



UNDER THREAT: Surveying Unhoused Angelenos in the Era of Camping Enforcement

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ABSTRACT

Homelessness is a complex social problem that has proven difficult to solve in Los Angeles County, partly due to the lack of timely data that can be used for evidence-based policy development and evaluation. The past year has seen the emergence of camping enforcement laws that are not based on evidence of unhoused people's needs and preferences and lack mechanisms to track housing trajectories. The **Periodic Assessment of Trajectories of Housing, Homelessness, and Health Study (PATHS)** attempts to fill this evidence gap by creating a representative, longitudinal cohort of unsheltered people experiencing homelessness (PEH) using mobile phone technology. The PATHS web-based survey platform was designed and piloted to address key challenges in surveying PEH, using a brief and highly focused questionnaire, trauma-informed design, and an innovative electronic gift card incentive delivery system. In this initial report, we report results for the 298 PEH who completed the baseline and Month 1 PATHS survey between December 2021 and July 2022. Key findings include:

- The PATHS sample looks similar to the LA Homeless Count Demographic Survey sample in most sociodemographic characteristics, with slight underrepresentation of male, Hispanic/Latino, and older respondents. The PATHS sample has identical levels of substance-using PEH as the homeless count survey.
- The PATHS sample has substantially worse health indicators than the general population, with 5 times higher level of food insecurity, 3 times higher rate of general poor health, and 2 times higher rate of anxiety and depression.
- About one third of PATHS respondents reported that they are currently on a waiting list for housing, with nearly half having received an offer at some time. Yet another third reported no engagement with outreach.
- 90% of PATHS respondents reported that they would be interested some kind of interim or permanent housing solution, but only 2% said they would be interested in a group shelter. Respondents placed a high priority on remaining with partners, family, or roommates (42%); possessions (33%); and pets (29%). They shared concerns about privacy (58%), safety (54%), cleanliness (49%), hours or curfew (42%), and staff interactions (35%) in housing and shelter options.
- PATHS respondents had high levels of concern but low levels of knowledge about camping laws. Unsheltered respondents reported much higher fears about camping laws than their sheltered counterparts.
- PATHS respondents reported an extraordinarily high level of exposure to law enforcement, both previously and presently: 55% of respondents had a lifetime history of incarceration and 19% of respondents had interactions with the police in the past 30 days, including 22% of those who were unsheltered.

The PATHS survey offers a relatively low-cost and rigorous approach to collecting timely data. In 2023, PATHS will produce new reports and a data dashboard, increase sample size, and develop new survey modules that can be used for planning and evaluation in the shifting policy environment of homelessness in Los Angeles County.

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I. INTRODUCTION

In Los Angeles (LA) County, it is estimated that there are more than 69,000 people experiencing homelessness (PEH) on any given night (LAHSA 2022). LA’s homelessness crisis represents a racial justice issue, in that Black Angelenos account for 30% of PEH but only 9% of LA County’s general population — a disproportionality that also exists nationally (Henry et al. 2020). Additionally, LA County is home to the largest unsheltered population in the United States, with close to three quarters of the county’s homeless population living outside on the streets, in tents or makeshift shelters, or in vehicles.

Although the drivers of LA’s homelessness crisis emerged decades ago from policies rooted in exclusion and neglect, political and public interest in addressing homelessness has risen dramatically in recent years, motivated by concerns of humanitarian well-being and livability. In 2016, county and city voters passed unprecedented ballot measures financing interventions aimed at tackling the homelessness crisis, including new supportive services and permanent supportive housing. And although the pandemic caused major disruptions to the provision of services and access to basic necessities for PEH, it also ushered changes to the county’s shelter ecosystem, including the implementation of Project Roomkey that placed thousands of PEH into hotels to protect them from COVID-19 (Culhane et al. 2020).

Abbreviations

PEH	People experiencing homelessness
PIT	Point-in-time Homeless Count
DS	Homeless Demographic Survey
LAHSA	LA Homeless Services Authority
41.18	LA Municipal Code 41.18 (camping ordinance)
PATHS	Periodic Assessment of Trajectories of Homelessness, Housing and Health Study

Amid continued efforts to house LA’s homeless population in the postpandemic era, there has been a rise in rhetoric and legal action aimed at removing homeless encampments from public view. Even with the 2019 *Martin v. Boise* ruling by the Ninth Circuit Court of Appeals, which made camping laws unenforceable so long as a jurisdiction could not provide adequate shelter, the rights and treatment of unhoused people in LA County remain contested. Indeed, in July 2021, the LA City Council passed an updated version of the LA Municipal Code (LAMC) 41.18 banning public camping in designated areas in the city. Unlike previous ordinances, LAMC 41.18 proceeds on a neighborhood-by-neighborhood basis, with enforcement that is supposed to occur only after PEH have been notified and offered shelter. Proponents of LAMC 41.18 suggest that the offers of housing mandated to occur alongside enforcements and cleanups will expedite processes of rehabilitation. Opponents, on the other hand, argue that housing or shelter offers are unlikely to meet the needs or expectations of PEH; that most offers will be temporary and not lead to permanent housing; and that PEH will be at greater risk of law enforcement abuse and service disruption. Despite this controversy surrounding the camping ordinance, in August 2022, the LA City Council once again expanded LAMC 41.18 to ban camping within 500 feet of schools and daycare centers in the city — creating the potential for far more dramatic changes in the scope of outreach, shelter, and law enforcement.

A critical component missing from discussions about LAMC 41.18 and efforts to house PEH is empirical data on the housing and shelter preferences of PEH in LA and the extent to which individuals living unsheltered have previously been engaged and offered housing. In fact, every stage of LA's emerging homelessness crisis — and the increasingly reactionary response from policymakers — has unfolded amid a near-total lack of comprehensive, high-quality evidence on the well-being, needs, or desires of the unhoused community. Recent research has shown that in the first year of the pandemic alone, 1,988 PEH died on the streets, reflecting both increases in drug overdose mortality and a 2.3 times higher age-specific risk of COVID-19 mortality compared to the general population (Nicholas et al. 2021; Porter et al. 2022). This mortality spike is particularly alarming, because it accelerated a trend of annual surges in PEH deaths that had already doubled between 2014 and 2020 (Nicholas et al. 2021).

Although a burgeoning evidence base has revealed stark health disparities facing the overall population of PEH, research on the distinct experiences of those enduring unsheltered homelessness remains limited (Richards and Kuhn 2022). Even fewer studies have tracked the well-being of unsheltered people over time, and none have done so at time intervals that capture the many ways in which people's lives can change and unravel in a short period. But designing and evaluating policies and interventions that are effective at improving the lives of unhoused people hinge on capturing their perspective through high-quality and timely data, which to date has not been a priority.

The current report begins to address this evidence gap by presenting initial results from the **Periodic Assessment of Trajectories of Housing, Homelessness and Health Study** (PATHS). PATHS aims to fill a current gap in LA County's homelessness data ecosystem by creating a representative, longitudinal cohort of unsheltered PEH in LA using an innovative approach that leverages widespread adoption of cell phone technology among PEH (Rhoades et al. 2017). A main goal of PATHS is to follow the health and housing trajectories of LA County's unsheltered population. It also aims to track the consequences of LAMC 41.18 and other new policies with recurring data on geographic movement and police encounters. With an ongoing panel, we can also introduce additional questions to the key target population that emerge over time, such as changes in camping enforcement, housing access, and engagement in street medicine. Such timely evidence can help generate new insights about evolving policies and practices as they occur.

We note that although much attention in the weeks following the release of the 2022 point-in-time homeless count has focused on the perceived weaknesses of the annual count in accurately assessing the current state of homelessness (Smith 2022), a far greater challenge facing the homeless response system in LAC is the lack of infrastructure to systematically track basic metrics needed for successful service provision and housing efforts: housing retention, reentry into homelessness, and well-being. Mobile surveys offer the potential to collect data at a frequent time scale for a relatively low cost. Although this report does not report longitudinal results, we hope that these initial findings will provide both a snapshot of the lives of unsheltered PEH in LA and a roadmap to future possibilities in data collection and analyses.

In our initial launch of PATHS, enrollment took place in two phases: during the annual LA County 2022 Homeless Count Demographic Survey (DS) fieldwork from December 2021 to March 2022 and during two subsequent recruitment pushes from March to July 2022. As of August 31, 2022, the PATHS 2022 cohort includes 411 individuals who completed baseline surveys, of which 298 Month 1 surveys and 673

subsequent monthly surveys have been collected. **For this initial report, we focus exclusively on the baseline and Month 1 results for the 298 participants who completed Month 1 surveys to introduce readers to PATHS**, establish its validity, and present initial findings. Results of longitudinal analyses of data collected will follow in the coming months, along with a public data visualization portal.

