

# Research Terms of Reference

## Water, Sanitation and Hygiene Rapid needs Assessment for Unhoused Seattlites Seattle WA

April 2020

By Timothy Liptrot –

tliprot@protonmail.com

### 1. Executive Summary

<b>Country of intervention</b>	United States					
<b>Type of Emergency</b>	<input checked="" type="checkbox"/>	Natural disaster	<input type="checkbox"/>	Conflict		
<b>Type of Crisis</b>	<input type="checkbox"/>	Sudden onset	<input checked="" type="checkbox"/>	Slow onset	<input checked="" type="checkbox"/>	Protracted
<b>Overall Research Timeframe</b> <i>(from research design to final outputs / M&amp;E)</i>	20/04/2020 to 31/05/2020					
<b>Research Timeframe</b>  <i>Add planned deadlines (for first cycle if more than 1)</i>	1. Start collect data: 05/05/2020			5. Preliminary presentation: 05/015/2020		
	2. Data collected: 25/05/2020					
	3. Data analysed: 31/05/2020			7. Outputs published: TBD		
<b>Number of assessments</b>	<input checked="" type="checkbox"/>	Single assessment (one cycle)				
	<input type="checkbox"/>	Multi assessment (more than one cycle)				
<b>Audience Type &amp; Dissemination</b> <i>Specify who will the assessment inform and how you will disseminate to inform the audience</i>	<b>Audience type</b>			<b>Dissemination</b>		
	<input type="checkbox"/> Strategic <input checked="" type="checkbox"/> Programmatic <input checked="" type="checkbox"/> Operational <input type="checkbox"/> [Other, Specify]			<input checked="" type="checkbox"/> General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) <input type="checkbox"/> Cluster Mailing (Education, Shelter and WASH) and presentation of findings at next cluster meeting <input checked="" type="checkbox"/> Presentation <input checked="" type="checkbox"/> Website Dissemination <input type="checkbox"/> [Other, Specify]		
<b>Detailed dissemination plan required</b>	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No		
<b>General Objective</b>	To improve evidence base for the COIVD 19 response on the sanitation and hygiene needs of unhoused people in Seattle. To inform needs prioritization of crisis response <sup>i</sup>					

<b>Specific Objective(s)</b>	<ol style="list-style-type: none"> <li>1. Provide timely information and analysis on the needs of the unhoused during the crisis</li> <li>2. Identify and assess humanitarian priority needs at the city-wide level</li> <li>3. Advise ongoing outreach programming</li> </ol>				
<b>Research Questions</b>	<ol style="list-style-type: none"> <li>1. What is the extent of knowledge about COVID transmission prevention among the at-risk population? <ol style="list-style-type: none"> <li>a. Which information sources are currently most active?</li> <li>b. Which sources are trusted to provide information?</li> </ol> </li> <li>2. What hygiene and sanitation behaviors are currently being practiced? <ol style="list-style-type: none"> <li>a. What barriers do people face to increasing those behaviors (hygiene access, knowledge etc.)?</li> </ol> </li> <li>3. What is the extent of access to the following vital resources: clean water, bathrooms, showers, cooking facilities, clothes washing? <ol style="list-style-type: none"> <li>a. How has the crisis affected access to these resources</li> <li>b.</li> </ol> </li> <li>4. Are there sub-populations with significant gaps in coverage?</li> </ol>				
<b>Geographic Coverage</b>	City of Seattle (CoS)				
<b>Secondary data sources</b>	- City of Seattle Homeless Needs Assessment 2016 (for census data, sample calculations and contextual facts) - Community Health Needs Assessment, Washington State by Kaiser Permanente 2019 (for census data, sample calculations and contextual facts) - Kaua'i District Health Office CASPER, forthcoming (for best practices)				
<b>Stratification</b> <i>Select type(s) and enter number of strata</i>	x	Geographical #:_ 1 Population size per strata is known? Yes X No (imputed unhoused population similar to housed, STRONG ASSUMPTOIN)	<input type="checkbox"/>	Group #:_ _ _ Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> [Other Specify] #:_ _ Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Data collection tool(s)</b>	X	Structured (Quantitative)		X	Semi-structured (Qualitative)
	<b>Sampling method</b>			<b>Data collection method</b>	
<b>Structured data collection tool # 1</b>	<input type="checkbox"/> Purposive Probability / Simple random <input type="checkbox"/> Probability / Stratified simple random X Probability / Cluster sampling <input type="checkbox"/> Probability / Stratified cluster sampling <input type="checkbox"/> [Other, Specify]			<input type="checkbox"/> Key informant interview (Target #):_ _ _ _ _ <input type="checkbox"/> Group discussion (Target #):_ _ _ _ _ X Household interview (Target #):_ 372 <input type="checkbox"/> Individual interview (Target #):_ _ _ _ _ <input type="checkbox"/> Direct observations (Target #):_ _ _ _ _ <input type="checkbox"/> [Other, Specify] (Target #):_ _ _ _ _	
<b>Target level of precision if probability sampling</b>	95% level of confidence			10+/- % margin of error	
<b>Data management platform(s)</b>	X	Github		<input type="checkbox"/>	

