

## Drivers of Unsheltered Homelessness and Conservation along the Jordan River, Salt Lake County, Utah

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**A research report delivered to the Jordan River Commission – March, 2022**

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## **Executive Summary**

### **Project purpose:**

The purpose of this project was to better understand the social and environmental complexities associated with unsheltered homelessness along the Jordan River corridor, in Salt Lake County, Utah. This research sought to contextualize the drivers that lead people experiencing homelessness (PEH) to reside along the Jordan River, as well as to identify mitigation strategies (i.e. access to services and facilities) that might assist in human survivorship and well-being, in addition to supporting conservation of the Jordan River corridor. In response to the changes in homeless resource center (HRC) locations, service areas, service type, and service quality, we sought to understand the drivers of PEH residing along the river, as well as their daily lived experiences in order to mitigate potential negative ecological effects of unsheltered homelessness. This research sought to identify mechanisms to support the well-being and conservation of the river and its users. Our specific research questions were to a) identify areas of encampments along the Jordan River; b) characterize who inhabits these encampments, in addition to their concerns and needs; and c) understand individuals' lived experiences of unsheltered homelessness, including their rationales for living adjacent to the Jordan River.

### **Research approach and methods:**

Researchers employed multiple phases and multiple methods to address the research questions. Across multiple months and multiple seasons (August-December, 2021), researchers sought to understand prevalence, use, preferences, and lived experiences of PEH along the Jordan River (within 250 yards of the river). Survey Questionnaires were developed to gather information regarding PEH personal needs, recent episodes of homelessness, user demographics, site-based management preferences, and perspectives on community, loneliness, water use, conservation approaches, and other perspectives of the Jordan River. The research team used purposive, site-specific random probability sampling approaches to ensure representative samples of PEH residing in Jordan River encampments. We collected responses from 60 PEH participants. Second, researchers conducted in-person, on-site in-depth semi-structured Qualitative Interviews with 16 PEH participants along the Jordan River. Interviews consisted of open-ended questions that allowed participants to share detailed descriptions of their lived experiences while living along the Jordan River corridor. The interview protocol emphasized individuals' experiences with local homeless and city services, proximity and access to basic living necessities, relationships with other unsheltered individuals living along the Jordan River, and relationships with the river itself.

These data helped researchers triangulate understandings of the functional, spatial, and temporal use of the Jordan River by PEH. The combination of Survey Questionnaires and Qualitative Interviews provides a comprehensive investigation into experiences of unsheltered homelessness along the Jordan River corridor. This report includes 12 Tables and 10 Figures providing documented empirical perspectives of PEH use and experiences along the Jordan River.

### **General findings:**

Across four months of engagement, numerous encampments were found throughout the Jordan River corridor, with most concentrated at specific locations closer to downtown Salt Lake City. Few of the encampments were "hidden" from view, though most were a short distance from roads and offered a degree of separation and seclusion. Analyses of 60 Survey Questionnaires of PEH

living along the Jordan River indicate some distinct trends among multiple measured domains, including demographics, feelings of loneliness, stewardship of the river, factors leading PEH to reside along the river, and preferences for management, among others. This population was 68% male, with an average age of 42 years old, 53% of whom are from Utah. The average time reported living along the Jordan River was 92 weeks. While scores varied, there was an overall low sense of loneliness from PEH participants, and they reported relatively high desires for stewardship of the river, and high desire for increased services (e.g., trash service, drinking water). When asked where they might go if they were forced to leave their camp location, 38% were unsure, 23% indicated that they would move elsewhere on the Jordan River corridor, while only 3% said that they would seek out shelter at one of the HRCs.

Analyses of the conducted Qualitative Interviews reveal five dominant themes from 16 semi-structured interviews with PEH living along the Jordan River. The identified themes were factors leading to short- and long-term Jordan River encampments; abatements as barriers; PEH experiences with the HRCs; community and residency along the Jordan River; and PEH perceptions of the Jordan River. Research participants noted that they lived along the river because abatements elsewhere in Salt Lake City had driven them there, and that the river offered a degree of both seclusion and access to nearby daily amenities like food, clean water, and convenience stores. Ongoing abatements and dislocations were common sources of anxiety for PEH, and alternative living in local HRCs was seen as either unavailable or undesirable. PEH life on the Jordan River was characterized by a sense of community among research participants, even as PEH expressed a sense of stigma from the housed population. Finally, PEH reported a sense of connection and a desire for stewardship of the river itself, perhaps contradicting common perceptions about these communities.

#### Project conclusions:

Findings from our project indicate that we are likely to see ongoing use of the Jordan River by PEH, regardless of law enforcement interdiction, increased signage, or other dissuasion techniques. We recommend that the Jordan River management plan be updated to more fully account for the ongoing use of the area by PEH, given current housing market trends, the limitations of the HRC system, and the ongoing impacts of COVID-19. The Jordan River corridor provided readily accessible amenities, such as food, clean water, and convenient stores, a secluded greenspace that is desirable for camping, and a sense of community and safety for PEH to support daily survival and well-being. An additional recommendation is that there be increased availability of trash receptacles, public restrooms, and needle disposal receptacles, providing for both increased quality of life and increased safety and conservation along the Jordan River corridor. While perhaps unpopular among managers, we recommend a reconsideration of current encampment abatement procedure, emphasizing a more collaborative relationship with PEH communities that emphasizes their stability and safety. Lastly, we suggest the development of a stewardship and empowerment program for PEH along the Jordan River that provides both knowledge acquisition and skill development to both reduce negative environmental impacts and create community connections between PEH and housed resident communities.

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## **Introduction**

### Overview and Research Purpose

The purpose of this project was to understand the various factors that lead people experiencing homelessness (PEH) to reside along the Jordan River, as well as to identify mitigation strategies (i.e. access to services and facilities) that will assist in human survivorship and well-being, in addition to supporting conservation of the Jordan River corridor. The Jordan River is an urban waterway, flowing through multiple Utah County and Salt Lake County municipalities, and is managed collaboratively by a variety of municipal, county, and state agencies, along with the support of non-profit organizations and the Jordan River Commission. In addition to serving as an essential outdoor recreational and health resource for local residents (including walking, biking, running, fishing, and boating), the adjacent paved Jordan River Parkway is an extended greenway that contributes substantially to the connectivity of the region, serving as a commuter and transit path for nearby communities. With the Jordan River's proximity to many urban amenities and services, the corridor also has seen use from PEH. Residing along the river presents safety and conservation concerns for PEH, other visitors, and the river ecology. PEH are often associated with outdoor defecation and urination, discarded intravenous needles, and criminal behavior, though there is limited empirical support for these assumptions. Other Jordan River visitors may have increased fear associated with perceptions of homelessness in the area, and may therefore refrain from recreating along the river. Additionally, unsheltered homelessness in public parks and protected areas is often accompanied by a number of undesirable ecological ramifications, including litter, debris, vegetation loss, soil compaction, decreased water quality, and negative impacts on sight and sound. Through this research and its findings, we seek to contribute to efforts from the Jordan River Commission, its members, associated agencies and organizations, and members of the broader community, to mitigate some of the negative impacts of PEH residing along the Jordan River. Simultaneously, this research seeks to identify mechanisms to support the well-being and conservation of the river and its diverse users.

Homelessness in the Salt Lake Valley has received increased attention in recent years, during which absolute numbers of homelessness, both sheltered and unsheltered, has seen steady increases in annual counts. Collaborative decisions from multiple constituencies (including the State of Utah, municipalities across the Salt Lake Valley, the Jordan River Commission, social services providers, and local residents) have charted a future that changed emergency sheltering options. This multi-year project closed a larger existing temporary homeless shelter in Salt Lake City's downtown Rio Grande district, and in the process created multiple new gender-specific homeless resource centers (HRCs) in a scattered-site model throughout the valley. As formal sheltering options have changed for PEH (including a decrease in the overall availability of nightly beds), unfortunately timed with the onset of the COVID-19 pandemic and its various restrictions, there have been notable shifts in the quantity and spatial distribution of PEH throughout the Salt Lake Valley. In particular, with more PEH residing outdoors, as well as increased abatement strategies within Salt Lake City's downtown and surrounding areas, there has been an increase in the number of both short-term and more established PEH and homeless encampments along the Jordan River. In response to the changes in HRC locations, service areas, service type, and service quality, it is vital to understand both the precipitants and the drivers of PEH residing along the river, as well as their daily experiences.

## Research Questions

While a variety of studies have examined elements of homelessness throughout the Salt Lake Valley, there has yet to be sustained empirical measurement and quantification of homelessness and its social and environmental impacts along the Jordan River. Data collected and analyzed from methods described in this prospectus can contribute to a more comprehensive evaluation of existing levels, distributions, and impacts of homelessness in this area. Our research started by understanding where the large and often enduring encampments are located on the Jordan River corridor (within 250 yards of the Jordan River), between 1700 North and 10600 South. Beyond these descriptive locations, we also sought to take a more nuanced approach to understanding people's lived experiences on the Jordan River. Specifically, in this research project, we were guided by two overarching research questions to drive our project during the summer, fall, and early winter months of 2021:

1. Who is inhabiting these encampments, what are their engagements with the river, what are their concerns, and what are their needs?
2. Why are people living along the Jordan River choosing to do so?

Embedded within each of these broad research questions are underlying concerns about PEH experiences, non-homeless recreational visitors' experiences, COVID-19, physical safety, park and river management, water quality, waste management, and environmental conservation, among others. Below, we detail the geographic and social setting, before turning to our research approach to consider more specific research questions and their associated methods.

## Geographic Setting and Scope of Work

The geographic scope of work was the Jordan River corridor (within 250 yards of the river) between 1700 North and 10600 South, in Salt Lake County (Figure 1, below). This research was designed to understand the lived experiences of homelessness as it relates to the Jordan River, and focuses specifically on those living, sleeping, and interacting in this approximately 22.6-mile corridor.





*Figure 1. Reference map of the Jordan River section of study in Salt Lake County, Utah*



The Jordan River is an urban waterway that stretches approximately fifty miles centrally through Utah's Salt Lake Valley, home to more than 1 million people, connecting Utah Lake and the Great Salt Lake. The river is home to many different species of native wildlife and plants, and serves as an outdoor recreational and health resource for local residents (including walking, biking, running, fishing, and boating). The Jordan River has an adjacent paved commuter and transit path, the Jordan River Parkway, that provides connectivity for communities in the region, and parts of this trail are in close proximity to various urban features, resources, and services, also attracting use from PEH. In 2019, the local emergency shelter system serving PEH changed; this shift, along with the onset of COVID-19 in 2020, led to increased numbers of homeless encampments throughout the Salt Lake Valley. These encampments are constructed in city parks, along streets, near railroad tracks, in the foothills, and along the Jordan River riparian corridor. This increase in encampments has resulted in the local health and police departments performing abatements, where camps are deemed unsafe and residents are forced to relocate. Throughout this process, the Jordan River has remained a space where encampments are common.

Encampments along the Jordan River consist of people residing in tents or constructed shelters, where multiple individuals and shelters are grouped together. There are often fire rings, chairs, containers to hold trash, suitcases with personal belongings, bicycles, and boxes to hold food, water, and other personal items. Some of the more established encampments have constructed showers, rugs in gathering areas, and even stairs cut into hillsides. These encampments function as communities, where resources, such as food and water, are shared. They also provide safety, support, assistance, and community. Some encampments provide needed services, such as bicycle repair or large batteries to charge cell phones and small electronic devices. Most PEH treat their tents or shelters as their home, with trash kept in containers or bags to be taken to trash receptacles, brooms and shovels to keep the surrounding areas clean, and items organized into boxes or containers inside and outside of shelter structures. PEH often spend time outside of their shelter structure, interacting with those around them or conducting daily tasks. Individuals usually only spend time within their shelter structure when sleeping or escaping the elements.

