results for the impact of fund availability on homelessness for those seeking rent assistance are presented in Panel A of Table 7. These results are from estimations of equations 1 (without controls) and 2 (with controls).¹⁴ We presents results for three different outcomes: whether the caller enters a shelter within 3 months of the call, whether the caller enters a shelter within 6 months of the call, and the number of days spent in a shelter during the first 6 months after the call. For clients seeking rent assistance, in specifications without controls (columns 1 and 2) fund availability is associated with a 1.1 percentage point decrease in the probability of entering a shelter within 3 or 6 months of the call, which is statistically significant at the 5% level. When we control for other observable characteristics of the caller (columns 3 and 4), the point estimate increases slightly, indicating that calling when funds are available reduces the probability of entering a shelter within 3 or 6 months by 1.3 percentage points. This

¹² These results do not change noticeably when we do not cluster by ZIP code. For this case, the standard errors are on average only 8% smaller than when we cluster. With no clustering, we fail to reject the hypothesis that the characteristics are the same 29 of the 35 cases.

¹³ With a Type I error rate of 5 percent and 36 draws to a distribution, there is a 9.6% chance of rejecting the null in four or more cases, a 2.9% chance of rejecting 5 or more, and a 0.7% chance of rejecting 6 or more.

effect represents a 72 percent decline in the likelihood of becoming homeless after 3 months and a 62 percent decline after 6 months.

That the effect at 3 months and 6 months are very similar suggests that much of the impact of temporary financial assistance on homelessness is immediate, and this impact neither grows nor fades away over time. To examine how the impact changes over time since the call, we re-estimate equation 2 with the dependent variable being whether the caller has checked into a shelter within z months after the call, where z ranges from 1 to 12. Figure 4 reports the main point estimates from these specifications along with the 95 percent confidence interval. The results for rent assistance confirm that calling when funds are available has an immediate impact on homelessness, which is not surprising given that most eligible callers face imminent risk of homelessness—they have already been served an eviction notice. The effect within 2 months is a bit larger than the effect within 1 month, but the magnitude of the effect changes very little for longer windows. The estimated impact within 12 months (a decline of 1 percentage point) is very similar to the estimated impact within 2 months (a decline of 1.3 percentage points). In all cases the estimate is statistically significant.

The results for days in a shelter reported in columns 5 and 6 of Table 7 are consistent with those for whether a caller enters a shelter. Calling on a day when funds are available reduces the time spent in a shelter over the next 6 months by 1.9 days (or 60%).¹⁵ Because the dependent variable in this case is the unconditional number of days in a shelter over the 6 months after the call to the HPCC, these estimates of the impact of fund availability on the days spent in shelter captures both the extensive and intensive margins. But nearly all of the effect on days can be accounted for by the effect on the extensive margin, suggesting that fund availability has only a small effect on the length of time one spends in a shelter conditional on entry. That the impact of fund availability falls predominantly on the extensive margin is not surprising given that the intervention targets people living in their own residence and the design of the intervention is to keep people in their own residence, and therefore avoid entering a shelter.

Panel B of Table 7 presents results analogous to those in Panel A, but for callers seeking assistance with security deposits. The point estimates imply an effect similar to that for rent

¹⁴ See Appendix Table 1 and Appendix Table 2 for the point estimates for the control variables included in the specifications in Table 7 for rent and security deposit, respectively.

¹⁵ We also consider the impact of fund availability on the time spent in shelter for clients who were already in a shelter when they called. The resulting point estimates are negative, but the sample size is small (85 clients for rent) and the standard errors are large.

assistance. For example, calling when funds for security deposit are available is associated with a 1.4 percentage point decline in the likelihood of ending up in a shelter within 3 months, and a 2 percentage point decline within 6 months, but only the latter estimate is significant at the 10% level. The point estimate in the last column indicates that calling when funds are available reduces the number of days spent in a shelter over the next 6 months by 3.6 days, and this estimate is significant at the 5% level. For those seeking security deposits, estimates of the impact of fund availability on homelessness z months after the call (Figure 4) indicate that the effect is comparable to the estimates for those seeking rent assistance. However, none of the estimates for security deposit are statistically significant. The lack of precision in the case of security deposit may be due to the considerably smaller sample for those calling for security deposit ($N = 874$) than for rent assistance ($N = 3,574$).¹⁶

Fraction of those Referred to Funds that Receive Assistance

The results discussed above show the impact of calling when funds are available (and therefore being referred to an agency for financial assistance) on homelessness. This is different from the effect of *receiving* assistance on homelessness because of noncompliance—some callers who are referred to an agency for assistance never end up receiving funds. Furthermore, some callers seeking assistance when funds are not available may receive funds by calling back when funds are available. The former situation can occur for several reasons such as the agency is not able to contact the client or the client is determined to be ineligible once he or she meets with the agency representative. With data on which callers actually receives funds we could estimate a first stage by regressing eventual receipt of funds on whether funds are available at the time of the call. Unfortunately, neither of our data sources includes information on actual receipt of financial assistance. However, we do have information on receipt of funds for a small subset of HPCC callers that can give us some sense of the relative receipt of funds rate for those who call when funds are available compared to those who call when they are not available.

Loyola University of Chicago's Center for Urban Research and Learning (CURL) conducted a descriptive evaluation of the HPCC (George et al., 2011). As part of this evaluation, CURL conducted a follow-up phone survey of callers within 7 days of the HPCC call. This

¹⁶ We also estimated the specifications in Table 6 clustering by ZIP code. The statistical significance of our main estimates for these models are very similar to those reported here—all of the coefficients are significant at the 5% level for rent assistance, but none are significant for security deposit.

phone survey included 357 eligible callers seeking financial assistance—108 called when funding was available, while 249 called when it was not. Of the 105 surveyed clients in the CURL sample who called the HPCC when funds were available and provided information for the survey on the status of their request, 71 percent had already received funds from the designated agency, were anticipating the receipt of funds, or their request was being processed; 18 percent were never contacted by the agency; and 10 percent were deemed ineligible by the agency and denied funds. The CURL study also found that only 13 percent of those who called when no funding was available had already paid their outstanding bill (within 7 days of the call), while 40 percent of those who called when funding was available had paid their bill. These numbers indicate that calling when funds are available has a noticeable impact on ability to address the urgent presenting need.

The CURL study does not report how often callers who contact the HPCC when funds are not available call back when funds are available. But since we have call data over an extended period of time, we can calculate this directly. Among those who call when funds are not available in our sample of first-time callers, only 7.6 percent have called back and been referred to funds subsequently. Assuming that this group actually receives funds at the same rate as the group that is referred to funds initially (71 percent), this implies that about 5 percent of those who initially call when no funds are available eventually receive financial assistance through an HPCC referral.

VIII. Results for Subgroups and Alternative Specifications

The impact of fund availability on homelessness varies considerably across groups. In Table 8, we report our main estimate of the effect of fund availability for winter and non-winter months, for families and individuals, males and females, those under and over 30 years old, those below and above median income in the sample, and those below and above the median need amount. In the top panel, we report the results for those seeking rent assistance, and in the bottom panel we report results for those seeking help with security deposit.

Most noticeable is the difference between the winter months and other months. The likelihood of entering a shelter within 6 months is much higher during winter months (5.8 percent for those who call when funding is not available) than in other months (1.6 percent). And the effect of fund availability is much larger in these winter months. For December through

February, calling on a day when funds are available reduces the likelihood of entering a homeless shelter in the next 3 or 6 months by 5.5 percentage points. The effect of fund availability for the non-winter months is still substantial—indicating a decline in homelessness of 0.6 percentage points (or 38 percent)—but the estimate is not precise. The pattern of larger effects in winter is also evident for those seeking help with security deposit, although these estimates are not significant. One factor that may be playing a role during these winter months is a more limited set of alternatives to shelters for those who are homeless. Those who might otherwise live on the streets if they become homeless in the warmer months are more likely to rely on shelters in the winter months. Thus, our measure of homelessness (shelter entry) is likely to reflect a larger fraction of the homeless population during winter months than in other months.

Our main effects also differ noticeably by income. Splitting our rent assistance sample by income, we find that for those below or equal to the median income for the sample, calling when funds are available reduces the likelihood of entering a shelter within 6 months by 1.9 percentage points (76 percent).¹⁷ There is little evidence of an effect of financial assistance on homelessness for those with above median income. Other groups that appear more likely to benefit from rent assistance include individuals, males, callers younger than 30, and callers with below or equal to the median need amount.

To assess the robustness of our main results, we examine how sensitive our results are to alternative sample restrictions or specifications. These results are reported in Table 9. Our measure of shelter entry includes those who enter permanent supportive housing, which is a very different (and much more stable) living arrangement than emergency or transitional housing. We include those who enter permanent supportive housing in our measure of homelessness because one must be homeless in order to qualify for these units. To determine whether our results are sensitive to how we treat permanent supportive housing, we estimate models where those who enter permanent supportive housing are not coded as homeless (about 8 percent of our sample of those who check into a shelter). The results using this narrower definition of shelter entry (column 2) are very similar to those for our main specification, although for those seeking security deposit the point estimate for days in a shelter is no longer significant.

¹⁷ To split the sample by income we calculate the median for equivalent scale adjusted real monthly family income, using the NAS recommended equivalence scale: $(\text{number of adults} + 0.7 * \text{number of children})^{0.7}$. Standardized to a family with one parent and two children, the median is \$1,384 for rent clients and is \$1,225 for security deposit clients (2012 \$), or on a per adult equivalent basis that is \$750 for rent assistance and \$664 for security deposit assistance.

