

Early Outcomes from the Los Angeles County Homelessness Prevention Unit



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Executive Summary

Homelessness remains one of the most urgent challenges facing Los Angeles County. Each year, most people entering services are either new to the system or returning after time away, an ongoing inflow that underscores why prevention is essential.¹ Permanent solutions to homelessness must go beyond rehousing efforts and include strategies to prevent homelessness before it occurs. This policy report provides an update on the Homelessness Prevention Unit (HPU), a program launched in 2021, which uses a first-of-its-kind predictive model to proactively reach people at the highest risk of becoming homeless and connect them to stabilizing services before they lose their housing. We provide an update to the findings in the California Policy Lab's [2024 HPU Policy Report](#) to share new evidence on how the HPU is performing so far.

This report focuses on outcomes from the HPU's pilot phase, before the launch of the formal randomized controlled trial. During this period, enrollment in the program was associated with improved outcomes related to housing stability, homelessness, and other adverse events. While these early results are promising, the limitations of the methods used highlight the need for rigorous evaluation through the ongoing randomized trial, expected to conclude in 2027. In the meantime, key refinements in outreach strategies and processes have improved enrollment rates among people identified by the HPU model as being at the highest risk for experiencing homelessness.

Key Findings

1. Enrollment in the HPU during the pilot period, which occurred before the start of the formal evaluation, is associated with a 71% decrease in the use of street outreach or interim housing within 18 months of referral to HPU outreach. We also observe lower rates of any observed homelessness, mental health crisis stabilization, and criminal justice involvement, although whether or not these associations are the effect of the HPU needs to be resolved by the formal evaluation.
2. The rate of enrollment in the HPU increased by 67% after the HPU made changes to its outreach and enrollment processes during the formal evaluation period.

To understand how the HPU works and who it serves, the following section provides a brief overview of the program.

¹ Rountree, J., Casey, P., Ramos, J., Klingmann, Z., Obermark, D. (2025). Report: Measure A Baseline Measures and Five-Year Trends from 2019–2024. California Policy Lab, University of California. <https://capolicylab.org/wp-content/uploads/2025/03/Data-Subcommittee-Baseline-report.pdf> [Accessed: 6 June 2025].

Overview of the Homelessness Prevention Unit

In 2019, the California Policy Lab and University of Chicago Poverty Lab published a [proof-of-concept paper](#) showing that linked administrative data could be used to identify Los Angeles residents who were at elevated risk for becoming homeless. In 2020, this idea became reality when the Homelessness Prevention Unit (HPU) was launched as a pilot program. The HPU is a Los Angeles County initiative, housed within the Housing for Health division of the Department of Health Services (DHS). The program is a collaboration between DHS, the Chief Information Office (CIO), the Department of Mental Health (DMH), and the California Policy Lab (CPL).

Using fully anonymized data, CPL developed and maintains the predictive model that identifies individuals at the highest risk of experiencing homelessness.² HPU staff then attempt to enroll those individuals into a program where they receive short-term, personalized case management and flexible financial assistance as well as referrals to additional supportive services such as mental health care, job training, or legal support. The program currently serves about 700 people annually, with the overarching goal of stabilizing individuals and families before a housing crisis results in homelessness. In 2024, CPL published a policy report on the HPU, outlining how the predictive model works, analyzing the equity of the model, sharing early data on outreach, enrollment, and exit surveys, describing the program's design and services, and detailing CPL's forthcoming randomized control trial to evaluate the HPU's impact.³ The report also shared stories and perspectives from HPU participants and staff. This report updates those findings with a preliminary outcomes analysis and new data on outreach and enrollment.

2 For more information about the data used to produce the predictive model, please see the [Technical Appendix](#).

3 Blackwell, B., Caprara, C., Rountree, R., Santillano, R., Vanderford, D., Battis, C. (2024). The Homelessness Prevention Unit: A Proactive Approach to Preventing Homelessness in Los Angeles County. California Policy Lab, University of California. <https://capolicylab.org/the-homelessness-prevention-unit-a-proactive-approach-to-preventing-homelessness-in-los-angeles-county/> [Accessed: 6 June 2025].

What is the Homelessness Prevention Unit?

The HPU is a Los Angeles County pilot program launched in 2021 to prevent homelessness among high-risk individuals identified through predictive analytics. It combines proactive outreach, flexible financial assistance, and tailored case management to stabilize households before they lose their housing.

Who is served?

The HPU serves adults and families who recently received County services and who are currently housed. Clients are randomly selected from a high-risk list generated by a predictive model and then contacted by HPU staff for enrollment.

What financial support is provided?

On average, participants receive \$6,469 in financial assistance over a 4 to 6 month period. Budget caps range from \$4,000 to over \$10,000, depending on household size and random assignment to either the “base” or “expanded” financial assistance groups. Payments are delivered quickly — often within days — through a partnership with Brilliant Corners, which uses existing financial infrastructure to process checks rapidly. This flexible cash assistance is spent on a range of needs identified by case managers and participants, including but not limited to rental assistance, utilities, food, transportation, furnishings, and debt resolution.

What other services are provided?

Each participant receives customized case management over a 4 to 6 month period, which often includes housing navigation, mediation with landlords, help securing benefits, and/or a warm handoff to other County programs, such as mental health treatment or employment services.

What makes the HPU different?

Unlike traditional prevention programs, the HPU does not require self-identification or eviction notices. Instead, it proactively reaches out to individuals at high risk, even those in informal or doubled-up housing situations who are often excluded from traditional services.

