

# **Impact Evaluation of the Los Angeles Homeless Services Authority Shallow Subsidy for Rapid Re-Housing, 2019–2023:**

Evaluation Results Report

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## Section 1: Introduction

### Objectives of the Evaluation

The Cloudburst Group (Cloudburst) was engaged by the Los Angeles Homeless Services Authority (LAHSA) to design and implement an impact evaluation to understand the impact of its Shallow Subsidy for Rapid Re-Housing pilot program on housing status and long-term housing stability, as well as secondary outcomes. The evaluation focuses on the first three years of Shallow Subsidy for Rapid Re-Housing program implementation, beginning June 15, 2019 through June 30, 2023 (including a one-year follow-up period), documenting the impact of the Shallow Subsidy for Rapid Re-Housing program on housing stability for families, youth, adults, and seniors exiting Rapid Re-Housing (RRH) or Homelessness Prevention programs.

This report presents the findings of the Shallow Subsidy for Rapid Re-Housing program impact evaluation. The report is structured as follows: Section 1 provides background information on shallow subsidies. Section 2 describes methods, data sources, and expected outcomes. Section 3 contains the evaluation findings on outputs and key outcomes. Section 4 concludes the report with next steps.

### Background

Stable housing is critical for the health and wellbeing of all populations. In the U.S., research has shown that unhoused populations have higher rates of chronic health conditions, infectious diseases, mental illness, and mortality. Programs that provide financial assistance for populations at risk of and experiencing homelessness are associated with better health and economic and social well-being.<sup>1</sup> People need stable housing to survive and thrive in neighborhoods and communities across the country.

Households facing immense rent burden, the possibility of eviction, or other triggers that push residents into substandard housing are increasingly likely to experience repeated homelessness and other barriers to wellbeing. Residential instability—because of rent burden, an eviction, or a forced move that spirals households into substandard and/or unsafe housing—is correlated with repeated homelessness, health disparities, and a descending path of compromised employment and education opportunities.<sup>2</sup>

Unfortunately, many housing assistance programs still render households vulnerable. Households participating in RRH and Homelessness Prevention programs can be especially vulnerable, having recently experienced homelessness or being at high risk of experiencing homelessness in the near future (and perhaps both). For example, up to 31 percent of families

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<sup>1</sup> Byrd B. (February 27, 2020). The emerging crisis of aged homelessness: what can be done to help? Health Affairs blog. Accessed July 1, 2020; Kim DH, Daskalakis C, Plumb JD, et al. (2008). Modifiable cardiovascular risk factors among individuals in low socioeconomic communities and homeless shelters. *Fam Community Health*; Morrison DS. (2009). Homelessness as an independent risk factor for mortality: results from a retrospective cohort study. *Int J Epidemiol.* 38(3): 877–883.

<sup>2</sup> Desmond, M., Gershenson, C., & Kiviat, B. (2015). Forced relocation and residential instability among urban renters. *Social Service Review*, 89(2), 227–262.

with children participating in RRH programs, where households pay 30 percent of their housing costs while receiving temporary housing assistance for up to two years, were found to re-enter shelter within 18 months of exiting RRH.<sup>3</sup> Additionally, up to 13 percent of urban families may still experience homelessness within three years of receiving Homelessness Prevention Subsidies, which target households on the brink of homelessness. Prevention housing assistance is typically a smaller amount of rental assistance than RRH funding but has also been found to be more successful when supporting stable housing before households experience homelessness.<sup>4</sup> Permanent housing subsidies, such as Section 8 vouchers, which do not expire so long as households meet certain criteria, are a promising means of ensuring housing stability. However, they are inaccessible to most households as the process of obtaining a Section 8 voucher can take several years.

A shallow subsidy is intermediate housing assistance, offering a smaller amount of rental assistance for a longer period in comparison to RRH. Subsidies are considered “shallow” compared to the “deep,” permanent subsidies of Permanent Supportive Housing or Housing Choice Vouchers or the average cost of RRH. The sustained length of shallow subsidy housing assistance expands housing stability options, increasing households’ abilities to attain permanent housing vouchers, benefits, and higher income while meeting costly living expenses. As a newer approach to the wide array of housing assistance programs that work to resolve homelessness, a shallow rental subsidy is less costly, overall, than a full housing subsidy (such as the Housing Choice Voucher) and can be less costly than RRH, which provides both housing assistance and deeper case management services. Households targeted for shallow subsidies have household income, or trajectories of benefits or other long-term housing vouchers, and generally have fewer physical and psychiatric barriers to stable housing. Light case management is attached to this subsidy type.

For over a decade in Los Angeles County, housing costs have been rising, vacancy rates have been decreasing, and homelessness has been increasing. Over 65,000 people are experiencing homelessness every night in Los Angeles County, according to 2022 U.S. Housing and Urban Development (HUD) reports.<sup>5</sup> In LA, the difficulty of finding and sustaining affordable housing for preventing and ending homelessness has been an extreme challenge. The multiple housing programs established by LAHSA to provide permanent and temporary housing assistance are not meeting the multi-level needs of households at risk of and experiencing homelessness. In an effort to decrease the use of RRH funding for households who could be moved off that program with a smaller subsidy amount, LAHSA created the Shallow Subsidy Pilot.

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<sup>3</sup> Walton, D., Wood, M., Rodriguez, J., Khadduri, J., Gubits, D., Dunton, L., & Shinn, M. (2018). Understanding rapid re-housing: Supplemental analysis of data from the Family Options Study. Washington, D.C.: U.S. Department of Housing & Urban Development.

<sup>4</sup> Shinn, M., Greer, A. L., Bainbridge, J., Kwon, J., & Zuiderveen, S. (2013). Efficient targeting of homelessness prevention services for families. *American Journal of Public Health*, 103(S2), 324–331. <http://doi.org/10.2105/AJPH.2013>

<sup>5</sup> HUD CoC Homeless Populations and Subpopulations Report. 2022. <https://www.hudexchange.info/programs/coc/coc-homeless-populations-and-subpopulations-reports/>

## Shallow Subsidy for Rapid Re-Housing Pilot

In 2018, LAHSA committed to support the expansion of housing stability choices with shallow subsidies. The overall goal of this pilot was to explore ways to increase effective, long-term permanent housing options for low-income households with high rent burden. To provide extended assistance to RRH and Homeless Prevention program participants who still need time to build economic security but could do so with lower levels of assistance, the LAHSA Shallow Subsidy for Rapid Re-Housing program was designed to provide an extended safety net of housing assistance. Expanding and sustaining housing stability is the ultimate goal.

The two target populations are households being moved out of homelessness with the housing assistance of RRH (including transition-age youth), and a smaller number of individuals enrolled in LAHSA Homelessness Prevention programs, with a focus on older adults (aged 62 and above). RRH and Homelessness Prevention providers refer clients to the shallow subsidy provider based on eligibility. LAHSA's program operator, The Salvation Army, screens households to confirm program eligibility, enrolling rent-burdened households who are current on rent payments with an income at or below 50 percent area median income (AMI)<sup>6</sup> who pay 60 percent or more of their total income toward rent. The program operator recertifies client eligibility annually. The shallow subsidy pilot was designed to require that all program participants be on a wait list for long-term housing assistance or qualifying education or employment assistance.

Qualifying individuals and families in the County of Los Angeles who remain rent burdened receive a monthly subsidy of 35 percent of the household's monthly rent for up to five years, supported by limited case management service staff. The original case management to client ratio was set at approximately one case manager for every 200 clients. The case managers confirm housing and support housing retention and community connections, working with clients and landlords to resolve tenancy disputes. Case managers also provide budgeting assistance and work with the client to develop a Financial Independence Plan. Client movement toward financial independence is tracked through quarterly case management contacts and an annual in-person check-in meeting. In accordance with a voluntary, client-centered approach, they also connect households to mainstream and community services as needed (e.g., referrals for employment and education services). Case managers also work to expand the permanent housing opportunities for clients by providing housing application and waitlist assistance, identifying and maintaining records on housing resources, and developing relationships with landlords.

LAHSA designed the Shallow Subsidy for Rapid Re-Housing program to last a maximum of five years for each enrolled household. Participants may exit sooner if they achieve financial independence, receive long-term affordable housing where rent is calculated as a percentage of their income, reach an income above 80 percent AMI, pay less than 50 percent of their total income toward rent, are hospitalized or incarcerated for 90 days or more, refuse contact with the program operator for 180 days or more, lose employment or income (in which case they will be connected to an RRH program), or experience a change in disability status and require

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<sup>6</sup> As determined by completing the LAHSA Household Composition and Income Eligibility form, the LAHSA Third-Party Income Eligibility form, or the LAHSA Self-Certification of Income form (as appropriate).



Permanent Supportive Housing (in which case they are connected to the matching coordinator for a higher level of care).

Twenty percent of LAHSA's shallow subsidy program was carved out for older adults aged 62 and above who were enrolled in a LAHSA Homelessness Prevention program. These households were in need of ongoing, temporary, "shallow" rental assistance that would allow this elderly population to establish federal benefit income, or to stay stably housed while waiting for affordable, low-income housing, such as Section 8 or senior housing.

An additional population was added by LAHSA to the Shallow Subsidy pilot program in Year 2. Called the Street to Subsidy program, shallow subsidies were also targeted to support households on fixed incomes (e.g., Supplemental Security Income [SSI], Social Security Disability Insurance [SSDI], pension, retirement) that were experiencing homelessness. LAHSA's goal was to provide a time-limited moderate subsidy for households waiting for a permanent subsidy, getting households rehoused sooner, and supporting them with limited case management to assist with benefits and housing stability referrals.