Although the vast majority (over 90 percent) of callers in our rent assistance sample are renting their own unit at the time of the call, some callers are living in shared housing with family or friends. Renters and those “doubling up” might differ considerably in terms of their financial needs and risk of homelessness, although for our sample these two groups enter homeless shelters at about the same rate. Also, as we showed above, currently living in shared housing appears to be related to the likelihood of calling when funds are available (Table 5). As shown in column 3 of Table 9, our main results are not sensitive to the inclusion of those living in shared housing. The results for those seeking rent assistance for a sample including only those currently renting are very similar to those for our full sample. For those seeking security deposit, the magnitudes of the point estimates are smaller in absolute value but similar in percentage terms to those for our main specification, but none of the estimates are statistically significant.

We also examine how sensitive our results are to the time window for our sample. For example, we estimate our main specifications for a narrower sample of the July 2010 – December 2012 period. For this narrower sample, we can look back at least 1 full year to verify that the caller has not contacted the HPCC in the past (for our main specification we could look back at least six months). The main point estimate for the narrower sample (column 4) is smaller in absolute value (-0.7 percentage points) but in percentage terms, this effect is comparable to those reported for the full sample. The smaller sample size does reduce the precision a bit, but the effect is still marginally significant (p-value = 0.085).

For our main specification we restrict the sample to first calls since June 1, 2009. This restriction imposes a moving window for the definition of a first call. A call on January 20, 2010, for example, will be the first one in the past 6 months, while a call on December 4, 2012 will be the first one in the past three and a half years. The estimates in column 5 show that the results are very similar to our main specification when we impose a fixed 6 months window for the definition of a first call, although for those seeking security deposit the point estimate for days in a shelter is no longer significant. Finally, we find results similar to those reported above when we estimate a logit model (column 6) rather than a linear probability model.

IX. The Costs and Benefits of Preventing Homelessness Through Emergency Assistance

A common criticism of programs that aim to prevent homelessness through financial assistance is that emergency funds tend to be poorly targeted—considerable resources go to

those who would not end up homeless even in absence of the assistance (Shinn et al., 2001; Burt, 2005; Culhane et al., 2010), suggesting that the temporary financial assistance in large part crowds out other resources that may be used to avoid becoming homeless. The evidence from our sample of callers to the HPCC is consistent with this argument. 98 percent of those who are eligible and call when no funds are available find a way to avoid entering a shelter over the next six months, even though they are facing eviction from their residence at the time of the call. Despite the blunt nature of this intervention, given the high cost of homelessness to individuals and society, even a small overall reduction may be cost-beneficial.

We cannot conduct a full cost benefit analysis because there is very limited information on how averting homelessness affects crime, health, and other key potential benefits. We can, however, construct reasonable estimates of the cost of reducing homelessness through emergency assistance, and we can estimate the value of some of the benefits resulting from reductions in homelessness. The remaining question then is whether the value to individuals and society of the unmeasured benefits of homelessness reduction are large enough to justify the documented costs.

For this cost-benefit discussion we will focus on rent assistance. The cost of reducing homelessness through rent assistance includes the operating costs of the call center and provider agencies as well as the cost of the financial assistance. Operating costs for the HPCC were about \$900,000 in 2012. Given that about a third of HPCC operating costs go towards providing rent assistance, the cost per caller referred for rent assistance comes to about \$103.¹⁸ The cost to the provider agency of distributing the financial assistance is about \$942 per caller referred, bringing the total cost per referral to about \$1,045.¹⁹ Our main estimates indicate that calling the HPCC when funding is available reduces the likelihood of entering a shelter by 1.3 percentage points, so the cost per new case of homelessness averted is about \$80,400. Given the average family size for our sample is 2.6, this puts the per person cost of averting a new case of homelessness at about \$30,900. However, this estimated cost per homeless spell averted focuses exclusively on

¹⁸ To get the fraction of operation costs for rent assistance, we assume that these costs are similar across the different types of requests, and 33 percent of HPCC calls in 2012 were requests for rent assistance. To get the cost per referral for rent assistance, we divide by the number of referrals in 2012: 2,913. Ideally, we would calculate the marginal cost of providing assistance to an additional caller, but we typically only have average cost information.

¹⁹ For callers referred for rent assistance, the average amount the HPCC calculates they are eligible for is \$1,182. Only about 71 percent of those referred for rent assistance end up receiving funds (George et al. 2011), so the cost of financial assistance for the delegate agencies is about \$839 per referral. We add to this the operating costs per referral for the funding agency, which are assumed to be \$103, comparable to operating costs for the HPCC.

entries into a homeless shelter, which does not capture the impact that emergency financial assistance has on homelessness for families that end up living on the street or in shelters that are not included in the HMIS data (recall that this database covers about 66 percent of all shelters in Chicago). If, for our sample, we are capturing just over half of all spells of homelessness, and the effect of assistance in percentage terms is similar for these unobserved spells, then the per person cost of a homeless spell averted comes to about \$16,000.²⁰ With an average spell length of 189 days, the cost per day is about \$86 per person.

The cost per homeless spell averted would be lower if the program were better targeted towards those for whom financial assistance is more effective at reducing homelessness. For example, our results show that the effect of homelessness prevention is more effective for very low-income families—i.e. those with family incomes below the median for our sample of callers. For these families, calling the HPCC when funding is available reduces the likelihood of entering a shelter by 2.1 percentage points. This estimate suggests that if the HPCC made the same number of referrals, but all of them were for low-income families, then the per person cost of averting a new case of homelessness would be \$9,600, which is 40 percent less than the cost for all eligible callers.

The benefits of this intervention result from avoiding a number of costs associated with becoming homeless including: the cost of providing shelter and other housing services; the cost to society of addressing other needs that may arise due to homelessness; and other private costs to the individual. Spellman et al. (2010) estimate an average cost of providing shelter for individuals who enter homelessness for the first time of about \$2,400 in 2012 dollars, but this number is far greater for the chronically homeless, the mentally ill, or other populations in need of supportive services. Moulton (2013) estimates that the cost of providing permanent supportive housing services for the chronically homeless is about \$55,600 per person per year. This numbers alone suggests that there could be considerable cost savings by reducing homelessness through financial assistance for those who are in need of supportive services. While we do not know who in our main sample would be eligible for such services we do know that more than 40 percent of those in our sample who end up in a shelter are in permanent supportive housing.

²⁰ Assuming for our sample we capture 66 percent of all shelter entries (because HMIS data covers 66 percent of all shelters) and that shelter entries capture 80 percent of all homeless spells (based on point in time counts for Chicago, HUD 2014), this suggests that we capture about 53 percent of the homeless spells.

Homelessness imposes a number of additional social costs beyond just housing services, including those that arise due to increased health care needs, criminal activity, and dependence on other government programs. Estimating these other social costs is challenging because there is very little evidence of how they are directly affected by homelessness. Flaming et al. (2015), estimate the average public costs (including health care, police and incarceration, and welfare programs such as food stamps) of the overall homeless in Los Angeles to be \$5,148 annually. Unfortunately, we do not have a comparable number for an otherwise similar population that is not homeless. But this estimate might be a reasonable upper bound of the impact of homelessness on these other costs.

Perhaps the most significant benefits of homelessness prevention stem from reduced private costs. For example, homeless adults face higher mortality rates (Barrow et al., 1999); one fifth of homeless children have been separated from their families and one quarter suffers from depression, and they are twice as likely to have a learning disability and to repeat a grade (Haveman, Wolfe and Spaulding, 1991). These private costs of homelessness can be extremely high. So even a small reduction in homelessness can generate substantial. For example, the benefits associated with declined mortality alone can offset much of the cost of reducing homelessness through financial assistance. Estimates from Barrow et al. (1999) suggest that age-adjusted mortality rates for the homeless population in NY City are 4 times as great as the U.S. population as a whole and 2 to 3 times as great as the population of New York City. Taking the lower bound of this mortality effect as causal; our main estimate of a 1.3 percentage point reduction in homelessness; an overall mortality rate estimate for those ages 25-55 of 0.44 percent; and the official EPA estimate of the value of a statistical life of \$7.4 million, the mortality reducing benefit per person comes to about \$13,000, or about 80 percent of the total cost of preventing a person from becoming homeless through financial assistance.

It is important to qualify that the estimate from Barrow et al. on the impact of homelessness on mortality is not causal. In fact, there is virtually no evidence of the causal relationship between homelessness and mortality or other private costs. This makes it difficult to calculate reliable estimates of the private benefits stemming from homelessness prevention. Nevertheless, taking the estimates of potential benefits discussed above at face value, these benefits amount to \$20,548 (\$2,400 + \$5,148 + \$13,000), already exceeds the estimated \$16,000 price tag for emergency financial assistance. The implied net benefits could be even greater if

one were to include the value of other potential benefits of homelessness prevention (such as improved health, better academic outcomes for children, etc.). Moreover, because the cost per homeless spell averted is significantly lower for the lowest-income callers, the net benefits of emergency assistance is considerably larger.

This discussion only addresses the impact of financial assistance on homelessness. Another potential benefit of this assistance is that it could help individuals and families avoid having to move to a new apartment or in with others due to eviction. Such moves could have a negative impact on outcomes, even though the family never becomes homeless. Several studies have established a strong association between moves and negative outcomes such as recidivism for low-income populations (Cohen and Wardrip, 2011).

X. Conclusions

Each year millions of Americans experience homelessness and many more are brought to the brink of homelessness. The social and private costs of homelessness are very high, not only because housing services for this population are expensive, but also because homelessness is strongly associated with other bad outcomes such as mortality, crime, poor health, and reduced educational attainment for children. In recent years, policy makers have given greater attention to programs that provide services for individuals before they become homeless. A common approach is to provide temporary financial assistance to those facing imminent homelessness. Despite broad, national efforts to prevent homelessness through such assistance, there is very little evidence of its impact on homelessness.