What are program costs?

The program costs are currently estimated by the HPU to be a little over \$12,000 per enrolled household, which includes cash assistance and administrative costs.

For more detail on the HPU’s design, services, and evaluation, please see the California Policy Lab’s [2024 HPU Policy Report](#).

Key Findings

Key Finding 1

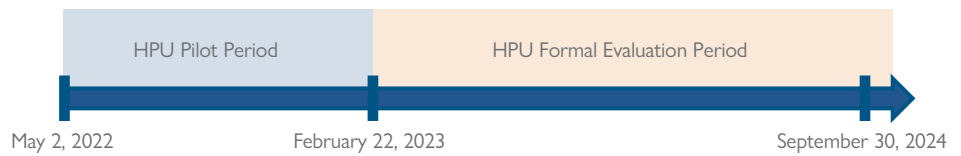
Enrollment in the HPU during the pilot period is associated with a 71% decrease in the use of street outreach or interim housing within 18 months of referral to HPU outreach.

We also observe lower rates of any observed homelessness, mental health crisis stabilization, and criminal justice involvement, although whether or not these associations are the effect of the HPU needs to be resolved by the formal evaluation.

The HPU will be evaluated to see whether it reduces homelessness and increases housing stability for participants as well as its impact on secondary outcomes such as hospitalizations, mental health crisis holds, criminal justice involvement, and death. The gold standard for evaluating a program's impacts is through a randomized control trial (RCT). An RCT is a research method that compares outcomes between people randomly assigned to receive a program and those who do not. For the HPU, only the treatment group is contacted and offered services, while the control group receives no outreach. This random assignment allows researchers to isolate the impact of a program by ensuring that any differences in outcomes can be attributed to the intervention (in this case, selection for the HPU program). The RCT for the HPU began in February 2023 and is currently in progress, with results anticipated to be available in 2027.⁴ In the meantime, this report shares outcomes from an early cohort of HPU participants who were enrolled in the program during the HPU pilot period (as seen in [Figure 1](#)) to get a sense of how they fared after being referred to HPU outreach.

⁴ For more information on the formal evaluation of the HPU, please see Blackwell, B., Caprara, C., Rountree, R., Santillano, R., Vanderford, D., Battis, C. (2024). The Homelessness Prevention Unit: A Proactive Approach to Preventing Homelessness in Los Angeles County. California Policy Lab, University of California. <https://capolicylab.org/the-homelessness-prevention-unit-a-proactive-approach-to-preventing-homelessness-in-los-angeles-county/> [Accessed: 6 June 2025].

FIGURE 1. Study Periods of the HPU Policy Report Update



Notes: Although the HPU “Formal Evaluation Period” is ongoing and expected to extend through June 2025, for the purposes of this report and the analysis on enrollment rates we will refer to the start of the formal evaluation in February 22, 2023 through September 30, 2024 (the furthest date with available data at the time of writing this report) as the HPU “Formal Evaluation Period.”

The sample for this analysis consists of 1,620 people who were identified by the predictive model and passed the eligibility screening stage between May 2, 2022 and February 22, 2023. HPU workers attempted to contact those 1,620 people and 335 (21%) were successfully contacted and enrolled in the program.⁵ The remaining 1,285 did not enroll, either because they were unable to be contacted, were found to be ineligible after contact, or declined to participate.⁶ We track outcomes for these individuals for an 18-month period from the date they were referred to outreach,⁷ comparing outcomes for people who were enrolled in HPU with those who were not enrolled. Because enrolled participants differ from people who were reached out to but not enrolled — for example, they are more likely to be women, more likely to be Black, and have lower rates of prior criminal legal involvement⁸ — we also apply a regression adjustment to ensure the non-enrolled group is comparable to the enrolled group along a wide range of characteristics such as demographics, geography, prior homelessness, health and mental health history, benefits enrollment, and criminal justice involvement.

5 The date range is chosen because 5/2/2022 was the date on which the HPU began consistent data collection using a standardized case management tool, and 2/23/2023 was the official start date of the RCT.

6 We considered the option of using the 163 people who were contacted but declined to enroll as the comparison group since they may more closely resemble the enrolled group. However, this group has a similar degree of selection (in terms of the baseline features in Table 2 of the Technical Appendix) to the overall non-enrolled group so we decided to use the larger non-enrolled sample as the comparison group.

7 We choose the date of assignment to outreach as the index date, rather than the date of HPU program entry or exit, in order to have a consistent index date for both HPU enrolled participants and individuals who were not enrolled.

8 See Table 2 in the Technical Appendix for more detailed sample characteristics for the two groups.

Figure 2 shows the prevalence of homelessness and other outcomes for the enrolled group and the non-enrolled group after applying a regression adjustment to ensure that the two groups are as similar as possible. **Any Observed Homelessness** refers to the occurrence of any record indicating homelessness from social safety net benefits, homeless services, or health system data, and is the primary outcome both for the HPU predictive model and the RCT evaluation. **Interim Housing or Street Outreach** measures enrollment in those programs through the homeless services Coordinated Entry System (CES). We also measure **Emergency and Inpatient Visits** in LA County Department of Health Services (DHS) hospitals and clinics; **Mental Health Crisis Stabilizations** by the LA County Department of Mental Health (DMH); and **Sheriff** arrests that result in a jail booking.⁹