Life along the Jordan River for PEH is difficult. It can be difficult to find regular access to needed resources, including food, clean water, restrooms, trash receptacles, and bathing options. PEH are also vulnerable to weather elements (rain, wind, high and low temperatures, and snow), as well as extreme weather events (flooding, high wind, blizzards, ice storms, thunderstorms, and downbursts). PEH also face high exposure rates to environmental hazards, including air pollution which is common in the Salt Lake Valley in the summer and early fall months due to wildfire smoke and in the winter months due to inversions.

## **Research Approach**

In general, our approach to this research project was one where researchers engaged carefully and thoughtfully with PEH research participants, recognizing that this population regularly faces high levels of stigmatization and mischaracterization, often exacerbating marginalization and further leading to detrimental outcomes. The entire research team entered into this project with the goal of highlighting the full humanity of PEH, and not focusing exclusively their marginalization or

even their status as PEH. In this way, we sought to avoid the multiple intellectual and moral traps associated with the deficit model, where members of a minoritized group are different simply because their social group is deficient in comparison to dominant majority social groups. While this approach informed all aspects of our research, in practical, everyday terms, what it meant was that we approached PEH with humility, respect, and grace, seeking to honor their ideas, thoughts, perspectives, and lived experiences with the dignity and rights that are consonant with contemporary justice-focused academic inquiry, as well as with basic decency. In all interactions and in our presentation of their data, we have tried to balance the very real difficulties associated with unsheltered homelessness with openness to also see beyond homelessness as the one and only characteristic that defines their lives.

To attend to the overall project purpose, we addressed the research questions using specific methods for incorporating on-site spatial, quantitative, and qualitative data. The use of multiple methods in social science and natural resource management research enhances the strength, reliability, validity, and the overall trustworthiness of findings by incorporating diverse approaches to data collection and analysis. For this study, the research approach required specific methods to access the data. Our overall research approach used two different methodological techniques: 1) Survey Questionnaires; and 2) Semi-structured Interviews, both of which are described in detail below.

## **Methods**

It is necessary for research methods to attend directly to research questions, and to align with the overall research approach. Our broad research question concerned why people initiated and maintained encampments along the Jordan River, but we narrowed this broad research question to more specific research questions concerning people's lived experiences, daily behaviors, and perspectives about surrounding resources. Therefore, our two research methods correspond directly with our two specific research questions, as detailed in Table 1, below.

Table 1: Research questions and methods overview

Research Question	Method
1. Who is located along the Jordan River, what is their health, what resources do they need?	Short on-site, in-person survey questionnaires (n = 60) to capture demographics, health concerns, and needs of PEH
2. What are the specific factors leading to unsheltered homelessness on the Jordan River? Why are both short-term and long-term encampments located where they are?	In-depth semi-structured interviews (n = 16) to understand experiences, including why PEH choose to live along the Jordan River, uses of the river, and identify resources and services that can mitigate the impacts of unsheltered homelessness



*Figure 2. PEH participant taking part in the survey by their camp, taken in November, 2021*

## Short Survey Questionnaires

**Research Question 1.** *Short survey questionnaires with individuals residing along the Jordan River.* Short semi-structured survey interviews ( $n = 60$ ) were conducted with PEH residing along the Jordan River (within 250 yards of the Jordan River). These relatively short engagements were intended to obtain demographic and descriptive information of PEH that reside along the river. These surveys collected data in five research sections:

- 1) Demographic information of PEH that reside along the Jordan River, including participants' age, gender, race, and other factors;
- 2) Sociological perspectives, divided into subcomponents:
  - a. Perspectives of loneliness, using the validated UCLA Loneliness Index instrument;
  - b. Naturalness and air quality, designed to understand the degree to which air quality has a negative impact on them;
- 3) Conservation and stewardship of the river, used to understand motivations for supporting the sustainability of the river ecosystem, including PEH responsibilities;
- 4) Push-pull factors influencing recreation and habitation of PEH along the river, used to determine how much various factors influence use of the Jordan River; and
- 5) Preferences for management of the Jordan River, used to indicate participants' desires for both improved and expanded versions of basic facilities. (See Appendix A for the full questionnaire.)

The research team used stratified random probability sampling approaches to ensure representative samples of PEH participants. To increase the representativeness of the sample, data collection was stratified by time of day (either in the morning, from 8:00am to 12:00pm, or in the afternoon, from 1:00pm to 7:00pm) and day of the week (either weekday or weekend). The survey questionnaires were conducted primarily in the late summer (August) and early fall (September), though some questionnaires were collected in October and November as well. PEH participants were approached and asked if they would take part in a short questionnaire that was conducted using Qualtrics survey software. The questionnaires were conducted on-site, outside, in or near existing encampments along the Jordan River. Researchers not only recorded participant responses (which was usually categorical/quantitative in nature), but also made note of additional participant comments and perspectives, adding to the overall context of the data collected. In addition to the graduate student field researchers, University of Utah undergraduate student volunteers also assisted with portions of this data collection process, contributing both to the research process and to student development. Upon completion of the short questionnaire, PEH participants were offered a gift card to a local grocery store. Once the short survey data were collected, the questionnaires were then tabulated and analyzed within Microsoft Excel and Statistical Package for the Social Sciences (SPSS) Version 24 software. These techniques enabled researchers to stratify and analyze the data.

The short survey questionnaires also served to support our building of rapport with various Jordan River PEH communities, so that we could adequately arrange the necessary in-depth interviews (Research Question 2) for this project. Field researchers scheduled in-depth interviews with individuals that we encountered along the river that were also willing to participate in longer, more probing discussions.

## In-Depth Semi-Structured Interviews

**Research Question 2.** *In-depth interviews with individuals residing along the Jordan River.* In-depth semi-structured interviews ( $n = 16$ ) were conducted with PEH that were residing along the

Jordan River corridor (within 250 yards of the Jordan River). We interviewed unsheltered PEH who were currently residing along the Jordan River between North Salt Lake and Sandy, Utah. Inclusion criteria required only that individuals were experiencing unsheltered homelessness and also resided within close proximity (250 yards) to the Jordan River and consented to participate in the study. Prior to beginning each interview, participants were informed as to what the interview would entail, as well as their right to stop the interview at any time, and verbally consented. Researchers used multiple methods to recruit and coordinate with potential study participants. We worked with local social service providers whose “street outreach” service teams assisted in identifying active campsites where researchers could potentially interview PEH. The frequency of displacement events along the Jordan River increased as the interview portion of this research progressed, making it difficult to locate dispersed PEH in the aftermath. Another method of outreach involved establishing relationships with specific study participants, often participants of our project’s quantitative survey questionnaires, who served as “gatekeepers” to introduce us to other individuals experiencing unsheltered homelessness along the Jordan River corridor. This snowball sampling technique was incredibly influential for this study, as several members of the unsheltered community along the Jordan River corridor were aware of the study before researchers met them. The trust that we were able to establish with many of the community members along the Jordan River through the gatekeepers allowed for relationship development and much greater empirical depth.

Researchers conducted on-site semi-structured interviews (n=16) with both women (n=7) and men (n=9). Interviews consisted of open-ended questions that allowed participants to share detailed descriptions of their lived experiences while living along the Jordan River corridor, as well as providing normative information to establish baseline data. These processes allowed researchers to establish a more relaxed and casual relationship with the participants, attempting to create a comfortable and conversational atmosphere. These interviews were designed to substantially expand upon the demographic and descriptive data collected with the short survey questionnaires that addressed Research Question 1, above. These longer interviews were designed to better capture nuanced experiences of PEH residing along the river, in order to gain more detailed information regarding the factors that led them to reside along the river, resources that they have access to, resources that would be useful to have access to, and a deeper understanding of PEH conservation and cleanliness practices. Our interview experiences were conducted either on location at riverside encampments or at another public space of the participant’s choosing. Participants often offered researchers chairs or cushions to sit on, and in some instances water to drink. As interviews were not scheduled and were conducted in the moment, participants often performed daily tasks while answering questions, such as fixing their bike, making food, stoking a fire, or cleaning their living space. In larger encampments, participants were often close to those that they chose to live with; however, all interviews were conducted one-on-one, socially distanced, and in relative privacy to allow participants to answer questions without undue external influence.

The interview protocol emphasized individuals’ duration of homelessness, experiences with local homeless and city services, proximity and access to basic living necessities, experiences with air pollution while experiencing homelessness along the Jordan River corridor, relationships with other unsheltered individuals living along the Jordan River, and relationships with the river itself.



In particular, health outcomes collected during interviews included PEH self-reports of physical and behavioral reactions to poor air quality events.

Interviews were recorded using an online digital survey platform which included check boxes for binary or multiple choice questions and unlimited space for writing out responses to more open-ended questions. Because participants are members of a vulnerable population and often shared personal information, researchers prioritized using trauma-informed methods and made all attempts to create safe and comfortable environments for participants. The majority of individuals that researchers encountered were willing and enthusiastic to take part in the study. Many asked to be updated on the progress and outcomes of this study, and some offered further assistance in providing their personal stories to expand the public understanding of the lived experiences of unsheltered PEH. Upon completion of the in-depth semi-structured interview, PEH participants were offered a gift card to a local grocery store.

Methodologically, the combination of survey questionnaires and semi-structured interviews enabled researchers to better understand and contextualize the lived experiences of those living precariously along the Jordan River corridor. In the sections that follow, we detail the results and findings from our questionnaires and interviews.



*Figure 3. An encampment along the Jordan River, taken in September, 2021*



## **Results**

The report results provide overall assessments of our data, followed by sections that stratify the data to point to specific differences in trends. The results from this study provide a defensible and replicable model that has multiple future applications. From this project, Jordan River managers, administrators, and advocates have empirical support for a variety of visitor use management options, and can leverage the results from this project to potentially garner increased resources from various political and management entities. Secondly, managers and administrators now have a trove of data and analyses to compare to future studies, providing a longitudinal assessment of trends and issues. Particular results and analyses from this study can be complimented or augmented with additional approaches or methods in forthcoming research projects to provide even more targeted assessments of specific areas or questions of concern. Finally, data and analyses from this project can be applied to other urban trail systems and urban-proximate outdoor recreation areas to assess use and efficacy of a variety of PEH-focused management decisions, as well as comparative demographics and perspectives.

Results from the multiple methodological techniques employed during this research project are presented below, in the following two sections: Quantitative Survey Results; and Qualitative Interview Results. Quantitative Survey Results include information about PEH demographics, loneliness, stewardship indicators, perspectives of naturalness, push and pull factors, and management preferences. Qualitative Interview Results include themes concerning PEH rationales for living along the Jordan River, specifically, the difficulties arising from abatements and displacement events, connections to community in Jordan River encampments, and perceptions of their relationships with the river itself.

In the following sections, we report specific findings from both the quantitative survey results and the qualitative interview results. Subsequently, in the Discussion section, we pull findings from these two sections together to make some broader conclusions about why people reside along the Jordan River corridor.

### **Quantitative Survey Questionnaires Results**

In this section, demographic and other data are presented together with pooled data from the survey questionnaires. (Again, the complete participant survey questionnaire can be found in Appendix A.) As discussed in the research methods section of this report, researchers conducted 60 on-site, in-person, structured questionnaires with PEH living along the Jordan River corridor. These engagements mostly took place within encampments or in nearby areas, and occasionally took place while walking along the Jordan River corridor or in nearby areas. For most participants, the survey questionnaire took approximately 10-15 minutes to complete, with researchers reading questions and possible responses to the participants. Researchers recorded participant responses on the Qualtrics mobile app on smartphones or tablets. PEH research participants were asked a wide range of closed-ended, convergent questions, all of which were derived from the project's research questions. There were also some open-ended questions asked, designed to follow up and extend upon participant responses to quantitative questions. The quantitative data were analyzed descriptively to understand some of the central tendencies associated with this often hard to reach

population that also address this project's broad and narrow research questions. In this section of the report, we present summary descriptive statistics from the quantitative survey questionnaire data in the following categories: demographics, loneliness, stewardship indicators, air quality, push-pull factors, and management perspectives.