This paper exploits quasi-random variation in the availability of funds to determine the impact of providing temporary financial assistance. The HPCC in Chicago connects those at risk of homelessness with such assistance, but the availability of funding varies unpredictably on a day-to-day basis. Consequently, we can determine the impact of the program on homelessness by comparing outcomes for those whose first call is when funds are available to those whose first call is when no funds are available. Our results show that eligible callers to the HPCC seeking rent assistance on a day when funding is available are 1.3 percentage points less likely to enter a shelter within 3 or 6 months than someone who calls when no funding is available, a reduction of more 60 percent. The impact of financial assistance is largest for those calling during winter months and for low-income callers.

An important concern with temporary financial assistance programs is that considerable resources go to those who would not end up homeless even in absence of the assistance, limiting cost effectiveness. Our estimated impact of this intervention suggests that the cost per homeless spell averted through emergency financial assistance is about \$16,000, and for the lowest income callers the cost is \$9,600. Although these estimates exceeds typical estimates of the cost of providing housing services to the homeless, the high private and social cost of homelessness suggest that the program is cost-beneficial.

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Appendix A: Comparing Bed Counts from HMIS and HIC

In order to check if the shelter data have universal coverage of the Chicago shelters, we compared the shelters that appear in the HMIS data with the shelters that appear in the Housing Inventory Count (HIC), a dataset that contains bed counts for shelters as well as designations for each homelessness treatment program type. This dataset is created by the U.S. Department of Housing and Urban Development (HUD), which requires jurisdictions to count their housing inventories. From HIC, as well as from supplemental independent research, we determined the HMIS data's coverage of Chicago shelters as well as the program type and shelter identification of each program in the HMIS data.

Two primary issues arise in the HMIS data when compared to the HIC information. First, many HMIS shelters do not appear in the HIC inventory of shelters, and vice versa. In the total HMIS data, 23,2945 of 79,100 shelter spells (29.5%) do not occur in shelter programs that also appear in HIC. A potential source for these non-HIC programs is the presence of inconsistent titles for programs; many organizations run a variety of programs, and these programs do not seem to always be recorded with consistent titles. Some subprograms may have been left out of HIC or recorded under a different name than the name listed in the HMIS data. For example, in the HMIS data there are two shelter programs, "AIDS Foundation of Chicago SafeStart 1" and "AIDS Foundation of Chicago SafeStart II," which we believe might be part of the "AIDS Foundation of Chicago Safe Start HUD SHP Grant" that appears in the HIC data.

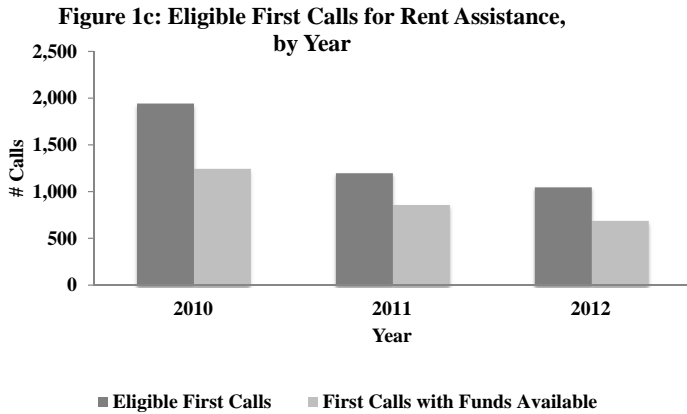
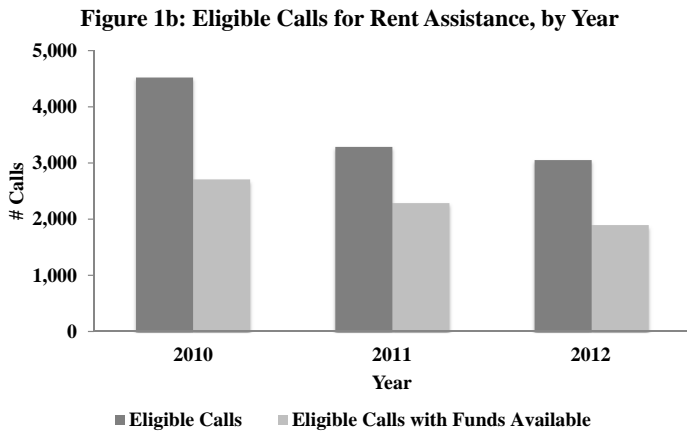
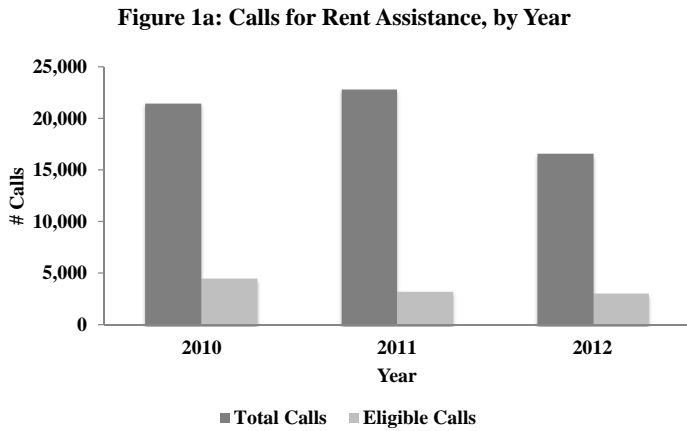
Still, the HIC coverage (70.5%) is reasonably large, and, conversely, 66% of beds listed in the 2012 HIC report belong to shelters that also appear in the HMIS data. Of the 34% of beds listed in the 2012 HIC report that do not belong to shelters that appear in the HMIS data, a disproportionately large number are emergency (overnight) shelters. While there is no clear rationale for this, it may be the case that overnight shelters are less stable and consequently are less frequently recorded in individual years' HIC reports.

Second, the HIC inventory contains shelter type designations, according to HUD and Continuum of Care, that are useful for understanding what types of shelters clients enter; the problem here is that these designations often disagree, in part because of the different definitions of program types by HUD and Continuum of Care. The HUD designations include emergency shelter, transitional housing, permanent supportive housing, rapid re-housing, and safe haven; meanwhile, the Continuum of Care designations include overnight shelter, interim housing, various forms of permanent housing, rapid re-housing, and safe haven. While these designations usually match, i.e. emergency shelters are overnight shelters, transitional housing is interim housing, and permanent supportive housing is permanent housing, there are some discrepancies. For instance, the Franciscan Outreach Association's Annex program is labeled as an overnight shelter by Continuum of Care but as a permanent supportive housing program by HUD.

In order to attempt to describe the shelters more accurately, we created a new imputed designation with categories of overnight, interim, permanent, and safe haven shelters. These designations were imputed by synthesizing the available designations in HIC with explicit labels in the shelter program titles as well as with implicit designations based off comparisons of programs within organizations. For example, while "Northside Housing & Supportive Services Supportive Housing Program III" does not appear in the HIC data, "Northside Housing & Supportive Services Supportive Housing Program II" does and has the permanent housing Continuum of Care designation; thus, we impute the former's type as permanent supportive

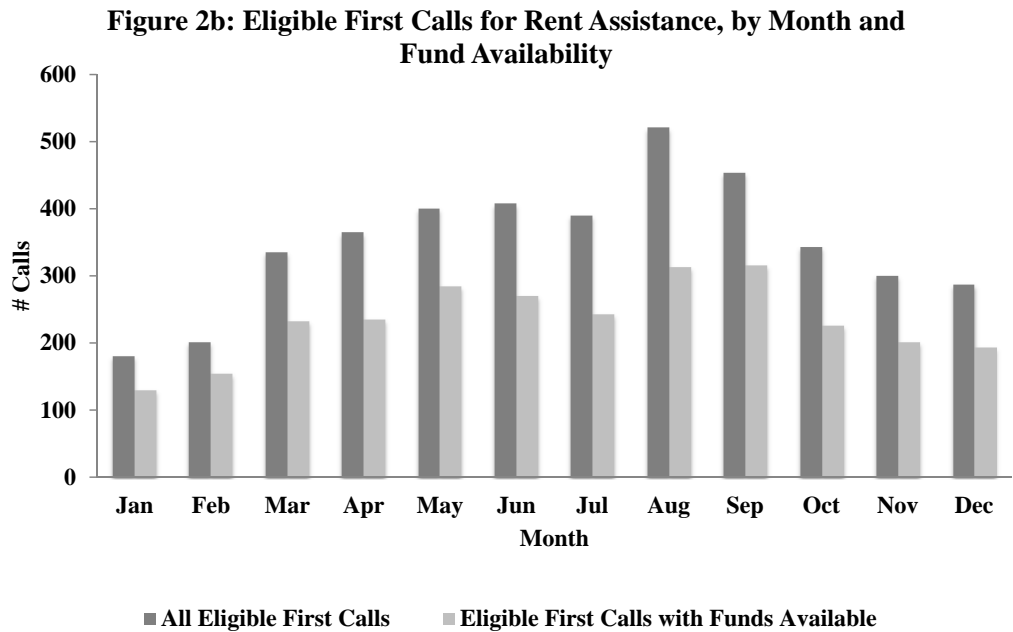
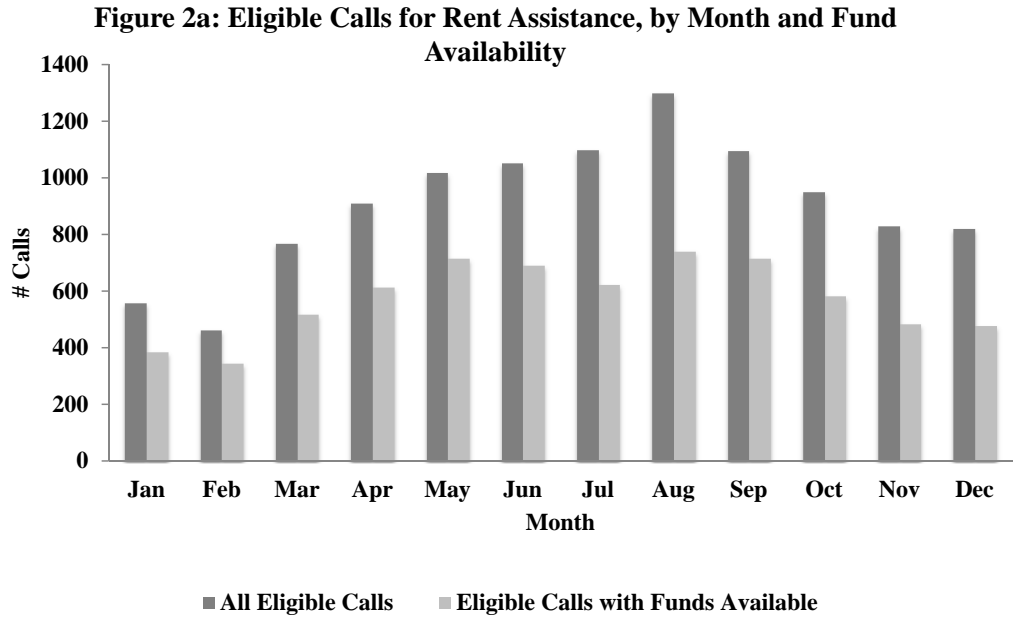
housing. We then tagged the HMIS shelter data with these imputed designations before combining it with the call data.