Our analysis suggests that enrollment in HPU is associated with a 71% lower rate of entry into interim housing and street outreach programs compared to people who were not enrolled, even after adjusting for observable differences between the two groups. As we explain below, this result is a non-causal association, but it is nonetheless encouraging given that HPU participants have more intensive service needs than people enrolled in other Los Angeles homelessness prevention programs.¹⁰

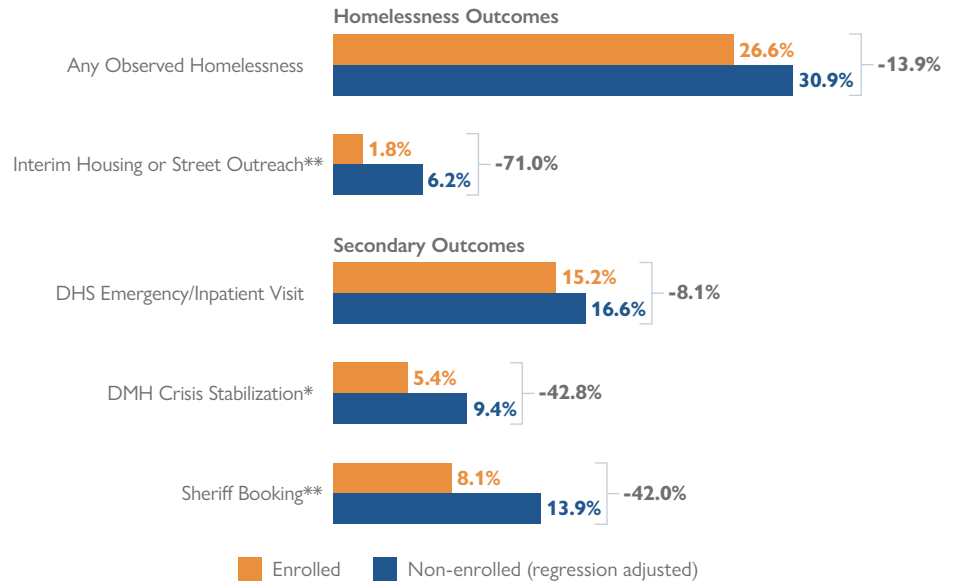
Our analysis also found HPU participants had lower rates of mental health crisis stabilizations (43% lower) and arrests (42% lower). However, the associations between HPU enrollment and mental health crisis stabilizations and arrests were also statistically significant at baseline (as seen in Table 2 of the Technical Appendix). As a result, even after using regression to adjust for all of the observed variables in Table 2 of the Technical Appendix, we still suspect that these differences could reflect unobserved, pre-existing differences between the enrolled and non-enrolled groups rather than the effect of HPU enrollment itself. We also observed lower rates of any observed homelessness (14% lower) and DHS emergency and inpatient visits (8% lower), but those differences were not statistically significant at a 95% confidence level and the DHS difference is only two percentage points.¹¹ As a result, all outcomes other than the use of street outreach or interim housing need to be further tested by the formal evaluation.

9 The sheriff booking outcome includes both misdemeanor non-felony bookings and felony bookings.

10 In our 2024 report, we found that when compared to conventional Measure H prevention recipients, HPU participants have significantly higher rates of diagnoses related to serious mental illness, substance use, and mortality as well as County jail bookings or probation events.

11 Given the significant differences for other outcomes, the lack of statistical significance for the Any Observed Homelessness outcome may be due to small sample size.

FIGURE 2. Individuals enrolled in the HPU during the pilot period had better outcomes over 18 months compared to individuals on the high-risk list who were referred to outreach but not enrolled.



Notes: This figure provides outcomes for the enrolled group (N = 335) and regression adjusted outcomes for the non-enrolled group (N = 1,285) within 18 months of being referred to HPU outreach. The regression adjusted outcomes are estimated using an OLS regression controlling for all covariates in Table 2 of the Technical Appendix plus interacted fixed effects for month, household type, and Spanish language status. Numbers to the right of the brackets represent percentage changes for the enrolled group in comparison to the regression adjusted non-enrolled group. Asterisks next to variable names indicate the statistical significance of differences between the enrolled and regression adjusted non-enrolled groups where ** p < 0.01 and * p < 0.05.

It is important to note that because enrollment in HPU was not randomized during this pilot period, we cannot be certain that these better outcomes for HPU-enrolled participants were caused by the HPU program itself and not by unobserved differences between the two groups. Although the administrative data allows us to control for a wide range of confounding factors — such as demographics, geography, prior histories of homelessness, and history with County health, mental health, social safety net, and justice agencies — differences in outcomes between the enrolled and non-enrolled groups could still be driven by factors unavailable in the data, such as whether someone was undergoing eviction proceedings when the HPU attempted to contact them. This is not a problem in our RCT, because enrollment is randomized, which creates a comparison group that is similar across observed and unobserved characteristics.

In addition, these results may also differ from those in the formal evaluation because the analysis covers a very early period in the implementation and refinement of the HPU program. As expected with launching any new program, the HPU team needed to make adjustments from its initial design. As a result, the HPU has made significant changes to their program model since the start of the formal evaluation period in terms of outreach, case management,

financial assistance utilization, and linkages to other supportive services. These programmatic differences could influence program participant outcomes, in comparison to the early days of the program.

The limitations of this non-causal analysis reaffirm the importance of also conducting the RCT. Nonetheless, the analysis provides suggestive evidence that the HPU is associated with positive outcomes.¹² These early findings offer insight into the program's potential, and the HPU has also evolved significantly since then. The next section describes those program updates and the HPU's subsequently improved enrollment rate.