### Jordan River PEH Questionnaires: Demographics

PEH participants were asked to self-identify their gender, age, location of birth, time experiencing homelessness (TEH) generally and along the JRC, and previous locations of residence while experiencing homelessness. Table 1 (below) provides measures of central tendency (mean, standard deviation, median, minimum, and maximum). Figure 4 (below) displays a map of self-identified birth locations of participants who were not born in Utah. Figures 5 and 6 (below) display maps of locations (in Utah and in Salt Lake Valley, respectively) participants self-identified as their previous residence prior to moving to their residence at the time of the survey.

Table 1. Summary statistics for participant demographics (n=60)

Demographics	Mean (SD)	Median	Min	Max
Age (years)	41.7 (9.81)	42	25	70
Gender	68% male			
Utah-born	53% Utah-born			
Self-reported TEH (weeks)	313.0 (355.7)	182	26	1768
Self-reported TEH on the Jordan River (weeks)	92.4 (243.3)	28	1	1560

Research participants were distributed normally across age, with more males represented (68%). Just over half of the population were from Utah, with other locations shown in Figure 4, below. The average amount of time experiencing homelessness and homelessness along the Jordan River were both unevenly distributed (indicated by the high standard deviation metrics), with maximum values indicating multiple decades facing homelessness. In these metrics, it might be more valuable to consider the median values as a more indicative measure of central tendency, with the median time experiencing homelessness overall at 182 weeks (more than three years), and time experiencing homelessness along the Jordan River reported as 28 weeks, or approximately half a year.

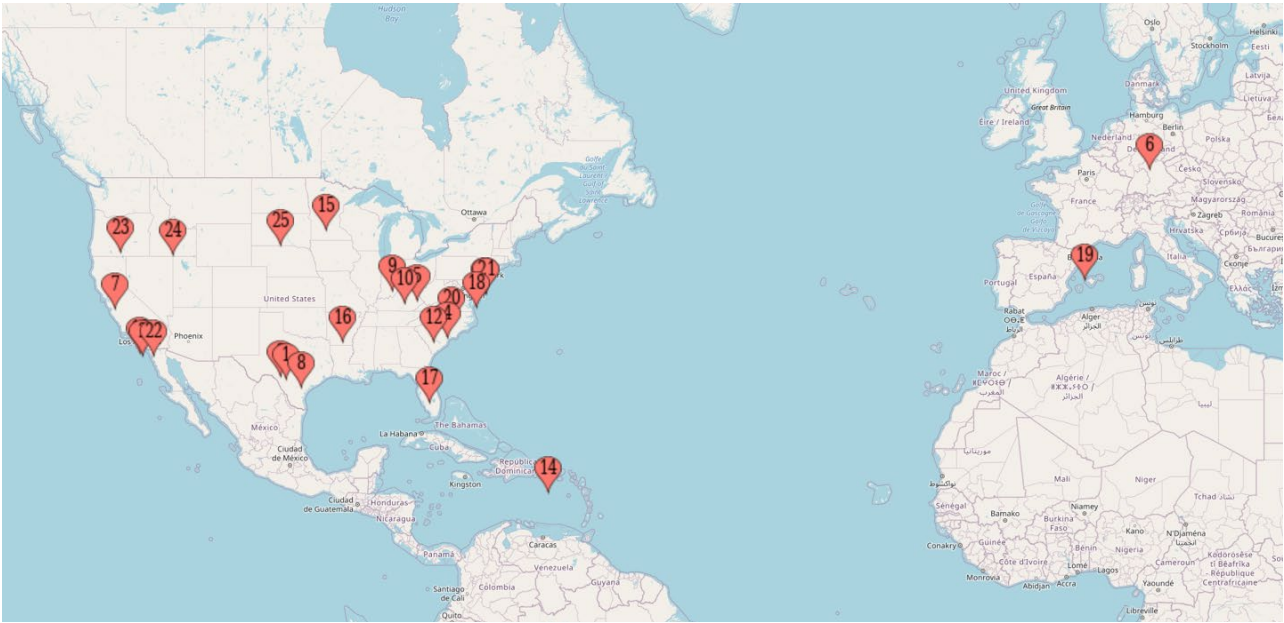


Figure 4. Map of birth locations of participants not born in Utah (n=28)

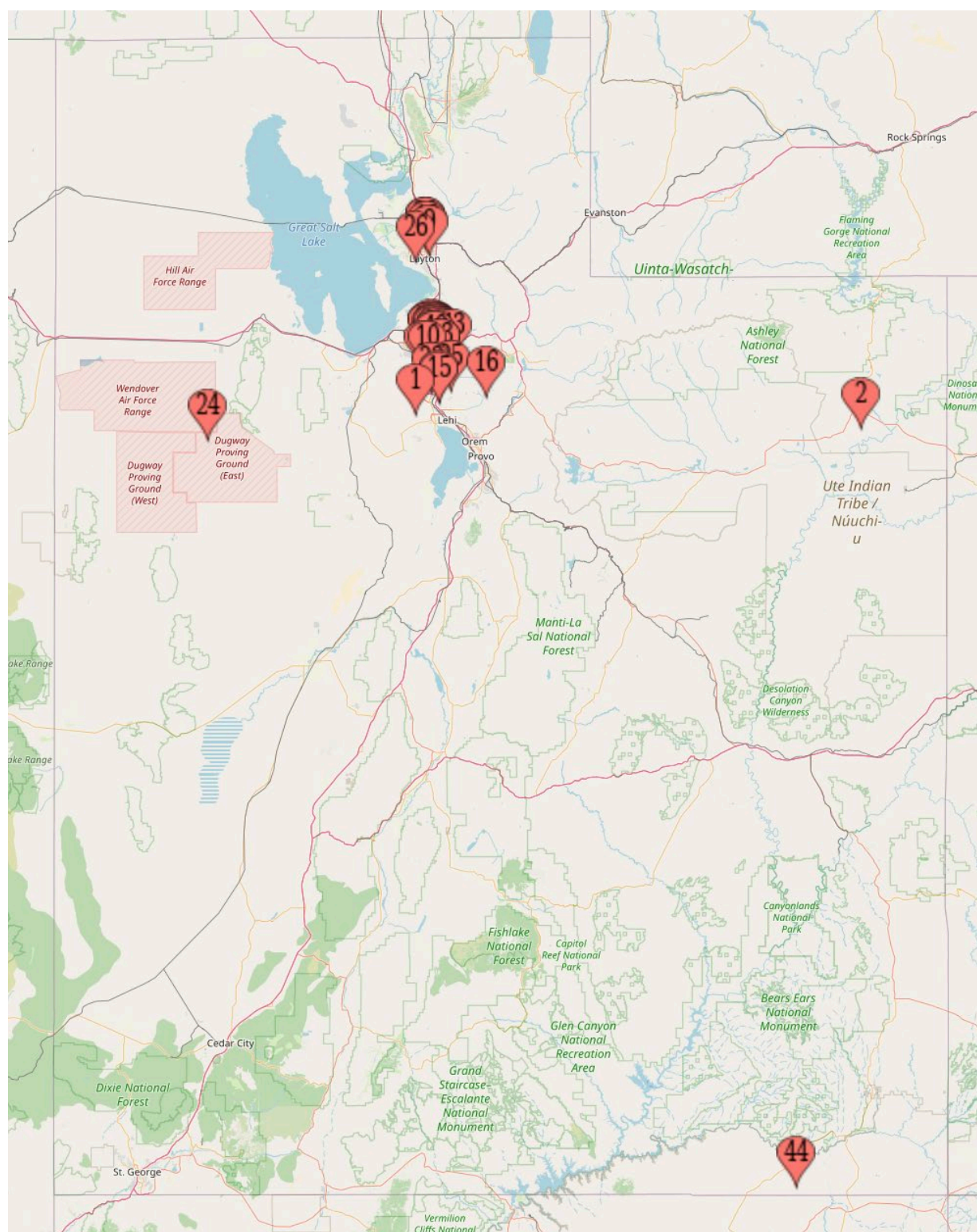


Figure 5. Map of locations in Utah participants lived prior to moving to location at time of survey ( $n=56$ ). Some locations not accurately plotted, e.g. when a participant's response was "in a house in SLC" but no further information was provided.



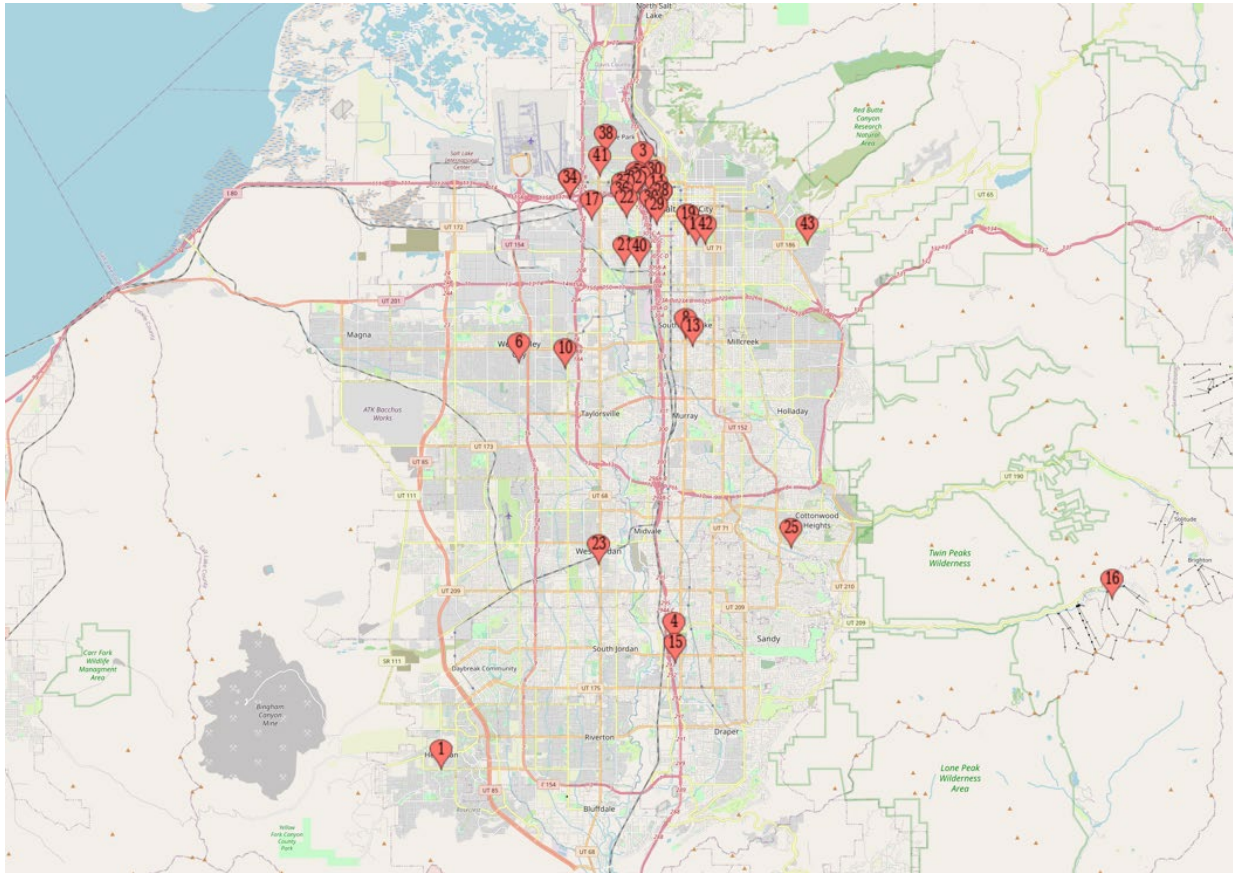


Figure 6. Map of locations in greater metropolitan area of SLC participants lived prior to moving to location at time of survey ( $n=48$ ). Some locations not accurately plotted, e.g. when a participant's response was "in a house in SLC" but no further information was provided.