Figure 1: HPCC Calls by year, 2010-2012



Notes: Figure 1a displays the distribution of all of the calls in the HPCC dataset by year, for the time window 20 January 2010 - 31 December 2012. Figure 1a also presents the distribution of all eligible calls; a call is eligible if it meets the eligibility criteria, regardless of referral to funds. These eligibility criteria include income level and other measures of self-sufficiency, risk of imminent homelessness, and the feasible ability of the program to fix the clients' needs. Figure 1b plots the distribution of eligible calls by year against the subset of eligible calls that are referred to a funding source by the HPCC. Figure 1c presents similar data as Figure 1b but restricts the sample to calls that are the first calls made by each client after 20 January 2010. Note that for all three figures, we do not have data on the first nineteen days of January 2010.

Figure 2: HPCC Calls by month, 2010-2012



Notes: Figure 2a displays the distribution of all of eligible calls in the HPCC dataset by month, for the time window 20 January 2010 - 31 December 2012, as well as the distribution of eligible calls that are referred to fund sources by the HPCC by month. A call is eligible if it meets the eligibility criteria, regardless of referral to funds. These eligibility criteria include income level and other measures of self-sufficiency, risk of imminent homelessness, and the feasible ability of the program to fix the clients' needs. Figure 2b presents similar data as Figure 2a but restricts the sample to calls that are the first calls made by each client after 20 January 2010. Note that for both figures, we do not have data on the first nineteen days of January 2010.

Figure 3: HPCC Calls by Day of the Week, 2010-2012

Figure 3a: Eligible Calls for Rent Assistance, by Day of the Week and Fund Availability

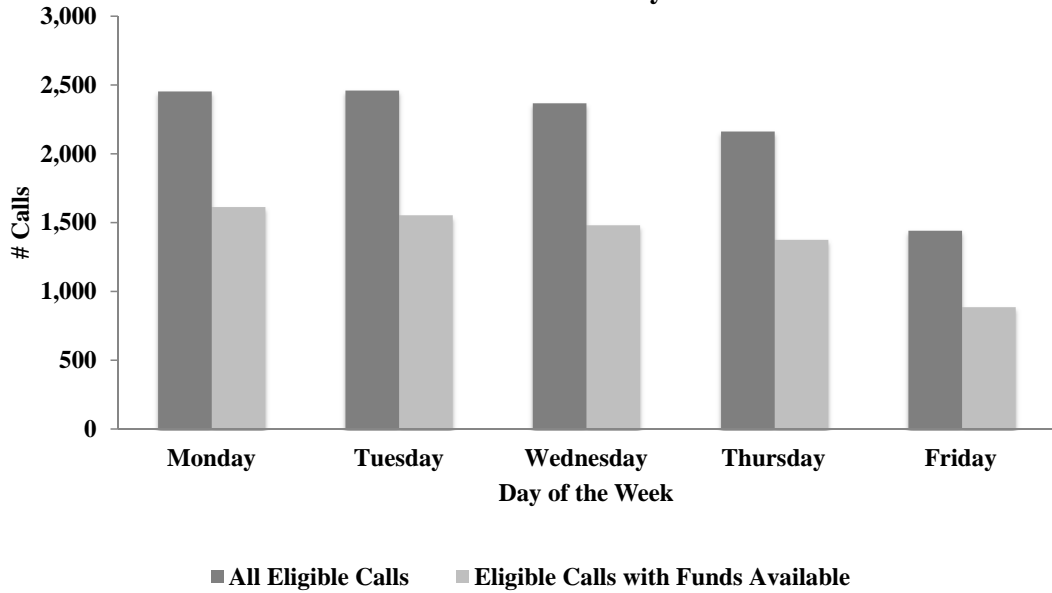
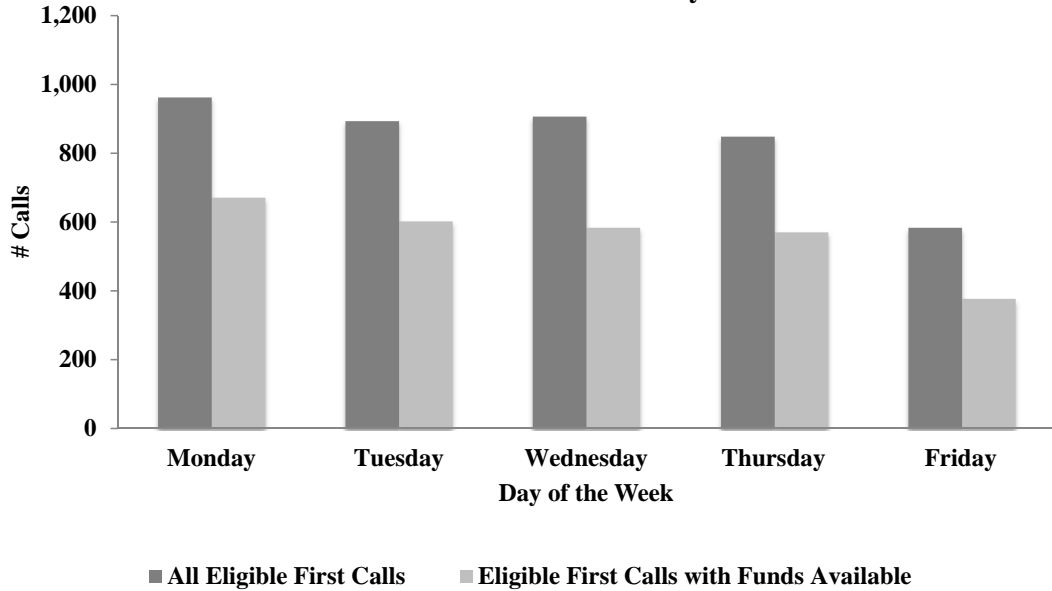
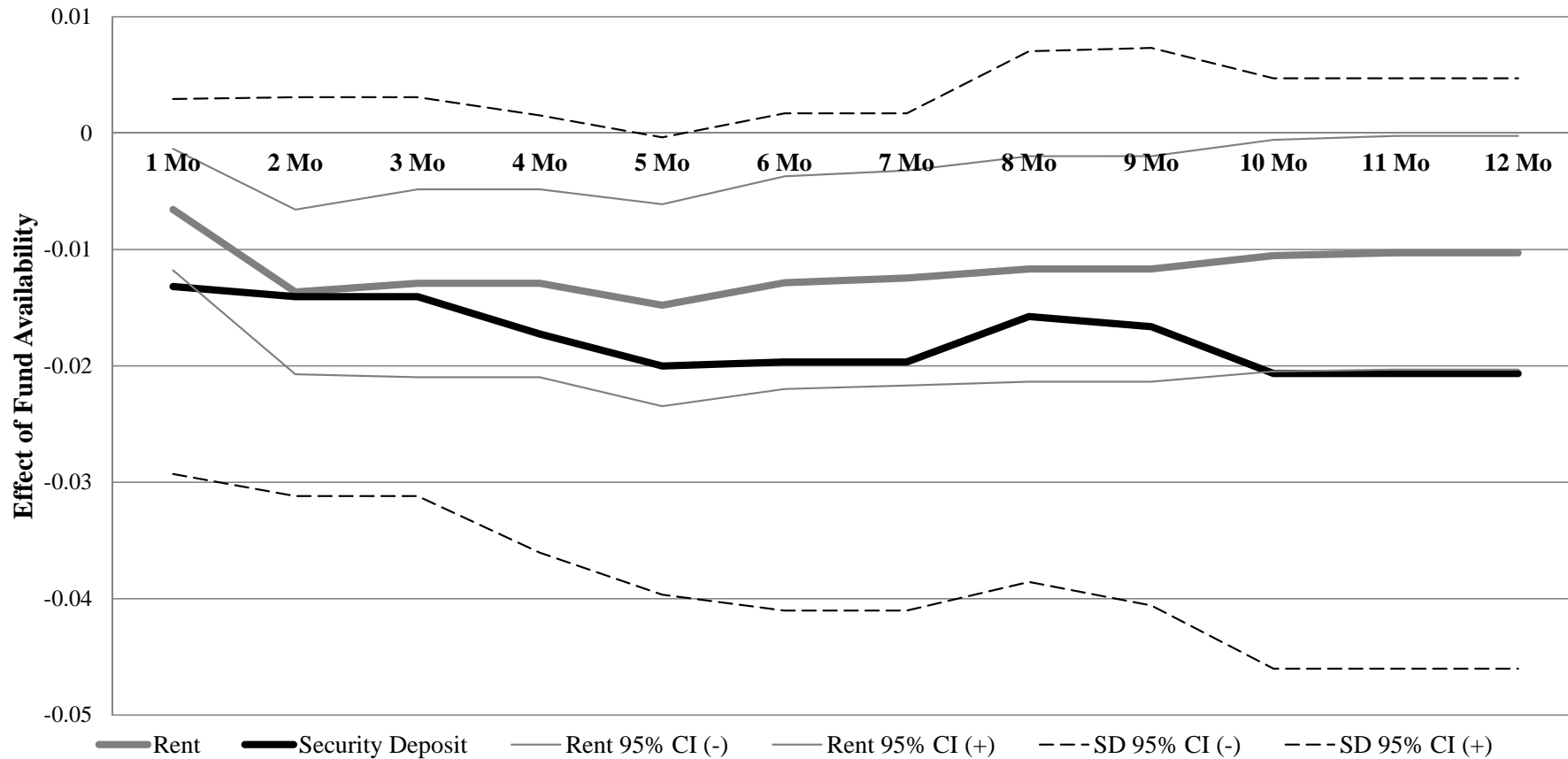