Program updates since 2023

The HPU relies on CPL's predictive model to generate a list of people at high risk of homelessness (the "high-risk list"). The use of predictive modeling to identify clients is unique and offers advantages, including finding people who are at very high risk of homelessness (as compared to clients of other prevention programs) and who are also disconnected from existing programs and unlikely to seek help.¹³ But this approach has a key challenge: HPU staff must contact and enroll the people on the high-risk list before they experience homelessness.

Establishing contact with potential participants and successfully enrolling them in the program has been challenging. Between May 2, 2022, and February 22, 2023, HPU reached out to 1,620 individuals, but only about 1 in 5 ultimately enrolled. Improving enrollment rates is a key priority for HPU because it means that vulnerable individuals and families who might not otherwise seek out prevention services are getting tailored support to stabilize their housing.

Building on lessons learned during the initial pilot phase, the program has implemented key changes aimed at improving outreach effectiveness, streamlining enrollment processes, and ensuring timely exits so that new clients can enroll. Program changes fall into two major categories: outreach and enrollment changes and revised discharge policies.

12 In the [Technical Appendix](#) we present a secondary analysis showing that individuals assigned to HPU case managers with higher enrollment rates had better outcomes, and that these estimates can be interpreted causally because case managers were conditionally randomly assigned. Although this secondary analysis does not specifically isolate the impact of HPU enrollment, it provides further suggestive evidence that the HPU is leading to better outcomes for program participants.

13 Blackwell, B., Caprara, C., Rountree, R., Santillano, R., Vanderford, D., Battis, C. (2024). The Homelessness Prevention Unit: A Proactive Approach to Preventing Homelessness in Los Angeles County. California Policy Lab, University of California. <https://capolicylab.org/the-homelessness-prevention-unit-a-proactive-approach-to-preventing-homelessness-in-los-angeles-county/> [Accessed: 6 June 2025].

Outreach and enrollment changes

- **Specialized Outreach Team** — When the HPU began, all case managers were responsible for outreach, but this was demanding work to balance on top of managing their regular casework with enrolled clients. To address this, HPU leadership created a specialized outreach team to improve contact and enrollment rates. Starting in September 2023, new outreach roles were added, including a dedicated outreach coordinator. The team expanded to four outreach specialists and one manager in June 2024. This added capacity allowed the team to more consistently send follow-up emails to all potential clients not initially reached by phone and to expand outreach to include County service providers who were currently or recently in touch with potential clients.
- **Optimized Contact Schedule** — When the HPU first launched, case managers called clients every three days, but this became difficult to maintain and oversee. This outreach cadence was adjusted so that each client receives at least one phone call per week for a maximum of 3 weeks so long as the number is not disconnected. HPU has found that this approach is much easier for staff to track and reduces the risk of clients falling through the cracks. Moreover, the less frequent cadence also had the unintended effect of seeming more legitimate because outreach staff feel that too many back-to-back phone calls can give the impression of a scam.

Revised discharge policies

As the program evolved, HPU staff have worked to ensure that more people are being discharged within four months so that they can enroll new clients without expanding their preferred caseload ratio of 15 to 1. In January 2024, a structured review process was introduced, where case managers assess clients' progress, housing stability, and budget use one month before discharge. If necessary, a two-month extension can be granted. This approach ensures that clients receive appropriate support while allowing more high-risk individuals to enter and benefit from the program in a timely manner.

Taken together, these adjustments likely improved HPU's ability to reach and enroll high-risk households and to move people more efficiently through the program.

Key Finding 2

The rate of enrollment in the HPU increased by 67% after the HPU made changes to its outreach and enrollment processes during the formal evaluation period

Table 1 shows that the enrollment rate has improved considerably, likely reflecting the effectiveness of these program adjustments. From May 2, 2022 to February 22, 2023 the HPU enrolled 21% of households referred to outreach. However, since the beginning of the RCT evaluation period on February 23, 2023 through September 30, 2024 (all currently available data), the HPU enrolled 30% of single adults and 43% of families assigned to outreach, with an overall enrollment rate across household types of 35%. This represents a 67% percent increase in the enrollment rate for all households.