In this report, we describe in greater detail the PATHS methodology in Section II. In Section III, we report on the dwelling types, neighborhood locations, and baseline characteristics of the PATHS sample and assess the representativeness of our sample compared to estimates of the overall population of PEH in LA County. Finally, in Section IV, we present the main findings of this initial report focusing on:

- A. Health and well-being
- B. Current housing and outreach status
- C. Perceptions of housing and shelter
- D. Camping law exposure
- E. Camping law perceptions
- F. Interactions with law enforcement

II. STUDY METHODOLOGY

The study was carried out jointly by investigators at the UCLA Fielding School of Public Health and USC Dworak-Peck School of Social Work, with digital innovation support from Akido Labs. In the two years before the launch of PATHS, we ran a successful pilot study that used electronic health record messaging systems to enroll 135 PEH in Santa Monica, Venice, and West Los Angeles, beginning in November 2020 and continuing to the present. The pilot study, funded by the University of California Office of the President and the Homeless Policy Research Institute, made critical advances in the incorporation of lived expertise into the study design; development of trauma-informed recruitment and survey instruments; and delivery of electronic incentives to a highly vulnerable population. The pilot generated important insights about the attitudes and experiences of PEH, particularly regarding vaccination (Kuhn et al. 2021). Information and data from the pilot study can be found at <https://www.homelessresearch.akidolabs.com/>.

PATHS attempted to enroll a representative sample of unsheltered PEH in LA by conducting in-person recruitment with skilled interviewers — all of whom had experience surveying PEH and several who had lived experience of homelessness. Initial funding support for this study came from the Conrad N. Hilton Foundation in September 2021. Protection of human subjects was overseen by the UCLA IRB (#21-001148). Recruitment took place in two distinct phases:

UCLA/USC Research: You are eligible for the study. Complete the next survey and receive a \$10 e-gift card.

Reply STOP to opt out.

PHASE 1, DECEMBER 2021–MARCH 2022. PEH were invited to participate after completion of the 2022 DS. Recruitment was conducted by the 25 members of the DS survey team.

PHASE 2, MARCH 2022–JULY 2022. PEH were invited to participate during dedicated canvassing exercises conducted in hotspots of unsheltered homelessness by six members of the DS team. Teams used comparable recruitment procedures to the DS but did not conduct any in-person surveys. Recruitment largely took place during two weeklong exercises in April and July 2022. This recruitment primarily took place in Downtown LA and the surrounding ring of neighborhoods with high concentrations of PEH (e.g., Hollywood, Westlake, South Park, Lincoln Heights).

In both recruitment phases, prospective respondents had two enrollment options: (a) recruiters offered to collect contact information and send a study invitation directly to respondents via email or SMS, or (b) recruiters distributed cards to prospective respondents, who could then enroll by scanning a QR code or texting a phone number. After completing one of the two recruitment options, prospective respondents received a text message linking them to a website with study information and a pre-screening survey. All enrollment and consent procedures were self-administered by prospective respondents on their phones; recruiters did not conduct informed consent or provide any study background beforehand. To be eligible for PATHS, respondents had to meet the following criteria:

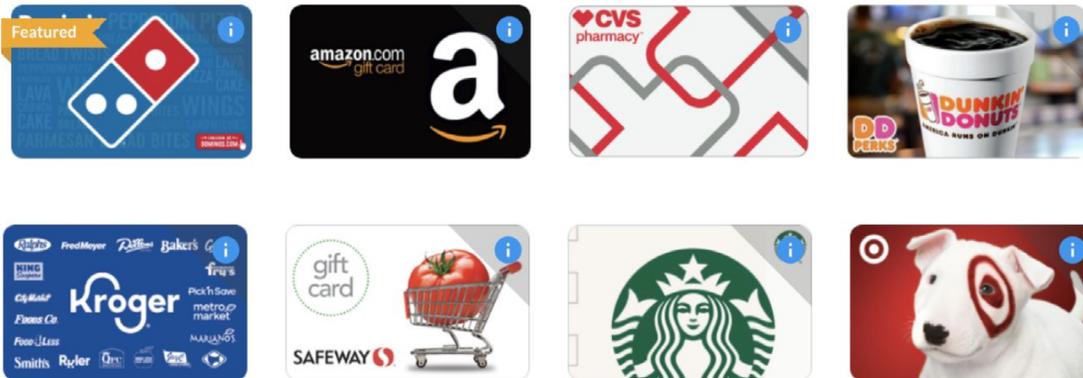
- Live in a homeless shelter or unsheltered setting (street, vehicle, tent, or makeshift shelter) at least one night in the past month
- Live in LA County
- Be 18 years old or older



Prospective respondents who met these criteria received a follow-up SMS or email message inviting them to complete a baseline survey. Upon completion of the baseline survey, they were enrolled in the study and subsequently sent a link to the monthly survey on the third Monday of each month. Baseline and monthly surveys had median completion times of 5 and 17 minutes, respectively. All surveys were conducted on a secure mobile website that could be accessed on a phone or computer. Surveys were available in English or Spanish.

A critical innovation of this survey is the delivery of electronic incentives for participation. Upon completion of each survey, respondents were connected to a portal where they could register to receive an electronic gift card. The initial incentive was \$5 per survey, which later increased to \$10 per survey in February 2022. Gift cards were available from a wide range of vendors, including grocery stores and restaurants, and delivered to respondents via email. In August 2022, the study added a debit card option.

Gift Vendor Options



Once enrolled, participants were invited to answer monthly surveys for 18 months. Survey invitations and subsequent reminders were sent via text message, and surveys were administered on a mobile-friendly web interface through the Qualtrics platform. As mentioned previously, our survey was designed and tested by people with lived experience of homelessness to be trauma informed, equity sensitive, and appropriate for a broad range of literacy levels. Questionnaires also were designed to encourage completion through the use of a visually engaging survey interface, buffers, and other techniques that prepare respondents for questions that could be triggering.

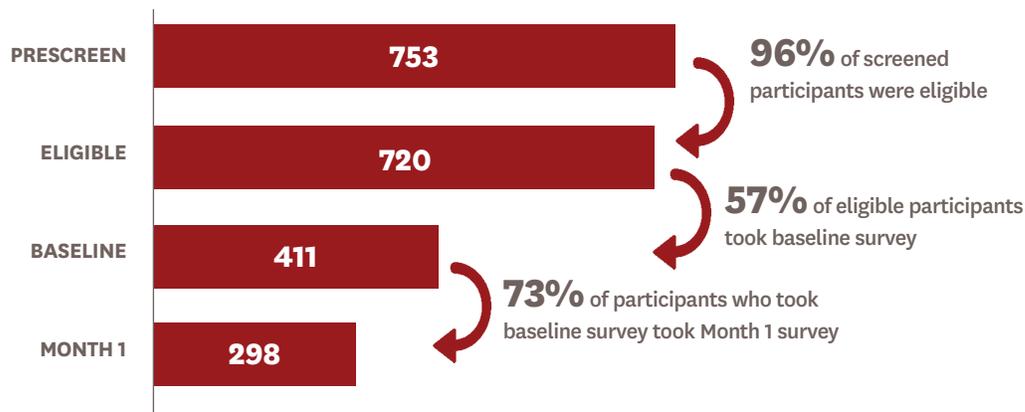
Although this survey was quantitative in focus and necessarily brief given the many technological challenges facing PEH, we nonetheless created opportunities for respondents to express their feelings about key issues in written responses. Our pilot study revealed that a small but significant subset of respondents viewed this survey as a valuable mechanism of self-expression in an environment where their opinions are often overshadowed. For this reason, we offered open response options, including “if other, please specify” options on preference questions and some open text fields. Although these open responses are no substitute for the rich narratives gained from truly qualitative or mixed-methods studies, they nonetheless created a regular means of adding some qualitative depth to the breadth of this study.

III. PATHS STUDY POPULATION

A. Enrollment and response rates

In 2022, we screened 753 individuals and enrolled 411 unique individuals in baseline surveys. Thus far, 298 participants (73%) have completed at least one monthly survey, and 971 total monthly surveys have been completed (Figure 1). For this initial report, we focused exclusively on the baseline and Month 1 results for the 298 participants who completed Month 1 surveys. Results regarding subsequent months will follow.