LAHSA intended that the bridge of shallow subsidies would allow households to decrease their rent burden and prevent homelessness. LAHSA's shallow subsidy total target populations goals were set to serve:

- 1,440 RRH households
- 360 Homelessness Prevention households
- 80 Street to Subsidy households

## Other Subsidy Models in the U.S.

LAHSA was one of the first large systems of care to structure a shallow subsidy pilot. There is one national shallow subsidy program, initiated by the United States Department of Veterans Affairs (VA) the same year that LAHSA's pilot began, and a few pilots undertaken in the past two years. Evaluations are tied to all four of these identified pilots. To date, there is no standard approach to these shallow subsidy pilots: each has a different target population and eligibility criteria, as well as varying ways to determine the amount of the shallow subsidy, with the length of time ranging from 18 months to five years. Most shallow subsidy pilots continue to refine the design of their program as the economic and funding environments change and they learn more about client needs.

**The VA SSVF Shallow Subsidy Initiative:** This national shallow subsidy program, which began implementation in October 2019, is run by the VA's Supportive Services for Veteran Families (SSVF) program. The SSVF Shallow Subsidy Initiative provides "shallow" rental assistance to households enrolled in SSVF's RRH or Homelessness Prevention programs, targeting households that remained rent burdened. This national shallow subsidy program is for veteran households experiencing homelessness or at risk of experiencing homelessness with enough income to pay the remaining rent, but still in need of a subsidy. This initiative utilizes shallow subsidies as a bridge toward long-term housing stability for veterans who are on fixed incomes, waiting for

permanent housing vouchers, on a wait list for other housing opportunities, or in shared living situations. There is not a standardized expectation of how long a veteran household receives RRH or Homelessness Prevention assistance before being enrolled into the SSVF Shallow Subsidy Initiative; it is assessed on an individual basis.

The SSVF Shallow Subsidy Initiative is set as a fixed monthly rate, paying up to 50 percent of rental costs that meet the Federal Market Rent standards set by HUD for each region. SSVF Shallow Subsidy Initiative grantees also receive light case management, with household rent determination made every two years. For veteran households that are between 30 percent and 50 percent AMI, shallow subsidy is 50 percent of rent for two years, minus the months of rental assistance received by SSVF RRH or Homelessness Prevention programs. For veteran households at or below 30 percent AMI, the shallow subsidy is also 50 percent of the rent and assistance lasts for two years. Veteran households who need continued assistance can stay enrolled in the SSVF shallow subsidy program.

**The Oakland Shallow Subsidy pilot** was launched in 2021, targeting formerly homeless renters who are at risk of homelessness. This prevention program, funded by Oakland’s Mayor’s Office and implemented by Bay Area Community Services, is researching whether shallow subsidies of \$700–\$800/month can improve housing stability and prevent homelessness. This pilot study is also assessing whether shallow subsidies can be a tool for reducing racial disparities in Homelessness Prevention.

The target population for this shallow subsidy program are renters who were previously homeless, have incomes below 30 percent AMI, and have rent burdens over 50 percent. Designed to reduce rent burden by 25 percent, shallow subsidies are capped at \$800/month for up to 18 months. An estimated 920 households will benefit from receiving this “shallower” subsidy. The evaluation of this innovative shallow subsidy prevention program is underway.

**San Diego Seniors Shallow Subsidy pilot**, launched in the Spring of 2023 by the County of San Diego Department of Homeless Solutions and Equitable Communities, is a shallow subsidy rental program that provides a flat rate of \$500 a month for 18 months to older adults at risk of homelessness. It is expected to serve 220 households, targeting seniors 55 and older with incomes at or below 50 percent AMI, paying 50 percent of their income on housing. This San Diego Seniors Shallow Subsidy Pilot is giving priority to seniors over 60 and households with incomes below 30 percent AMI who live in one of the County’s identified 39 Health Equity Zip Codes.

**LAHSA’s Shallow Subsidy for Rapid Re-Housing pilot** evaluation will contribute to this emerging field of research as LAHSA continues its iterative approach to evolving a responsive shallow subsidy model based on what the field is currently learning from these shallow subsidy initiatives.

## Theory of Change for LAHSA Shallow Subsidy Pilot

With the growth of homelessness in Los Angeles and beyond, the need to evaluate whether shallow subsidies prevent and end homelessness after the receipt of temporary housing

assistance motivates this LAHSA Shallow Subsidy Evaluation. There is limited research on how and whether a shallow subsidy prevents homelessness, and this evaluation of the Shallow Subsidy for Rapid Re-Housing program allows us to assess both its positive and negative effects. The expectation of LAHSA is that shallow subsidies will decrease the cost burden to households after RRH or Homelessness Prevention exit and expand housing stability for households as they are given a longer period of time to increase income, decrease debt, and help to meet costly expenses that risk a return to homelessness.

This innovative shallow subsidy pilot is an opportunity to study the effects of extending a limited level of housing assistance for RRH and Homelessness Prevention households. There are multiple pathways that can occur for households who exit RRH/Homelessness Prevention to receive shallow subsidies for up to five years. Perhaps shallow subsidies will buy households additional time to increase their economic support, either from improved employment status, earned income, or public benefits. For some households, this could be the difference between housing stability and instability and between remaining housed and experiencing homelessness. Shallow subsidies may also provide an additional income buffer that could make up the difference between losing housing if an emergency or crisis occurs, and they may improve a household's capacity to find better work by allowing for improved investments in childcare or other household needs. The generous duration of assistance could result in similar housing stability success as seen in the families who received permanent subsidies in the Family Options Study.

If the Shallow Subsidy for Rapid Re-Housing program contributes to increased housing stability, then it may, in turn, have beneficial spillover effects into other outcome domains. In the Family Options Study experiment, this appeared true of permanent subsidies, which showed consistent effects not only on housing stability but on adult mental health.<sup>7</sup> However, it is unclear whether one year of evaluation study (as is the case with this study) is enough time to observe impacts on non-housing outcomes.

In addition, because enrollment into the Shallow Subsidy for Rapid Re-Housing program triggers the end of RRH and Homelessness Prevention assistance, LAHSA expects that receipt of shallow subsidy assistance may decrease the amount of RRH/Homelessness Prevention assistance that some households would have otherwise received. Similarly, receipt of shallow subsidy assistance will prevent households from re-enrolling in RRH and Homelessness Prevention programs (as long as households maintain Shallow Subsidy for Rapid Re-Housing assistance). If reduction in RRH/Homelessness Prevention assistance coincides with favorable shallow subsidy impacts on housing and/or non-housing outcomes, then a case could be made that redirecting funding from RRH/Homelessness Prevention assistance to Shallow Subsidy for Rapid Re-Housing assistance would allow for a more efficient and effective use of limited housing assistance by right-sizing the assistance resources to each household's need.

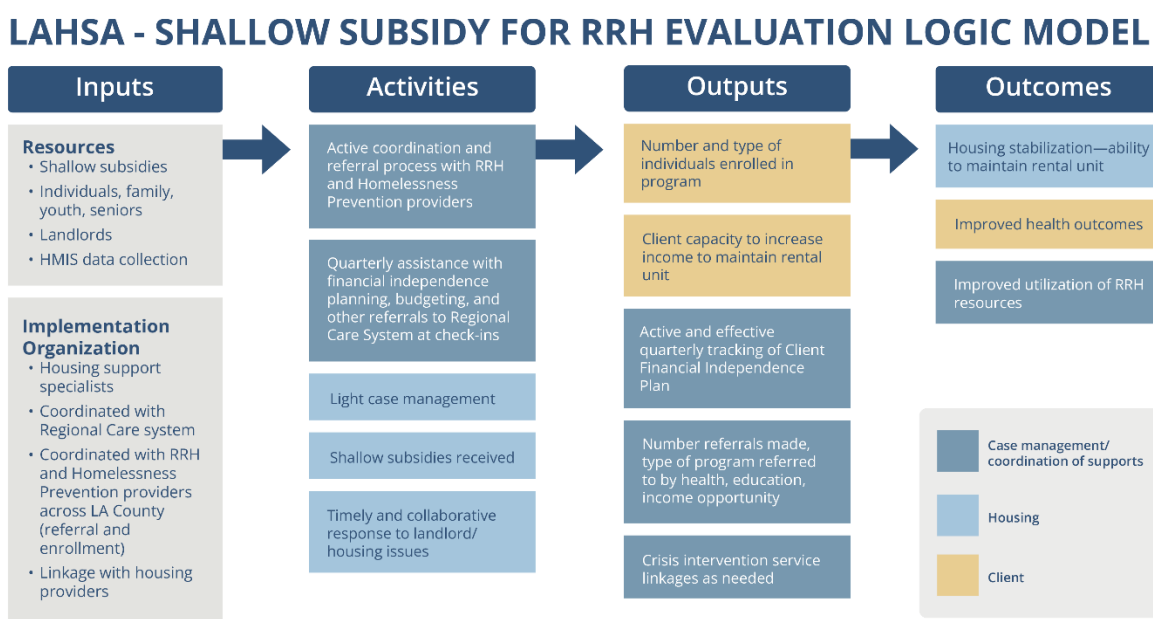
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<sup>7</sup> Gubits, D., Shinn, M., Bell, S., Wood, M., Dastrup, S., Solari, C. D., ... Spellman, B. E. (2015). Family Options Study: Short-term impacts of housing and services interventions for homeless families. Washington, DC: U.S. Department of Housing and Urban Development; Gubits, D., Shinn, M., Wood, M., Bell, S., Dastrup, S., Solari, C. D., ... Kattel, U. (2016). Family Options Study: 3-year impacts of housing and services interventions for homeless families. Washington, DC: U.S. Department of Housing & Urban Development.



This small shallow subsidy could result in a significant increase in housing stability and related outcomes for households at risk of recurrent homelessness. The shallow subsidy will seek to move households who only need a small amount of assistance out of RRH and Homelessness Prevention sooner, allowing more people who need longer and greater amounts of housing assistance to be served by RRH and Homelessness Prevention programs. Understanding the theory of change presented by the LAHSA Shallow Subsidy for Rapid Re-Housing pilot program led to the development of a preliminary logic model (Figure 1, below) depicting multiple pathways toward housing and non-housing outcomes. It outlines the activities, outputs, and outcomes the evaluation team expects to assess throughout the LAHSA Shallow Subsidy for Rapid Re-Housing program impact evaluation.