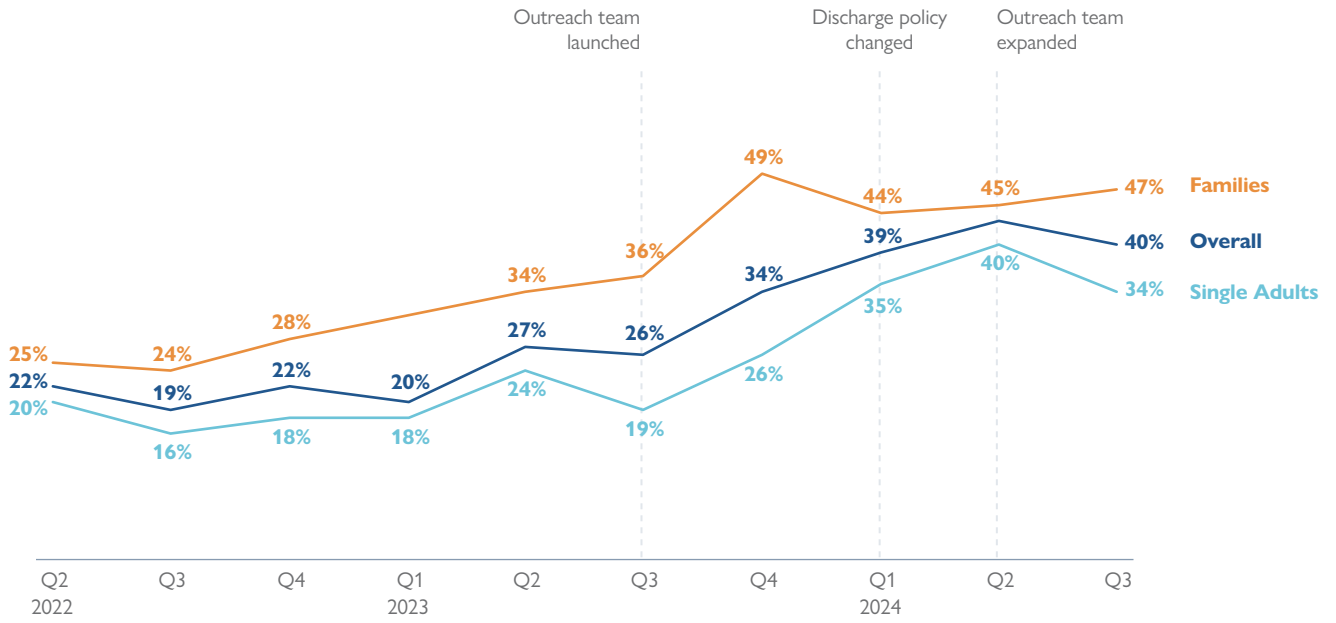
TABLE 1. Total adults and families referred to outreach and enrolled in the Homelessness Prevention Unit before and after the start of the formal evaluation period

HOUSEHOLD TYPE	PILOT PERIOD 5/2/2022 THROUGH 2/22/2023			FORMAL EVALUATION PERIOD TO DATE 2/23/2023 THROUGH 9/30/2024		
	ASSIGNED TO OUTREACH	ENROLLED	ENROLLMENT RATE (%)	ASSIGNED TO OUTREACH	ENROLLED	ENROLLMENT RATE (%)
Single Adults	1,071	192	18	1,177	356	30
Families	549	143	26	756	325	43
Total	1,620	335	21	1,933	681	35

Notes: The above numbers cover two distinct groups: (1) those assigned (non-randomly) to outreach before the official start of the randomized control trial (5/2/2022 to 2/22/2023), and (2) those assigned randomly to HPU outreach from the beginning of the formal evaluation period (2/23/2023) through the currently available data (9/30/2024).

The quarterly enrollment rates in Figure 3 illustrate how this improvement occurred over time in relation to the program changes HPU made. In Q2 2022, the program enrolled 20% of single adults and 25% of families referred to outreach. This steadily increased until peaking at 40% of single adults in Q2 2024 and 49% of families in Q4 2023. This improvement in enrollment rates allows the HPU to serve more people more quickly, which in turn ensures that a more significant share of those identified by the model as being at the highest risk of experiencing homelessness receive the supports that can help prevent that from happening.

FIGURE 3. Quarterly Homelessness Prevention Unit enrollment rates from the beginning of the formal evaluation period (February 23, 2023) through currently available data (September 30, 2024)



Notes: Numbers are for those referred to outreach from quarter 2 of calendar year 2022 through quarter 3 of calendar year 2024. Enrollment rate for families in 2023 Q1 is suppressed due to small cell size.

Conclusion

These findings provide positive signals for the HPU's effectiveness and highlight the significant progress HPU staff and leadership have made in refining their approach to proactive outreach. Preliminary analysis suggests that HPU enrollment is associated with better housing outcomes and reduced likelihood of adverse events, though we cannot claim the HPU has a causal impact on these outcomes because this association may partially or entirely be explained by differences in unobservable characteristics. The forthcoming RCT will provide a more definitive evaluation of the HPU's impact, allowing for a rigorous assessment of the program's effectiveness in preventing homelessness. In future research, we also plan to contextualize participants' outcomes with information on program costs (currently estimated by the HPU to be a little over \$12,000 per enrolled household).¹⁴

In addition to early outcome results, this report also finds that enrollment rates improved significantly after the HPU made changes to its outreach and enrollment processes. As a result, a greater proportion of individuals at high risk of experiencing homelessness have been successfully enrolled in HPU services.

As the HPU continues to evolve and the County prepares for future investments under Measure A, these lessons on program change, proactive outreach, and serving a uniquely high-risk population will be critical in designing and scaling effective prevention efforts. The insights gained from this report serve as a foundation for strengthening evidence-based strategies to prevent homelessness and reinforcing the HPU's commitment to supporting those most vulnerable to housing instability in Los Angeles County.

¹⁴ This estimate was calculated by dividing the HPU's \$8.6 million in total program expenditures (including operating costs and financial assistance provided) in FY 2023–24 by the 700 households served, which results in \$12,286 spent per client. For additional context, our original report estimated that on average participants received \$6,469 in financial assistance.

Acknowledgments

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Technical Appendix

This Technical Appendix describes in detail how the analysis in the [Key Finding 1](#) section was performed, and also provides a secondary analysis to provide further empirical support for the main findings.

Data Sources

For the HPU project, CPL uses an individual-level linked administrative dataset from LA County’s Chief Information Office (CIO), referred to as the “Information Hub.” The Information Hub started in 2006 as an effort by the CIO to link health services and benefits data for adults in LA County. In subsequent years, the CIO and County agencies have worked hard to forge legal agreements and build data-engineering pipelines to link administrative data from 11 County agencies into a regularly-updated data environment. The Information Hub is a critical piece of data infrastructure for both analytical and operational use cases in LA County. It includes health, mental health, social service benefits, arrests, probation, and homelessness service records for millions of individuals from 2010 onwards. CPL’s work on the HPU project, including predictive modeling and data analysis, is performed using a fully anonymized, de-identified copy of the Information Hub data.