Figure 3b: Eligible First Calls for Rent Assistance, by Day of the Week and Fund Availability



Notes: Figure 3a displays the distribution of all of eligible calls in the HPCC dataset by day of the week, for the time window 20 January 2010 - 31 December 2012, as well as the distribution of eligible calls that are referred to fund sources by the HPCC by day of the week. A call is eligible if it meets the eligibility criteria, regardless of referral to funds. These eligibility criteria include income level and other measures of self-sufficiency, risk of imminent homelessness, and the feasible ability of the program to fix the clients' needs. Figure 3b presents similar data as Figure 3a but restricts the sample to calls that are the first calls made by each client after 20 January 2010. Note that for both figures, we do not have data on the first nineteen days of January 2010.

Figure 4: The Effect of Fund Availability on Shelter Admittance Within 1-12 Months of Call



Notes: Figure 4 displays the impact of fund availability on shelter admittance across various number of months after the call. The sample consists of eligible calls that are the first calls made within the 20 January 2010 - 03 April 2013 time window by clients. Eligibility criteria include income level and other measures of self-sufficiency, risk of imminent homelessness, and the feasible ability of the program to fix the clients' needs. The sample is also restricted to clients who self-identify as living in housing that they either rent or own or that belongs to a friend or family member.

Table 1: HMIS Coverage of HIC Data, 2012

	HIC Total Beds	HIC Total Beds in HMIS Shelter Data	% of Group in HMIS Data	% of Total in HMIS Data
All HIC Beds	16,084	10,637	66.1	66.1
Department of Housing and Urban				
Permanent Supportive Housing	8,646	5,284	61.1	32.9
Transitional Housing	3,550	2,705	76.2	16.8
Emergency Shelter	2,527	1,287	50.9	8.0
Safe Haven	41	41	100.0	0.3
Homeless Prevention and Rapid Re- Housing Program	1,320	1,320	100.0	8.2
Continuum of Care (CoC) Designations				
Interim Housing	3,401	2,507	73.7	15.6
Overnight Shelter	1,356	495	36.5	3.1
Permanent Housing	8,646	5,284	61.1	32.9
Permanent Housing with Short Term Supports	1,202	880	73.2	5.5
Safe Haven	41	41	100.0	0.3
Youth, Project-Based, Age Appropriate	118	110	93.2	0.7
Homeless Prevention and Rapid Re- Housing Program	1,320	1,320	100.0	8.2

Notes: This table only demonstrates the HMIS coverage of the 2012 HIC data. Conversely, 71% of shelter spells that appear in the HMIS data occur in shelters that are covered by HIC (55,806 of 79,100 spells).

Table 2: Sample Sizes

Sample Composition	Rent or Security Deposit		Rent		Security Deposit	
	N	% Referred to Funds	N	% Referred to Funds	N	% Referred to Funds
All Calls (January 20, 2010 - December 4, 2012)	105,880	9.2	60,044	11.8	45,836	5.7
Eligible calls	16,612	56.1	10,726	63.5	5,886	42.7
First calls, as of June 1, 2009	6,234	62.8	4,121	66.7	2,113	55.0
Excluding HPRP/Shelter Case Manager	5,858	60.4	4,103	66.6	1,755	45.9
Excluding clients in shelters	4,448	58.2	3,574	66.0	874	26.5

Notes: The restrictions for each sample build upon each other down the table, such that, e.g., the samples below the "Eligible calls" constraint only contain eligible calls. Excluding clients in shelters involves excluding clients who have "exiting shelter" as a reason for applying for funds and restricting the sample to clients who report living in housing that they own, rent, or cohabit with friends/family.

Table 3: Homeless Shelter Entry Rates and Factors Related to Fund Availability for Eligible HPCC Callers by Availability of Funds

Variable	All Calls	Calls When Funds Are Not Available	Calls When Funds Are Available	Difference
	(1)	(2)	(3)	(4)
<i>Panel A: Rent</i>				
Outcome variables				
Shelter Admittance: 3 Months	0.011 (0.002)	0.018 (0.004)	0.007 (0.002)	-0.011** (0.003)
Shelter Admittance: 6 Months	0.014 (0.002)	0.021 (0.004)	0.010 (0.002)	-0.011** (0.003)
Days Spent in Shelter: 6 Months	2.088 (0.312)	3.169 (0.657)	1.531 (0.330)	-1.637** (0.468)
Factors related to fund availability				
Final need amount (\$)	996 (11)	1235 (19)	875 (14)	-360.07** (15.699)
\$1 to \$300 in Need	0.050 (0.004)	0.044 (0.006)	0.053 (0.005)	0.009* (0.005)
\$301 to \$900 in Need	0.521 (0.008)	0.252 (0.012)	0.659 (0.010)	0.407** (0.011)
\$901 to \$1200 in Need	0.106 (0.005)	0.160 (0.011)	0.078 (0.006)	-0.083** (0.008)
\$1201 to \$1500 in Need	0.182 (0.006)	0.322 (0.013)	0.110 (0.006)	-0.211** (0.009)
More than \$1500 in Need	0.128 (0.006)	0.211 (0.012)	0.086 (0.006)	-0.124** (0.008)
Veteran	0.028 (0.003)	0.024 (0.004)	0.031 (0.004)	0.007* (0.004)
N	3,574	1,216	2,358	
<i>Panel B: Security Deposit</i>				
Outcome variables				
Shelter Admittance: 3 Months	0.010 (0.003)	0.012 (0.004)	0.004 (0.004)	-0.008* (0.004)
Shelter Admittance: 6 Months	0.016 (0.004)	0.020 (0.006)	0.004 (0.004)	-0.016** (0.005)
Days Spent in Shelter: 6 Months	2.340 (0.653)	3.062 (0.879)	0.341 (0.341)	-2.722** (0.774)
Factors related to fund availability				
Final need amount (\$)	930 (18)	955 (21)	859 (32)	-96.354** (24.570)
\$1 to \$300 in Need	0.103 (0.010)	0.090 (0.011)	0.138 (0.023)	0.048** (0.015)
\$301 to \$900 in Need	0.394 (0.017)	0.393 (0.019)	0.397 (0.032)	0.004 (0.023)
\$901 to \$1200 in Need	0.150 (0.012)	0.157 (0.014)	0.129 (0.022)	-0.028* (0.017)
\$1201 to \$1500 in Need	0.383 (0.012)	0.377 (0.015)	0.400 (0.020)	0.022 (0.016)
More than \$1500 in Need	0.153 (0.012)	0.171 (0.015)	0.103 (0.020)	-0.068** (0.016)
Veteran	0.041 (0.007)	0.033 (0.007)	0.065 (0.016)	0.032** (0.010)
N	874	642	232	

Notes: Results are for our main sample of eligible first-time calls for rent or security deposit assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. The omitted group for need amounts here is the small subset of callers whose need amounts are missing in the data.