	<input type="checkbox"/>	[Other, Specify]				
<b>Expected output type(s)</b>	<input type="checkbox"/>	Situation overview #: __	X	Report #: 1	<input type="checkbox"/>	Profile #:
	<input type="checkbox"/>	Presentation (Preliminary findings) #: __	X	Presentation (Final) #: 1	<input type="checkbox"/>	Factsheet #: 1
	<input type="checkbox"/>	Interactive dashboard 1#: __	<input type="checkbox"/>	Webmap #: TBD	<input type="checkbox"/>	Map #: TBD
	<input type="checkbox"/>	Preliminary findings document #: 2 factsheets at 20 respondents and 60 respondents				
<b>Access</b>	X	Public				
	<input type="checkbox"/>	Restricted				
<b>Visibility</b> <i>Specify which logos should be on outputs</i>	None					

## 2. Rationale

### 2.1. Rationale

The COVID-19 pandemic has radically changed the access to services and the needs of Seattle's homeless population. As shelters have closed and become unsafe, many people have moved out of the shelter system. At the same time, the recession has caused an influx of low-income housed people using food banks. These two changes mean that needs assessments conducted at the point of service are less reliable. At the same time, the needs of the unhoused have shifted rapidly since the last at-scale community needs assessment, conducted in 2016. Service providers reported increased need for up-to-date, information about services and pandemic transmission, hygiene supplies, and clean water, as the shutdown of many public institutions has removed key access points.

This rapid needs assessment (RNA) will undertake a spatially randomized survey of Seattle's unhoused population using a spatially balanced random survey. The key added value of the research instrument is to assess coverage on the entire population, making information useful for city-wide response planning and local service providers.

## 3. Methodology

### 2.1. Methodology overview

The study will be predominantly quantitative and data will be collected through randomly selected interviews with persons living outside of housing or shelters. The sampling of persons will be based weighted by population density across census districts as a proxy for the unhoused population. This is the strongest assumption undertaken in the assessment. Data will be collected solely by the principal investigator.

### 2.2. Population of interest

The population of interest is persons currently without housing in the CoS. This may include persons living in informal tented settlements, shelters and vehicles. The preliminary stakeholder consultation revealed that shelter populations have declined during the COVID crisis and that shelters regularly collect needs information on their residents. This creates a problem for sampling as the ratio of in-shelter to out-of-shelter unhoused people is unknown (previously it would have been taken from the last CoS HNA). In response the data collection will be practiced during hours when shelter residents are not usually in residence.

### 2.3.1. Primary Data Collection

#### Tool

The questionnaire will be circulated by email to 5 early stakeholders involved in outreach and advocacy for comment. After the first 20 respondents are selected, a second comment may be held to add more questions. The reason for the second comment period is that some stakeholders may wait for more credibility before supporting.

#### Sampling strategy

The sampling methodology is based on the Community Assessment for Public Health Emergency Response (CASPER) toolkit developed by the CDC, but adapted to the distribution of unhoused persons. 17 Census districts will be randomly selected (weighted by census population) and 3 districts will be selected at true random among the downtown area. This is to compensate for the assumed higher ratio of unhoused to housed persons in the downtown. Within each census track random GPS points will be generated, and the enumerator will search for respondents within 200 meters of that point. Within each track new points will be generated until 5 respondents per track have been surveyed.