Primary analysis: selection-on-observables (OLS)

The analysis in [Key Finding 1](#), which estimates whether HPU is associated with improved outcomes, employs a selection-on-observables assumption using Ordinary Least Squares (OLS) regression to estimate impacts. The selection-on-observables assumption is motivated by the wide range of background covariates available in the Information Hub data, which include demographics, geography, and prior histories of encounters with County agencies across homelessness, health, mental health, social safety net, and the criminal legal system. The OLS regression is estimated using equation:

$$y_i = \beta T_i + X_i' \theta + \delta_{psm} + \varepsilon_i$$

where y_i is an outcome for individual i , T_i is a binary indicator for HPU enrollment for individual i ; X_i' is a vector of individual-level covariates for individual i ; δ_{psm} is a vector of fully interacted fixed effects for month, household type, and Spanish language status; and ε_i is an error term. The individual-level covariates in the regression are those in [Table 2](#) of the Technical Appendix.

Secondary case manager analysis

While the analysis in [Key Finding 1](#) provides suggestive evidence that individuals who enrolled in HPU have better outcomes than those who were outreached but did not enroll, we cannot definitively say that the difference in outcomes between the two groups were caused by HPU enrollment. Specifically, the differences could reflect *selection bias*: characteristics or events which are not observed in the Information Hub data, but affect both whether someone can be successfully contacted and enrolled in HPU *and* whether they experience homelessness in the future. For example, an individual may be undergoing eviction proceedings when they are outreached by HPU, making them harder to contact and also putting them at increased risk of homelessness. That could potentially lead to differences in observed outcomes even if HPU enrollment itself has no effect.

Although the wide range of observed covariates could proxy for some of these unobservables, we will need results from the randomized control trial (RCT) in order to obtain credible estimates of the causal impact of the program that are free of selection bias. However, because of the high level of “non-compliance” (non-enrollment) in the RCT treatment group (with approximately 65% not enrolling), we will need a large sample size (approximately 1,000 people enrolled in the HPU) to achieve sufficient statistical power to detect impacts.¹⁵ We anticipate that this enrollment number will be reached in mid-2025. Because we also need to track participants for an 18-month outcome period, we will not have RCT results until at least 2027.

In the meantime, we present a secondary analysis which estimates the effect of assignment to HPU case managers with higher enrollment success rates. This approach is not an evaluation of case managers or their strategies. Instead, it is intended to provide supporting evidence that the results of the selection-on-observables OLS analysis are not primarily driven by selection bias. The sample consists of individuals who were referred to HPU outreach in the pre-RCT period from 5/2/2022 through 2/22/2023. Sample characteristics in [Table 2](#) show that the enrolled group differs from the non-enrolled group along demographic characteristics, prior history of homeless service use, and prior engagements with County agencies.

15 For more information see Santillano, R., Blackwell, B., and von Wachter, T. (2023). Evaluation of a Homelessness-Prevention Program in Los Angeles County. Open Science Framework. <https://osf.io/p5u3x>. [Accessed: 6 June 2025].

TABLE 2. Sample characteristics for a cohort of individuals referred to HPU outreach between 5/2/2022 and 2/22/2023, prior to the start of the randomized control trial.

Values are given in percentages, apart from Age and Area Deprivation Index.

	ENROLLED (N = 335)		NOT ENROLLED (N = 1,285)		DIFF
	MEAN	STD	MEAN	STD	
Demographics and Geography					
Race/ethnicity: Latinx	34.6	(47.6)	46.8	(46.8)	-12.2**
Race/ethnicity: Black	42.7	(49.5)	28.8	(28.8)	13.9**
Race/ethnicity: White non-Latinx	12.5	(33.2)	15.2	(15.2)	-2.6
Gender: female	65.1	(47.7)	46.2	(46.2)	18.8**
Family household type (at referral)	42.7	(49.5)	31.6	(31.6)	11.1**
Spanish language status	3.0	(17.0)	6.6	(6.6)	-3.6*
Age (years)	41.1	(11.2)	41.9	(41.9)	-0.8
SPA 1 (Antelope Valley)	11.6	(32.1)	11.8	(11.8)	-0.1
SPA 2 (San Fernando Valley)	14.9	(35.7)	10.2	(10.2)	4.7*
SPA 3 (San Gabriel Valley)	8.4	(27.7)	11.1	(11.1)	-2.8
SPA 4 (Central LA)	14.3	(35.1)	12.1	(12.1)	2.3
SPA 5 (West LA)	2.4	(15.3)	1.8	(1.8)	0.6
SPA 6 (South LA)	20.3	(40.3)	21.2	(21.2)	-0.9
SPA 7 (South Bay / Harbor)	6.6	(24.8)	8.6	(8.6)	-2.0
SPA 8 (East LA)	18.2	(38.6)	15.6	(15.6)	2.6
Area Deprivation Index (0–100)	40.3	(17.8)	40.2	(40.2)	0.0
Predictive model risk score (0–100)	28.6	(22.9)	27.5	(27.5)	1.1
Prior Homelessness (Last 5 Years)					
DPSS homeless flag	73.7	(44.1)	72.9	(72.9)	0.8
Interim housing or street outreach	6.0	(23.7)	5.5	(5.5)	0.4
Any HMIS (including prevention)	15.5	(36.3)	12.7	(12.7)	2.8
DPSS CalWORKs Homeless Assistance	20.3	(40.3)	10.2	(10.2)	10.1**
DHS homeless flag	9.3	(29.0)	7.9	(7.9)	1.4