**Figure 1. LAHSA — Shallow Subsidy for RRH Evaluation Logic Model**



The overall goals for the Shallow Subsidy for Rapid Re-Housing program evaluation are to document how the program impacts housing status and assess how well the initiative helps participants maintain housing stability, tracking differences in outcomes based on household income, household size, disability status, age, race or ethnicity, or other characteristics. The evaluation focuses on the first three years of implementation, beginning in 2019 through 2022, documenting how effective the Shallow Subsidy for Rapid Re-Housing program is for the targeted populations (individuals, families, youth, and seniors) exiting RRH or Homelessness Prevention assistance.

## Section 2: Evaluation Design

### Evaluation Questions

This impact evaluation design focuses on answering the following primary research question:

1. **Does the subsidy improve housing stability by preventing returns to homelessness within 12 months of completing RRH/Homelessness Prevention?**

In addition, the evaluation design considers several secondary research questions:<sup>8</sup>

2. **Does the subsidy improve health outcomes, including physical health, mental health, use of physical health services, and use of mental health services?**
3. **Does the subsidy affect how individuals in other housing programs (RRH and Homelessness Prevention) participate in those programs?**
4. **Are there differences in outcomes based on household income, household type, household size, disability status, age, race, or ethnicity?**

The impact evaluation provides causal inference evidence about the impacts produced by the Shallow Subsidy for Rapid Re-Housing intervention and assesses whether the ultimate goals of the program have truly been achieved. To be able to draw inferences about causality or impact confidently attributed to the subsidy program alone, the evaluation employs a quasi-experimental design, as described below. The impact evaluation design rigorously controls for bias, confounding factors, and changes over time, to allow for causal inference on the effects of the Shallow Subsidy for Rapid Re-Housing program.<sup>9</sup>

### Data Sources

This evaluation draws upon these administrative data sources to answer the evaluation questions:

1. Countywide homelessness data from the LA Homeless Management Information System (HMIS) Collaborative.
2. Administrative data on physical and mental health care utilization contained in the Enterprise Linkage Project (ELP) integrated data warehouse.

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<sup>8</sup> The plan for this evaluation included two other evaluation questions (Does the subsidy improve financial stability outcomes, including employment, earnings, and access to mainstream public resources?; Does the subsidy reduce criminal justice involvement, including arrests, criminal charges, and incarceration?), but these were not able to be included in the final analysis due to a lack of available data.

<sup>9</sup> Although such designs can be more appropriate than randomized controlled trials in some cases, they are also vulnerable to measurement biases introduced by unobserved variables. Such biases can render causal inferences less valid—quasi-experimental designs rely on stronger assumptions about the comparability between treatment and control groups and require statistical corrections to minimize selection bias. Nevertheless, the current study's design was rigorous enough to estimate the effects of the Shallow Subsidy for Rapid Re-Housing program with high confidence.

A summary of outcomes and data sources used to answer each evaluation question is presented in Table 1 (below).

**Table 1: Summary of Evaluation Questions, Key Outcomes, and Data Sources**

Evaluation Question	Key Outcomes	Data Source (e.g., quantitative or qualitative collection)
<b>Primary Outcomes</b>		
Does the subsidy improve housing stability by preventing returns to homelessness, evictions, or forced moves among participants throughout the program and within 12 months of completing it?	Returned to shelter in past year	LA HMIS Collaborative
<b>Secondary Outcomes</b>		
Does the subsidy improve health outcomes, including physical health, mental health, use of physical health services, and use of mental health services?	Any contact with the California Department of Health Services (DHS) or Department of Mental Health (DMH) in past year Number of emergency room visits in past year Number of inpatient and outpatient visits in past year	ELP (DHS, DMH)
Does the subsidy affect the extent to which households utilize RRH and Homelessness Prevention programs?	Length of time in RRH/Homelessness Prevention (immediately prior to baseline and during follow-up)	LA HMIS Collaborative
Are there differences in outcomes based on household income, household size, disability status, age, race or ethnicity, or other characteristics?	Subgroups include: above/below 25% AMI, single adults/families, disability status, senior adult/non-senior adult, youth/non-youth, person of color/non-person of color, Latinx/non-Latinx, # of people in household	Subgroup analysis

To protect client identities, only anonymized HMIS and ELP data was shared with the evaluation team. The data extracts were constructed by matching the HMIS ID or personal ID of individuals

found in the HMIS system to be eligible for the study<sup>10</sup> to DHS and DMH records in the ELP database. After they were provided to the evaluation team, the data sources were merged by the evaluation team using an anonymized client ID.

The Salvation Army also administered an annual survey to program group participants at the time of recertification to provide additional information on changes over time on evaluation outcomes for program participants. The annual survey was administered to clients at the time of annual recertification in English or Spanish. Working in coordination with LAHSA, Cloudburst delivered a full training to all personnel enrolling clients into the study, including providing training to Salvation Army staff regarding how to administer program forms that contain fields for use in the evaluation. The process used to collect this information was the same as Salvation Army's normal process for recording client information (inputting the information into HMIS).

Additionally, to gain insight into the shallow subsidy program enrollment and case management processes, as well as interagency partnerships between referring providers and the Salvation Army, four focus groups were held in March and April 2022 with key stakeholders. Two were held with RRH and Homelessness Prevention providers, one with The Salvation Army supervisors and one with The Salvation Army housing support specialists. In total, 10 RRH providers, three Salvation Army supervisors and six Salvation Army housing specialists participated in the focus group discussions. The focus group discussions included the grounding-in-reality program experience of RRH and Homelessness Prevention providers, varying perspectives on the client experience, cross-agency relations between The Salvation Army and providers, and case depictions of the shallow subsidy assistance process.

On October 22, 2019, the Advarra Institutional Review Board determined that this study is exempt from oversight using the Department of Health and Human Services regulations found at 45 CFR46.104(d)(2) and 45 CFR46.104(d)(4).

## Research Methodology

### Sampling and Matching

The general process for sampling treatment households was as follows. The Salvation Army worked with LA County to develop a process for awarding shallow subsidy assistance to households who met specified eligibility and prioritization criteria. Households who met these criteria and enrolled in the Shallow Subsidy for Rapid Re-Housing program were sampled into

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<sup>10</sup> HMIS clients were eligible for the study if any of the following applied to them during the study timeframe (6/1/2018–9/15/2022): 1) Exited RRH exit; 2) Aged 62 or older and exited Homelessness Prevention; 3) Participation in a Street Outreach program; 4) Participation in an Emergency Shelter program; 5) Participation in a Transitional Housing program; 6) Received Project Roomkey temporary housing during the COVID-19 pandemic; 7) Participation in a Recovery Re-Housing program; 8) Participation in Street to Subsidy; 9) Participation in Shallow Subsidy; 10) Participation in RRH; 11) Shared Housing program enrollment. The study timeframe includes a one-year lookback period in addition to the three years of the shallow subsidy program.

the treatment group. Households who exited RRH or Homelessness Prevention around the same time but did not enter the shallow subsidy<sup>11</sup> were sampled into the comparison group.

The evaluation team deployed a statistical matching process to create a reduced, final comparison group that is statistically equivalent to the final treatment group across a range of baseline household characteristics (including pre-treatment outcomes). Matching techniques generally follow several steps. First, researchers use existing literature to choose variables that have theoretical relationships to outcome measures. Second, they assign weights to these variables, so that members selected from a pool of comparison group members have similar characteristics to those in a treatment group. Finally, researchers assess post-matching differences between groups. If group differences are too large, they apply new weights, repeating this process until an adequate match is achieved between treatment and comparison groups.

The evaluation matched comparison households to treatment households using a combination of exact matching and the genetic matching method.<sup>12</sup> Genetic matching is a method whereby an iterative algorithm minimizes the multivariate distance between comparison and treatment observations, creating an optimally matched sample. Through R's GenMatch function, this method uses an algorithm that rapidly cycles through potential matching weights, thereby removing the need for tedious manual weighting. The algorithm produces optimal weights by minimizing a metric called Mahalanobis distance. Following Diamond and Sekhon, the evaluation team used one-to-one matching with replacement to estimate the average treatment effects on treated households (ATT). This means that the evaluation matched some comparison households to multiple treatment households. Variables used for genetic matching included: total monthly income; birth month and year; race; ethnicity; sex; veteran status; month and year of program exit; and receipt of SSI, SSDI, Temporary Assistance to Needy Families (TANF), and General Assistance (GA). The evaluation also used exact methods to match groups by project type, program location, and program ID.

This approach produced a sample of 1,061 shallow subsidy households matched to 611 comparison households. Table 2 provides selected demographic characteristics of each group.

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<sup>11</sup> The original sampling design in this evaluation was to construct the comparison group from similar households who met the eligibility criteria for the shallow subsidy program immediately before the launch of the program, but this was not feasible because 1) due to the COVID-19 pandemic, the experiences of comparison households (pre-COVID-19) and treatment households (during COVID-19) would differ too substantially and 2) HMIS lacks sufficient data on potential comparison households to determine whether they would have met the shallow subsidy eligibility criteria.

<sup>12</sup> Diamond, A., & Sekhon, J. S. (2013). Genetic matching for estimating causal effects: A general multivariate matching method for achieving balance in observational studies. *The Review of Economics and Statistics*, 95(3), 932-945.

**Table 2. Characteristics of Heads of Household Receiving Shallow Subsidy and Heads of Matched Comparison Households, N=1,061 Pairs**

Variable	Shallow Subsidy (%)	Matched Control (%)
Female	71	51
<b>RACE</b>		
White	36	33
Black	55	61
Asian	1	1
American Indians and Alaska Natives	3	2
Native Hawaiian and Pacific Islander	1	1
Hispanic	31	24
Veteran	2	50
Disabled	30	43
<b>BENEFITS</b>		
TANF	33	15
SSI	21	19
SSDI	6	6
GA	4	6

### Analytic Method

All analyses used linear and logistic regression models to determine the Shallow Subsidy for Rapid Re-Housing program’s influence on outcomes among treatment households relative to comparison households. Models controlled for sex, ethnicity, age, disability status, veteran status, total monthly income, and length of program stay. To answer the primary research question, the team used a logistic model to regress returns to shelter within one year of program completion on receipt of the shallow subsidy. We repeated this analysis for health outcomes, using logistic regression to measure contact with care within one year of program completion and linear regression to measure duration of care in days during this period. Control variables in each regression provided tests of differences between subgroups mentioned in Table 1. Finally, the evaluation tested program utilization by regressing days of program use on whether or not households received the shallow subsidy.