Table 4: Funding Rate and Number of Calls

Dependent variable: log number of calls per day	First Calls			Eligible Calls			All Calls		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Yesterday's funding rate	-0.098*	-0.098*	-0.093	-0.186**	-0.185**	-0.151*	-0.100*	-0.097*	-0.078
	(0.058)	(0.058)	(0.058)	(0.080)	(0.082)	(0.083)	(0.051)	(0.052)	(0.053)
Tomorrow's funding rate			-0.153**			-0.217**			-0.109**
			0.059			0.084			(0.054)
5 day lag funding rate		-0.007	-0.008		-0.065	-0.083		-0.006	-0.016
		(0.058)	(0.058)		(0.083)	(0.082)		(0.053)	(0.052)
5 day lead funding rate			-0.031			-0.092			-0.070
			0.060			0.086			(0.055)
10 day lag funding rate		-0.005	-0.011		-0.099	-0.097		0.018	0.018
		(0.055)	(0.055)		(0.076)	(0.077)		(0.048)	(0.049)
10 day lead funding rate			-0.065			-0.200**			-0.119**
			0.056			0.078			(0.049)
Monday	0.248**	0.248**	0.243**	0.298**	0.301**	0.303**	0.251**	0.250**	0.253**
	(0.044)	(0.044)	(0.044)	(0.044)	(0.044)	(0.030)	(0.030)	(0.030)	(0.030)
Tuesday	0.173**	0.173**	0.207**	0.211**	0.218**	0.207**	0.177**	0.177**	0.171**
	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.029)	(0.029)	(0.029)	(0.029)
Wednesday	0.103**	0.104**	0.154**	0.157**	0.163**	0.154**	0.126**	0.125**	0.121**
	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.029)	(0.029)	(0.029)	(0.029)
Thursday	0.070	0.070	0.098**	0.100**	0.104**	0.098**	0.086**	0.085**	0.082**
	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.029)	(0.029)	(0.029)	(0.029)
February	-0.075	-0.075	-0.079	-0.082	-0.086	-0.103**	-0.121**	-0.121**	-0.135**
	(0.064)	(0.064)	(0.064)	(0.064)	(0.064)	(0.043)	(0.043)	(0.043)	(0.043)
March	0.124*	0.124*	0.103	0.111*	0.112*	0.069	0.073	0.072	0.045
	(0.066)	(0.067)	(0.067)	(0.066)	(0.067)	(0.045)	(0.044)	(0.045)	(0.045)
April	-0.118**	-0.119*	-0.144**	0.017	-0.001	-0.043	-0.128**	-0.126**	-0.153**
	(0.060)	(0.061)	(0.062)	(0.060)	(0.061)	(0.042)	(0.040)	(0.041)	(0.042)
May	-0.046	-0.046	-0.021	-0.020	-0.017	0.048	-0.037	-0.037	0.005
	(0.055)	(0.055)	(0.057)	(0.055)	(0.055)	(0.039)	(0.037)	(0.037)	(0.039)
June	0.019	0.020	0.025	0.102*	0.112**	0.120**	0.047	0.046	0.051
	(0.055)	(0.055)	(0.054)	(0.055)	(0.055)	(0.037)	(0.037)	(0.037)	(0.037)
July	0.055	0.055	0.033	0.057	0.056	0.016	0.081**	0.081**	0.054
	(0.060)	(0.060)	(0.060)	(0.060)	(0.060)	(0.040)	(0.040)	(0.040)	(0.040)
August	0.104*	0.105*	0.097*	0.080	0.084	0.069*	0.091**	0.091**	0.081**
	(0.055)	(0.055)	(0.054)	(0.055)	(0.055)	(0.037)	(0.037)	(0.037)	(0.037)
September	-0.033	-0.033	-0.018	0.036	0.040	0.063*	-0.023	-0.023	-0.010
	(0.055)	(0.055)	(0.054)	(0.055)	(0.055)	(0.037)	(0.037)	(0.037)	(0.037)
October	0.081	0.082	0.081	0.000	0.008	0.009	0.066*	0.066	0.067*
	(0.060)	(0.060)	(0.059)	(0.060)	(0.060)	(0.040)	(0.040)	(0.040)	(0.040)
November	0.141**	0.141**	0.142**	-0.028	-0.026	-0.042	0.118**	0.118**	0.110**
	(0.065)	(0.064)	(0.064)	(0.065)	(0.064)	(0.043)	(0.043)	(0.043)	(0.043)
December	-0.052	-0.052	-0.058	0.035	0.025	-0.010	-0.009	-0.008	-0.031
	(0.073)	(0.073)	(0.073)	(0.073)	(0.073)	(0.049)	(0.049)	(0.049)	(0.049)
First 5 days of month	0.015	0.014	0.038	0.071**	0.057	0.082**	0.058**	0.059**	0.075**
	(0.035)	(0.037)	(0.038)	(0.035)	(0.037)	(0.025)	(0.024)	(0.025)	(0.026)
Last 5 days of month	-0.001	-0.002	-0.001	-0.022	-0.027	-0.018	-0.012	-0.013	-0.004
	(0.035)	(0.037)	(0.039)	(0.035)	(0.037)	(0.025)	(0.024)	(0.025)	(0.026)
N (number of days)	660	660	660	661	661	661	661	661	661

Notes: Funding rate is defined as the number of eligible clients who call when funds are available divided by the number of eligible clients. These regressions are based on all days on which eligible calls were made by clients to the HPCC, February 3, 2010–November 14, 2012; this window restriction allows every day to have a 10 day lag and 10 day lead. These lag and lead variables are lags and leads across days on which eligible calls were made to the HPCC, i.e. when the HPCC is effectively open. The month indicators are defined synthetically as the 16th of the previous month through the 15th of the current month, e.g. February runs from January 16th through February 15th.

Table 5: Means of Characteristics of Eligible, First-time Callers, Rent Assistance

Variable	Mean	Regression-Adjusted Means		T-Statistic on Difference
	Full Sample	Funds Are Not Available	Funds Are Available	
	(1)	(2)	(3)	(4)
Female	0.769	0.788	0.759	-1.530
White, non-Hispanic	0.082	0.067	0.090	2.088
Black, non-Hispanic	0.882	0.898	0.873	-1.813
Other, non-Hispanic	0.040	0.038	0.040	0.284
Hispanic	0.083	0.080	0.084	0.329
Age	38.649	39.157	38.402	-1.923
Number of Adults in Caller's Household	1.357	1.346	1.362	0.626
Number of Minors in Caller's Household	1.285	1.295	1.282	-0.238
Percentage in ZIP Code with HS Degree	78.688	78.962	78.548	-1.385
Labor Force Participation Rate in ZIP Code	60.661	60.612	60.666	0.198
Unemployment Rate in ZIP Code	18.875	18.914	18.869	-0.176
Median Age in ZIP Code	33.870	33.778	33.916	1.153
Monthly Housing Cost in ZIP Code (In Thousands)	0.995	0.998	0.994	-0.510
Median Household Income in ZIP Code (In Thousands)	36.840	36.684	36.880	0.367
Fraction Black in ZIP Code	0.640	0.648	0.637	-0.903
Fraction White in ZIP Code	0.238	0.237	0.238	0.100
Fraction Other Races in ZIP Code	0.122	0.114	0.125	1.976
Applying Due to Benefit Loss	0.152	0.165	0.145	-1.190
Applying Due to Inability to Pay Bills	0.011	0.016	0.008	-2.227
Applying Due to Exiting Shared Housing	0.036	0.023	0.043	2.648
Applying to Flee Abuse	0.007	0.009	0.006	-0.687
Applying Due to Job Loss	0.410	0.398	0.416	1.255
Monthly Income (In Thousands)	1.256	1.270	1.249	-0.946
Income Greater than Twice Poverty Line	0.256	0.274	0.246	-1.386
Receiving SNAP Benefits	0.579	0.591	0.575	-0.696
Receiving Child Support	0.047	0.056	0.042	-1.687
Receiving Earned Income	0.699	0.699	0.700	0.048
Receiving Disability Payments	0.060	0.068	0.056	-0.870
Receiving SSI	0.100	0.098	0.101	0.273
Receiving Income from TANF	0.042	0.042	0.042	-0.048
Receiving Unemployment Payments	0.205	0.187	0.215	1.915
Receiving Other Income Sources	0.052	0.057	0.050	-0.951
Living Situation: Rent Housing	0.913	0.927	0.905	-1.736
Living Situation: Own Housing	0.004	0.008	0.001	-2.497
Living Situation: Shared Housing (with Family/Friends)	0.083	0.064	0.093	2.477
Shelter Inhabitancy in Past 18 Months	0.028	0.025	0.030	0.691
N	3,574	1,216	2,358	

Notes: Results are for our main sample of eligible first-time calls for rent assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. The means for calls referred/not referred to funds are regression-adjusted and clustered by zip code. Column (2) presents the predicted dependent variables from the regressions of fund availability on each characteristic when funds are not available; column (3) similar presents the predicted dependent variables when funds are available. The regressions include controls for day of the week, month, time of the month (first five days, last five days, and middle days), year-request amount interactions, and veteran status.

Table 6: Means Characteristics of Eligible, First-time Callers, Security Deposit Assistance

Variable	Mean	Regression-Adjusted Means		T-Statistic on Difference
	Full Sample	Funds Are Not Available	Funds Are Available	
	(1)	(2)	(3)	(4)
Female	0.809	0.816	0.788	-0.892
White, non-Hispanic	0.061	0.061	0.058	-0.148
Black, non-Hispanic	0.911	0.917	0.898	-0.689
Other, non-Hispanic	0.029	0.022	0.045	1.078
Hispanic	0.066	0.060	0.080	0.879
Age	39.297	39.947	37.704	-2.324
Number of Adults in Caller's Household	1.334	1.348	1.299	-0.826
Number of Minors in Caller's Household	1.512	1.536	1.454	-0.590
Percentage in ZIP Code with HS Degree	77.814	77.864	77.729	-0.212
Labor Force Participation Rate in ZIP Code	59.895	59.908	59.893	-0.023
Unemployment Rate in ZIP Code	19.482	19.447	19.541	0.143
Median Age in ZIP Code	33.653	33.707	33.517	-0.563
Monthly Housing Cost in ZIP Code (In Thousands)	0.986	0.989	0.976	-1.118
Median Household Income in ZIP Code (In Thousands)	35.872	36.228	34.958	-1.388
Fraction Black in ZIP Code	0.655	0.654	0.658	0.139
Fraction White in ZIP Code	0.226	0.227	0.223	-0.215
Fraction Other Races in ZIP Code	0.119	0.119	0.120	0.067
Applying Due to Benefit Loss	0.027	0.025	0.035	0.704
Applying Due to Inability to Pay Bills	0.007	0.008	0.004	-0.379
Applying Due to Exiting Shared Housing	0.225	0.220	0.243	0.748
Applying to Flee Abuse	0.031	0.031	0.031	-0.036
Applying Due to Job Loss	0.073	0.079	0.058	-0.757
Monthly Income (In Thousands)	1.104	1.108	1.095	-0.199
Income Greater than Twice Poverty Line	0.190	0.187	0.199	0.297
Receiving SNAP Benefits	0.693	0.704	0.663	-1.380
Receiving Child Support	0.068	0.073	0.055	-0.921
Receiving Earned Income	0.532	0.521	0.565	0.936
Receiving Disability Payments	0.150	0.157	0.127	-0.857
Receiving SSI	0.219	0.225	0.202	-0.649
Receiving Income from TANF	0.100	0.091	0.127	2.013
Receiving Unemployment Payments	0.100	0.104	0.090	-0.625
Receiving Other Income Sources	0.100	0.101	0.099	-0.069
Living Situation: Rent Housing	0.610	0.600	0.633	0.990
Living Situation: Own Housing	0.008	0.011	-0.001	-2.326
Living Situation: Shared Housing (with Family/Friends)	0.382	0.388	0.369	-0.630
Shelter Inhabitancy in Past 18 Months	0.042	0.043	0.042	-0.023
N	874	642	232	

Notes: Results are for our main sample of eligible first-time calls for security deposit assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. The means for calls referred/not referred to funds are regression-adjusted and clustered by zip code. Column (2) presents the predicted dependent variables from the regressions of fund availability on each characteristic when funds are not available; column (3) similar presents the predicted dependent variables when funds are available. The regressions include controls for day of the week, month, time of the month (first five days, last five days, and middle days), year-request amount interactions, and veteran status.