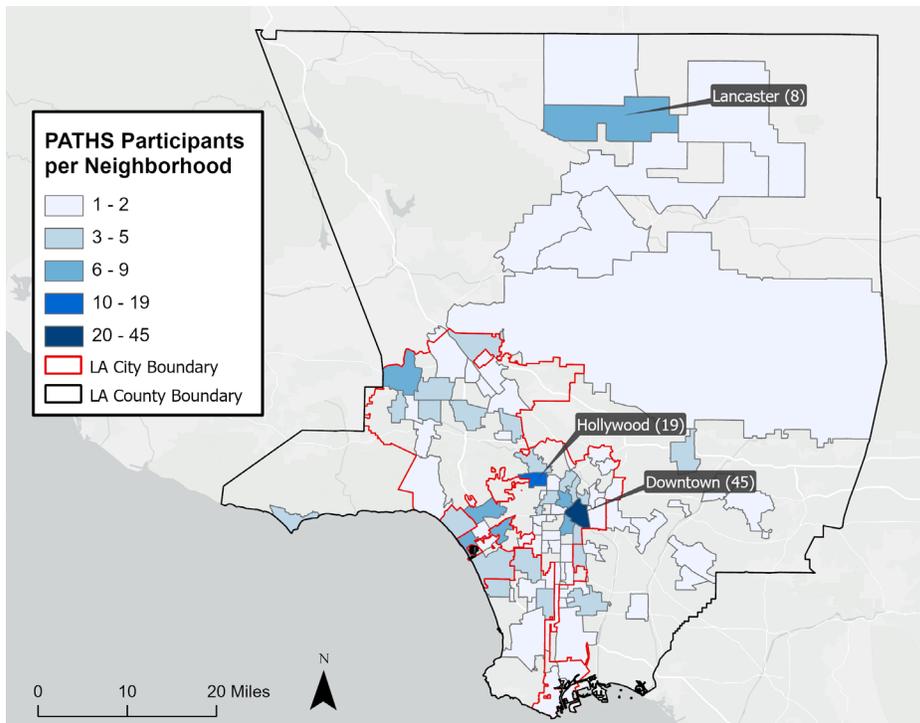
FIGURE 1: PATHS screening and enrollment funnel



B. Spatial distribution of participants in Month 1

To track geographic movement among participants across months, we recorded respondents' current sleeping location in each monthly survey. We gathered information on respondents' geographic location by asking their permission to access their precise coordinate location from their device, asking them self-report their current living address, or asking them to select the neighborhood they live in on a list of 270 neighborhoods in LA City and LA County. Of the 298 respondents who took a Month 1 survey, 282 respondents (95%) provided some type of location data during that month. Of these 282 people, 45% provided GPS data or an exact address or intersection and 55% provided neighborhood-level data. Figure 2 shows the locations where PATHS participants indicated sleeping at the time of the survey. These locations are aggregated to neighborhoods in LA City or municipalities outside LA City to protect confidentiality. We found that 68% of respondents reported living in the city of LA (red outline). Neighborhoods in LA County with the most respondents were Hollywood ($n = 19$) and Downtown LA ($n = 45$). These locations align broadly with the spatial distribution of LA's PEH observed in the 2022 point-in-time count. Further detail on respondent locations in the city of LA can be found in Section III.D, Figure 10.

FIGURE 2: Map of respondent location by neighborhood or city in LA County

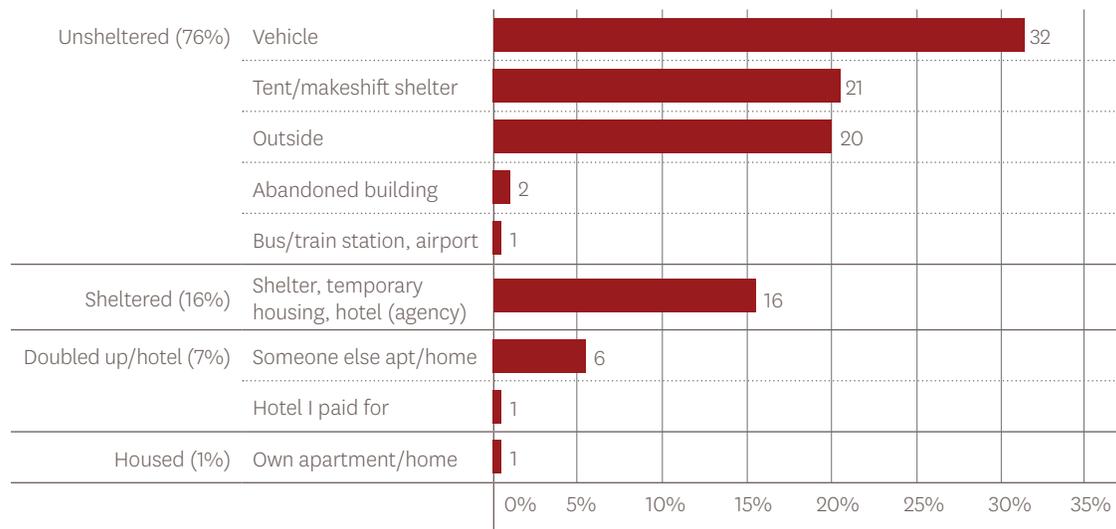


Note: n=282 and excludes 16 individuals who did not provide location data. Neighborhood boundaries are defined by jurisdiction data from Los Angeles Homeless Services Authority. The neighborhoods that are color coded indicate where PATHS participants specified where they lived at the time of survey, whereas the areas in grey indicate areas with no PATHS participants.

C. Dwelling types in Month 1

In each monthly survey, we collected highly granular information on the type of housing or shelter respondents slept in the previous night. Figure 3 summarizes the dwelling locations of the PATHS respondents at Month 1. Many respondents (76%) were unsheltered, with a distribution of dwellings roughly comparable to the 2022 DS. Although all respondents were recruited on the streets, 16% reported being sheltered. This is unsurprising given that recruitment took place during the day, when many PEH are forced to leave shelters. Another 8% were housed, primarily being doubled up. Although all respondents had to be unhoused at the time of screening, many rotated among unsheltered, sheltered, and doubled-up locations. Future reports will track respondents as they move across multiple dwelling types and physical locations, and future analyses will examine how trajectories differ for those who remain in a single location over time versus those who move between locations and dwelling types.

FIGURE 3: Last night housing location



Note: n=293 because five respondents indicated “Prefer not to answer.”

D. Representativeness of the PATHS sample to LA County’s unsheltered population

As a phone-based survey, PATHS appears to be remarkably representative of LA County’s unhoused population. Table 1 summarizes key demographic characteristics of PATHS participants in comparison to the 2022 DS. Of the 298 respondents who completed the Month 1 survey, 29% were Black, 30% were White, 31% were Latinx, and 10% were some other race or did not specify. Relative to the DS, our sample slightly overrepresents Whites (30% vs. 21%) and underrepresents Latinx (32% vs. 44%). This may be partly explained by the fact that a Spanish language survey option was not added until July 2022, in response to feedback from recruiters that many approached PEH spoke Spanish. The PATHS sample is also slightly younger (54% under age 40 vs. 36% of all unhoused PEH in LA County), likely due to the degree of technology literacy required to enroll in and complete mobile surveys. The survey had slightly lower representation of men than the overall unhoused population (54% vs. 66%), a pattern that is typical of many opinion surveys. The overrepresentation of women in the PATHS sample is also beneficial in that it provides a larger sample size for a group that is highly vulnerable. Despite these differences, our sample is highly similar to the entire adult homeless population in duration of homelessness (82% homeless for > 1 year), history of substance use disorder (32% vs. 30%), and presence of any physical health condition (39% vs. 35%). We collected data on physical health conditions using the Center for Disease Control and Prevention’s COVID-19 risk factor screener, which captures a wide range of chronic conditions (see questionnaire in Appendix 1). The most common physical health conditions reported by PATHS respondents were asthma (25%), diabetes (8%), liver disease (4%), HIV/AIDS (4%), and chronic obstructive pulmonary disease (3%).

TABLE 1: Comparison of Month 1 survey responses to 2022 LA County Homeless Demographic Survey

	PATHS (n = 298)	Homeless Count (18+)
	%	%
AGE		
18-24	7	4
25-39	47	32
40-49	23	20
50-59	15	20
60+	7	14
SEX		
Male	54	66
Female	44	32
Neither male nor female	3	1
RACE/ETHNICITY		
Black or African American, non-Hispanic	30	30
White, non-Hispanic	30	21
Asian, non-Hispanic	3	1
Native Hawaiian / Pacific Islander, non-Hispanic	1	0
American Indian /Alaskan Native, non-Hispanic	1	1
Hispanic / Latino	32	44
Other	2	3
Homeless for > 1 year	82	82
Substance use disorder	32	30
Any physical health condition	39	35

Note: Values for 2022 homeless count come from detailed subpopulation tables.

Given some differences between the PATHS and DS sample composition, we initially weighted our results by age, sex, and race and ethnicity to match DS estimates. Because the results were largely unchanged, we present unweighted results for simplicity of presentation.