Questionnaire respondents' place of birth was distributed across the United States, with 47% of the population born beyond Utah. Three participants were born outside the United States. Within Utah, most participants were born along the populated Wasatch Front, the majority of which originated in the Salt Lake Valley. Approximately 93% of participants had moved to their location along the Jordan River at the time of the survey from another location with Utah. At the time of the survey, 80% of all participants had moved from a location within Salt Lake County, approx. 8% from a location within Weber County, and approx. 2% from a location within each of Tooele, Uintah, and San Juan Counties.

## Jordan River PEH Questionnaires: Loneliness Index

We asked PEH participants about their perceptions of their feelings of loneliness. Participants were read statements and asked to rate on a four-point Likert scale how much that statement represented their feelings (4 – often, 3 – sometimes, 2 – rarely, or 0 – never). Table 2 (below) provides measures of central tendency (mean and standard deviation) for participant responses.

Table 2. Participant scores on the UCLA Loneliness Index (n=59)

Statement	Mean (SD)
I am unhappy doing things alone.	2.20 (1.09)
I have nobody to talk to.	2.58 (1.14)
I cannot tolerate being alone.	2.75 (1.13)
I lack companionship.	2.58 (1.20)
I feel as if nobody really understands me.	2.19 (1.19)
I find myself waiting for people to reach out to me.	2.78 (1.09)
There is no one I feel I can turn to.	2.39 (1.21)
I am not close to anyone.	2.71 (1.17)
My interests and ideas are not shared by those around me.	2.56 (1.24)
I feel left out.	2.98 (1.05)
I feel completely alone.	2.61 (1.18)
I am unable to reach out and communicate with those around me.	2.52 (1.18)
My social relationships are superficial.	2.45 (1.10)
I need more company.	2.93 (1.17)
No one really knows me well.	2.40 (1.27)
I feel isolated from others.	2.67 (1.25)
I am unhappy if I begin to feel withdrawn.	2.49 (1.14)
It is difficult for me to make friends.	3.17 (1.05)
I feel shut out and excluded by others.	2.93 (1.13)
People are around me but not with me.	2.16 (1.13)

The four-point Likert scale for loneliness is designed to move participants away from “average” responses, though many of responses for specific questions averaged very close to a middle (2.5) response. Of particular note in these data are scores that are close to or above 3.0 (equivalent to a “sometimes” response), including “I feel left out,” “I need more company,” “It is difficult for me to make friends,” and “I feel shut out and excluded by others.”



### Jordan River PEH Questionnaires: Stewardship Indicators

We asked PEH participants questions designed to assess each individual's perceptions of their social and emotional relationship with the Jordan River. Participants were read statements and asked to rate on a five-point Likert scale (1 – strongly disagree, 3 – neither agree nor disagree, 5 – strongly agree) how much they agreed with that particular statement. Table 3 (below) provides measures of central tendency (mean and standard deviation).

Table 3. Participant scores on stewardship indicator statements (n=60)

Statement	Mean (SD)
I enjoy living along the Jordan River.	3.30 (1.45)
I view the Jordan River as home.	3.42 (1.61)
I use the Jordan River for recreation.	3.20 (1.61)
Keeping the river bank and the river clean is important to me.	4.83 (0.55)
I see the river as simply a place to live.	3.00 (1.50)
I would like to learn about the ways that I can help keep the river and river bank clean.	4.25 (1.15)

Of note in these data is that all scores for stewardship indicators are above 3.0, and many of them are well above this middle threshold. “Keeping the river bank and the river clean is important to me” scored notably high, as did a statement inquiring about possibilities for learning more about stewardship on the Jordan River.

### Jordan River PEH Questionnaires: Air Quality

Using both open response and Likert scale questions, PEH participants were asked about their experiences with air quality while living in the Salt Lake Valley. Sentiment analysis was performed on participant responses to the open question to understand self-reported effects of poor air quality and perceptions of air quality along the Jordan River. Table 4 (below) provides frequencies and percentages of identified experiences with air quality across participants.

Table 4. Participant response frequencies and percentages sorted by sentiment with respect to individual experiences with poor air quality in the Salt Lake Valley.

Experience Type	Frequency	Percent
Respiratory Health	15	25%
Other Physical Health	1	1.7%
Mental Health/Behavioral	2	3.3%
Sensory	8	13.3%
Other	12	20%
Better by the JR	7	11.7%
No Issue	19	31.7%

\*Note: “Sensory” refers to participants being able to see, smell, taste, or feel poor air quality. “Better by the JR” refers to participant perceptions that air quality is higher along the Jordan River. Participants could indicate multiple experiences associated with air quality.

While 31.7% of respondents indicated that they had “no issue” with air quality from a health perspective, and 11.7% of respondents indicated that air quality is better at the Jordan River than it is elsewhere in the Salt Lake Valley, it is notable that 57% of respondents indicated that negative air quality had a physical or mental health impact on them. Respiratory health was the most reported impact of negative air quality, a finding that aligns with other research on PEH in the Salt Lake Valley. Below, Table 5 provides measures of central tendency (mean and standard deviation) for a single quantitative measure of air quality’s perceived impact.

Table 5. Participant scores on air quality-related statement (n=60)

Statement	Mean (SD)
Air quality has an impact on me.	3.14 (1.62)

The score for this single-item measure of air quality impact was slightly above 3.0, the middle threshold for this indicator on a five-point Likert scale.

### Jordan River PEH Questionnaires: Push-Pull Factors

In addition to demographic and questions regarding stewardship and recreation, Jordan River PEH participants were also asked a series of questions regarding push-pull factors that contribute to their choice to move to and continue to reside along the Jordan River corridor. Participants were asked to respond to a series of five-point Likert scale statements, as well as provide more information through an open response question. Sentiment analysis was performed on participant responses to the open question to identify the particular push-pull factors that are most relevant to participants. Table 6 (below) provides measures of central tendency (mean and standard deviation). Table 7 (below) provides frequencies and percentages of identified reasons for moving/staying across participants. Additionally, an open response question was used to identify general trends in how PEH participants might choose new locations to move to if living along the Jordan River corridor was no longer an option. These results are listed in Table 8, below.

Table 6. Participant scores on “push-pull” statements (n=60)

Statement	Mean (SD)
I live on the Jordan River to escape from the city.	3.03 (1.57)
I live on the Jordan River because fewer people can see me.	3.22 (1.60)
I love along the Jordan River to avoid interactions with authorities.	2.62 (1.63)

Table 7. Participant response frequencies and percentages sorted by sentiment with respect to individual reasons to move to and continue to reside along the Jordan River corridor

Reason	Frequency	Percent
Community	24	40.0%
Nature	7	11.7%
Resources	6	10.0%
Safety	19	31.7%
Last Resort	15	25.0%
Forced	10	16.7%
Thriving	15	25.0%

\*Note: participants could indicate multiple reasons for locating on the Jordan River.

Table 8. Frequencies and percentages of participant-identified possibilities of future moving locations

Location	Frequency	Percent
Current Location	3	5.0%
Along JRC	14	23.3%
Wilderness	3	5.0%
Other in SLCo	8	13.3%
Motel/Apartment	2	3.3%
HRC/Shelter	2	3.3%
Not Sure	23	38.3%

PEH respondents showed slight preference for living on the river to avoid the city and being seen by fewer people, though they indicated slightly that they were not trying to avoid interactions with authorities. Of their stated rationales for why they chose to live on the river, “community” (40%) was the strongest response, followed by “safety” (31.7%), and “thriving” (25%) and “last resort” (25%). When asked to where they might relocate if they were forced to move, 38% of respondents indicated that they were not sure, while 23.3% of respondents would relocate to other locations along the Jordan River corridor. Also of note in these data are that 5% indicated that they would not leave, and little more than 3% of respondents said that they would see accommodation at one of the existing HRCs or other sheltering services.

## Jordan River PEH Questionnaires: Management Perspectives

PEH participants were asked questions regarding the availability and accessibility of necessary resources, as well as the specific and overall management of the Jordan River and surrounding areas. Both five-point Likert scale statements and binary response questions were used to assess the lived situations and perspectives of participants regarding restroom, trash receptacles, and shower access, among others. Table 9 (below) provide measures of central tendency (mean and standard deviation) on the five-point Likert scale, and Table 10 (below) provides percentages for each question. Table 11 (below) provides indications for the distances that PEH typically travel to access particular resources and/or services. Lastly, Figure 7 (below) shows percent of participants who self-identified access to a variety of homelessness resource types.

Table 9. Participant scores on resource access statements (n = 60)

Statement	Mean (SD)
Access to trash cans would be useful.	4.77 (0.56)
Access to restrooms would be useful.	4.98 (0.13)
Access to showers would be useful.	4.90 (0.44)
I feel safe living near the river.	3.26 (1.56)

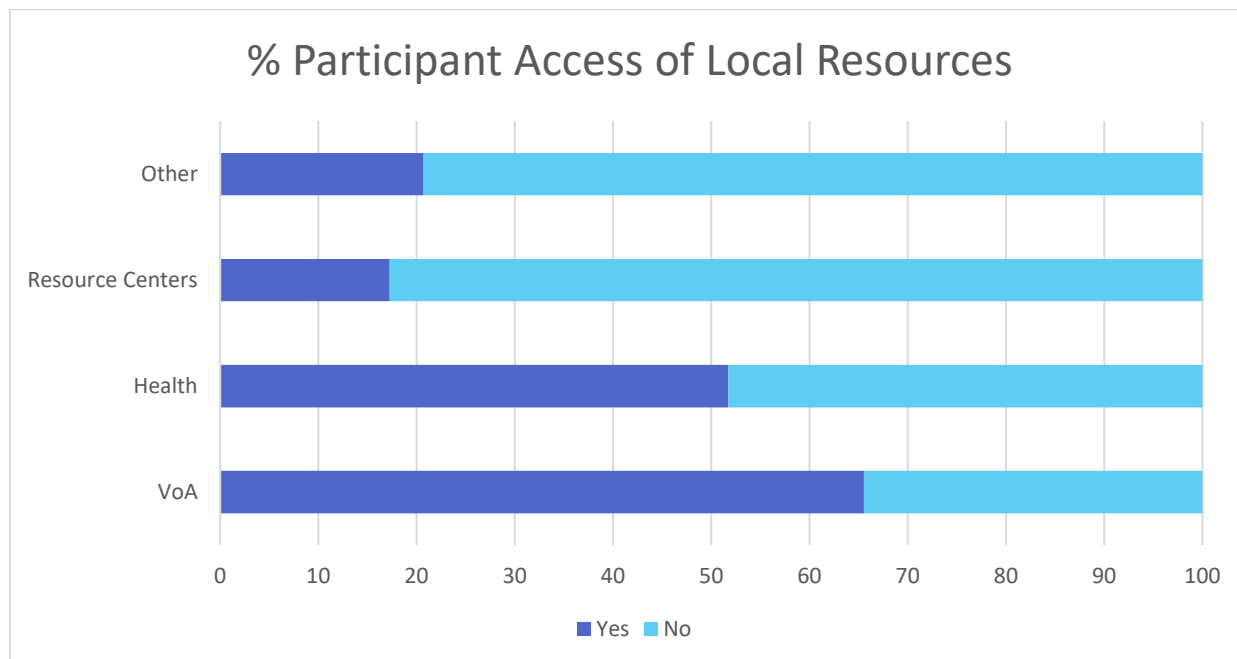
Table 10. Participant scores on resource access questions (n = 60)