Wherever possible the head of household (or family unit) will be interviewed. In case where the head of household is not available and there is more than one adult within the household, the data collectors will introduce the assessment and then ask household members who they think among themselves would be best able to provide information given the nature of the assessment.

Wherever possible, the head of household will be interviewed. In While the sampling will not be disaggregated by gender, it is expected that a large enough sample of both male and female respondents will be captured in the survey to allow for findings representative to the male and female population of the camp, albeit at a lower level of confidence.

#### Data collection method

One enumerator, the PI, will administer the survey, traveling by bicycle and car. Data will be gathered using Kobo (an Android-based mobile application). The tool will be piloted. in order to test the form in the field prior final use and ensure that data collectors are fully familiar with it. Data collected during the course of the survey will be stored directly on github

For many respondents, minimizing the risk of transmission is to simply collect data by phone or by proxy. Surveys conducted in shelters or large tent encampments can be done by shelter staff or by phone randomized within the encampment, effectively eliminating enumerator-respondent contact. Unfortunately, some unhoused people lack working cellphones or a systematic way to be selected by phone surveys. To maintain generalizability, these respondents must be approached in person and offered an instruction card to call for a phone interview, with an in-person interview conducted as a last resort if phone calls are truly impossible. In the event of an in-person interview social distancing will be maintained. The PI (sole enumerator) has collected the necessary masks and gloves, and is tested for COVID-19 regularly as part of his volunteer work with ROOTS Shelter.

### 2.5. Data Processing & Analysis

To ensure the quality of the data collected, the following checks will be implemented:

- Data cleaning will be conducted by the PI at 20 respondents, 60 respondents and 80 respondents to ensure proper use of the questionnaire.
- Data cleaning logs and the respective raw will be kept to allow all steps of the process to be replicated

Once all data has been collected and cleaned, data will then be analysed by a review of descriptive statistics in addition to more advanced statistical analysis where appropriate, through R. The final report will include not include the disaggregation of survey variables by population subgroups because . A list of the main indicators that will guide the analysis have been outlined in Annex 6: Data Analysis Plan.

## 4. Data Analysis Plan (TBD)

Research questions	IN #	Data collection method	Indicator group / sector	Indicator / Variable	Questionnaire Question	Instructions	Questionnaire Responses
NA (introductory information and demographics)	A.1	HH Interview	Key characteristics	Enumerator ID	Enumerator ID	Enter name	
	A.1.1	HH Interview	Key characteristics	Introduction	<p>Hello, my name is _____</p> <p>and I am conducting a survey of unhoused people. My intent is to provide service providers with accurate information about the characteristics and needs of refugees and of unhoused people. This survey asks about your access to resources such as water, hygiene supplies and information regarding hygiene. The data will be collected in an anonymous way and your name will not be associated with it.</p>	Read	
	A.2	HH Interview	Key characteristics	Willing to be interviewed	Are you willing to take part in this interview?	Select one	Yes; No
	A.3	HH Interview	Key characteristics	District	What is the number of the district you live in?	Enter number	TBD
	A.4	HH Interview	Key characteristics	Block number	What is the number of the block you live in?	Enter number	TBD