Table 7: OLS Estimates of the Effect of Fund Availability on Shelter Spells

Dependent Variable:	Shelter Admittance				Days Spent in Shelter	
	3 months	6 months	3 months	6 months	6 months	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Rent</i>						
Funds Are Available	-0.011** (0.004)	-0.011** (0.004)	-0.013** (0.004)	-0.013** (0.005)	-1.637** (0.659)	-1.912** (0.743)
Caller and call characteristics	No	No	Yes	Yes	No	Yes
N	3,574	3,574	3,574	3,574	3,574	3,574
Mean of Dependent Variable for Control Group	0.018	0.021	0.018	0.021	3.169	3.169
<i>Panel B: Security Deposit</i>						
Funds Are Available	-0.008 (0.008)	-0.016* (0.010)	-0.014 (0.009)	-0.020* (0.011)	-2.722* (1.477)	-3.585** (1.670)
Caller and call characteristics	No	No	Yes	Yes	No	Yes
N	874	874	874	874	874	874
Mean of Dependent Variable for Control Group	0.012	0.020	0.012	0.020	3.062	3.062

Notes: Results are for our main sample of eligible first-time calls for rent or security deposit assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. These regressions include controls for observable characteristics, variables for the day of the week, month, and time of the month of each call, and need amounts interacted with year dummies. The regressions also include indicator variables for observations with missing observable characteristics.

*Significant at the 10% level, **significant at the 5% level, for the coefficient on fund availability

Table 8: OLS Estimates of the Effect of Fund Availability on Shelter Spells by Subgroup

	All Clients	Winter (Dec-Feb)	Not Winter (Mar-Nov)	Below or Equal to Median Income	Above Median Income	Families	Single Individuals	Female	Male	Age Under 30	Age 30+
Need: Rent											
Shelter Admittance: 3 Months	-0.013** (0.004) {0.018} [3,574]	-0.055** (0.015) {0.058} [531]	-0.006 (0.004) {0.012} [3,043]	-0.021** (0.006) {0.023} [1,781]	-0.003 (0.006) {0.013} [1,790]	-0.009* (0.005) {0.015} [2,578]	-0.025** (0.009) {0.027} [996]	-0.010** (0.005) {0.018} [2,747]	-0.023** (0.009) {0.019} [826]	-0.021** (0.009) {0.025} [854]	-0.011** (0.005) {0.016} [2,720]
Shelter Admittance: 6 Months	-0.013** (0.005) {0.021} [3,574]	-0.055** (0.015) {0.058} [531]	-0.006 (0.005) {0.016} [3,043]	-0.019** (0.006) {0.025} [1,781]	-0.005 (0.007) {0.018} [1,790]	-0.009 (0.005) {0.018} [2,578]	-0.026** (0.010) {0.030} [996]	-0.011** (0.005) {0.022} [2,747]	-0.020** (0.009) {0.019} [826]	-0.025** (0.009) {0.028} [854]	-0.010* (0.005) {0.019} [2,720]
Days in Shelter: 6 Months	-1.912** (0.743) {3.169} [3,574]	-8.079** (2.301) {7.923} [531]	-0.921 (0.788) {2.469} [3,043]	-2.938** (1.006) {3.565} [1,781]	-0.681 (1.125) {2.783} [1,790]	-0.977 (0.837) {2.507} [2,578]	-4.613** (1.600) {4.931} [996]	-1.375 (0.849) {3.108} [2,747]	-3.959** (1.568) {3.383} [826]	-3.608** (1.552) {3.912} [854]	-1.511* (0.860) {2.942} [2,720]
Need: Security Deposit											
Shelter Admittance: 3 Months	-0.014 (0.009) {0.012} [874]	-0.048 (0.048) {0.029} [111]	-0.013 (0.009) {0.010} [763]	-0.034** (0.015) {0.018} [436]	-0.002 (0.011) {0.006} [438]	-0.018* (0.010) {0.013} [638]	-0.010 (0.020) {0.012} [236]	-0.014 (0.011) {0.013} [707]	-0.001 (0.020) {0.009} [167]	-0.030 (0.026) {0.030} [237]	-0.005 (0.008) {0.006} [637]
Shelter Admittance: 6 Months	-0.020* (0.011) {0.020} [874]	-0.087 (0.058) {0.043} [111]	-0.017 (0.011) {0.017} [763]	-0.035* (0.020) {0.031} [436]	0.001 (0.012) {0.010} [438]	-0.023* (0.014) {0.023} [638]	-0.010 (0.020) {0.012} [236]	-0.022 (0.013) {0.023} [707]	-0.001 (0.020) {0.009} [167]	-0.042 (0.028) {0.036} [237]	-0.008 (0.012) {0.015} [637]
Days in Shelter: 6 Months	-3.585** (1.670) {3.062} [874]	-9.666 (8.588) {5.638} [111]	-3.581** (1.779) {2.752} [763]	-6.183** (3.138) {4.636} [436]	-0.782 (1.743) {1.429} [438]	-3.922* (2.105) {3.360} [638]	-2.428 (3.041) {2.195} [236]	-3.790* (2.030) {3.402} [707]	-0.219 (3.531) {1.538} [167]	-6.438 (4.724) {5.864} [237]	-1.897 (1.630) {2.061} [637]

Notes: Results are for our main sample of eligible first-time calls for rent or security deposit assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. These coefficients are from Table 7. The equivalent scale adjusted real median income, standardized for a family with one parent and two children, is \$1,384 for rent clients and is \$1,225 for security deposit clients in 2012 \$ (or c for rent assistance and \$664 for security deposit assistance). The median need amount is \$850 for rent clients and \$900 for security deposit clients.

Statistics reported: Estimates impact (Standard error) {Mean outcome in control group} [Number of observations]

*Significant at the 10% level, **significant at the 5% level, for the coefficient on fund availability

Table 9: Alternative Specifications

	Main Specification	Entering non-Permanent Supportive Housing	Renters Only	19 July 2010 as Beginning of Time Window	First Calls in 6 Months	Logit
	(1)	(2)	(3)	(4)	(5)	(6)
Need: Rent						
Shelter Admittance: 3 Months	-0.013** (0.004) {0.018} [3,574]	-0.013** (0.004) {0.017} [3,574]	-0.015** (0.004) {0.019} [3,263]	-0.007* (0.004) {0.011} [2,778]	-0.014** (0.004) {0.019} [5,106]	-1.116** (0.390) {0.033} [2,106]
Shelter Admittance: 6 Months	-0.013** (0.005) {0.021} [3,574]	-0.013** (0.004) {0.021} [3,574]	-0.013** (0.005) {0.019} [3,263]	-0.007 (0.004) {0.013} [2,778]	-0.014** (0.004) {0.022} [5,106]	-0.797** (0.330) {0.032} [2,738]
Days in Shelter: 6 Months	-1.912** (0.743) {3.169} [3,574]	-1.994** (0.708) {3.021} [3,574]	-2.028** (0.745) {3.077} [3,263]	-1.009 (0.708) {1.864} [2,778]	-1.824** (0.615) {3.123} [5,106]	
Need: Security Deposit						
Shelter Admittance: 3 Months	-0.014 (0.009) {0.012} [874]	-0.009 (0.008) {0.009} [874]	-0.007 (0.010) {0.008} [533]	-0.016* (0.009) {0.011} [722]	-0.011 (0.009) {0.012} [1,363]	-1.070 (1.063) {0.014} [874]
Shelter Admittance: 6 Months	-0.020* (0.011) {0.020} [874]	-0.010 (0.009) {0.014} [874]	-0.008 (0.011) {0.010} [533]	-0.022* (0.012) {0.018} [722]	-0.018* (0.011) {0.022} [1,363]	-1.563 (1.041) {0.021} [874]
Days in Shelter: 6 Months	-3.585** (1.670) {3.062} [874]	-2.159 (1.451) {2.176} [874]	-1.871 (1.670) {1.641} [533]	-3.507** (1.780) {2.607} [722]	-2.352 (1.639) {3.204} [1,363]	

Notes: Results are for our main sample of eligible first-time calls for rent or security deposit assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. These coefficients are from regressions with controls, i.e. as in Table 7. The sample sizes decrease for the logit models for rent because the logit models omit observations for which some variables perfectly predict failure for the dependent variable. The sample sizes do not change for security deposit, because we do not include controls in the security deposit logit models in order to maintain a usable sample size.