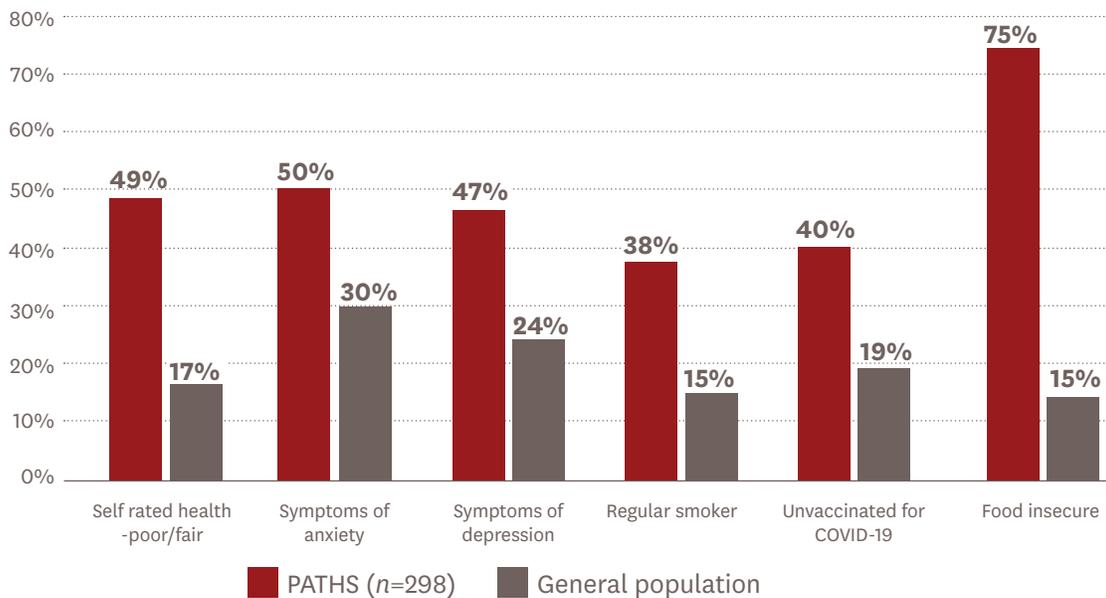
IV. MAIN FINDINGS

A. Health and well-being

PATHS provides the first comprehensive look at the health of PEH using validated measures that are widely collected in the general population. Here, we report general health (using a self-rated health question); psychological distress (using the Patient Health Questionnaire-4); anxiety (using the Generalized Anxiety Disorder 2-item scale); depression (using the Patient Health Questionnaire-2); smoking behavior; substance use (using a custom single-item question inclusive of multiple substances); COVID-19 vaccination status; recent emergency room or hospital use; and food security (using a modified version of the standard U.S. Department of Agriculture scales).

In our Month 1 surveys, we observed exceptionally poorer physical and mental health status measures relative to the adult population of LA County (Figure 4). Forty-nine percent of respondents rated their health as fair or poor (vs. 17% of LA County adults), 50% had symptoms of anxiety (vs. 30% in LA County), and 47% had symptoms of depression (vs. 24% in LA County). PATHS respondents were more than twice as likely to be a regular smoker (38% vs. 18%) and twice as likely to be unvaccinated for COVID-19 (40% vs. 19%). Of particular severity was food insecurity: 75% of PATHS respondents reported experiences of food insecurity, 5 times as high as the adult population of LA County (15%).

FIGURE 4: Comparison of selected health indicators to the general population



Notes: All values for PEH come from the PATHS. For the general population, self-rated health and smoking come from a state source (California Health Interview Survey 2022); anxiety, depression, and food insecurity come from a federal source (US Census Bureau 2022).

In Table 2, we report health outcomes of PATHS survey respondents by race/ethnicity to understand how notable racial health disparities in the general population compare to those among PEH. For simplicity of presentation, we do not present statistical tests or covariate-adjusted estimates, which we will save for future publications. We also note that sample size limited our ability to address understudied concerns relating to the health of other racial and ethnic subgroups ($n = 31$), most notably American Indian and Alaska Native populations ($n=4$), which face substantially higher risks of homelessness than the general population (Fowle 2022). Hispanic/Latino respondents (57%) reported higher rates of poor or fair health than Black (41%) or White (48%) respondents, whereas White respondents reported higher rates of psychological distress (59%) compared to Black (49%) and Hispanic/Latino (41%) participants, with more nuanced variation among rates of anxiety and depression. Whites reported far higher frequency of smoking (58% regular smokers vs. 33% of Hispanic/Latino and 26% of Black respondents) and daily substance use (45% vs. 26% of Hispanic/Latino and 13% Black of respondents).

We note that these general patterns represent an inversion of racial disparities observed in the general population, wherein Black respondents tend to report higher levels on some of these same health measures. This inversion is consistent with other recent studies (Finer and Henshaw 2006; Porter et al. 2022). These studies point to the highly racialized experience of homelessness: Whereas Black people are driven into homelessness 4 times more frequently and for various structural and economic reasons, entry into homelessness among White people may be more driven by individual health factors, such as mental illness and substance use (Edwards 2021; Fowle 2022; Fowler, Toro, and Miles 2009). We note that these patterns demand further exploration, including studies that separate differences at entry into homelessness from those emerging as a result of homelessness.

TABLE 2: Mental and physical health of PATHS month 1 respondents by race and sex

	RACE / ETHNICITY			SEX	
	Black ($n = 86$)	White ($n = 88$)	Hispanic/ Latino ($n = 93$)	Male ($n = 160$)	Female ($n = 130$)
	%	%	%	%	%
Self-rated health (poor or fair)	41	48	57	44	55
Psychological distress	49	59	41	39	63
Anxiety	55	53	43	40	62
Depression	42	54	45	38	58
Regular smoker	26	58	33	43	33
Daily substance use*	13	45	26	31	25
Unvaccinated for COVID-19	47	42	38	35	49
Emergency room or hospital visit in past month	20	16	16	15	21
Food insecure	70	75	82	70	79

*Includes cannabis, methamphetamine, cocaine, fentanyl, heroin, and prescription opioids.

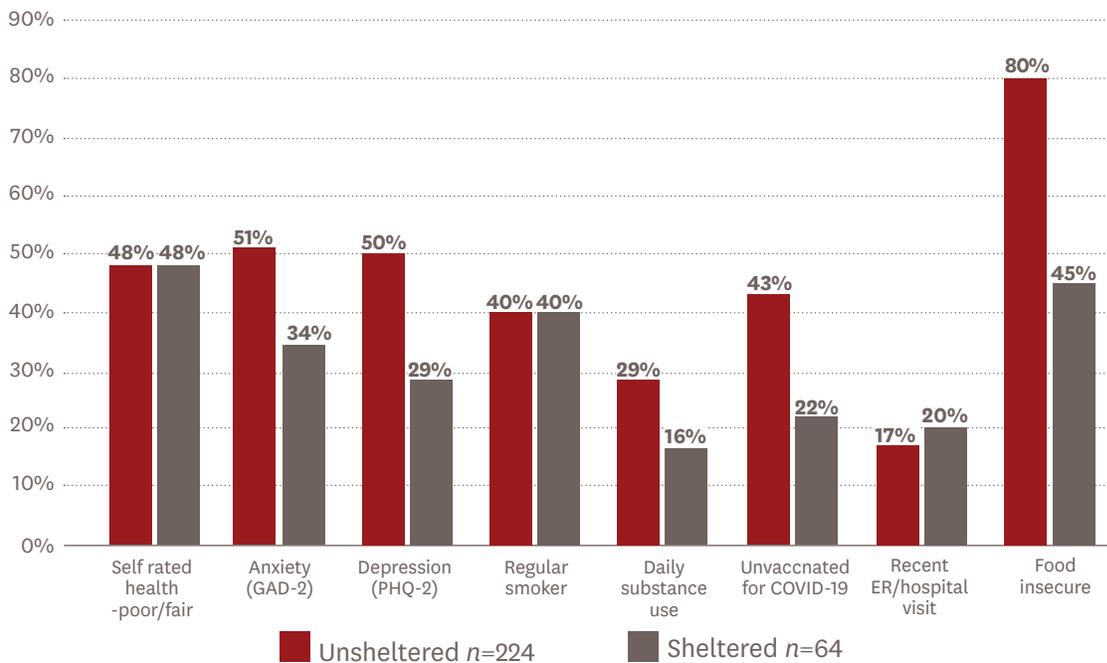
Note: Race/ethnicity analysis included 267 participants, excluding individuals who reported another race ($n = 31$).

Sex analysis included 290 respondents, excluding eight transgender or other gender nonconforming respondents.