** p < 0.01; * p < 0.05.

continued

	ENROLLED (N = 335)		NOT ENROLLED (N = 1,285)		DIFF
	MEAN	STD	MEAN	STD	
Prior Encounters with County Agencies (Last 5 Years)					
DHS emergency/inpatient	46.6	(50.0)	46.8	(46.8)	-0.2
DHS non emergency/inpatient	44.2	(49.7)	46.1	(46.1)	-1.9
DHS Elixhauser/Charlson comorbid diagnoses	38.2	(48.7)	41.0	(41.0)	-2.8
DMH crisis stabilization	23.6	(42.5)	30.2	(30.2)	-6.6*
DMH non-crisis	78.8	(40.9)	73.3	(73.3)	5.5*
Diagnosis related to serious mental illness	21.2	(40.9)	24.2	(24.2)	-3.0
Diagnosis related to substance use disorder	49.9	(50.1)	53.8	(53.8)	-3.9
Sheriff felony bookings	23.6	(42.5)	32.2	(32.2)	-8.6**
Sheriff misdemeanor and non-felony bookings	35.5	(47.9)	43.0	(43.0)	-7.5*
Probation spells	10.1	(30.2)	12.8	(12.8)	-2.7
CalFresh	99.7	(5.5)	99.6	(99.6)	0.1
CalWORKs	42.4	(49.5)	28.8	(28.8)	13.6**
General Relief	43.6	(49.7)	51.6	(51.6)	-8.0**
Medi-Cal	91.9	(27.3)	89.8	(89.8)	2.1
Reported earned income in DPSS data	37.9	(48.6)	28.6	(28.6)	9.4**

** p < 0.01; * p < 0.05.

During the pilot period, the HPU management team had a policy of randomly assigning individuals to case managers for outreach, taking into account family household type and Spanish language status, for which there were specialist case managers. Once individuals were assigned to case managers, those case managers were responsible for contacting them via proactive outreach, enrolling them in the program, and providing HPU services.

In the econometric literature on caseworker or examiner leniency designs, conditionally random assignment of the persons or entities responsible for assigning treatment is typically used as an instrument for estimating the causal effect of the treatment of interest.¹⁶ However, such designs impose an exclusion restriction which requires that the caseworker or examiner has no impact on outcomes other than assigning treatment. For HPU, case managers are responsible for direct service provision, and can therefore affect participant housing and homelessness outcomes through services other than simply enrolling

16 For an overview of the literature, see Eric Chyn, Brigham Frandsen, and Emily C Leslie, "Examiner and Judge Designs in Economics: A Practitioner's Guide," National Bureau of Economic Research w32348 (2024).

them in the program. Because the exclusion restriction does not apply in our context, we limit our application of the design to a “reduced form” analysis, where we use ordinary least squares (OLS) regression to estimate the causal impact of being assigned to a caseworker with a higher enrollment rate. While this does not specifically isolate the effect of HPU enrollment from other effects that case managers could have on participants’ outcomes through differences in service duration, intensity, or skill level, we nonetheless believe that it provides important secondary evidence for the overall value of the HPU program in reducing homelessness and other adverse outcomes.

We implement the design using the standard approach of constructing a leave-one-out case manager enrollment rate C_i , defined as the percentage of individuals assigned to individual i ’s case manager (excluding i) who enrolled in the HPU. For interpretability, we apply standard scaling to C_i so that regression coefficients can be interpreted as an increase of one standard deviation. Since assignment to case managers is conditionally random within household type and Spanish language status in a given month, all regressions that test for relevance and conditional random assignment include fully interacted fixed effects for month, household type, and Spanish language status.

Table 3 presents evidence that being assigned to a case manager with a higher enrollment success rate increases a person’s likelihood of enrolling in HPU. We estimate a model predicting whether or not a person will enroll in HPU based on their case manager’ leave-one-out enrollment success rate C_i , including month, family type, and Spanish language status as interacted fixed effects. We find that a person’s likelihood of enrolling in HPU is strongly related to the rate at which their case manager enrolls other clients. Specifically, an increase in their case manager’s enrollment rate C_i of one standard deviation (13.3 percentage points from a baseline of 20.7%) increases a person’s likelihood of HPU enrollment by 12.7 percentage points from a baseline of 20.7%, with an F-test value of 142.

TABLE 3. Association of case manager leave-one-out enrollment rate with individual enrollment rates.

F-test estimated using OLS regression controlling for interacted month, household type, and Spanish-language fixed effects. Standard errors are clustered at the case manager level.

	VALUE	STD	P-VALUE
Individual enrollment rate (%)	20.7	(40.5)	
Case manager leave-one-out enrollment rate (%)	20.7	(13.3)	
F-test	142.1		
Impact of one SD increase in case manager leave-one-out enrollment rate on individual enrollment rate (p,p)	12.7	(1.1)	0.0

Table 4 provides evidence that individuals are randomly assigned to case managers with varying success rates C_i conditional on interacted fixed effects for month, family type, and Spanish language status. We regress case managers' success rate C_i on the 34 covariates related to an individual's demographics and service use history (including interacted fixed effects) and find three significant differences at $p < 0.05$, a result consistent with conditional random assignment.¹⁷ The results in this table can be contrasted with the strong selection observed when directly comparing the enrolled and non-enrolled groups in **Table 2**, where we see 13 significant differences (10 differences at $p < 0.01$ and 3 differences at $p < 0.05$). Overall, this provides evidence that clients are randomly assigned to case managers, conditional on month, household type, and language. This is consistent with the operational workflows described by HPU program leadership.