Question	Percentage
Do you ever go to the restroom on the ground?	68%
Do you have regular access to a trash can?	80%
Do you ever have to resort to cleaning yourself in the river?	8%
Do you have regular access to a shower?	67%
Do you have regular access to clean drinking water?	71%
Do you have regular access to a restroom?	63%
Have you lived in a camp that has been forced to move?	88%

Table 11. Participant scores on resource walking distance questions

Question	Mean (SD)
How far do you have to walk to get to a trash can?	1.53 (1.01)
How far do you have to walk to get to a shower?	2.34 (1.40)
How far do you have to walk to access clean drinking water?	1.63 (1.07)
How far do you have to walk to get to a restroom?	1.63 (0.98)

\*Note: For distances traveled, 1 = 0-5 minutes, 2 = 5-10 minutes, 3 = 10-15 minutes, 4 = 15-20 minutes, 5 = 20+ minutes



*Figure 7. Percent of self-identified participant access of local homelessness resources*

There were numerous strong levels of agreement concerning a number of the management-focused items in our survey. For instance, we see very high level of agreement that trash cans, restrooms, and shower access would be useful, all of which were almost at 5.0 on the Likert scales. With those statements in mind, it should be pointed out that despite these desires, most PEH participants indicated that they are able to use available trash cans (80%), showers (67%), and restrooms (63%). What these metrics do not address are the difficulties associated with accessing these resources. Most PEH indicated that they could attain trash receptacles and restrooms within a 10-minute walk, but that shower access was more difficult and/or distant to access.

### Survey Questionnaire Conclusions

The data above illustrates that the population of PEH residing on the Jordan River is diverse not only in basic demographics, but also in time spent living along the Jordan River corridor. Those who move to encampments along the Jordan River corridor are likely to have moved from other locations in Salt Lake County. This finding will be further corroborated by qualitative responses in the following section, which suggest that many people first come to live on the Jordan River after being displaced from other encampments elsewhere in the Salt Lake Valley. Commonly shared reasons to move to an encampment along the Jordan River among survey participants included being closer to family and friends, increasing feelings of safety, improving personal abilities to thrive through perceptions of increased stability and freedom, moving after abatement events, and feeling that there is nowhere else to go. Survey participants shared concerns of maintaining a level of cleanliness within and around their living spaces, both for their own health and for the health of the river and surrounding ecosystems. There was a strong consensus amongst survey participants that more trash cans, open restrooms, and open showers along the Jordan River corridor would be useful. There was also a strong consensus amongst survey



participants that bathing in the river was not an activity they engaged in. When asked about where they might move if they were forced to do so, most participants stated that they were unsure, though many respondents noted that they intended to stay along the JRC, and very few mentioned staying in HRCs, motels, or pursuing an apartment.



*Figure 8. PEH participants responding to the survey in their camp fireside, taken in November 2021*

## Qualitative Interview Results

As discussed in the research methods section of this report, researchers conducted 16 on-site, in-person, semi-structured interviews with PEH living along the Jordan River corridor. These interviews mostly took place within encampments or in nearby areas. The lengths of the interviews ranged from 37 to 98 minutes ( $M = 64$  minutes), resulting in a substantial amount of qualitative interview data. Research participants were asked a wide range of open-ended, divergent questions, all of which were derived from the project's research questions. Specific semi-structured interview questions can be found in Appendix B of this report. In addition to recording the content of the interviews, researchers also took comprehensive field notes to account for nonverbal communication and other contextual data that inform the overall experience. The qualitative data were analyzed thematically to understand some of the more dominant narratives emerging from the interviews that also address this project's broad and narrow research questions. In this section

of the report, we present five representative and illustrative themes from the qualitative interview data. Themes and their operationalizations are presented in the following text, summarized in Table 12, below:

Table 12. Summary of qualitative themes and operationalizations

Theme	Operationalization
Factors leading to short- and long-term Jordan River encampments	Refers to specific or general factors leading to either homelessness or rationale for locating along the Jordan River
Abatements as a barrier	Refers to difficulties resulting from abatement efforts of encampments at the Jordan River or elsewhere
PEH experiences with and perceptions of the HRCs	Refers to HRC characteristics or management that may dissuade PEH from seeking emergency shelter there
Community and who is considered a resident of the Jordan River	Refers to a sense of community that is developed by PEH residing along the Jordan River, as well as differences perceived between housed and unhoused residents
PEH perceptions and responsibilities of the Jordan River	Refers to participant uses, perceptions, and stewardship of the local environment, including the Jordan River itself

Below, we detail each of these themes derived from the data, and we provide representative direct participant quotes that provide context, color, and deeper understanding of PEH experiences of living along the Jordan River corridor.

#### Theme 1: Factors leading to short- and long-term Jordan River encampments

When asked why individuals had chosen to reside along the Jordan River two common themes emerged:

1. First, PEH reported being driven to the Jordan River by abatements procedures in downtown Salt Lake and other urban spaces; and
2. Secondly, PEH reported being drawn to the Jordan River based on its seclusion from the public and its proximity to amenities, such as convenience stores, restrooms, water, and other basic needs.

Many PEH that we interviewed told us that they did not necessarily choose to reside along the river, but were forced to move to the Jordan River after repeated abatement and/or displacement events left them with seemingly nowhere else to go. As one interviewee explained:

*I didn't choose to be homeless. I didn't choose to live by the river. I was forced into this life by circumstance and forced to live here by the police and the health department. I had no choice in the matter.*

Another interviewee that we spoke with explained that he was also forced to live along the river due to an abatement that occurred near the Gail Miller Resource Center, one of the recently opened HRCs:

*I had built a permanent shelter across from the Gail Miller Resource Center with four walls and a bathroom in 2019, but was forced to move. I chose to come near the river because it was nice and quiet. There were only five of us when I moved here over a year ago, but once the abatements started, a lot of people came out here. It exploded.*

There were similar thoughts from others. For instance, we interviewed another PEH residing along the river. This person was also forced to move from a previous encampment elsewhere, and subsequently followed a friend to the Jordan River:

*I had nowhere else to go after the abatements downtown began. No one did. We were all driven out of the city. It was either the river or the foothills. I had friends who had moved out here to the river and chose to follow them. I knew they would help me.*

The Jordan River also provides seclusion and privacy for PEH, but also offers access to nearby needed amenities, such as food, clean drinking water, restrooms, trash receptacles, and convenience stores. For example, one interviewee stated:

*I feel hidden out here on the river. People can't just see me; they have to look for me. The river is also close to things that I need. I can use the public restrooms at the park when they are open or go to a gas station. Water and food are easy to find too. I go to the food banks around here and can trade for other things from my friends that live near me. The rec center (Northwest Recreation Center) also lets us take showers.*

One PEH that we spoke with had previously lived in the foothills and explained that living along the river made fulfilling his daily needs easier:

*When I lived in the foothills and the canyons above the city, it was difficult to find food and water. I had to travel far for the things that I needed to survive. It is easier out here by the river. I can get what I need, when I need it.*

Another PEH that we interviewed compared residing closer to downtown Salt Lake City to living along the Jordan River:

*Living in the city was easier, because I could find everything I needed within a block or two. Here I have to ride my bike miles at a time to get food and water. But living here is still pretty central. I can use public restrooms and there are trash cans along the path that I can use.*

The majority of PEH that we interviewed along the Jordan River came to the river immediately following abatement events elsewhere. Many of the individuals that we spoke with expressed that they did not necessarily choose to reside there, but they accepted the location as a viable alternative to other more preferred locations. It was clear that individuals felt that the abatement events gave them limited options of where they could go. Many PEH stated that they moved to the Jordan River because of social connections; they knew other people in their extended social community who were already there, and that they had hoped to find both a sense of community and relative physical, social, and emotional security in relocating to spaces that were already secured and/or vouched for by existing friends or other social relations.

It was clear that PEH felt that the abatement events gave them two options for continued camping: either moving out of Salt Lake City and into the nearby foothills or canyons, or moving to spaces along the Jordan River. Both of these options were notable to PEH as they provided some seclusion from the general public eye and provided visual and material protection by the trees and other natural structures. Those who we interviewed had chosen to live along the Jordan River because it gave them better spatial proximity and therefore access to various amenities (such as drinking water, food, restrooms, and trash receptacles) that help PEH meet their daily needs.

## Theme 2: Abatements as a concern – the mental and emotional impacts on PEH

When asked if they had experienced an abatement and/or displacement event, every PEH that we interviewed responded affirmatively. We asked interviewees to both describe these events and to tell us about their subjective experiences with these abatement events. The most common theme that came from these conversations was that, in addition to the material loss and spatial dislocation, abatement events caused substantial mental and emotional discomfort and trauma, characterized by ongoing anxieties about future dislocations. All of the factors associated with displacement were characterized as both significantly and negatively impacting the PEH community on the Jordan River. For instance, one interviewee explained some of their recent experiences with abatement events:

*Abatements are terrible. We aren't even treated like humans. I feel like we are cattle being herded. We are just cattle that are in the way, an eyesore to the community. The way the police talk down to us is dehumanizing. There is no understanding or empathy from them. We're just seen as a problem to be dealt with, and nothing more. It's incredibly emotionally painful to be treated this way.*

Another individual spoke about how abatement events have increased overall levels of anxiety in the community, and have led to increased feelings of fear for individuals and throughout this encampment:

*Abatements have totally increased this year. They [abatement events elsewhere in the Salt Lake Valley] have forced more people to live here along the river, and they have definitely increased the anxiety levels around here. You can see it. People fight with each other a lot more than they used to. It has been getting worse. We are constantly stressed not knowing when the next abatement will happen. There is little peace and comfort anymore, just anxiety and fear.*

One other individual that we spoke with had a similar experience with abatement events, and described the circumstances:

*I have been forced to move five different times. You would think that after the first couple of times, that I would have gotten used to it. But that isn't how it goes. Each time I've been forced to move has been as stressful as the last. The way they treat us and talk down to us. I dream about it a lot. The more I'm forced to move, the less I sleep.*

Many PEH expressed that abatement events have negatively impacted the sense of community along the Jordan River. One individual explained this situation explicitly:

*There used to be more of a sense of community around here, but being forced to move all of the time, stress levels are high and people are less trustworthy. We keep losing our personal belongings and when we get desperate, we sometimes have to steal from each other. We still try to stick together and help each other out, but there are less people that I trust to help me. I feel more alone every day.*

The abatement events have also impacted PEH's ability to stabilize and work to change their circumstances and their efforts to move on from homelessness. One individual that we interviewed explained this conundrum:

*I have been forced to move more times than I can count. If I had the ability to keep my tent up and leave it for the day without the stress of not knowing whether the police will take it, I could get a job. I could work and save money and try to find an apartment or a motel to stay in. I could change my circumstances. But that is not an option. This tent and these things are all that I have, I can't risk losing them. I won't survive if I lose them. How am I expected to plan for the future if I am constantly stressed about my current situation?*

Every person that we interviewed had a detailed and specific story about an abatement event where they were forced to move to a new location. Many PEH that we spoke with had experienced more than three abatements. When PEH spoke about their lived experiences of abatement events, they were often full of anxiety and fear. We often heard about being talked down to and demeaned by law enforcement, public health, and other institutional authorities. We often heard about the loss of personal belongings and important documents. Abatements were noted as causing a lot of stress and trauma for PEH on the Jordan River.