Table 2 also reports variation in health outcomes by sex. Women (55%) were more likely to report poor or fair health than men (44%) and had substantially higher rates of anxiety (62% vs. 40%) and depression (58% vs. 38%), despite being less likely to report regular smoking (33% vs. 43%) and daily substance use (25% vs. 31%). Women were also more likely to be unvaccinated for COVID-19 (49%) than men (35%). Due to low statistical power, we could not quantitatively address health outcomes for transgender and other gender nonconforming individuals ($n = 8$), who face higher risks of both homelessness and adverse health outcomes (Richards et al. 2022).

Figure 5 compares these same health outcomes by sheltered vs. unsheltered status on the previous night and illustrates striking disparities. Unsheltered respondents were substantially more likely to screen for anxiety or depression, nearly twice as likely to report daily substance use, nearly twice as likely to report food insecurity, and nearly twice as likely to be unvaccinated for COVID-19 compared to sheltered respondents. Sample size limitations prevented us from reporting detailed breakouts for doubled-up individuals, but our internal analysis suggested that doubled-up individuals look similar on most health measures to unsheltered people, suggesting that these individuals move between the streets and doubled-up settings. These findings of worse health status among unsheltered compared to sheltered participants are consistent with the results of a recent systematic literature review on unsheltered homelessness (Richards and Kuhn 2022). In the coming months, PATHS data should allow us to explore whether additional months of unsheltered homelessness lead to further health deterioration.

FIGURE 5: Mental and physical health by last night shelter status



B. Current housing and outreach status

The current homelessness crisis is characterized by gaps in the availability of permanent and temporary housing solutions and outreach capabilities. To track current bottlenecks in the homelessness services landscape, we asked monthly questions about each respondent's current situation with regard to housing. This is not an easy question to ask due to the complexity of the system and the opaque nature of what it means to be on a "waitlist." Nevertheless, we attempted to ask about current housing and outreach status through unfolding questions:

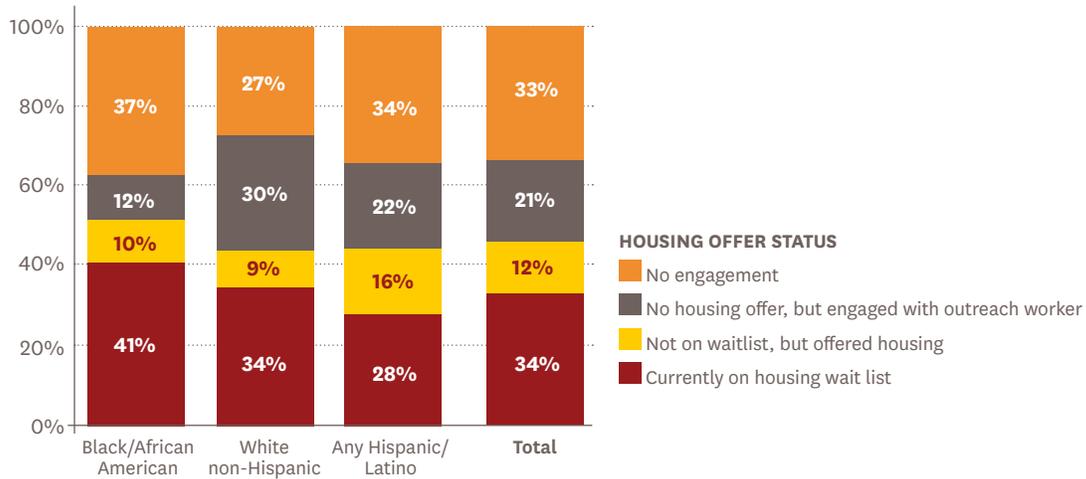
1. Are you currently on a waiting list for housing in Los Angeles?
2. (If no to previous) Since you have been homeless in Los Angeles, have you been offered housing?
3. (If no to previous) Since you've been in this area, have you been engaged with an outreach worker (i.e., from LAHSA, DMH, DPH, other housing agency)?

These questions allow us to establish a hierarchy between those with a current housing slot, those with some housing offer, those who are engaged with outreach, and those who are not engaged at all. It also gives us some sense of the potential impact of clearing current waiting lists and the share of PEH who are unserved.

Figure 6 shows the results overall and by race/ethnicity. Approximately one third of respondents said they were currently on a waiting list for housing (34%), with another 12% having received some offer. This leaves more than half who had not yet received a housing offer, including one third (33%) who reported no engagement with outreach. This is a troubling number, though it is quite a bit lower than figures reported elsewhere. For example, a 2020 linkage study of homeless deaths found that only 21% of individuals who died on the streets could be linked to the LA Homeless Services Authority's Homeless Management Information System records (Perry 2020). This may either suggest that a large number of people are engaged but not fully identified in outreach or that those who are disconnected from outreach are more likely to die. In either case, the 34% figure still offers considerable room for renewed outreach effort. We note that respondents may interpret engagement with outreach to mean different things, and future survey rounds could measure specific types of outreach engagement.

Unsurprisingly, fewer Hispanic/Latino respondents reported being on a housing waitlist (28%) than White (34%) or Black (41%) respondents. Although the higher figure for Black respondents may reflect successful efforts to address glaring racial disparities in homelessness incidence and housing retention, it remains troubling that a higher share of Black respondents (37%) had no system engagement than White respondents (27%). Notably, 30% of White respondents were engaged with outreach but had not received an offer. We note that these results should be interpreted carefully, because there is considerable room for interpretation in each category. Being engaged but not receiving a housing offer could reflect regional variations in outreach capacity or housing inventory, different levels of acuity, or client resistance to outreach. Similarly, presence on a housing waitlist may not necessarily reflect imminent entry into housing. This longitudinal survey will allow us to track whether participants with higher levels of outreach progress into housing.

FIGURE 6: Housing offer status by race/ethnicity



Note: Sample sizes are the same as in Table 2.

C. Perceptions of housing and shelter

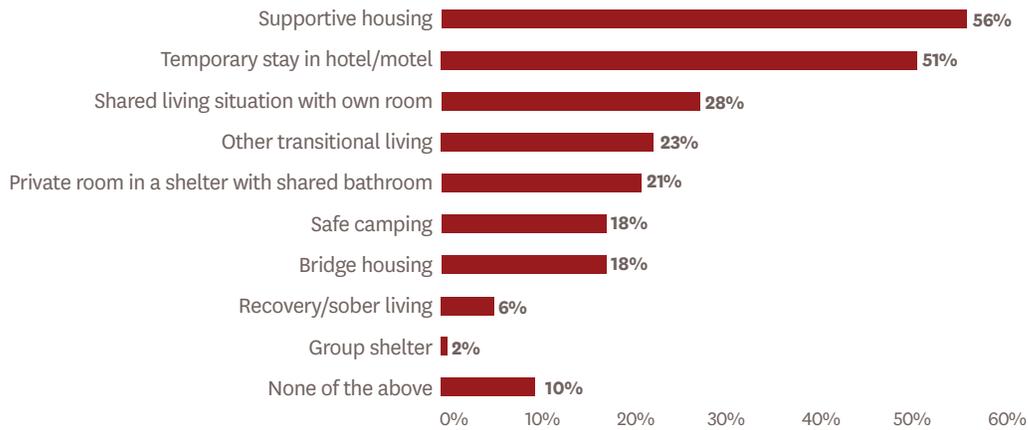
Current popular and political sentiment suggest that a critical component of any emergency approach to homelessness involves rapidly placing a large number of PEH into shelters or other interim housing solutions. Yet it is also widely understood that interim solutions also may not last and that many PEH may be dissatisfied with currently available options, particularly congregate shelters. At the same time, there may be a public perception that many PEH are resistant to housing solutions. To address this concern, we surveyed respondents each month about their needs, preferences, and barriers to housing and shelter.

First, we asked PEH about which housing types they would be “interested in receiving.” We chose this language as a compromise between more restrictive wording (e.g., “prefer”) or more inclusive wording (e.g., “willing to accept”). We offered a menu of nine widely available and easily understood housing options using language tested for clarity among experts and people with lived expertise. For ethical reasons, we made clear in our informed consent that answers to these questions would not lead to a housing offer but would simply help us understand people’s needs.

Figure 7 emphatically suggests that most PEH are willing to accept some housing option. Only 10% of respondents clicked “None of the above,” with little variation by race and ethnicity or unsheltered or sheltered status. Among the 90% who expressed interest in housing, the average number of acceptable options was two to three, with 44% selecting only a single acceptable option, indicating a high degree of selectivity for housing or shelter type. More importantly, only 2% of respondents expressed interest in a group shelter setting. We note that this is substantially lower than the 30% who reported that they would accept group shelter in LA LEADS, a recent pen-and-paper survey conducted in Skid Row, Hollywood, and Venice (Ward, Garvey, and Hunter 2022). This suggests that a higher share of respondents might be willing to accept a group shelter under certain circumstances, but we note that the share is quite low in both studies and that those with low interest in group shelter may be less likely to remain in that setting.