TABLE 4. Evidence for conditional random assignment of case managers.

Each row represents a regression of the case manager leave-one-out enrollment rate on the characteristic plus interacted fixed effects for month, household type, and Spanish-language status. Standard errors are clustered at the case manager level.

	DIFF	STD
Demographics and Geography		
Race/ethnicity: Latinx	-0.2	(0.4)
Race/ethnicity: Black	1.2	(0.6)
Race/ethnicity: White non-Latinx	-1.0	(0.6)
Gender: female	1.9	(1.0)
Age (years)	0.0	(0.0)*
SPA 1 (Antelope Valley)	0.2	(1.1)
SPA 2 (San Fernando Valley)	1.6	(1.1)
SPA 3 (San Gabriel Valley)	-1.1	(0.6)
SPA 4 (Central LA)	0.8	(0.7)
SPA 5 (West LA)	0.2	(1.3)
SPA 7 (South Bay / Harbor)	0.5	(0.7)
SPA 8 (East LA)	-0.6	(0.6)
Area Deprivation Index (0–100)	0.0	(0.0)
Predictive model risk score (0–100)	-2.3	(1.4)

** $p < 0.01$; * $p < 0.05$.

continued

17 At least one of the three significant differences (prior enrollment in DPSS CalWORKs Homeless Assistance programs) may be due to its functioning as a proxy for family household type, which is one of the factors which determine how case managers are assigned.

	DIFF	STD
Prior Homelessness (Last 5 Years)		
DPSS homeless flag	-1.5	(1.0)
Interim housing or street outreach	1.0	(1.2)
Any HMIS (including prevention)	-0.3	(0.6)
DPSS CalWORKs Homeless Assistance	2.3	(1.0)*
DHS homeless flag	0.5	(0.5)
Prior Encounters with County Agencies (Last 5 Years)		
DHS emergency/inpatient	0.0	(0.8)
DHS non emergency/inpatient	0.0	(0.7)
DHS Elixhauser/Charlson comorbid diagnoses	0.1	(0.8)
DMH crisis stabilization	-0.8	(0.6)
DMH non-crisis	0.8	(0.7)
Diagnosis related to serious mental illness	-0.2	(0.6)
Diagnosis related to substance use disorder	-0.5	(0.6)
Sheriff felony bookings	-0.8	(1.0)
Sheriff misdemeanor and non-felony bookings	-0.9	(0.4)*
Probation spells	0.3	(0.9)
CalFresh	4.6	(4.6)
CalWORKs	2.4	(1.3)
General Relief	-1.1	(0.9)
Medi-Cal	0.5	(0.8)
Reported earned income in DPSS data	0.1	(0.6)
Dependent variable (case manager leave-one-out enrollment rate) mean	20.7	

** $p < 0.01$; * $p < 0.05$.

Table 5 shows impact estimates for the case manager analysis. Because standard scaling has been applied to the case manager enrollment success rate, the estimates can be interpreted as the effect of being assigned to a case manager with an enrollment success rate that is higher by one standard deviation (13.3 p.p. from a baseline of 20.7%). The overall pattern of impacts observed in this analysis are similar to those seen in the selection-on-observables analysis in **Figure 2**, with positive impacts on **Interim Housing or Street Outreach** and **Sheriff Bookings** being statistically significant at a 95% confidence level. However, as we might expect, they are smaller in magnitude since assignment to more successful case managers involves only a marginal increase in the likelihood of HPU enrollment, rather than HPU enrollment itself. In summary, there is evidence that being assigned to a case manager with a higher enrollment rate leads to better outcomes in terms of homelessness and other adverse events. This method will not necessarily work for the formal evaluation period because during that time the HPU selected the case manager with the highest enrollment rate to lead their newly formed outreach team, removing the opportunity to use the random variation from case manager assignment to measure program effectiveness. Nonetheless, it provides encouraging support for the validity of the primary analysis of this report.

TABLE 5. Impacts of assignment to case managers with higher enrollment rates.

Impact represents an increase of the case manager leave-one-out enrollment rate by one standard deviation (13.3 percentage points from a baseline of 20.7%). Each row represents an OLS regression of the outcome variable on the scaled case manager leave-one-out enrollment rate plus all covariates from **Table 2** and interacted fixed effects for month, household type, and Spanish language status. Standard errors are clustered at the case manager level. ** $p < 0.01$; * $p < 0.05$.

	SAMPLE MEAN	IMPACT (P.P)	STD
Any Observed Homelessness	29.3	-2.2	(1.4)
Homeless Flag in Benefits Data (7-18 months)	25.8	-2.2	(1.3)
Homeless Flag in Benefits Data (at 18 months)	20.2	-2.1	(1.0)*
Conventional housing in benefits data (at 18 months)	70.4	2.0	(0.8)*
Interim Housing or Street Outreach	4.9	-1.8	(0.8)*
DHS Emergency/Inpatient Visit	17.2	0.4	(1.1)
DMH Crisis Stabilization	9.8	-0.5	(0.6)
Sheriff Booking	14.9	-2.0	(0.8)*

** $p < 0.01$; * $p < 0.05$.