It was also common to hear that PEH along the Jordan River became less trustworthy of their peers with the increase in abatement events. Many PEH talked about a general sense of increased stress levels among encampment members, often attributed to previous or rumored future abatements.

This increased level of stress was noted as leading to more stealing and general crime within the community of PEH along the Jordan River. It was clear that PEH felt that there was a correlation between increased abatement events and decreased levels of safety within the PEH community. Many individuals described a decrease in community safety and unity that coincided with the perceived increased frequency of abatement events during the summer, fall, and early winter of 2021.

### Theme 3: PEH experiences with and perceptions of Homeless Resource Centers

In 2019, a multiyear process of decentralizing emergency sheltering services in Salt Lake County was completed with the opening of a scattered site model of gender-specific Homeless Resource Centers (HRCs). Rather than a single large shelter in the downtown/Rio Grande/Pioneer Park area, smaller and more targeted HRCs were established throughout the valley. When PEH along the Jordan River were asked about their experiences with the HRCs, two common themes arose:

1. Many PEH that we interviewed indicated that they had never had the opportunity to stay at an HRC due to the unavailability of beds; and
2. The PEH who had stayed at an HRC had negative experiences while staying at the HRCs.

For instance, 62% of the PEH on the Jordan River that we interviewed had tried to stay at an HRC, but they were turned away because there were no beds available. One individual simply explained their experience with HRC bed availability, which was common among the people that we interviewed:

*I have tried to stay at the shelter centers many times, but there is never any space. I don't try anymore. No matter how cold it gets, I don't see the point in trying anymore.*

Another individual had a similar experience:

*I haven't stayed at one [of the HRCs]. I have gone many times and have never gotten a bed. They are always full. It is really frustrating. It would be nice to have the option of a nice warm bed.*

Of the PEH that we spoke with who had stayed in an HRC, many of them had negative experiences and expressed that they would rather stay in encampments along the Jordan River. One individual explained their experience within an HRC:

*When I got a bed [at an HRC] I was excited at first. The night before I had slept in my truck and it was cold. But the longer I stayed [in the HRC], the longer I realized that what they are doing was not working. It was not their fault. The housing was the issue. They say it's the housing market around here. I know a guy who has been in a shelter for four years and still doesn't have housing. There are also too many rules and regulations [at the HRC] that I had a hard time meeting. I have a job and had a hard time getting back to the shelter when they wanted. And if you don't check-in on time, they throw all of your stuff away. Your clothes, your stuff, everything. How is that a resource? It ended up being too much stress and they didn't want to work with me anymore, so I moved out here [to the Jordan River].*



Another individual that we interviewed had a similar experience staying at an HRC:

*What resources? Honestly, they give you a shitty mattress and you're crammed right next to another person. The meals aren't large enough. They have a brand-new computer lab that I have never seen open. The case workers are completely understaffed and overworked. Many of them don't seem invested. Why does it take so long to file our paperwork? I wasn't getting any help. At least out here I have the freedom to have a job and can enjoy the outdoors, even if it's tough sometimes. If the resource centers were helpful, I would use them, but they are not.*

PEH that we interviewed also spoke about their experiences and concerns with how mental health is handled within the HRCs. One individual spoke directly to these concerns:

*It felt like an insane asylum, it was awful. Mental health was not treated well there. There was no support for those who needed help with their mental illnesses. People need a safe place to process their mental illness and that is not available at the resource center. I never felt safe. I was always anxious and couldn't take it anymore, so I had to leave.*

It was also regularly expressed that PEH who suffered from anxiety and other mental illnesses felt overwhelmed by the HRCs, and subsequently chose living in an encampment instead. One individual explained:

*I can't stay there [at the HRCs], I won't stay there. I have social anxiety. It gets really bad when I am around a lot of people. Staying at the resource center is not an option because there are too many people. I wouldn't be able to breathe or think or sleep or anything. I refuse to put myself through that. It's not good for me. I am much safer outside here where I can manage my anxiety.*

More than half of the PEH that we interviewed along the Jordan River had never stayed in one of the HRCs, which was stated as being mostly due to the unavailability of beds throughout the HRC system. Many individuals told stories about trying to stay in the HRCs and constantly being turned away. Many of these individuals expressed deep frustration with the perceived limited number of beds available within the HRC system.

Of the PEH that we interviewed who had stayed in the HRC system, all of them unfortunately expressed negative experiences. These negative experiences included inability to meet the rules and regulations, a failure to receive the level of assistance that they had hoped for, and the limited available support for mental health. In sum, there was a high degree of frustration with the HRCs among PEH residing on the Jordan River. It was also common for individuals to speak of traumatic events that occurred during their stay within the HRC system. Simultaneously, others spoke about mental illness being a barrier that prevented them from staying in the HRC system, such as social anxiety. These individuals felt triggered by the idea of living in common spaces with a large number of individuals, which forced them avoid to avoid the HRCs and reside outside. While not a widespread concern, there were additional difficulties posed by the onset and the ongoing management of the COVID-19 pandemic, raising concerns about congregant sheltering and

spreading or being exposed to respiratory viruses that are mitigated by both social distancing and being outdoors. Publicly provided shelters like the Salt Lake Valley's HRCs were viewed as being contrary to these public health measures of necessity.

#### Theme 4: Community and who is considered a resident of the Jordan River

One of our primary goals was to understand the social relationships (or lack thereof) among PEH communities. When we asked PEH about the perceived and felt a sense of community along the Jordan River, many expressed that they felt a sense of community among those with whom they resided, but simultaneously felt a sense of otherness and disdain from those in the community who were not experiencing homelessness. These findings align with other studies that report high negative levels of stigma reported by PEH, with subsequent mental and emotional health concerns. The sense of community among the PEH that we interviewed, though stressed by reported abatement events, remained very strong. It was common to hear of people going out of their way to help those around them in their times of need. One individual explained their perception of community:

*There is a strong sense of community among us [who live along the Jordan River], if one person is down, everyone will come together to help them out. Last week when a group of folks got flooded out near the river, we offered them tents and places to sleep. When times are at their worst is when we are really at our best.*

Another individual that we spoke with expressed that PEH along the Jordan River worked together to ensure each other's survival:

*People look out for each other around here. People communicate what they know and help when they can. Communication out here is important out here for survival. It takes all of us to stay alive.*

One individual that we interviewed emphasized the sense of community among PEH, and how these relationships ultimately support survival of their community. We asked them to characterize the community in their encampment and others:

*Community here among us [PEH along the Jordan River] is strong. I think that is why I like to live here. It is because we can relate to each other. We teach each other things and help each other. It has brought us together and helped us all survive.*

Others expressed that there is a sense of community among and within those experiencing unsheltered homelessness, but exactly opposite with those who are not experiencing homelessness. For example, one individual explained:

*There is a sense of community among those of us who are homeless, yes. But there is not by the other side of society. The "normal" side of society does not want us here and do not provide us with any help or understanding.*

Another individual that we spoke with agreed with the division in community between PEH and those who are housed:

*None of the people outside of our community [of PEH] want us in their community. There is a clear line between us who live in tents here and those who live in houses here. They look down on us.*

One individual that we interviewed felt this sense of “otherness” from individuals within the community that were not experiencing homelessness. They described their experiences:

*Some of the people in the community have honestly just ripped my heart and soul. We are all struggling to find a better tomorrow, but there are a select few that take from you and take from you and just destroy your spirit. You know, people look at the homeless like we are the lowest form of life. Like we're nothing. Or less than nothing. We don't choose to be homeless or choose stay in tents. This isn't what I want to be doing. But my conversations with homeless people are always better than those with money. I've had golfers throw things at me and my friends. People that walk by look down at us. Cops bully us. There is no support for our struggles from the outside community. We aren't worth their time or energy. And that's exactly how they treat us.*

The PEH that we interviewed talked about a strong sense of community among those who were unsheltered along the Jordan River. Many PEH that we spoke with talked about the importance helping those around them in times of need, because it made it more likely to receive assistance when they were in need. Sharing and trading knowledge, skills, and recourses was expressed as an important tool for survival.

It was also clear that there was a perceived division between those experiencing homelessness and those who were not. PEH often spoke about feeling a lack of empathy and disdain from those who were not experiencing homelessness, those who primarily use the Jordan River Parkway for recreation and/or as a transit corridor. Many spoke about not being considered part of the general, or housed, community and felt a strong sense of “otherness” and unacceptance from those outside of the PEH community.

#### Theme 5: PEH perceptions and responsibility of the Jordan River

Common mainstream perspectives are that PEH have little regard for the local environment and are responsible for ecological disturbances. Part of our interviews engaged directly with these questions. When asked how they keep their space clean and about keeping the river and river bank clean is important, two key themes emerged:

1. All PEH that we interviewed expressed that keeping their space, the river, and the river bank was important and each individual had a method of doing so; and
2. Many individuals expressed frustrations with the improperly disposed of trash from individuals that use the JR for recreation and commuting.

It was clear that PEH that we spoke with reported being very conscious of the cleanliness of the space where they reside and their impact on the river, the river bank, and other ecological systems.

Everyone who participated in our study shared their daily routines for keeping the space around their shelter clean. One individual explained:

*I rake this area [around my tent] every day. I'm always picking up trash and things by hand. When I can, I buy trash bags or else get them some other way to help keep it clean. I treat my tent like it was my house, like you'd treat your house. I keep it clean like I would keep a house clean. It is important to me.*

Another individual had a similar response and even stated that cleaning was a useful task for their emotional well-being:

*I use a shovel, a rake, and a broom to keep it clean around here. It is good for my self-esteem. I feel better when I am taking care of the space around me. It's something I can control, and it just makes me feel good.*

This feeling of wanting to take care of particular spaces often extended beyond their tents or the spaces of their encampments. Many individuals expressed that they take time to pick up the trash and tidy around other PEH shelters, as well as along the riverbank:

*I always go around and pick up, even outside of my camp. I pick up all of the trash that I can see when I'm walking around or visiting other people. I will even bring the trash cans here for people to use and then take them back when they are full. It helps to have the trash cans closer. It makes it easier for everyone to throw their trash away and keep the whole area clean.*

Nearly all of the participants that we interviewed stated that it was “important” to them to keep their space and the surrounding river clean, and there were multiple rationales for doing so. For instance, one participant explained:

*It's really important to me to keep my space and the river clean. It's not just about us, about the people. We have a whole bunch of animals living here and they can't survive with trash everywhere. It's bad for them. It isn't just about us who live here, but animals, birds, and other creatures too. I think of it as my home, you know? You wouldn't want trash in your home, would you?*

Another research participant explained a similar sentiment:

*It is very important to me to keep the river and river bank clean. It isn't just for me; it is for our children and for our future. It's for the river and the other living things around here. It's up to all of us to take care of that.*

The majority of PEH that we spoke with also expressed their frustration with discarded trash from individuals who engage with the Jordan River for recreation or for their daily commute. Interviewees told us how they often feel that there is a general perception that the broader community contributes trash found along the river, but it is often blamed on PEH, leading to a sense of frustration as to who should take responsibility. As one individual explained:

*I am always picking up from the kids that walk along here and the people who exercise here, or ride through on electric scooters or whatever. It is like they think that nobody is watching or cares. But it impacts us. It is where we live. But they don't see it that way. We aren't wanted here, so they don't care. But we end up having to clean up after them, or otherwise we get the blame.*

Another individual expressed their frustration with the perceptions of trash and litter along the Jordan River from the general population:

*I am constantly cleaning up from people who ride their bikes or walk down the path [Jordan River Parkway]. I see them drop wrappers all of the time. I usually try to pick it up because I like my space to be clean, but also, if I don't pick it up then others that don't live here with us are going to blame us for it. It is easy to blame us. They think we're trash and so obviously the trash must be our fault.*

Other individuals talked about how keeping the space around them clean may help dismantle these perceptions of individuals who reside unsheltered along the Jordan River, and that if they do so, ultimately PEH may gain greater acceptance, and may even be seen as members of the community. One individual stated:

*For one, keeping the trash picked up is going to keep the pedestrians and the city from pestering us. If we [PEH] raise our standards of living, keep our spaces tight, then people who are complaining can't do that anymore. If we can change the ways that they complain about us, then we can maybe change the way the people think about us. We might then not be seen as criminals or trespassers, but part of the community.*

It was clear that PEH along the Jordan River felt that keeping the space around their shelter and along the river and river bank was very important to them. Many individuals referred to the space around them as their home. They compared their camp to a home and that they keep the space around their shelter as clean as they would if it were a house, apartment, or other more permanent residence. It was also common for individuals to refer to the importance of keeping the river clean for the larger community and for preservation of the wildlife along the Jordan River.