Critically, respondents showed much greater interest in nongroup options. More than half (56%) of respondents reported interest in supportive housing, which is the pillar of the current system. We also observed that 51% would accept a temporary stay in a hotel or motel, such as the highly successful Project Roomkey. A smaller but substantial share would accept the other interim options. Another 18% were interested in safe camping. Overall, 62% of respondents would accept at least one transitional option (hotel or motel, shelter with shared bathroom, bridge housing, or other transitional housing).

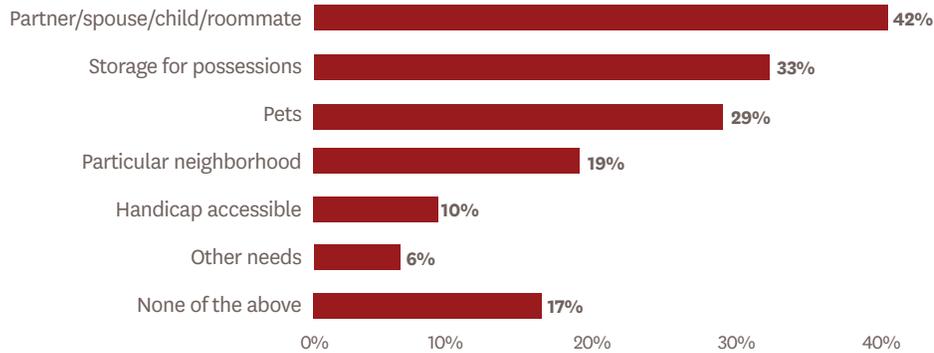
FIGURE 7: Housing and shelter options respondents would be interested in receiving



Note: Question allowed respondents to check all options that applied to them. Figures includes 289 respondents and excluded 9 respondents indicated “Prefer not to answer.”

To dig deeper into the specific types of shelter facilities that are needed, we asked respondents whether they have any “specific needs or requirements for housing shelter” (Figure 9). Most respondents expressed some preference (83%). Our results largely reflect the so-called three Ps: partners (42%), possessions (33%), and pets (29%). Notably, another 19% expressed a preference for a fourth P: place, in the form of a particular neighborhood. This 19% is lower than the 36% reported in the LA LEADS study, which may reflect that this prior study surveyed only areas with unique histories and amenities — Hollywood, Venice, and Skid Row — and that respondents in other areas are not as committed to a particular location. For instance, although the numbers are small, we observed that 27% of respondents in Service Planning Areas 4 and 5 (Downtown, Westside) had a neighborhood preference, whereas none of the 21 respondents in Antelope Valley or San Gabriel Valley had a preference. This points to the complex housing preferences among PEH and the need to both consider location in decision making and conduct surveys that ask respondents to rank these preferences, perhaps even using photographic imagery comparing different types of housing. An additional 10% expressed a need for disability accessibility, reflecting the high level of health disadvantage and need in a sizable subset of this population.

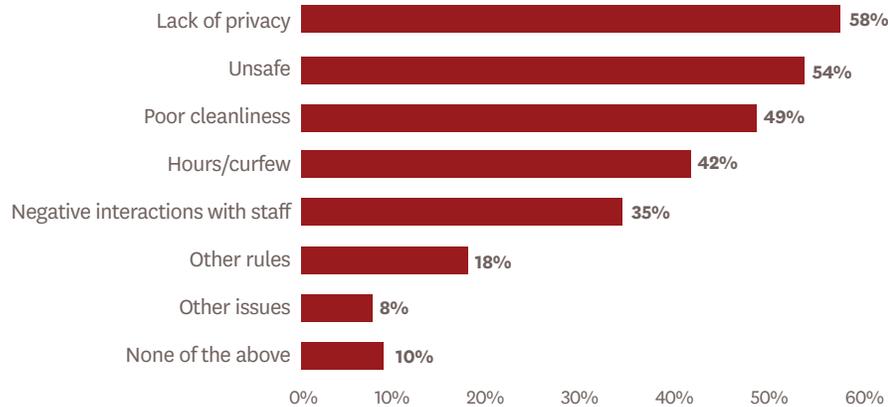
FIGURE 8: Housing and shelter needs



Note: Question was only asked to the 90% of people (n = 275) who indicated that they would be interested in housing (see Figure 7). Question allowed respondents to check all options that applied to them.

Finally, we queried respondents on “issues that would keep you from moving into a shelter or housing” (Figure 9). Only 10% reported no barriers, with 90% reporting at least one. Those who reported barriers listed an average of three barriers. Our results reflect the understanding of the housing barriers PEH most often face in earlier provider or qualitative studies (Hunter et al. 2021; Padgett, Bond, and Wusinich 2022), with lack of privacy (58%), safety (54%), cleanliness (49%), hours (42%), and negative staff interactions (35%) as the most common barriers in our sample.

FIGURE 9: Perceived barriers to shelter or housing uptake



Note: Question allowed respondents to check all options that applied to them. Nine respondents indicated “Prefer not to answer.”

Qualitative data were also collected in a free text-response field that allowed respondents to describe issues they faced when acquiring or staying in housing or shelter. Below we present a selection of particularly striking experiences and perceptions from participants who varied by race/ethnicity and current housing status. Collectively, they highlight concerns of safety, freedom, trauma, and equity and raise doubt about the acceptability of group shelter as a temporary housing option, even among those living outside or on the streets.

The amount of bullying, psychological, and emotional abuse that I have been subjected to by other clients ... and outright abusive security guards. These places keep you mentally messed up. [Black woman, living in shelter]

Curfews do not fit my work schedule. Other homeless people tend to be mentally unstable, and dirty — and I do not want to be associated with that. I would not stay in a group setting, for these reasons, but have never been offered housing of any kind, at any point, from any service in the county.
[White woman, living in hotel]

Rules are prioritized over human needs.
[White man, living outside]

[There is] inequality in terms of placements and quality of housing; Housing [is] offered without thought for distance to medical facilities, access to transportation, and basic services.
[Black woman, living in vehicle]

Feels like jail and I am poor not a criminal. Staff is not educated or trained to treat people like individuals. Everyone is treated like a criminal or a drug addict even if you aren't.
[Native American and White woman, living in tent]

I don't want my addictions to be a burden on anyone.
[Hispanic/Latino man, living in tent]

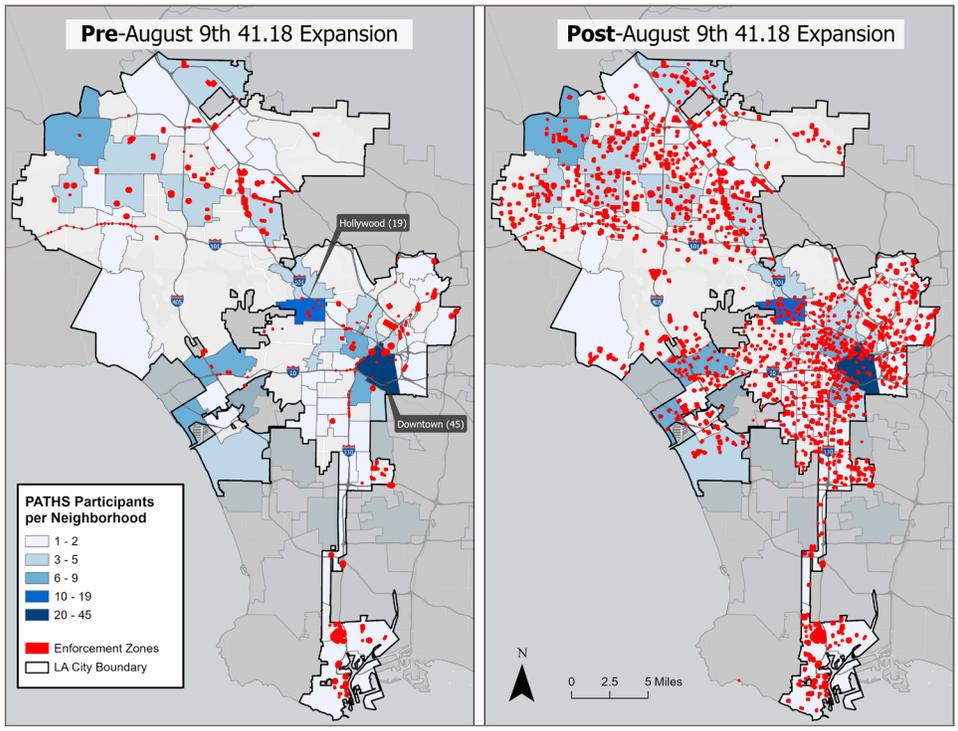
I experienced molestation [and] don't feel comfortable sleeping around people.
[Black woman, doubled up]

D. Camping law exposure

One key goal of PATHS is to measure the effects on PEH with different levels of exposure to camping enforcement based on their location. In this section, we attempt to establish initial levels of exposure. Because our sample included respondents in LA County but outside the city of LA boundaries that represent the jurisdiction of LAMC 41.18, we conducted archival research to identify municipalities that approved a similar law banning camping in a public area in the past 5 years. The list of those municipalities is included as Appendix Table 1. Of the 282 respondents who provided location data, 52% were living in either a neighborhood in the city of LA with an approved or posted LAMC 41.18 enforcement zone or a municipality in LA County that recently implemented a camping law at the time of survey. Among respondents living in LA County but outside of LA City, 34% (30 of 89) lived in a town with a recently approved camping ordinance. The widespread exposure to camping laws outside the city of LA has largely been underreported, and a future report will explore the details and impact of these ordinances.