The focus group discussion transcripts were de-identified fully, using the same process Cloudburst employs with qualitative data across its impact evaluations. Analysis of the focus



group discussion transcripts involved reading and re-reading the transcript of the exercise and carefully coding and grouping responses in a consistent manner, allowing comparison of responses and identification of common themes and trends.

## Challenges and Limitations of Interpretation of Results

There are five main limitations of this study that inform the interpretation of results:

- 1) First, matching techniques such as the genetic matching method used in this evaluation are a useful tool to select comparable control and treatment groups based on observable characteristics and are used when the program assignment rule is unclear. However, matching assumes that uptake into treatment is based entirely on observed characteristics (known as the selection-on-observables assumption). Although the results of the matching process give the team high confidence in the comparability of the treatment and comparison groups, it is not guaranteed that no unobserved variables influenced the results. Evaluations that rely on matching methods are generally more compelling when it is possible to match on pretreatment outcomes since this makes it possible to achieve balance on otherwise unobservable characteristics. Limited access to administrative and provider data on the potential comparison group hindered this evaluation because it limits confidence that the program and comparison group are similar on observable and unobservable characteristics.
- 2) A second limitation relates to sample size, especially for tests of particular program referral sources (i.e., Homelessness Prevention) or types (i.e., Street to Subsidy). Overall, enrollment numbers in the shallow subsidy program did not meet LAHSA's stated enrollment goal of 1,800 participants (1,440 former RRH participants and 360 former Homelessness Prevention participants). While the study had a sufficient number of clients that it retained power to detect overall impacts and impacts for the former RRH participants (1,250 clients), it is possible that the Shallow Subsidy for Rapid Re-Housing program significantly influenced outcomes among households exiting emergency shelter or Homelessness Prevention services, but the evaluation cannot detect them due to the small size of the samples (33 and 78 clients, respectively).
- 3) Third, the data collection period overlapped substantially with the most disruptive years of the COVID-19 pandemic. As a result, further analysis is needed to determine how the impacts of the Shallow Subsidy for Rapid Re-Housing program observed in the current study will generalize beyond the pandemic period. Still, the fact that the evaluation found benefits resulting from the shallow subsidy despite unusual circumstances may indicate its promise as an intervention for households needing shallow assistance for extended periods of time.
- 4) Fourth, the team necessarily relied on the cooperation of LAHSA and other agencies to provide the core data for analysis within the evaluation timeline. Due to changes in the requirements for obtaining Department of Public Social Services data from the ELP, it was not possible to include this data in the evaluation, limiting the primary and secondary outcomes and indicators that the evaluation could explore.
- 5) Finally, depending on HMIS and targeted cross-sector administrative data sources (instead of administrative data supplemented with primary survey data) is also a limitation of the evaluation because it means the evaluation relies on a single measure of

some outcomes of interest from outside sources. This approach does not support investigation of nuances in these outcomes, and it also means that if there was an unforeseen data access or quality issue with that measure (as described above), the evaluation was not able to measure that outcome at all.

## Section 3: Findings

### Process Evaluation—LAHSA’s Evolving Shallow Subsidy for Rapid Re-Housing Pilot Program

This section summarizes process evaluation findings about the evolution of LAHSA’s shallow subsidy program based on qualitative focus group discussions with Salvation Army staff and RRH and Homelessness Prevention providers, as well as monthly check-in calls with LAHSA and The Salvation Army to track program progress.

LAHSA envisioned and executed this shallow subsidy program as a pilot with the flexibility to shift strategies or parameters in response to challenges encountered. Both LAHSA and The Salvation Army undertook process learning and associated programmatic adaptations during the study period.

Initially, the first challenge that the Shallow Subsidy for Rapid Re-Housing pilot faced was very low initial numbers of client referrals and enrollments (only approximately 10 referrals per month). LAHSA made a number of program changes to increase the number/speed of referrals and enrollments, reach more people who previously experienced homelessness and were vulnerable to falling back into homelessness, and provide bridge support to people on fixed income, giving them time to explore and apply for other housing options (shared housing and other alternative housing models). These changes include:

#### **Increasing awareness of the Shallow Subsidy for Rapid Re-Housing pilot among providers.**

Based on feedback from providers during the first start-up year, it was determined that providers had a high level of confusion about the new shallow subsidy program. As a result, The Salvation Army soon updated outreach messaging about the program and established a continuous, rotating training outreach schedule to meet with each of LA’s service planning areas to describe in detail the rationale behind the program, establish the eligibility criteria for the shallow subsidies, define referral and enrollment processes, and troubleshoot challenges and problems in a timely manner.

The Salvation Army also established provider coordination case conferencing monthly to discuss issues with enrollment and program processes for shallow subsidy referrals coming from RRH providers, providing partnership around paperwork and eligibility constraints for enrolling households. The Salvation Army also added as-needed case conferencing before the next assigned time to discuss referrals without delay if providers cannot make their assigned case conferencing. End of month referrals/enrollments are important to increase flow into shallow subsidy and increase others’ access to RRH on a timely basis.

A Standard Operations Procedures guidebook was developed to direct the timing and process of all case conference meetings. Initially, providers referred households to the program who needed a higher level of case management than was provided by the shallow subsidy light case management model. The case conferencing venue allowed for a partnership feedback loop between The Salvation Army and RRH/Homelessness Prevention providers for enrollments to be

aligned with the subsidy goals. Based on feedback, LAHSA also removed the barrier of waiting for all paperwork to be entered into HMIS before the household was enrolled into shallow subsidy and created an easier way to calculate rent burden for Salvation Army enrollment staff.

The evaluation's focus groups confirmed that providers and Salvation Army staff found that the overall referral and enrollment process worked after the initial start-up adjustments made by Salvation Army staff on training and the case conferencing structure. The Salvation Army also created effective mechanisms to publicize the program (workshop) and established an effective case conference process with providers on program enrollment processes (monthly calls). In client case examples, Salvation Army and RRH providers described how they have worked together on the "same side" during case conferencing, advocating for the enrolling client by together finding creative solutions to increase access to shallow subsidies. The Salvation Army's training offered to referring providers (regular and on-demand presentations) was also found to be useful. Providers believed this enrollment training outreach should be sustained by The Salvation Army, as RRH and Homelessness Prevention providers voiced their belief for the ongoing need for case conferencing and training on shallow subsidy requirements.

**Refining the amount of rental subsidy provided to 35 percent of local Fair Market Rent or client rent amount instead of \$300 or \$500/month subsidy for individuals or families.** In the first year of the program, the economic hardship resulting from COVID-19 began to impact enrolled shallow subsidy households' abilities to pay rent. Many program participants did not meet the initial eligibility criteria of paying their portion of the rent. The original shallow subsidy levels were set at \$300 for individuals and \$500 for households of two or more, and it was determined that that amount of the subsidy plus a client's income was not enough to cover the rent. LAHSA changed the shallow subsidy amount to be higher, setting the subsidy to be based on 35 percent of a household's monthly rent.

**Enrolling participants who are not at the end of RRH assistance.** In the beginning of the first year of operations, providers were waiting until program participants were at the end of their RRH program, instead of determining shallow subsidy eligibility in a progressive engagement, month-by-month approach. LAHSA and The Salvation Army encouraged providers to exit people who were not at the end of their RRH and who can maintain housing stability with lower subsidy levels as this allows LAHSA to right-size RRH subsidies to households in greater need, maximizing limited housing assistance resources to reach the largest number of households.

**Expanding eligibility for shallow subsidy for clients exiting Homelessness Prevention to include all individuals and families, not just older adults (62 and older).** This change was identified early by providers as a need. In focus groups, Homelessness Prevention providers expressed that many of their clients faced the same housing stability challenges as clients older than 62 and all providers asked LAHSA for the Homelessness Prevention guidelines, initially limited to households 62 and older, to be opened to eligible households of any age. Some providers estimated that as many as 70–80 percent of their existing prevention clients could utilize shallow subsidy if the age limit was removed. However, executing the change was an administrative challenge due to the shallow subsidy funding mechanism. In Year 4, LAHSA was able to make this change, moving to a system where some prevention slots are reserved for older

adults, while the rest are “open” and can be filled by any individual or family, including older adults.

As enrollment picked up following these changes, new challenges emerged, requiring programmatic modifications:

**Reducing The Salvation Army’s case management ratio.** Initially, the shallow subsidy case management staff to client ratio was planned to be 200 households to every one Salvation Army case manager. With the onset of COVID-19, the massive loss of employment, and the release of Emergency Housing Vouchers into the system, Salvation Army case managers found themselves spending many more hours a week with each enrolled household to support the enrollment process of benefits and the intensive paperwork required for Emergency Housing Voucher acceptance. As a result, LAHSA changed the case management ratio from 200 households to 100 households in Year 2, and in Year 4 of the program, LAHSA again lowered the target case management ratio to be 30 households for every one Salvation Army case manager (though that target has not yet been met; the current case management ratio is closer to 1:80), based on continued need for a more intensive case management environment. This change allows The Salvation Army to focus not only on crisis management referrals but also building and supporting housing stability goals for enrolled households. While both providers and Salvation Army staff underscored the need for a decreased case management ratio for Salvation Army staff in focus groups, the current 30:1 case management ratio is costly and has not been attainable in practice.