Many PEH also spoke about the perceptions about cleanliness and unsheltered homelessness in comparison with the contrasting perceptions of the housed community. It was clear that many PEH felt that they were often blamed for any litter or trash found along the Jordan River. They spoke about going out of their way to pick up discarded trash by those who used the Jordan River for recreation and daily commuting. There was a general sense of those who lived unsheltered along the Jordan River being seen as “others” and not welcome along the Jordan River and seen as outsiders, while those who used the Jordan River for enjoyment and transportation were perceived as more welcome guests – regardless of how either group actually participated in the conservation and protection of the Jordan River. As we note below, in the Limitations section, it is possible that we did not capture the perspectives of PEH who resided along the Jordan River for shorter durations, therefore displayed less stewardship and attention to litter, ecological disturbance, and associated conditions.

## Interview Conclusions

The interviews that we conducted with PEH living along the Jordan River paint a more nuanced picture of this population than what might be captured alone from surveys questionnaires or basic observations. These in-depth, semi-structured interviews allowed PEH participants to share their stories and lived experiences while living along the Jordan River corridor, and provided a rich and extensive data set to help answer this project's research questions. The qualitative data also provided the five dominant themes discussed above. These themes help us better understand why PEH reside along the Jordan River and also help us better understand the lived experiences of PEH along the Jordan River.

Some of the established themes from the interviews cover ground that has already been established by local social services agencies and/or people associated with the Salt Lake Valley Coalition to End Homelessness. For instance, the idea that the HRCs are either full, uninviting, or too stringent in rules to accommodate certain segments of the homeless population is well established in Salt Lake County, as it is in many areas of the United States. What is new, however, are the ways in which PEH have worked to find viable alternatives to the HRCs, including establishing and maintaining encampments along the nearby Jordan River.

The interviews revealed that abatements are a significant concern for PEH living along the Jordan River. Many people live in fear of abatements, regardless of whether or not they have never actually faced an abatement themselves. It is widely perceived that law enforcement, health department officials, and other authorities administering abatements are acting in a manner that is punitive toward PEH, and that direct material and psychological harm result from these dislocation events. While PEH living along the Jordan River do not pretend that they are unseen or undetectable in these locations, they seem to be of the mindset that abatements in these locations are more difficult to conduct, and therefore less likely. Abatements are presented as a "fact of life" for PEH along the Jordan River, and many individuals indicated that when the next abatement occurred, they had a plan of both where to immediately go next, and that if they were unable to escape homelessness moving forward, they would likely return to the Jordan River.

Lastly, it should be noted that the interviewees reported a high sense of community on the Jordan River, both for the social/human community and the broader ecological community. Social relationships were positioned as a vital source of security and interaction. The interviewees indicated that they felt a sense of stigma and isolation from other, non-homeless users of the Jordan River, even if PEH denied contributing to negative social and environmental conditions on the river. We heard numerous narratives of PEH appropriately attending to litter, human waste, and other negative environmental impacts, though participants indicated that additional resources like restrooms or regularly serviced trash receptacles would make these efforts much easier, leading to a subsequent increase in potential compliance. In effect, what we heard is that many PEH living along the Jordan River see this space as their home. And because of its status as home, there was a reported desire to treat the surrounding people and landscape in a way that provided for ongoing security, stability, and a degree of sustainability. As abatements represent the ultimate in insecurity for PEH along the Jordan River, the surrounding PEH social community and a more sustainable



nearby ecological system together offer avenues for potentially forming the foundations upon which PEH might be able to move beyond the daily immediacies of homelessness, and further establish the systems (relationships, security, physical health, mental health, etc.) that might eventually lead to more stable housing.



*Figure 9. A PEH research participant taking part in a survey, taken in November 2021*



## Limitations

Identifying limitations in a research study serves to strengthen the overall methodology, findings, and conclusions. There are numerous limitations associated with this study, though none of them are so substantial that they negatively impact either the overall findings or the overall quality of this study. However, in this brief section, we identify and explore some of these limitations both to acknowledge potential oversights and to address possible concerns.

One of the most immediate limitations that the researchers found was how to define and locate the research participants and the area. Unsheltered homelessness is often characterized by a high degree of mobility and overall spatial instability, usually due to both itinerant lifestyles and displacement from law enforcement and other institutions. Various encampments along the Jordan River came, went, came back, and left again, often in unpredictable ways. Our stratified random probability sampling undoubtedly could not account for all of these changing dynamics, and our research team certainly missed capturing some people's important experiences in both the questionnaires and the interviews. The Jordan River extends well beyond Salt Lake City to the north and south. We focused on the Salt Lake City sections as these areas have seen the bulk, though not the totality, of unsheltered homelessness along the river.

An additional limitation of this research project concerned the PEH who participated in the study. Our research team only surveyed and interviewed PEH who were English speaking. Though we did not encounter PEH whose primary language was something other than English, there are undoubtedly those folks out there, and our snowball sampling may have led us away from these individuals and communities. Future similar studies should consider specific outreach to other language communities along the Jordan River and across the Salt Lake Valley. Similarly, we likely oversampled longer-term PEH residents of the Jordan River, as opposed to those who only spend a night or two. For safety and other practical concerns, we truncated our data collection time periods to daylight hours, so it is likely that some PEH were working or otherwise occupied during our surveying and interviewing periods. As part of the inclusion criteria, the participants of our study were unsheltered, and this fact likely directly colors their perceptions of the Homeless Resource Centers (HRCs) in the Salt Lake Valley. This standpoint among PEH along the Jordan River does not undermine their perspective, but appropriately situates their feedback. Lastly, it should be noted that nearly all the data in this project is self-reported as opposed to observational. The subjective nature of these data are necessarily partial and clouded, and should be taken as PEH perspectives of their lived experiences, as opposed to some type of external objective marker of their lived experiences. Survey respondents and interviewees concerning any number of social, political, environmental, or other topics often represent themselves in research as a balance between how they actually are and how they might like to see themselves. These perceptions, regardless of their subjective or objective nature, remain paramount in understanding the phenomenon in question, though they should be interpreted and characterized appropriately.

Many of the limitations of this research project, similar to other social science endeavors, could be addressed with additional time, resources, and personnel. A longer, though more resource intensive, project might have included more days and times to survey, with a larger number of research assistants. Our project leveraged the support of numerous student volunteers, and longer, more intensive projects can further develop and incorporate these types of valuable experiences.



Figure 10. Sign posted near an encampment along the Jordan River, taken in September, 2021

## **Discussion and Recommendations**

Continued monitoring and future research is important considerations for maintaining adequate and strategic resource and visitor use management. A variety of research and monitoring projects could address some of the concerns presented in this report. Specifically, user conflict studies, as

well as studies understanding the satisfaction levels with various management strategies, may be warranted. Ongoing studies could enable Jordan River managers to better understand the users – homeless and housed alike – and their motivations and behaviors. Examples of these kinds of studies might include:

- Spatial research to understand the movement and intensity of PEH encampments along the Jordan River corridor
- Clustering research to understand the dynamics of encampment size and community among PEH encampments along the Jordan River
- Social networking analysis of functional sharing networks among PEH along the Jordan River

Beyond these suggested considerations for future research, it may be a valuable exercise to distinguish between the *precipitants* of homelessness and the main *drivers* of homelessness, both locally here in the Salt Lake Valley and across the United States. Precipitants of homelessness are particular and non-generalizable; they are the set of individual circumstances that cause a particular person to become homeless and/or remain homeless. For instance, a substance use disorder is a common precipitant for many PEH. Other examples might include fleeing domestic violence, becoming unemployed, or suddenly facing unexpected medical bills or other expenses. As established in a wealth of ethnographic and other social science literature, the precipitants of homelessness are often some combination of structural factors, personal mistakes, and plain bad luck. These precipitants of homelessness help explain why a particular person became homeless, but usually they are not necessarily *drivers* of homelessness. The localized, individualized, and often personalized precipitants of homelessness cannot effectively indicate why broader trends like increases in the overall rate of homelessness is what it is.

Our research pointed (often indirectly) at a number of precipitants of homelessness along the Jordan River. For instance, in our interactions with PEH along the Jordan River, during surveys, interviews, or otherwise, we heard stories of family instability, addiction to drugs or alcohol, a landlord who may have behaved unreasonably, and instances where an unforeseen medical bill became insurmountable. But rarely did the narrative from PEH extend to larger political economic realities of the local and regional housing market exceeding reasonability. Studies suggest that when the median monthly rent for an area exceed 30% of the median monthly income for that area, a steady rise in homelessness is likely to follow. These kinds of structural concerns are more clearly a driver of homelessness in Salt Lake County (and elsewhere) than the individualized ambiguities of employability, work ethic, poor decision making, unethical behavior, or personal (mis)fortune. At the levels of housing prices currently found in Salt Lake County, a person who is struggling for whatever reason is likely to struggle to find available housing in a hyper competitive housing market like those found locally.

Lastly, we offer a number of research-derived recommendations for consideration. While there are a number of implications coming from both the quantitative and qualitative sections of our research, a number of actionable themes cut across the research, standing out as places where direct engagement could lead to substantially improved outcomes for PEH, other visitors to the Jordan River, and the local ecological conditions. The following research-driven mitigation strategies might be considered:

1. Update Jordan River management plans to account for ongoing use of the area by PEH

A first step might be to update the Jordan River management plan to more fully account for the ongoing use of the area by PEH. The reality of the current housing crisis, the limitations of the HRC system, and the severe negative economic impacts of COVID-19 within Salt Lake Valley make it probable that PEH encampments are going to be a regular feature in the region. Our research showed that, in addition to the long-term and ongoing residency of PEH along the Jordan River, the Jordan River corridor was seen as providing readily accessible amenities, such as food, clean water, and convenience stores, a secluded greenspace that is desirable for camping, and a sense of community and safety for PEH to support daily survival and well-being. We suggest that Jordan River management plans include ongoing use of the region by PEH, and incorporate mitigation strategies that support the well-being of these members of the community, as well as support the conservation and ecological integrity of the Jordan River and the riparian corridor.

2. Increased availability of trash receptacles, public restrooms, and needle disposal receptacles

The majority of PEH that we surveyed and interviewed indicated that having a greater number of trash receptacles available along the Jordan River would be useful in helping them dispose of trash effectively, and would help them keep the Jordan River and riverbank clean. It was also suggested that the existing trash receptacles be serviced more frequently. It was common for PEH to keep bound trash near their tents and structures, as trash receptacles were often full. PEH participants also responded that having increased access to public restrooms and/or portable restrooms along the Jordan River would be beneficial in helping them defecate and urinate appropriately and with greater dignity. PEH participants also responded that safe disposable sites for needles would be beneficial along the Jordan River. Many individuals that we spoke with expressed minimal options for safely disposing needles, and that they often resorted to throwing them away in the trash. Providing safe needle disposal would benefit the health and well-being of PEH, individuals who use the Jordan River corridor for recreation and commuting, and also support the conservation of the river and river bank.