For respondents in the city of LA and thus, under the jurisdiction of LAMC 41.18, we measured direct and neighborhood-level exposure to enforcement. Figure 10 maps the neighborhood locations of the 193 respondents living in city of LA boundaries in relation to all approved and posted LAMC 41.18 enforcement zones, differentiating between enforcement zones that existed at the time they were initially surveyed versus current enforcement zones that include an expansion around schools and daycare centers as approved on August 9, 2022. LA City neighborhoods with the highest frequency of PATHS participants are indicated, most notably Downtown (45) and Hollywood (19). Of the 102 respondents in the city who provided an exact location (not shown to protect respondent confidentiality), 19% were living in an approved or posted enforcement zone at the time of survey (left panel). Notably, an additional 20% were living in places designated as enforcement zones after the survey (right panel), meaning that these respondents were at risk of displacement due to LA City’s camping law.

FIGURE 10: Respondent location relative to LAMC 41.18 enforcement zones in LA City



Data source: Data of enforcement zones from LA Department of City Planning and the Kenneth Mejia for City Controller Campaign. Map reflects neighborhood-level location of individuals in LA City (n = 193).

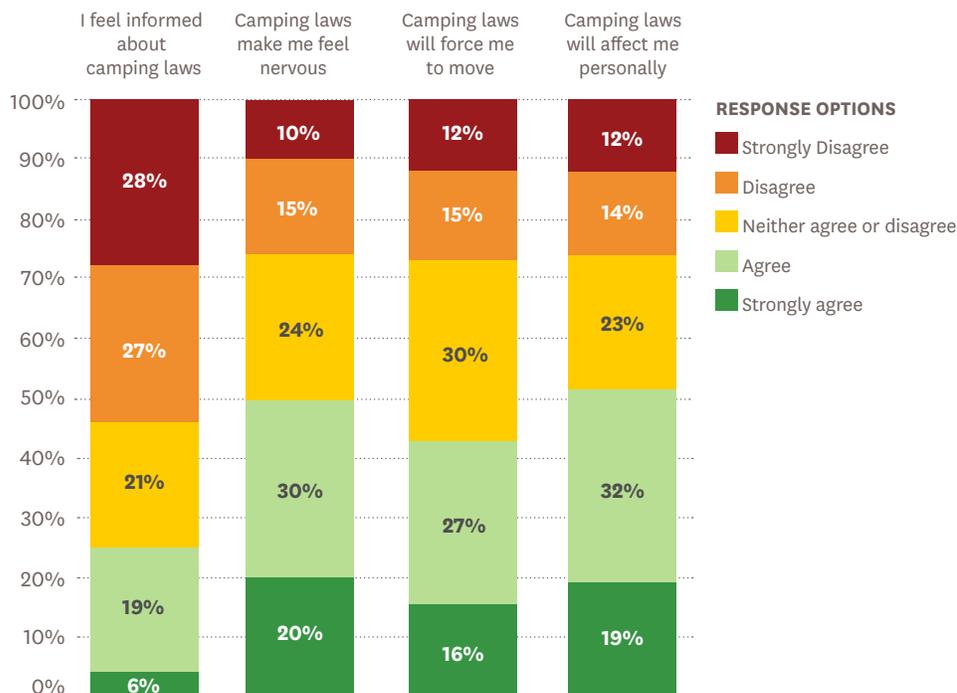
E. Camping law perceptions

To gauge respondents' knowledge and awareness of camping ordinances, we asked them four questions with a 5-point response scale, from *strongly agree* to *strongly disagree*:

1. I feel informed about the new laws that ban camping in parts of LA.
2. Laws that ban camping make me feel nervous or anxious.
3. Laws that ban camping will force me to move to a different place.
4. Laws that ban camping will affect me personally.

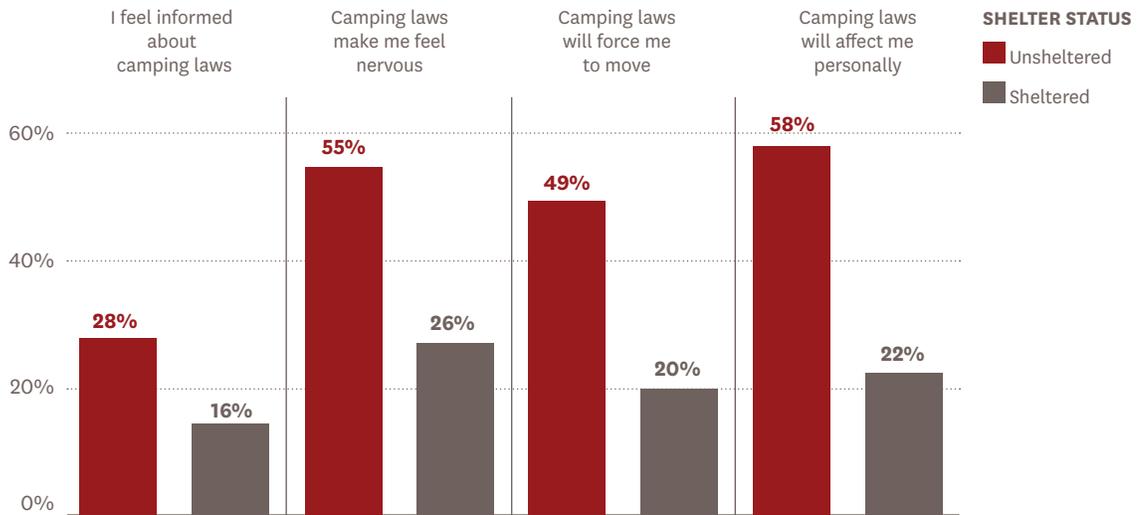
Figure 11 illustrates the high, though not universal, level of concern about the ordinances and the perceived lack of knowledge about them. Across the full sample, only 6% said they strongly agreed that they were informed about the laws, with another 19% reporting being somewhat informed. Yet concern about the ordinances was high, with 50% either strongly agreeing or agreeing that the laws made them nervous, 43% saying they would have to move, and 51% saying they would affect them personally.

FIGURE 11: Camping law perceptions



Unsurprisingly, these expressions of anxiety or impact were 2 to 3 times higher among those who were unsheltered than those who were sheltered, as shown in Figure 12. In total, 73% of unsheltered versus 44% of sheltered respondents expressed some degree of personal impact or concern based on agreeing with at least one of the last three statements.

FIGURE 12: Camping law perceptions by shelter status

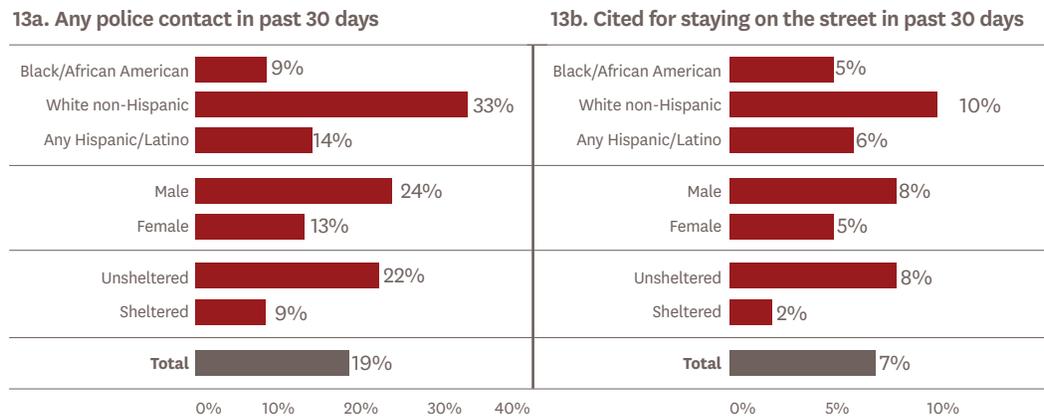


F. Interactions with law enforcement

One great concern surrounding the camping ordinances is that they will intensify the overpolicing of PEH, who already have shockingly high levels of involvement with the criminal justice system. Overall, 55% of all respondents had a lifetime history of incarceration, which was exacerbated by extraordinarily high levels of regular contact with law enforcement in our sample. In contrast to the general population, in which Black Americans are highly overrepresented in the carceral system, PATHS data show that 70% of White respondents had an incarceration history, compared to 51% of Latinx and 48% of Black respondents. As in the case of inverted health disparities, this likely points to the unique patterns of selection driving homelessness among different race/ethnic groups.