A specified timeframe for RRH and Salvation Army handoff was also created after RRH providers asked for a clearer process around the timing of when The Salvation Army picks up full responsibility for case management. This is because some RRH providers had been continuing to provide case management services to their former clients when the case management ratio was too high and shallow subsidy support specialists were not consistently available for clients. RRH providers asked for a two-month overlap to ensure paperwork and case management happens smoothly for clients and landlords, as maintaining effective landlord relations is critical to continued housing options from those participating landlords. This enhanced timeframe for handoff processes allows for a clear transition to case management for clients, providers, and landlords.

**Solidifying the plan for increasing support to struggling clients.** Once the shallow subsidy began, it became clear to LAHSA and The Salvation Army that some clients would struggle to maintain housing with this level of assistance. The first option that LAHSA and The Salvation Army explored was for clients who struggle in the Shallow Subsidy for Rapid Re-Housing program to return to RRH or Homelessness Prevention. One hope was that this safety valve would reassure referring providers that their clients would receive the support they needed if they struggled in the shallow subsidy pilot and therefore would be less hesitant to enroll participants. During the COVID-19 pandemic, Shallow Subsidy for Rapid Re-Housing program exits were put on hold and The Salvation Army had more latitude to provide greater levels of support to clients temporarily, but once program exits resumed in 2022, it became clear that the pathway for this type of return to RRH or Homelessness Prevention was difficult within LA’s prioritization system. This led to cases where a client was exited from shallow subsidy because they needed more support but did

not receive it, resulting in client and provider grievances (when providers were contacted by former clients seeking assistance). The Salvation Army and LAHSA decided that a better strategy would be to permanently build flexibility into the shallow subsidy structure that would allow clients to stay in the shallow subsidy pilot but temporarily receive a higher assistance amount or receive assistance to pay off rent arrears. However, in some cases a reverse referral pathway is still necessary (and does not currently exist).

**Limited funding for shallow subsidy pilot.** As the pilot continued, LAHSA was not able to sustain the funding for full enrollment of clients. After Year 3, LAHSA reduced funding to 720 slots allocated from RRH and 80 for the Street to Subsidy program. Due to the decrease in available slots in the next fiscal year, enrollment in the shallow subsidy pilot from RRH and from the Street to Subsidy program was paused from February 2022 to September 2022. This is a challenge because the uncertain availability of the program (whether or not it will be accepting referrals at a given time) hinders case planning by RRH and Homelessness Prevention providers. In focus groups, providers stated that they needed consistent access to shallow subsidy funding, as they use shallow subsidy as an incentive to motivate clients to move out of RRH, spending significant time preparing households for this transition. Providers voiced that opening and closing shallow subsidy enrollment is difficult for their planning, preparation, and transition process. It was recommended to LAHSA that referrals from RRH remain open continuously, ensuring funding levels to allow for that.



## Primary Outcome—Housing Stability

This section presents impact evaluation results on the primary outcome in this evaluation: housing stability, as measured by returns to shelter after 12 months.

To determine the influence of shallow subsidies, the evaluation team regressed returns to shelter within one year of program exit upon shallow subsidy enrollment (Table 3).

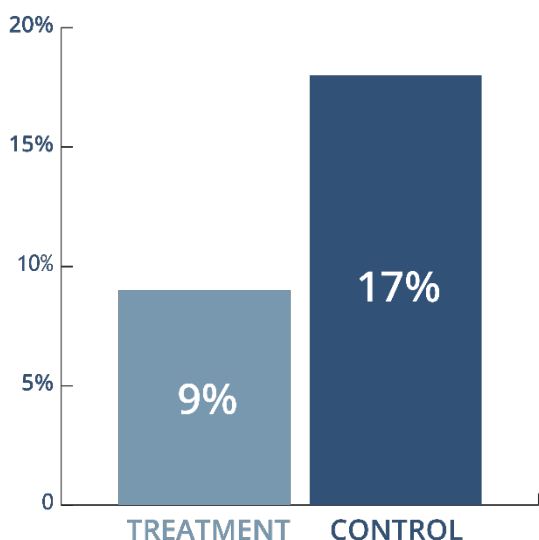
**Table 3. Association Between Shallow Subsidies and Returns to Shelter in Year After Exit from Homeless Services**

Variable	Odds Ratio	95% Confidence Interval
Female	0.83	0.59, 1.17
Hispanic	0.78	0.54, 1.11
Birth year	0.97*	0.96, 0.98
Disabled	0.63*	0.46, 0.87
Veteran	0.98	0.65, 1.46
Monthly income	0.97	0.91, 1.02
Length of program stay	1.02	0.95, 1.09
Received subsidy	0.42*	0.29, 0.60

\*  $p < .05$

The analysis controlled for sex, ethnicity, age, disability status, veteran status, total monthly income, and length of program stay. For control households, odds of returning to shelter were nearly 2.5 times greater than those for households enrolled in the Shallow Subsidy for Rapid Re-Housing program. Whereas 9 percent of treatment households returned to shelter, 17 percent of control households returned (Figure 2). In addition, returns to shelter were associated with age and disability status. Compared to households headed by disabled people, odds of returns to shelter were 58 percent greater for households headed by non-disabled. Also, a one-year increase in the head of household's age also corresponded to a 3 percent decrease in the likelihood of return.

**Figure 2. Percentage of Households Homeless 12 Months After RRH/Prevention Exit by Treatment Status**



Following the analysis of the full sample, the team repeated the regression from Table 3 for households entering into the Shallow Subsidy for Rapid Re-Housing program from each project type. In these analyses, no variables reached significance among households exiting emergency shelter and only age was associated with returns to shelter among households exiting Homelessness Prevention. In the latter case, a one-year increase in the head of household’s age corresponded to a 9 percent increase in odds of return. Table 4 provides results for households entering into the Shallow Subsidy for Rapid Re-Housing program from RRH programs. In this group, the odds of returning to shelter were nearly three times greater for control households than for those receiving Shallow Subsidy for Rapid Re-Housing program assistance. Compared to households headed by disabled and Hispanic individuals, the odds of return to shelter for non-disabled and non-Hispanic heads of household were 78 percent and 54 percent higher, respectively. Finally, a one-year increase in the head of household’s age corresponded to a 4 percent decrease in odds of return.

**Table 4. Association Between Shallow Subsidies and Returns to Shelter in Year After Exit from RRH**

Variable	Odds Ratio	95% Confidence Interval
Female	0.83	0.57, 1.21
Hispanic	0.65*	0.43, 0.98
Birth year	0.96*	0.95, 0.97
Disabled	0.56*	0.40, 0.79
Veteran	0.83	0.54, 1.29
Monthly income	0.97	0.92, 1.03
Length of program stay	1.03	0.96, 1.11
Received subsidy	0.34*	0.23, 0.51

\*  $p < .05$

The qualitative data supports these overall findings. Focus groups confirmed that The Salvation Army and referring provider respondents found the shallow subsidy program to be an effective intervention for long-term housing stability. They reported that clients are very appreciative of the program because it allows them to stay in their housing and guides them to other resources. Respondents also felt that shallow subsidy clients received their Emergency Housing Vouchers sooner than they otherwise would have because of case manager support in the application process.

## Secondary Outcome—Health

This section presents impact evaluation results on the first of two secondary outcomes in this evaluation: physical and mental health, as measured by receipt of any DHS and DMH health services (i.e., inpatient, outpatient, or emergency services).

To determine the influence of shallow subsidies on healthcare utilization, the evaluation team regressed health services within one year of program exit upon shallow subsidy enrollment (Table 5). The analysis controlled for sex, ethnicity, age, disability status, veteran status, total monthly income, and length of program stay. Results indicated that receiving Shallow Subsidy for Rapid Re-Housing program did not significantly influence a household’s likelihood of using any health service (i.e., inpatient, outpatient, or emergency services through either DHS or DMH): 17 percent of treatment households used DHS or DMH services, as compared to 16 percent of control households. However, as Table 5 shows, the odds increased by more than two times for households headed by disabled people and decreased by six times for those headed by veterans.

**Table 5. Association Between Shallow Subsidies and Use of Any DHS or DMH Health Services in Year After Exit from Homeless Services**

Variable	Odds Ratio	95% Confidence Interval
Female	1.20	0.83, 1.74
Hispanic	1.05	0.76, 1.45
Birth year	1.01 <sup>t</sup>	0.99, 1.02
Disabled	2.27 <sup>*</sup>	1.64, 3.13
Veteran	0.16 <sup>*</sup>	0.07, 0.37
Monthly income	1.03	0.98, 1.09
Length of program stay	1.02	0.97, 1.09
Received subsidy	0.76	0.55, 1.06

\*  $p < .05$ ; <sup>t</sup>  $p < .1$

Next, the evaluation team examined results separately by health department (DMH and DHS) and service type (inpatient, outpatient, and emergency care). In these analyses, the Shallow Subsidy for Rapid Re-Housing program was not significantly associated with any outcomes.

However, it approached significance for DMH care, such that shallow subsidy recipients tended to have lower odds of using care than peers in the control group ( $p = .07$ ). Compared to non-disabled participants, those with disabilities had 57 percent greater odds of accessing DHS care, 2.5 times greater odds of accessing DMS care, and twice the odds of accessing outpatient care. Compared to non-veterans, veterans had 3.5 times greater odds of accessing DHS care, four times fewer odds of accessing DMH care, and three times fewer odds of accessing outpatient care. Finally, households headed by women had 70 percent greater odds of using DMH services. No results pertaining to inpatient or emergency care reached significance.

## Secondary Outcome—System Utilization

This section presents impact evaluation results on the final secondary outcome in this evaluation: system utilization, as measured by length of time in prior RRH or Homelessness Prevention programs.

The evaluation team regressed length of prior program stay upon shallow subsidy enrollment and the covariates included in previous regressions. In an analysis of the full sample, the odds of spending more than one year in a program were three times greater for participants of the Shallow Subsidy for Rapid Re-Housing program than for peers in the control group. Odds of this outcome also increased by 2 percent with a one-year increase in a head of household's age. Compared to households headed by disabled people and veterans, the odds of spending more than one year in a program for those headed by non-disabled people and non-veterans were 38 percent and two times greater, respectively. Results for households referred to the Shallow Subsidy for Rapid Re-Housing program from RRH and their matched controls mirrored those in the full group, with the exception that the association between length of stay and head of household's age became non-significant in this smaller group. Analyses of households referred from emergency shelter and Homelessness Prevention services did not yield significant results.