Increasing the availability of trash receptacles, public restrooms and/or portable restrooms, and safe needle disposal would not only positively impact the health and well-being of the PEH who reside along the Jordan River, but it would also support conservation efforts of the Jordan River and river bank. These mitigation strategies will also support the Jordan River corridor as a safe space for recreation within the community.

3. Alternative approach to abatement procedures

Abatement and displacement events are traumatic for PEH that live along the Jordan River, disrupting their stability and thereby decreasing their ability to help change their circumstances. Many PEH that we spoke with discussed the stress and trauma that they have experienced from an abatement event. Many PEH expressed increased stress levels, inability to sleep, and increased tensions within PEH community structures. It was also expressed that the constant stress of not knowing when the next abatement event would occur, leading PEH afraid to leave their tents and

lose all of their belongings. Many PEH stated that this fear led them to lose employment, skip meetings with community service providers to obtain vital documents and apply for housing vouchers, and seek out medical care, all of which limit their ability to change their circumstances, and it negatively impacts their health and well-being.

Creating alternative options for maintaining the overall health concerns of encampments for PEH who reside along the river would increase PEH's ability to secure employment and assistance that is required to move them into housing. Our research findings do not provide alternatives abatement procedures, but we suggest that future approaches could involve a more collaborative relationship between authorities administering abatements with PEH to keep encampments clean and safe and not require any dislocations.

#### 4. Stewardship and empowerment program for PEH along the Jordan River

All PEH that we surveyed and interviewed expressed the importance keeping the Jordan River and river bank clean. They equated their camp or shelter to their home, and described how they felt ownership in the space surrounding their home. PEH indicated a sense of pride and stewardship in the Jordan River and surrounding environments. At the same time, PEH perceived a division between themselves and those who were not experiencing homelessness. This perception was associated with feelings of disdain and a lack of empathy from those outside of the PEH community. This disconnect was at odds with the stewardship that PEH felt, and it was clear that the PEH community would like to break down these barriers. We talked with all PEH participants about their interest in being involved with educational programs that could help increase their awareness the needed conservation efforts along the Jordan River, teaching them ways that they could be part of conservation efforts. The majority of PEH were interested in participating in some sort conservation education and empowerment program, and initial efforts at these kinds of weekly programs at the Jordan River Nature Center have shown promise. These individuals also felt that participation in the community conservation efforts would not only be beneficial for their health and well-being, as well as that of the river, but that this participation could help act as a way to bridge the disconnect between the community of those experiencing homelessness and those outside of the PEH community.

Creating a program to help educate PEH along the river about conservation efforts and techniques would augment the current practices that individuals along the river are already implementing to support the health and well-being of the Jordan River. Increasing their stewardship capacities in these efforts would increase conservation efforts along the Jordan River, and may also help decrease the need for abatement procedures. Conservation education for PEH along the river may also help to dispel the negative perceptions held by the local housed community. Breaking down common misconceptions may help integrate these two communities, and may also increase feelings of trust and empathy, which will benefit the health and well-being of the entire community surrounding the Jordan River.



## **Appendices**

### Appendix A: Unsheltered PEH Survey Questionnaire

Surveys were conducted on-site, in locations of encampments along the Jordan River. Questions were recorded by research team members via the Qualtrics mobile app on tablets or smartphones. Many of the following questions are dichotomous (yes/no) in nature, though researchers took copious notes to further characterize these responses. Questions with multiple options for response are indicated below.

1. Date of survey
2. How long have you been experiencing homelessness?
3. How long have you been residing along the Jordan River?
4. Where did you reside before?
5. Were you born in Utah?
6. If not, where were you born?
7. Why have you chosen to live along the Jordan River?
8. Have you lived in a camp that has been forced to move?
9. If you were displaced, where would you go?
10. What have your experiences with air quality been while living in the Salt Lake Valley?
11. What local resources have you accessed?
  - a. VOA Outreach
  - b. Health
  - c. Resource Centers
  - d. Other (specify)
12. Do you have regular access to a restroom?
13. How far do you have to walk to get to a restroom?
  - a. 0-5 minutes
  - b. 5-10 minutes
  - c. 10-15 minutes
  - d. 15-20 minutes
  - e. 20+ minutes
14. Do you ever go to the restroom on the ground?
15. Do you have regular access to a trash can?
16. How far do you have to walk to get to a trash can?
  - a. 0-5 minutes
  - b. 5-10 minutes
  - c. 10-15 minutes
  - d. 15-20 minutes
  - e. 20+ minutes
17. Do you ever have to resort to cleaning yourself in the river?
18. Do you have regular access to a shower?
19. How far do you have to walk to get to a shower?
  - a. 0-5 minutes
  - b. 5-10 minutes
  - c. 10-15 minutes
  - d. 15-20 minutes
  - e. 20+ minutes
20. Do you have regular access to clean drinking water?
21. How far do you have to walk to access clean drinking water?

- a. 0-5 minutes
  - b. 5-10 minutes
  - c. 10-15 minutes
  - d. 15-20 minutes
  - e. 20+ minutes
22. On a scale from 1 to 5 with 1 being strongly disagree and 5 being strongly agree, how much do you agree with the following statements:
- a. Keeping the river bank and the river clean is important to me.
  - b. Access to trash cans would be useful.
  - c. Access to restrooms would be useful.
  - d. Access to showers would be useful.
  - e. I would like to learn about the ways that I can help keep the river and river bank clean.
23. On a scale from 1 to 5 with 1 being strongly disagree and 5 being strongly agree, how much do you agree with the following statements:
- a. I live on the Jordan River to escape from the city.
  - b. I live on the Jordan River because fewer people can see me.
  - c. I live along the Jordan River to avoid interactions with authorities.
  - d. I enjoy living along the Jordan River.
  - e. I view the Jordan River as home.
  - f. I use the Jordan River for recreation.
24. On a scale from 1 to 5 with 1 being strongly disagree and 5 being strongly agree, how much do you agree with the following statements:
- a. I see the river as simply a place to live.
  - b. I feel safe living near the river.
  - c. Air quality has an impact on me.
25. Please indicate how often each of the statements below is descriptive of you. (often, sometimes, rarely, or never)
- a. I am unhappy doing things alone.
  - b. I have nobody to talk to.
  - c. I cannot tolerate being alone.
  - d. I lack companionship.
  - e. I feel as if nobody really understands me.
  - f. I find myself waiting for people to reach out to me.
  - g. There is no one I feel I can turn to.
  - h. I am not close to anyone.
  - i. My interests and ideas are not shared by those around me.
  - j. I feel left out.
  - k. I feel completely alone.
  - l. I am unable to reach out and communicate with those around me.
  - m. My social relationships are superficial.
  - n. I need more company.
  - o. No one really knows me well.
  - p. I feel isolated from others.
  - q. I am unhappy if I begin to feel withdrawn.
  - r. It is difficult for me to make friends.
  - s. I feel shut out and excluded by others.
  - t. People are around me but not with me.
26. Name
27. Date of birth
28. Gender

- a. Male
- b. Female
- c. Outside of the binary (specify)

## Appendix B: Unsheltered PEH Interview Protocol

1. Date of interview
2. How long have you been experiencing homelessness?
3. How long have you been residing along the Jordan River?
4. Where did you reside before?
5. Were you born in Utah?
6. If not born in Utah, where were you born?
7. Can you explain why you chose to live along the river?
8. Where else have you lived?
9. How does living along the river compare to those other places?
10. What do you enjoy about living along the river? Please explain...
11. What do you not enjoy about living along the river? Please explain...
12. Do you plan to stay living along the river?
13. If you were forced to leave here (by the police, health department, etc.), where would you go, and why?
14. Who do you live with? Why do you choose to live with these people?
15. Do these people, that you live with, help you in times of need? Do you help them when they are in need too?
16. Do you feel a sense of community along the river? Please explain...
17. Tell us about the air quality here? What differences in air quality do you notice across the seasons?
18. If the air quality is bad, how does it affect you? How does it change your behavior?
19. Explain what things locally you think create poor air quality. (i.e., inversion, driving, factory pollution)
20. Explain what things beyond the local contribute to poor air quality. (i.e., wildfire smoke)
21. Who do you think is most responsible for poor air quality?
22. Is camping here good for you or bad for you in terms of air quality. Explain.
23. Have you previously stayed in a shelter or one of the resource centers?
24. How do you feel about the resource centers (new community shelters)?
25. Do you interact with outreach services (VOA, TRH, etc.)?
26. How have your interactions with these outreach teams been?
27. Can you list the positive things that these outreach services/teams have provided you with?
28. Can you list any negative interactions that you have had with these outreach services/teams?
29. Are there certain things that you think would be helpful that these outreach teams could provide or give to you?
30. Can you tell me about how and where you go to the restroom?
31. Can you tell me about how others around you go to the restroom?
32. Would restrooms along the river be useful?
33. Can you tell me about how and where you bathe?
34. Can you tell me about how others around you bathe?
35. Would bathing stalls along the river be useful?
36. Can you tell me about how and where you dispose of your trash?
37. Can you tell me about how others around you dispose of their trash?
38. Would trash cans along the river be useful?
39. If you use needles, can you tell me about how and where you dispose of needles?
40. If others around you use needles, can you tell me about how they dispose of their needles?
41. If you use needles, how many minutes does it take to walk to a needle disposal container?
42. Would easy access to safe needle disposal containers be useful?
43. Can you tell me things that you do to keep the space around where you live clean?

44. Can you tell me about how keeping the river bank clean is important to you?
45. Can you tell me about how keeping the river clean is important to you?
46. Can you tell me about how and where you get your food?
47. Do you ever have to resort to finding things around the river to eat when you are hungry?
48. Can you tell me about any activities that you do along the river for fun?
49. Name
50. Date of birth
51. Gender
  - a. Female
  - b. Male
  - c. Outside the binary (specify)



### Appendix C: Related Relevant Literature

While there is a broad array of literature on homelessness, broadly, and unsheltered homelessness, more specifically, there is a relative dearth of academic literature concerning unsheltered homelessness in parks and protected areas. Much of the literature on homelessness approaches from either healthcare or social policy perspectives, while research on unsheltered homelessness may tend to be more spatial, public health, political, and/or ethnographic in nature, coming from disciplinary approaches found in sociology, anthropology, geography, and urban studies, among others. Below is a list of recent academic literature related to unsheltered homelessness in parks and protected areas, some of which has direct applicability to understanding and analyzing experiences of unsheltered homelessness on the Jordan River.

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Bloch, S. (2018). Place-based elicitation: Interviewing graffiti writers at the scene of the crime. *Journal of Contemporary Ethnography*, 47(2), 171-198.

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## **Acknowledgements**

The authors thank the individuals living along the Jordan River Corridor, as well as other folks facing unsheltered homelessness who contributed to this research. The authors would like to acknowledge support from the Jordan River Commission to help make this research project possible. The authors would also like to acknowledge individuals from various sheltering and social services agencies who assisted with and informed many aspects of this project. This project benefitted from support from the University of Utah's Global Change and Sustainability Center, as well as the College of Health and the Department of Parks, Recreation, and Tourism. Finally, the project investigators would like to acknowledge the efforts of many students from the University of Utah who contributed to different aspects of this project. Will Ambler, Lauren Damon, Gavin Goodin, Jack Hughes, Anya Korfine, Will Marin, Abby McCartney, Rachel Pearce, Chandler Tisherman, and Cameron Zirk contributed to data collection of on-site survey questionnaires.

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