Statistics reported: Estimates impact (Standard error) {Mean outcome in control group} [Number of observations]

*Significant at the 10% level, **significant at the 5% level, for the coefficient on fund availability

Appendix Table 1: OLS Estimates of the Effect of Fund Availability on Shelter Spells, Rent Assistance

Dependent Variable:	Shelter Admittance				Days Spent in Shelter	
	3 months	6 months	3 months	6 months	6 months	6 months
Variable						
Funds Are Available	-0.011** (0.004)	-0.011** (0.004)	-0.013** (0.004)	-0.013** (0.005)	-1.637** (0.659)	-1.912** (0.743)
\$301 to \$900 in Need			0.006 (0.010)	0.010 (0.012)		1.051 (1.863)
\$901 to \$1200 in Need			0.024* (0.012)	0.030** (0.014)		4.423** (2.247)
\$1201 to \$1500 in Need			0.013 (0.012)	0.016 (0.013)		2.430 (2.092)
More than \$1500 in Need			0.009 (0.012)	0.020 (0.014)		1.236 (2.154)
Veteran			0.03** (0.011)	0.037** (0.012)		6.488** (1.943)
Female			0.005 (0.004)	0.006 (0.005)		0.959 (0.802)
African American/Black			-0.006 (0.008)	-0.006 (0.009)		-0.468 (1.432)
Multi-racial/Other Race			0.015 (0.011)	0.013 (0.013)		1.687 (2.023)
Hispanic			0.006 (0.008)	0.004 (0.009)		0.940 (1.508)
Age			0.000 (0.000)	0.000 (0.000)		0.015 (0.031)
Number of Adults in Caller's Household			-0.001 (0.003)	-0.001 (0.003)		-0.004 (0.544)
Number of Minors in Caller's Household			-0.001 (0.002)	-0.002 (0.002)		-0.160 (0.276)
Percentage in ZIP Code with HS Degree			0.001 (0.000)	0.001 (0.001)		0.064 (0.081)
Labor Force Participation Rate in ZIP Code			0.000 (0.001)	0.000 (0.001)		0.049 (0.098)
Unemployment Rate in ZIP Code			0.001 (0.001)	0.000 (0.001)		-0.064 (0.122)
Median Age in ZIP Code			-0.002* (0.001)	-0.002** (0.001)		-0.328* (0.192)
Monthly Housing Cost in ZIP Code (In Thousands)			-0.068** (0.033)	-0.07* (0.038)		-11.099** (6.015)
Median Household Income in ZIP Code (In Thousands)			0.001** (0.001)	0.001 (0.001)		0.146 (0.110)
Fraction Black in ZIP Code			0.023 (0.020)	0.029 (0.023)		5.174 (3.643)
Fraction Other Races (Non-Black/White) in ZIP Code			0.053 (0.033)	0.051 (0.037)		8.746 (5.900)
Applying Due to Benefit Loss			-0.005 (0.005)	-0.007 (0.006)		-0.774 (0.949)
Applying Due to Inability to Pay Bills			-0.014 (0.017)	-0.019 (0.019)		-2.752 (3.074)
Applying Due to Exiting Shared Housing			-0.010 (0.010)	-0.012 (0.011)		-1.675 (1.733)
Applying to Flee Abuse			0.069** (0.021)	0.068** (0.024)		6.462* (3.789)
Applying Due to Job Loss			-0.003 (0.004)	-0.005 (0.005)		-0.811 (0.725)
Monthly Income (In Thousands)			-0.003 (0.003)	-0.003 (0.004)		-0.537 (0.605)
Income Greater than Twice Poverty Line			-0.004 (0.005)	-0.003 (0.006)		0.079 (0.978)
Receiving SNAP Benefits			-0.001 (0.004)	-0.001 (0.004)		-0.010 (0.711)
Receiving Child Support			0.014 (0.009)	0.017* (0.010)		1.495 (1.538)
Receiving Earned Income			-0.012* (0.006)	-0.008 (0.007)		-1.587 (1.143)
Receiving Disability Payments			-0.002 (0.008)	0.006 (0.010)		0.743 (1.521)
Receiving SSI			-0.011 (0.007)	-0.007 (0.008)		-1.838 (1.254)
Receiving Income from TANF			0.001 (0.009)	0.000 (0.010)		-1.131 (1.657)
Receiving Unemployment Payments			-0.005 (0.007)	0.000 (0.007)		-0.512 (1.181)
Receiving Other Income Sources			-0.013 (0.008)	0.002 (0.009)		-0.082 (1.512)
N	3,574	3,574	3,574	3,574	3,574	3,574
Mean of Dependent Variable for Control Group	0.018	0.021	0.018	0.021	3.169	3.169

Notes: Results are for our main sample of eligible first-time calls for rent assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. For the observable characteristics variables, missing values have been recoded as zeros. These regressions include dummies for these missing values as control variables (coefficients not reported here). These regressions also include other controls for variable that are not reported here: variables for the day of the week, month, and time of the month of each call and dummies indicating missing need amounts. The need amounts are also interacted with year dummies (coefficients not reported here).

*Significant at the 10% level, **significant at the 5% level, for the coefficient on fund availability

Appendix Table 2: OLS Estimates of the Effect of Fund Availability on Shelter Spells, Security Deposit Assistance

Dependent Variable:	Shelter Admittance				Days Spent in Shelter	
	3 months	6 months	3 months	6 months	3 months	6 months
Variable						
Funds Are Available	-0.008 (0.008)	-0.016* (0.010)	-0.014 (0.009)	-0.020* (0.011)	-2.722* (1.477)	-3.585** (1.670)
\$301 to \$900 in Need			-0.022 (0.017)	-0.023 (0.021)		-4.354 (3.242)
\$901 to \$1200 in Need			-0.028 (0.020)	-0.027 (0.025)		-4.317 (3.852)
\$1201 to \$1500 in Need			-0.021 (0.019)	-0.009 (0.023)		-2.329 (3.592)
More than \$1500 in Need			-0.019 (0.020)	-0.003 (0.025)		-2.364 (3.796)
Veteran			0.058** (0.019)	0.054** (0.024)		6.52* (3.657)
Female			0.014 (0.010)	0.022* (0.012)		2.505 (1.890)
African American/Black			0.016 (0.018)	0.044* (0.023)		7.509** (3.475)
Multi-racial/Other Race			0.006 (0.027)	-0.003 (0.033)		0.151 (5.107)
Hispanic			-0.008 (0.020)	0.028 (0.025)		4.956 (3.810)
Age			0.000 (0.000)	-0.001 (0.000)		-0.091 (0.060)
Number of Adults in Caller's Household			-0.005 (0.006)	-0.005 (0.008)		-1.307 (1.172)
Number of Minors in Caller's Household			-0.001 (0.003)	0.000 (0.004)		0.439 (0.559)
Percentage in ZIP Code with HS Degree			-0.001 (0.001)	0.001 (0.001)		-0.020 (0.168)
Labor Force Participation Rate in ZIP Code			0.000 (0.001)	-0.002 (0.001)		-0.418** (0.208)
Unemployment Rate in ZIP Code			-0.001 (0.001)	-0.001 (0.002)		-0.120 (0.233)
Median Age in ZIP Code			0.001 (0.002)	0.001 (0.002)		0.519 (0.378)
Monthly Housing Cost in ZIP Code (In Thousands)			0.054 (0.060)	-0.023 (0.075)		-0.190 (11.529)
Median Household Income in ZIP Code (In Thousands)			-0.001 (0.001)	0.000 (0.001)		-0.126 (0.223)
Fraction Black in ZIP Code			-0.035 (0.039)	-0.099** (0.049)		-18.879** (7.507)
Fraction Other Races (Non-Black/White) in ZIP Code			-0.096 (0.062)	-0.125 (0.077)		-19.922* (11.856)
Applying Due to Benefit Loss			0.001 (0.022)	-0.010 (0.028)		-0.887 (4.244)
Applying Due to Inability to Pay Bills			-0.025 (0.043)	-0.033 (0.054)		-4.665 (8.213)
Applying Due to Exiting Shared Housing			-0.007 (0.009)	-0.003 (0.011)		-0.647 (1.707)
Applying to Flee Abuse			0.075** (0.022)	0.061** (0.027)		8.677** (4.176)
Applying Due to Job Loss			-0.002 (0.014)	-0.007 (0.018)		-0.266 (2.686)
Monthly Income (In Thousands)			-0.003 (0.007)	-0.007 (0.009)		-0.948 (1.379)
Income Greater than Twice Poverty Line			-0.009 (0.012)	-0.013 (0.015)		-1.724 (2.326)
Receiving SNAP Benefits			0.004 (0.009)	-0.001 (0.011)		-0.334 (1.639)
Receiving Child Support			-0.021 (0.015)	-0.006 (0.018)		-3.131 (2.805)
Receiving Earned Income			-0.004 (0.011)	0.006 (0.014)		0.733 (2.133)
Receiving Disability Payments			-0.008 (0.012)	0.013 (0.015)		1.870 (2.316)
Receiving SSI			-0.012 (0.011)	-0.004 (0.014)		-0.048 (2.116)
Receiving Income from TANF			-0.004 (0.013)	0.002 (0.016)		-0.369 (2.506)
Receiving Unemployment Payments			-0.015 (0.014)	-0.003 (0.017)		-1.237 (2.648)
Receiving Other Income Sources			-0.014 (0.013)	0.014 (0.017)		2.107 (2.532)
N	874	874	874	874	874	874
Mean of Dependent Variable for Control Group	0.012	0.020	0.012	0.020	3.062	3.062

Notes: Results are for our main sample of eligible first-time calls for security deposit assistance, January 20, 2010-December 4, 2012. See text for additional restrictions. For the observable characteristics variables, missing values have been recoded as zeros. These regressions include dummies for these missing values as control variables (coefficients not reported here). These regressions also include other controls for variable that are not reported here: variables for the day of the week, month, and time of the month of each call and dummies indicating missing need amounts. The need amounts are also interacted with year dummies (coefficients not reported here).

*Significant at the 10% level, **significant at the 5% level, for the coefficient on fund availability