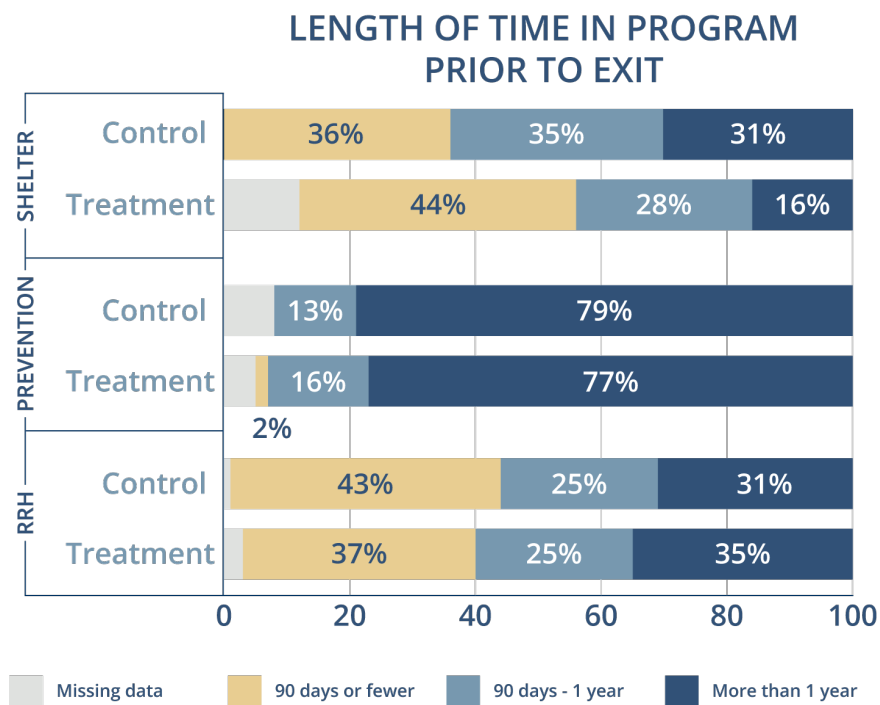
**Table 6. Association Between Shallow Subsidies and Odds of Using a Homelessness Program for More Than One Year**

Variable	OR	95% CI
Female	1.09	0.81, 1.48
Hispanic	0.80	0.61, 1.06
Birth year	1.02*	1.01, 1.03
Disabled	0.72*	0.55, 0.95
Veteran	0.48*	0.29, 0.79
Monthly income	1.00	0.96, 1.05
Length of program stay	1.02	0.97, 1.09
Received subsidy	3.11*	2.32, 4.19

\*  $p < .05$

Accordingly, we do not see an indication that shallow subsidy clients spent less time in RRH before entering the shallow subsidy. However, the difference in the longest category of system utilization (more than one year) for the treatment and comparison groups is generally quite small (only 4 percentage points for RRH clients and 2 percentage points for Homelessness Prevention clients). Finally, it is important to remember that during the COVID-19 pandemic, there were stays on program exits that may have increased the time spent in these programs.

**Figure 3: Length of Time in Program Prior to Exit, by Program Type and Treatment Status**



The average length of stay in shallow subsidy during the study period was 456 days (1.25 years). By referral source, the average length of stay in shallow subsidy was 479 days (1.31 years) for clients from RRH, 237 days (0.65 years) for clients from Homelessness Prevention, and 133 days (0.36 years) for Street to Subsidy clients. Households who exited the shallow subsidy program during the observation period stayed in the program for an average of 307 days. Households who entered the shallow subsidy program between January 2019 and December 2020 stayed in the program for an average of 442 days. Among all households who received shallow subsidies, 8% exited the program within 30 days, 8% stayed between 30 and 90 days, 19% stayed between 90 days and a year, and 55% stayed more than one year.

In interpreting these numbers, it is important to remember that many clients entered shallow subsidy from Homelessness Prevention and Street to Subsidy later, because the program either began later (Street to Subsidy) or began most enrollments later (Homelessness Prevention), so they have had less time to receive the shallow subsidy (and the team would expect to see a lower length of stay to date for that reason).

## Section 4: Discussion

The Shallow Subsidy for Rapid Re-Housing program pilot shows great promise in its ability to prevent returns to shelter in the year after exiting RRH. Our results indicate that enrolling in the Shallow Subsidy for Rapid Re-Housing program significantly reduces sheltered homelessness in the year after a household exited the program. In fact, comparison households had more than twice the odds of returning to shelter during this period, even if they received other RRH assistance. One goal of this study was to understand whether the outcomes gap between permanent subsidies and RRH (such that the former yields better housing outcomes for families than the latter as observed in the literature) is best explained by the differing depth or duration of permanent subsidies compared to time-limited subsidies. These findings suggest that the *duration* of assistance matters greatly; specifically, that many households in traditional RRH could benefit from longer assistance periods, even if they receive less financial support than that which a permanent subsidy offers.

The results are especially striking because during the majority of the study period, locales within LA County were subject to a county-wide eviction moratorium as a COVID-19 pandemic support measure. The COVID-19 Tenant Protections Resolution (formerly the LA County Eviction Moratorium) took effect on March 4, 2020 and expired on March 31, 2023 (after the data period covered by the evaluation). In this pandemic and policy environment, one would expect far fewer evictions in both the treatment and control groups, potentially obscuring the evaluation's ability to detect program outcomes; the fact that the evaluation found significant housing stability effects despite this environment of more protections than is typical suggests that the effect of the shallow subsidy in a context without strong eviction protections could be even greater.

There is less evidence about the effects of the shallow subsidy on households exiting Homelessness Prevention or literal homelessness, and the evaluation cannot determine whether this is due to a lack of study power for these smaller samples or different needs within these client groups. The evaluation also did not detect impacts of the shallow subsidy on health outcomes, though it is possible that a longer time horizon would be needed for those to be perceptible, and the evaluation was not able to explore effects on income or criminal justice involvement due to data limitations. These are all important areas for further study in research on shallow subsidies.

In terms of programmatic factors that contributed to the success of the subsidy, it is clear that the time-limited subsidy and prevention teams at LAHSA and The Salvation Army did a great deal of iterative work to ensure that the shallow subsidy program found qualifying clients and met their needs. This required adapting the program to respond to emerging challenges. The Salvation Army also worked closely with referring providers to understand the specifics of each referred case and connected supports they needed to enter and be successful in the shallow subsidy program. Maintaining this collaborative problem-solving ethos across stakeholders appears essential to the continued success of the Shallow Subsidy for Rapid Re-Housing program.

Going forward, LAHSA appears committed to continuing to refine its shallow subsidy model, with plans to expand on its model in fiscal year 2023–2024, where the shallow subsidy is to be administered by three program operators instead of one. The two new program operators will



be an RRH/Homelessness Prevention providers, allowing LAHSA to explore whether there are advantages to administering the program more similarly to RRH/Homelessness Prevention instead of by an outside agency.

One aspect of the program that deserves greater attention is the assumption that the housing support specialists provide sufficient financial independence counseling that shallow subsidy clients will eventually graduate out of the program after increasing their incomes above the eligibility requirements. While the evaluation did find that some clients' incomes increased during the time in the shallow subsidy (56 percent of clients increased their income, and the median increase in annual household income was \$966), the assumption that the increase in income would be sufficient to graduate from the program has not shown to be true during the evaluation follow-up period. This could be due to the program and evaluation taking place during the COVID-19 pandemic, when many clients faced severe challenges with reduced work hours, or clients could simply need more time in the program (beyond the one-year follow-up period) to increase their incomes sufficiently to achieve financial independence.

Rather, the most common reasons for program exit to-date included the client receiving a permanent housing voucher or becoming lost to follow-up after not being able to be contacted for 180 days. This suggests that most often, the shallow subsidy program was acting as a bridge support until households qualified for permanent support or potentially self-resolved their need for assistance (though the evaluation lacks the data to confirm whether households self-resolved), rather than as a tool for increased household incomes. There also appears to be a desire by LAHSA and The Salvation Army that clients do not utilize the full five years of subsidy (but rather motivate a goal of two years of shallow subsidies). As the Emergency Housing Vouchers that flooded the system during COVID-19 will no longer be available, and as most shallow subsidy households did not show an increase in income at the end of their shallow subsidy assistance, the focus on shallow subsidy going forward as a longer-term (three to five years) housing assistance program may be a critical consideration.

A key challenge that LAHSA faces in utilizing these findings for maximizing homelessness assistance is the current limited availability of funding to maintain or expand the shallow subsidy pilot to meet the need for this assistance. It was programmatically detrimental that soon after the shallow subsidy referral system began working smoothly, the number of shallow subsidy slots was cut by LAHSA, forcing a hiatus in referrals and number of program exits. Yet every RRH and Homelessness Prevention provider in the focus groups confirmed there is significant need for shallow subsidies for exiting homelessness sooner and preventing homelessness. It was suggested that LAHSA could determine the estimated number of households who could benefit from the shallow subsidy program and assess how the number of shallow subsidy slots could be substantially expanded to maximize RRH and Homelessness Prevention resources, prevent homelessness, and increase housing stability.

## Recommendations

### Programmatic

- Ensure continued system training with all referring providers on the shallow subsidy program and enrollment determinations.
- Continue monthly case conferencing between the program operator(s) and RRH/Homelessness Prevention providers, creatively supporting the client enrollment process as households move from RRH/Homelessness Prevention programs to shallow subsidy programming.
- As much as it is feasible, unify administration of shallow subsidy programs for clients exiting RRH and Homelessness Prevention to avoid confusion and inefficiencies.
- Continue monthly coordination calls between program operator(s), including field staff and LAHSA, to clarify program changes and eligibility criteria, troubleshoot specific issues, and collectively answer questions.
- Continue to support flexibility in the amount of shallow subsidy funding for each household in response to short term client setbacks and the larger economic environment.
- Continue to refine the target case management ratio, determining the target ratio based on a light case-management model as well as economic constraints and the need to support households through system administrative processes in attaining permanent housing vouchers (i.e., Housing Choice Vouchers and Emergency Housing Vouchers).
- Intensify transition planning for clients exiting the Shallow Subsidy for Rapid Re-Housing program. Explore shared housing options.
- Identify reverse referral pathway for clients exiting shallow subsidy because they need more support.