	<b>A.7</b>	HH Interview	Key characteristics	Respondent gender	Gender of respondent	Select one	Male; Female; Other; Prefer not to answer
	<b>A.8</b>	HH Interview	Key characteristics	Respondent age	How old are you?	Enter number	
		HH Interview	Key characteristics	Respondent Education	How many years of education have you completed?	Select one	0-9 years; 10-12 years; more than 12 years
	<b>A.9</b>	HH Interview	Key characteristics	Is head of household?	Is the respondent the head of household?	Select one	Yes; No
	<b>A.17</b>	HH Interview	Key characteristics	respondent health concerns	Do you have any health concerns which impact your ability to do everyday tasks?	Select one	Yes; No
	<b>A.18</b>	HH Interview	Key characteristics	type of health concerns	What kind of health concerns do you face?	Select any or all	Difficulties seeing even when wearing glasses; Difficulties hearing even when using hearing aid; Difficulties walking or climbing stairs; Difficulties remembering or concentrating; Difficulties washing all over or dressing; Difficulties communicating even in native language; Other
<b>1. What is the extent of access to the WASH knowledge</b>	<b>B.1</b>	HH Interview	Attitudes	Important_issue	How much do you feel you know about COVID-19	Select one	A lot/ some/ a little/ nothing
				Useful_info	Which of these types of information would be most useful to you?	Select any or all	Symptoms of novel coronavirus; How I can protect myself and my family against the novel coronavirus; Personal stories from other people on how they cope with the pandemic situation; Scientific progress in development of a vaccine or treatment against novel coronavirus; How I can take care of a person who belongs to a risk group; How I can best take care of my children's school education; How the novel coronavirus is different from other diseases such as flu; The pandemic evolution in the world; The pandemic evolution in the USA; The pandemic evolution in Seattle/King County; Information about authorities' decisions; How I will be impacted economically by the pandemic; How to maintain my mental health during the isolation; How to maintain my social contact despite the physical distancing;
	<b>B.3</b>	HH Interview	Water knowledge	filling day	Which statement is true about	Select one	There is a vaccine for COVID-19; There is currently no vaccine for the novel coronavirus; Don't know

				vaccines for COVID-19		
<b>B.4</b>	HH Interview	Water knowledge	how much water	Which of the following can be symptoms of COVID-19	Select one	cough;Fever;Shortness of breath;Sore throat;Runny or stuffy nose;Muscle or body aches;Headaches;Fatigue;Diarrhea; Loss of taste and smell;Abdominal Discomfort;Vomiting;Hair Loss;Chest congestion;Skin Rash
<b>B.5</b>	HH interview	Water knowledge	Water quality satisfaction	What is the maximum incubation period (i.e., the time from viral infection to developing symptoms of illness) of the novel coronavirus?	Select one	Up to 3 days;Up to 7 days;Up to 14 days;Don't know
<b>B.5.1</b>	HH interview	Water knowledge	Reasons for dissatisfaction	Which of the following statements are true?	Select all that apply	Antibiotics can be used to treat the coronavirus;Antibiotics can be used to prevent the coronavirus;People of all ages can become infected with the coronavirus;People of all racial and ethnic groups can become infected with the coronavirus;Eating garlic can lower your chances of getting infected with the coronavirus;Most people who are infected with the coronavirus die from it;Most people who are infected with the coronavirus recover from it;Younger adults are most at risk of severe symptoms if they become infected; Older adults are most at risk of severe symptoms if they become infected;Masks do not affect the likelihood of transmitting covid-19 to others
<b>B.5.2</b>	HH Interview	practices	checked water quality	Which of the following are effective measures to prevent the spread and infection of the novel coronavirus	Select one	Avoiding touching your eyes, nose, and mouth with unwashed hands; Use of disinfectants to clean hands when soap and water is not available for washing hands; Staying home when you are sick or when you have a cold; Adapt below list to local context/above list Herbal supplements; Covering your mouth when you cough; Using caution when opening letters; Getting the flu vaccine; Wearing a face mask; Using antibiotics; Using homeopathic remedies; Physical distancing (keeping minimum 2 metres between you and other persons outside your household); Self-isolation; Disinfecting surfaces; Disinfecting the mobile phone; Eating garlic, ginger, lemon;