PATHS also tracks monthly experiences of policing over time. Figure 13 shows that in our initial monthly surveys, 19% of respondents had interactions with police in the past 30 days and that 7% were cited or ticketed for staying on the streets. Levels of police interaction were substantially higher for unsheltered PEH (22%) than sheltered PEH (9%). Interestingly, levels of police interaction and citation were substantially higher for White respondents (33%) than for Black respondents (9%), with smaller but still notable gaps in citations (10% White, 5% Black). These patterns require further exploration, because they may reflect differences in neighborhood location, shelter status, and risk behavior between Black and White PEH.

FIGURE 13: Interactions with law enforcement and camping law citations



Our study also explored the nature and respectfulness of interactions with police. Given the difficulty of asking an open-response question about police interactions, this initial study simply aimed to use the open-response capabilities of the survey to gather general intelligence on the types of experiences and concerns shared among respondents. For respondents reporting a recent police interaction, we asked the following open-ended question to which 33% of participants provided a response:

If you are willing, please share any other information you feel is important to know about this/these recent interaction(s) with police or other law enforcement.

Here we report a small selection of those interactions, which point to initial themes of trauma, targeting, and disrespect and the existence of some positive interactions.

Police at war with homeless. [White man, living outside]

Slept on Santa Monica beach and got woken up at least 4-5 times for “camping.”
[Black man, living outside]

The police respect you if you are cooperative, however, I have known them to harass the homeless. [White man, living outside]

They weren’t wearing their masks. They have to lead by example for me to take covid 19 [sic] serious. [Hispanic man, living in tent]

Police definitely do not regard homeless people as regular citizens/humans.
[Asian American woman, living in shelter]

The police are surprisingly very nice and informative never an issue with them in a negative accord. [Black man, living in tent]

I fear police greatly, I feel hunted by them. I am not a criminal, I have a condition that makes me incompetent and they treat me like I am lying. I fear they will kill me just by their negligence. [Other race woman, living in tent]

Future versions of this study will include systematic questions on the nature of interactions with police.

Although PATHS tracks changes in policing as a direct legal consequence of camping ordinances, imminent questionnaire revisions will attempt to capture a fuller picture of changes in interpersonal and systemic violence. The stigmatization of PEH that is both implicit in the ordinances and explicit in the language of some politicians and residents can create an enabling structure for a much wider array of physical and verbal violence and socioeconomic marginalization. In particular, the criminalization of homelessness may enable a range of predatory behaviors for those seeking to maintain tenuous access to housing and resources, including financial shakedowns (Ellsworth 2019; Lee and Schreck 2005). Illegality may create an environment of impunity and fear of reporting or redressing frequently experienced crimes, like domestic violence, theft, trafficking, and drug distribution. Finally, hateful rhetoric in mainstream and social media may encourage a rise in hate speech and hate crimes against PEH (Toohey 2022). In fall 2022, we will introduce a module to track experiences of abuse, violence, and predatory behavior.

V. DISCUSSION

This report provides a snapshot of the health, housing preferences, and security of PEH in LA County at a critical juncture. Our study shows that it is possible to conduct high-quality scientific research among PEH using mobile phones at a relatively low cost. We note this is an important innovation, because mobile phones often serve as a lifeline for PEH, who do not benefit from access to wired technology or other advantages of a permanent residence. Given the prohibitive costs and efforts associated with in-person longitudinal tracking and the ubiquity of phones, there is a unique opportunity to monitor the health and well-being of PEH using mobile survey technology.

Focusing on our substantive findings, our study supports the notion that LA County's unhoused population faces dire health conditions, both physical and mental, compared to the general population. In addition to many other well-known disparities in disease, PEH face nearly twice the risk of mental illness, twice the risk of poor general health, and 5 times higher risk of food insecurity. Those who are unsheltered face even worse conditions. Although health disparities among LA County's unsheltered population may have been expected, our results also show that one third of PEH are already on a waiting list and that most PEH, 90%, are interested in being housed. This runs contrary to public sentiment that often depicts unsheltered individuals as uninterested in shelter or housing.

The findings make clear that although respondents were amenable to a wide range of interim and permanent housing solutions, they emphatically rejected group shelter. They also cited the need to maintain access to partners, pets, and possessions and raised concerns about basic sanitation, security, and dignity in any setting. Also notable is that although many respondents were interested in some sort of housing or shelter alternative to living unsheltered, and despite significantly expanded outreach services in LA County during the past 5 years (LAHSA 2021), roughly one third of our sample reported that they were not currently engaged with any kind of housing outreach. This begs the question of how formal services can better connect with a significant portion of LA County's unsheltered population that is not currently engaged.

The findings that most unsheltered PEH were interested in interim and permanent housing solutions and either were on a waitlist for housing or had no engagement with outreach services speaks to current concerns regarding LAMC 41.18. Specifically, respondents expressed a lack of knowledge and serious concerns about new camping ordinances, particularly among those who were unsheltered. Our findings suggest that respondents already face an extraordinarily high burden of policing, which likely represents a period that precedes the full brunt of enforcement of camping ordinances. Further, it is not clear the extent to which housing and shelter preferences are considered when outreach services are offered — whether by individual outreach efforts or the system as a whole. This suggests that there may be other, more humane alternatives to threats or enactment of policing that could improve housing outcomes. Given that this report represents some of the first information regarding housing and shelter preferences among LA County’s unsheltered population (Ward et al. 2022), it is doubtful that such information has been considered in current strategic planning.

The situation in LA County is unfolding rapidly, and our goal is for PATHS to serve as an evolving platform for evidence-based monitoring. Immediate next steps are to retain our longitudinal sample over time and double our sample size through recruitment during the 2023 DS that will take place between December 2022 and March 2023. Our questionnaire will continue to evolve in response to emerging changes in the homelessness crisis and policy responses. Additionally, in the coming months, PATHS will be revised to incorporate more questions on violence, crime, and abuse experienced by PEH. It will also include more detailed reporting on the nature of housing offers and preferences.

One key limitation of PATHS is that it currently only covers individuals who already own a phone. Although our evidence suggests that this sample is broadly representative of the larger population of PEH, the sample could be made even more representative by giving out phones to potential respondents who lack them. Indeed, given the value of mobile phones as a lifeline for people who lack a physical address and wired connection, we would argue that all PEH should be offered phones as a natural part of the outreach process, alongside mechanisms to help them maintain mobile coverage and charging access (Hunter, Ramchand, and Henwood 2020). Although information technology is not a panacea and past efforts to create “innovative apps” to solve homelessness have failed, the simple ability to call or text a caseworker could dramatically improve continuity of care and reduce tracking burdens for caseworkers, who face severe fatigue and burnout (KPMG and United Way of Greater Los Angeles 2022). Widespread offers of phones alongside the opportunity to share survey data have the possibility to radically transform homeless services — from chance encounters to a person-based approach focused on building lasting care relationships and collecting solid evidence on who stays in housing and who recovers.

At the same time, we note that surveys, mapping, and mobile phones alone will not address the homelessness crisis or heal the rifts in our community regarding the contested issues of homeless encampments, camping and other quality-of-life ordinances, and the right to space for unhoused people. Although our study can map people’s changing locations and how it relates to a wide range of experiences and outcomes over time, it is uncertain whether we can generate a simple quantitative narrative of the impact of recent camping laws on the health and housing trajectories of PEH. PEH have and will continue to use a wide range of strategies to adapt to evolving enforcement mechanisms,

presumably resulting in countermeasures from authorities. Ultimately, we hope that future PATHS reports will shed light on the experiences of a population that is constantly and increasingly under threat and that our findings can add to constructive conversations on how best to address the homelessness crisis with evidence-based policies that also preserve the rights, autonomy, and dignity of the unhoused.

Conclusion

This initial report of PATHS demonstrates that the current discussion regarding camping ordinances and enforcement in LA County is sorely lacking empirical data that can be addressed to better inform public perceptions and policy decisions. PEH, particularly those who are unsheltered, suffer from a wide range of health burdens. Although 90% are interested in interim or permanent housing options, few are interested in group shelter. This population, already subject to extraordinarily high levels of policing, faces concerns and lack of knowledge about new camping ordinances. Reports on the results of monthly PATHS surveys will be published in the near future, along with data visualization tools for public use.

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