### Strategic

- Fund shallow subsidy programming at the highest level possible to ensure that it is consistently available to the greatest proportion of eligible clients exiting RRH/Homelessness Prevention.
- Continue to research the impact of shallow subsidies on improving household income while also identifying additional pathways to long-term housing stability outcomes.
- Confirm that the total cost of administering shallow subsidies, including administrative costs and the average amount of subsidy per enrolled household, is significantly less than the total cost of administering RRH on a per-household basis. Identify ways to decrease the shallow subsidy programming transactional costs to solidify the longer-term shallow subsidy as a core system housing option.

## Appendix A. Data Collection Instruments

### Annual Survey Instrument

Note to Program Operator: Please administer this survey to the head of household immediately after completion of annual recertification.

Please answer the following questions to the best of your ability. Your answers will be used to help Los Angeles County evaluate and improve the Shallow Subsidy Program. Your answers will not be used to determine whether you are eligible for the program.

HMIS ID: \_\_\_\_\_

Date of survey: \_\_\_\_\_

#### Housing Stability

- 1) Do you expect to lose your primary residence in the next 14 days?
  - No
  - Yes
  - Don't know
  - Refused to answer
  
- 2) [If answered "yes" to Question 1] Have you already identified what your next residence will be?
  - No
  - Yes
  - Don't know
  - Refused to answer
  - Not applicable
  
- 3) [If answered "no" to Question 2] Do you have what you need to find and obtain a new residence?
  - No
  - Yes
  - Don't know
  - Refused to answer
  - Not applicable
  
- 4) When you began receiving the shallow subsidy last year, did you move to a new residence?
  - No
  - Yes
  - Don't know
  - Refused to answer

5) Since then, how many other times did you move to a new residence?  
Answer: \_\_\_\_\_  Don't know  Refused to answer

6) How many of these times did you move unwillingly?  
Answer: \_\_\_\_\_  Don't know  Refused to answer

## Employment and Income

1) Including you, how many people in your household are employed full-time?  
Answer: \_\_\_\_\_  Don't know  Refused to answer

2) Including you, how many people in your household are employed part-time?  
Answer: \_\_\_\_\_  Don't know  Refused to answer

3) Including you, how many people in your household are employed seasonally or sporadically (including day labor)?  
Answer: \_\_\_\_\_  Don't know  Refused to answer

4) What is your best estimate of your household's total income in the past 12 months?  
Answer: \_\_\_\_\_  Don't know  Refused to answer

## Public Benefits

At any time during the past 12 months, have you or anyone in your household received:

1) SNAP (a.k.a. food stamps or CalFresh) benefits?  
 No  
 Yes  
 Don't know  
 Refused to answer

2) Social Security Disability Insurance (SSDI) benefits?  
 No  
 Yes  
 Don't know  
 Refused to answer

3) Supplemental Security Income (SSI) benefits?  
 No  
 Yes  
 Don't know  
 Refused to answer

4) Assistance from the LA County Department of Public Social Services (DPSS)?  
 No  
 Yes (check all that apply)

- Temporary financial assistance
- Temporary employment assistance
- In-home supportive services (IHSS)
- Don't know
- Refused to answer

5) Medicaid benefits?

- No
- Yes
- Don't know
- Refused to answer

6) Medicare benefits?

- No
- Yes
- Don't know
- Refused to answer

## Physical and Mental Health

1) In the past 12 months, about how many times have you been admitted to an emergency room?

Answer: \_\_\_\_\_  Don't know  Refused to answer

2) Currently, do you have health insurance?

- No
- Yes
- Don't know
- Refused to answer

3) Think about your physical health during the past 30 days. How would you rate it?

- Excellent
- Good
- Fair
- Poor
- Don't know
- Refused to answer

4) Think about your mental health during the past 30 days. How would you rate it?

- Excellent
- Good
- Fair
- Poor
- Don't know
- Refused to answer

## Focus Group Discussion Guide

We are researchers working with the Los Angeles Homeless Services Agency (LAHSA) and The Cloudburst Group on a study about the impact of the shallow subsidy for rapid re-housing program.

This is a small group discussion about your recollections of participant experiences in the program as well as how the program may have changed over time. This discussion will be recorded by the Zoom meeting platform. The discussion will take approximately one hour of your time. Participation is voluntary. You may decline to answer any question [or do any task] that you do not wish to answer [or do]. You are not expected to have an answer to all of these questions, as it may not relate to your role or you do not have a perspective on that particular point. It is very much okay to pass on those questions that you do not relate to. You may choose to stop being part of the discussion at any time without consequence, and you will not have to answer any more questions and I will ask if I can still use the information that you have given to me. Your answers will be kept fully confidential. If you have any questions for me, please feel free to ask at any time. Do you understand these conditions and are you willing to participate?

### The Salvation Army

#### Introductions (5 min)

#### Referral & Enrollment (10 min)

- 1) Please describe any changes over time in how program referrals were made. This includes the process for providers to submit referrals.
- 2) Please describe any changes over time in the formal eligibility criteria (age, income as % of AMI, rent burden, etc.).
- 3) If you have rejected referred clients, what were the most common reasons for rejection, and did these reasons change over time?
- 4) Did any referred clients decline to participate in the program?
  - a) If yes, did they give a reason that you could share with us?
- 5) Could you share any complaints or challenges in program referral / eligibility / acceptance / enrollment?
- 6) During the referral/enrollment process, what is the hardest information/criteria to verify and why?
- 7) Digging deeper: How did this affect the time it takes for a client to enroll in the subsidy?

#### Recertification and Exits (10 min)

- 8) From start to finish, on average how long would you estimate the recertification process for a client takes?
- 9) During the recertification process, what is the hardest information/criteria to verify and why?

- a) Digging deeper: How did this affect the time it takes for recertification?
- 10) What are the most common reasons why a client is exited from the program?
  - a) Do you keep in touch with program participants if and when they leave the program? If so, how?
- 11) What are the steps in the exit process?

### **Client Experience and Outcomes (20 min)**

- 12) What impacts do you think the SS-RRH program is making on clients and the community? In other words, how do you think the program is working for clients and the community?
- 13) Do you have any success stories that you can share with us?
- 14) Prior to your clients coming into the SS-RRH program, were you aware of challenges they had in **stabilizing housing**? If yes, can you share some of those challenges?
  - a) Did **the program** lessen any of these challenges?
  - b) Did **factors unrelated to the program** lessen any of these challenges?
  - c) What, if any, challenges remain?
- 15) Prior to your clients coming into the SS-RRH program, were you aware of challenges they had in **financial independence**? If yes, can you share some of those challenges?
  - a) Did **the program** lessen any of these challenges?
  - b) Since the clients have enrolled in shallow subsidy has anyone increased their income so they are able to pay more than 65% of their rent?
  - c) Did **factors unrelated to the program** lessen any of these challenges?
  - d) What, if any, challenges remain??
- 16) Prior to your clients coming into the SS-RRH program, were you aware of other challenges (employment, benefits, criminal justice, health) they had? If yes, can you share some of those challenges?
  - a) Did **the program** lessen any of these challenges?
  - b) Did **factors unrelated to the program** lessen any of these challenges?
  - c) What, if any, challenges remain?
- 17) How are clients engaging with the program? How frequently are they in contact with their Housing Support Specialist? Are clients paying rent on time?
  - a) Do you see differences in client progression for clients you are able to meet with on a frequent basis versus those you are not able to meet with on a frequent basis?
  - b) Did you see changes over time in how clients participated in SS-RRH? If so, what are these differences?



- 18) What were some of the major case management challenges that you encountered during your work with clients? How could the case management experience have been improved?
  - a) Digging deeper: Probe about issues with caseload if it is not mentioned.
- 19) How many trainings related to SS-RRH did you participate in? Did you find them to be adequate in supporting you as a supervisor/housing support specialist?
- 20) Were there factors related to The Salvation Army organizational structure or resources that affected your work?
- 21) Would you like to share any other feedback or challenges that we did not ask about already?

## RRH and Prevention Providers

### Introductions (5 min)

### Client Experience and Outcomes (20 min)

- 1) What impacts do you think the SS-RRH program is making on clients and the community? In other words, how do you think the program is working for clients and the community?
- 2) Prior to your clients coming into the SS-RRH program, what challenges did they face? For example, in stabilizing housing, financial independence, employment, benefits, criminal justice, health.
- 3) Do you keep in touch with former clients once they enter the SS-RRH program? If so, how?
- 4) Overall, in your view how successful has the SS-RRH program been in addressing these challenges?
- 5) Did you see any clients/households return to your agency/caseloads? If so, why do you think that happened?

### Referral & Enrollment (20 min)

- 1) How did you find out about the SS-RRH program and referral process? Was program referral information clearly communicated to providers?
- 2) Please describe any changes over time in how **program referrals** were made. This includes the process for providers to submit referrals. Were these changes in the program referral criteria clearly communicated?
- 3) Please describe any changes over time in the formal **eligibility criteria** (age, income as % of AMI, rent burden, etc.). Were these changes in the eligibility criteria clearly communicated?
- 4) Please describe any changes over time in the **client prioritization process**, including The Salvation Army Monthly SPA Shallow Subsidy Case Conferencing Meeting.
- 5) How often did you attend the monthly Case Conferencing Meetings? Did you find them helpful?

- 6) If referred clients were rejected, what were the most common reasons for rejection?
  - a) Digging deeper: Did these reasons change over time?
- 7) Did any referred clients decline to participate in the program?
  - a) If yes, did they give a reason that you could share with us?
- 8) Could you share any additional complaints or challenges in program **referral / eligibility / acceptance / enrollment** processes?