1.a. What outreach sources are currently most active/effective?	D.1	HH Interview	Services received	connected to network	Which of the following sources have provided you with information about the public health in the last month (multiple select)	Enter Number	The Police Navigation Team;A shelter;A food bank or food provider;A healthcare organization;211;Word-of-mouth;Internet search;radio stations; government press releases; zoom calls; your doctor; hospitals Other
	D.2	HH Interview	Services received	reason not connected	Do you have access to the internet (via mobile phone or computer)		Yes, consistent; Yes, but only sometimes; No; Don't know
1.b	E.1	HH Interview	responsibility	responsible for household networks	How much do you trust the following sources of information about the novel coronavirus	Very low confidence [*] [*] [*] [*] [*] Very high confidence	The Police Navigation Team;A shelter;A food bank or food provider;A healthcare organization;211;Word-of-mouth;Internet search;radio stations; government press releases; zoom calls; your doctor; hospitals Other
	E.2	HH Interview	responsibility	responsible for household problems	How much confidence do you have in the below individuals and organizations that they can handle COVID-19 well?	Very low confidence [*] [*] [*] [*] [*] Very high confidence / NA	Your own family doctor; Your Employer (if applicable) ; Media ; Other opinion leaders ; Hospitals ;; Local Public Health Authority ; Schools ; Public transportation companies ; Government ; Police ;; Church ; The president ;
2. What sanitation and hygiene behaviors are currently being practiced	F.1	HH Interview	hotline usage	desludging hotline	Are you, or have you been, infected with COVID-19?	Enter Number	Yes, tested and the result was positive ; Yes, suspected but not confirmed by a test ; No, tested and the result was negative ; No ; Don't know
	F.2	HH Interview	hotline usage	what did your do	Do you know people in your immediate social environment who are or have been infected with the novel coronavirus?		Yes, confirmed; Yes, suspected but not confirmed by a test[*] No, tested and the result was negative; No; Don't know
	F.3	HH Interview	hotline satisfaction	if reported leakage, how satisfied	How difficult would you say avoiding infection with COVID-19 is?	Select one	Extremely difficult to Extremely easy
	F.4	HH Interview	hotline satisfaction	leakage satisfied with hotline	Which of the following measures have you taken to prevent infection with the novel coronavirus?	Multiple Select	Cleaning high touch surfaces in your living space like door handles, tent flaps, blankets; Cleaned high-touch electronic like phone, tablet, or laptop; Handwashing for at least 20 seconds; Avoiding touching your eyes, nose, and mouth with unwashed hands; Use of disinfectants to clean hands when soap and water was not available for



							washing hands ; Staying home when you were sick or when you had a cold ; Herbal supplements ; Covering your mouth and nose when you cough or sneeze ; Using caution when opening letters ; Getting the flu vaccine ; Wearing a face mask ; Using antibiotics ; Using homeopathic remedies ; Physical distancing (keeping minimum 2 metres between you and other persons outside your household) ; Self-isolation ; Eating garlic, ginger, lemon
<b>2.b. What barriers to people face to increasing those behaviors</b>	<b>G.1</b>	HH Interview	Community mobilization knowledge	Jordan water scarce	[to avoid prejudicing the sample, the question "do you have enough information" is not asked again here]	Select one	• Yes • No • I don't know
<b>3. 3. What is the extent of access to the following vital resources, and how has the crisis affected access: clean water, bathrooms,, clothes washing?</b>					Do you have health insurance?	Select one	Yes • No • I don't know
					If yes, what type?	Select one	Medicaid; Medicare; employer-sponsored; private or group health insurance; National Health Insurance; Unknown
					Do you have consistent access to clean water for drinking	Select one	Yes, consistent; Yes, but only sometimes; No; Don't know
					If yes, from what sources	Select multiple	Tbd
					Has the pandemic affected your access to clean water for drinking?	Select one	Yes • No • I don't know
					Do you have consistent access to clean water for washing	Select one	Yes, consistent; Yes, but only sometimes; No; Don't know
					If yes, from what sources	Select multiple	Tbd
					Has the pandemic affected your access to clean water for washing?	Select one	Yes • No • I don't know
					Do you have consistent	Select one	Yes, consistent; Yes, but only sometimes; No; Don't know

				access to toilets?		
				Which of these locations do you use?	Select multiple	Tbd
				Has the pandemic affected your access to toilets?	Select one	Yes • No • I don't know
				Do you have consistent access to showers?	Select one	Yes, consistent; Yes, but only sometimes; No; Don't know
				Which of these locations do you use?	Select multiple	Tbd
				Has the pandemic affected your access to showers?	Select one	Yes • No • I don't know
				How often are you able to wash your clothing?	Select one	Yes, consistent; Yes, but only sometimes; No; Don't know
				Are you able to wash your clothing as often as you like?	Select one	Yes • No • I don't know