### **Conclusion (5 min)**

- 1) Considering your current RRH and/or prevention caseloads, do you see a need for expanding the shallow subsidy program to serve exiting clients? What percentage of your clients do you think could benefit from shallow subsidy to help stabilize their housing?
- 2) Would you like to share any other feedback or challenges that we did not ask about already?

## Appendix B. Supplemental Analyses

### Exhibit 2. Shallow Subsidy Impacts for Full Participant Sample

Outcome	Treatment			Comparison			Impact		Cohen's d
	N	M	(SD)	N	M	(SD)	Impact	SE	
Housing and Homelessness									
One or more nights literally homeless <sup>a</sup> post-RRH (%)	1061	8.6	0.3	1061	16.8	0.4	-0.9***	0.2	0.25
Number of emergency shelter episodes post-RRH	1061	0.05	0.8	1061	0.1	1.1	-0.1***	0.02	0.03
Physical and Mental Health									
Any involvement with DMH post-RRH (%)	1061	27.1	0.4	1061	21.8	0.4	-0.3*	0.2	0.12
Any involvement with DHS post-RRH (%)	1061	15.6	0.4	1061	11.9	0.3	0.1	0.2	0.10
Homeless Program Participation									
Number of days in focal intervention	1061	478.5	327.7	1061	271.0	238.6	171.5	18.9	0.68
Number of days enrolled in RRH or Homelessness Prevention during follow-up	1061	35.1	42.9	1061	53.7	45.2	-10.2***	2.6	0.42

\*/\*\*/\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.

<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.

Notes: Means with standard deviations in parentheses are shown.

**Exhibit 2. Shallow Subsidy Impacts for Former RRH Participants**

Outcome	Treatment			Comparison			Impact		Cohen's d
	N	M	(SD)	N	M	(SD)	Impact	SE	
<b>Housing and Homelessness</b>									
One or more nights literally homeless <sup>a</sup> post-intervention (%)	974	7.5	0.3	974	16.9	0.4	-1.1***	0.2	0.33
Number of emergency shelter episodes post-intervention	974	<0.001	<0.1	974	0.1	1.1	-0.1	0.01***	0.51
<b>Physical and Mental Health</b>									
Any involvement with DMH post-intervention (%)	974	27.5	0.4	974	21.6	0.4	-0.4**	0.2	0.14
Any involvement with DHS post-intervention (%)	974	15.4	0.4	974	11.7	0.3	0.1	0.2	0.11
<b>Homeless Program Participation</b>									
Number of days in focal intervention	974	497.4	330.1	974	291.7	242.2	166.3***	20.4	0.66
Number of days enrolled in RRH or Homelessness Prevention during follow-up	974	35.2	43.0	974	52.5	46.0	-8.0*	4.1	0.39

\*/\*\*/\*\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.

<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.

Notes: Impact estimates and outcome means are regression-adjusted for baseline household characteristics.

**Exhibit 3. Shallow Subsidy Impacts for Former Prevention Participants (Older Adults)**

Outcome	Treatment			Comparison			Impact		Cohen's d
	N	M	(SD)	N	M	(SD)	Impact	SE	
<b>Housing and Homelessness</b>									
One or more nights literally homeless <sup>a</sup> post-intervention (%)	61	14.8	0.4	61	11.5	0.3	0.4	0.7	0.13
Number of emergency shelter episodes post-intervention	61	--	--	61	--	--	--	--	--
<b>Physical and Mental Health</b>									
Any involvement with DMH post-intervention (%)	61	21.3	0.4	61	17.2	0.4	0.2	0.6	0.10
Any involvement with DMH post-intervention	61	11.5	0.3	61	10.3	0.3	1.4*	0.8	0.04
<b>Homeless Program Participation</b>									
Number of days in focal intervention	61	276.3	164.7	61	151.0	136.5	112.7***	38.9	0.84
Number of days enrolled in RRH or Homelessness Prevention during follow-up	61	36.3	47.8	61	58.2	43.5	-11.4	12.4	0.49

\*/\*\*/\*\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.

<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.

Notes: Means with standard deviations in parentheses are shown.

**Exhibit 4. Shallow Subsidy Impacts for Street to Subsidy Participants**

Outcome	Treatment			Comparison			Impact		Cohen's d
	N	M	(SD)	N	M	(SD)	Impact	SE	
<b>Housing and Homelessness</b>									
One or more nights literally homeless <sup>a</sup> post-intervention (%)	26	34.6	0.5	26	23.1	0.4	0.7	0.9	0.23
Number of emergency shelter episodes post-intervention	26	1.0	1.0	26	1.1	0.9	--	--	0.29
<b>Physical and Mental Health</b>									
Any involvement with DMH post-intervention (%)	26	26.9	0.5	26	37.5	0.5	1.1	1.0	0.22
Any involvement with DHS post-intervention (%)	26	30.8	0.5	26	20.8	0.4	-0.6	0.9	0.22
<b>Homeless Program Participation</b>									
Number of days in focal intervention	26	153.5	148.8	26	108.6	183.9	30.0	69.3	0.26
Number of days enrolled in RRH or Homelessness Prevention during follow-up	26	44.2	49.8	26	37.6	43.7	-4.5	15.8	0.14

*\*/\*\*/\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.*

*<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.*

*Notes: Impact estimates and outcome means are regression-adjusted for baseline household characteristics.*

### Exhibit 5. Outcomes by Sex

Outcome	Female			Male			Interaction with Treatment	
	N	M	(SD)	N	M	(SD)	B	SE
Housing and Homelessness								
One or more nights literally homeless <sup>a</sup> post-intervention (%)	1301	10.9	0.3	821	15.5	0.4	1.0***	0.4
Number of emergency shelter episodes post-intervention	1301	0.04	0.2	821	0.09	0.3	0.03	0.03
Physical and Mental Health								
Any involvement with DMH post-intervention (%)	1301	30.0	0.5	821	16.7	0.4	0.8**	0.3
Any involvement with DHS post-intervention (%)	1301	13.7	0.3	821	15.3	0.4	-0.6	0.4
Homeless Program Participation								
Number of days in focal intervention	1301	395.2	326.5	821	325.5	268.2	169.4***	20.2
Number of days enrolled in RRH or Homelessness Prevention during follow-up	1301	37.8	42.4	821	52.7	48.8	-16.5***	5.1

\*/\*\*/\*\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.

<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.

Notes: Means with standard deviations in parentheses are shown.



**Exhibit 6. Outcomes by Ethnicity**

Outcome	Hispanic			Non-Hispanic			Interaction with Treatment	
	N	M	(SD)	N	M	(SD)	B	SE
Housing and Homelessness								
One or more nights literally homeless <sup>a</sup> post-intervention (%)	558	9.7	0.3	1494	14.1	0.3	0.9**	0.4
Number of emergency shelter episodes post-intervention	558	0.03	0.1	1494	0.1	0.02	<.001	<.001
Physical and Mental Health								
Any involvement with DMH post-intervention (%)	558	28.5	0.5	1494	24.5	0.4	0.6**	0.3
Any involvement with DHS post-intervention (%)	558	13.1	0.3	1494	15.1	0.4	-0.5	0.4
Homeless Program Participation								
Number of days in focal intervention	558	383.1	317.5	1494	362.6	303.8	148.7***	30.2
Number of days enrolled in RRH or Homelessness Prevention during follow-up	558	37.2	42.6	1494	45.8	46.3	5.2	5.0

\*/\*\*/\*\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.

<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.

Notes: Means with standard deviations in parentheses are shown.

**Exhibit 7. Outcomes by Disability Status**

Outcome	Disabled			Non-Disabled			Interaction with Treatment	
	N	M	(SD)	N	M	(SD)	B	SE
Housing and Homelessness								
One or more nights literally homeless <sup>a</sup> post-intervention (%)	734	11.9	0.3	1277	13.9	0.3	1.0***	0.3
Number of emergency shelter episodes post-intervention	734	0.04	0.03	1277	0.1	0.05	0.003	.003
Physical and Mental Health								
Any involvement with DMH post-intervention (%)	734	30.0	0.5	1277	22.9	0.4	-0.1	0.3
Any involvement with DHS post-intervention (%)	734	13.9	0.3	1277	14.6	0.4	-0.01	0.4
Homeless Program Participation								
Number of days in focal intervention	734	307.6	267.5	1277	403.9	322.5	189.8***	26.3
Number of days enrolled in RRH or Homelessness Prevention during follow-up	734	47.9	48.2	1277	39.6	42.7	4.8	4.7

\*/\*\*/\*\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.

<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.

Notes: Means with standard deviations in parentheses are shown.

**Exhibit 8. Outcomes by Veteran Status**

Outcome	Veteran			Non-Veteran			Interaction with Treatment	
	N	M	(SD)	N	M	(SD)	B	SE
Housing and Homelessness								
One or more nights literally homeless <sup>a</sup> post-intervention (%)	547	18.6	0.4	1561	10.6	0.3	0.8	0.8
Number of emergency shelter episodes post-intervention	547	0.1	0.1	1561	0.04	0.4	0.6***	0.6
Physical and Mental Health								
Any involvement with DMH post-intervention (%)	547	6.1	0.2	1561	28.5	0.5	1.1	1.0
Any involvement with DHS post-intervention (%)	547	10.2	0.3	1561	15.0	0.4	1.5**	0.8
Homeless Program Participation								
Number of days in focal intervention	547	250.1	200.0	1561	413.0	328.1	223.2**	105.3
Number of days enrolled in RRH or Homelessness Prevention during follow-up	547	63.1	41.3	1561	39.4	45.1	-47.9***	13.3

\*/\*\*/\*\*\* Treatment impact is significantly higher than 0 at the .10, .05, and .01 levels, respectively, using a two-tailed t-test.

<sup>a</sup> That is, stayed in an emergency shelter or a place not fit for human habitation.

Notes: Means with standard deviations in parentheses are shown.

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