Geographies of Urban Unsafety: Homeless Women, Mental Maps, and Isolation

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Geographies of Urban Unsafety:
Homeless Women, Mental Maps, and Isolation

by
Jan Radle Roberson

A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
in
Urban Studies

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Abstract

This study explores the intersection of urban unsafety and the marginalized population of homeless women. Specifically, it investigates how homeless women identify/perceive and navigate unsafe urban space. Specific research questions include:

1. What does housing insecurity look like for an unhoused woman?
2. In what ways is mental mapping a robust tool for gathering the stories (data) of vulnerable populations such as unhoused women?
3. What does the spatialization of unsafe locations look like and are demographic groupings dissimilarly affected?
4. What are the critical reasons for unsafety identified by participants?
5. How do homeless women respond to urban unsafety; that is, what strategies do they utilize?

The experiences of marginalized homeless women are not well studied or understood; there is little research on homeless women’s perceptions of and responses to urban unsafety. This research affords an often-invisible group an opportunity to make themselves and their stories more visible, through the “radical” aspect of mental mapping. The key research methods are mental maps and interviews which provide data not only on demographics but also on unsafe locations, reasons for and responses to unsafety, and spatialization and maps of unsafety using Graphic Information Systems (GIS).

Through GIS maps and graphs, key results show different patterns of spatial usage and movement in terms of race/ethnicity (White vs. Non-White), age (over 55 vs. under 40), type of housing (Inside vs. Outside Living), and sex work (Non-Sex Worker vs. Sex Worker). Those women who are White, over 55, Inside Living,
or a Non-Sex Worker have broader areas of geographic movement than do others in this study; one might consider this a notion of higher status. The data also illustrate that the participants’ primary response to unsafety is avoidance; the principal categories for reasons for unsafe locations, as indicated by the women, involve both the Built Environment and Too Many People.

Themes which emerged include Housing Insecurity, Older Women Living in Vehicles, Art of Mental Mapping (as a robust, inclusive, and amazing research method, especially with marginalized groups), and Spatial Inequity (illustrating demographic groupings dissimilarly affected.) The concluding thesis of isolation draws together these factors, themes, and maps. The intrinsic lived experiences of our participants, involving poverty, fragmentation of services, unsafety, untreated trauma, and spatial inequity illustrate and support our thesis of isolation.
Dedication

To the women who shared their lives and stories with me and allowed me to make their invisible stories more visible, who showed compassion, humor (so much humor!) and incredible insights from such different perspectives than I had ever expected. I knew nothing. You taught me everything. I was able to be your storyteller. You were my sherpani, my guides through conversations about unsafe urban space, homelessness, and so much more. This is your research. These are your stories. Thank you.
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CHAPTER I: INTRODUCTION

The overall objective of this study is to investigate how homeless women perceive and navigate unsafe urban space. Through a two-step data collection process of mental maps and then interviews, the participants in this research identify, for example, unsafe locations, reasons for and responses to unsafety, and describe their navigation and movement through such space; perception of unsafety is foundational to this investigation. The research utilizes extensive demographic and spatial data analyses, involving Graphic Information System (GIS).

The specific research questions are:

1. What does housing insecurity look like for an unhoused woman?
2. In what ways are mental mapping a robust tool for gathering the stories (data) of vulnerable populations such as unhoused women?
3. What does the spatialization of unsafe locations look like and are demographic groupings dissimilarly affected?
4. What are the critical reasons for unsafety identified by participants?
5. How do homeless women respond to urban unsafety; that is, what strategies do they utilize?

Evolving from the examination of the research questions are themes of Housing Insecurity, Age and Living in Vehicles, Art of Mental Mapping, and Spatial Inequity. The thesis of Isolation provides an overall perspective and explanation of our research topic. The steppingstones to our understanding are research questions, themes, and thesis along with graphs and maps.
Two brief notes are warranted: First, in terms of the words “homeless” versus “unhoused,” the literature nearly always uses the word homeless; it is rare to see the phrase unhoused women in the literature or even policy documents. Homeless implies that those who are unhoused do not have homes, a statement which I refute. That assertion, of homeless women not having homes, reflects a bias inherent in much of the literature towards the unhoused population. Most of the participants indicated to me that whatever or wherever is their current housing is their home; I take my guidance from that. I use the words homeless and unhoused interchangeably here. Second, this document employs gender-neutral pronouns, that is, words which do not indicate female or male. Our literature should follow this practice.

My study attempts to contribute to the literature (such as urban unsafety, women’s perceptions and experiences with unsafety), methodology (e.g., use of mental mapping), and analysis of the phenomena of unhoused women navigating unsafe urban space, a topic which has been overlooked by researchers.
CHAPTER II: REVIEW OF KEY LITERATURE

This research investigation of homeless women perceiving and navigating unsafe urban space has its foundation in four related and intersecting literatures: urban poverty, homelessness, gender (specifically, homeless women), and urban unsafety, all with a geographic focus in the United States.

Clear parallels can be drawn between poverty and homelessness throughout the course of history. A study conducted by Fingfield-Connett (2010) confirmed that the key factors of homelessness are a growing shortage of affordable housing and a simultaneous increase in poverty. Poverty indicators have pointed to the same gender patterns over time. For example, “In 2014, 39.8 percent of single-mother families were poor, more than double the rate for all families with children” (Chaudry et al., 2016, p. 7). Also, there are more poor women/families headed by women than there are poor men/families headed by men; that places a larger proportion of women within the boundaries of poverty. Falling into poverty means a citizen is often one illness, accident, or paycheck away from living on the streets. Gaetz et al. (2013) write:

The millions of Canadian families and individuals living in "core need" (paying more than 50% of their income on housing) are at serious risk of homelessness, as are families and individuals spending more than 30% of their income on housing. Arguably, the most impactful factor is the lack of affordable housing nationwide; however, discrimination can impede access to employment, housing, justice and helpful services. Racial and sexual minorities are at greater risk of such discrimination” (p. 5).

(The patterns of homelessness are quite similar in the United States and Canada.)
The well-known writer on poverty, Katz (2013) states that social scientists have done relatively little to battle the image of the “underclass defined by behavior rather than poverty” (p.207). There was more attention paid to the behavior of the poor rather than “to its origins in the transformations that intensified poverty within the nation’s cities” (Katz, 2013, p.207). Katz refers to homelessness as an important theme of poverty.

Figure II.1 below shows a representation of the convergence of poverty, homelessness, gender, and urban safety. At a high level, poverty is measured in the United States by comparing a person's or family's income to a set poverty threshold or minimum amount of income needed to cover basic needs. People whose income falls under their threshold are considered poor. It is not the intent here to present a full discussion of poverty, poverty thresholds, or homelessness in the United States, rather to show poverty as the underlying basis and typically a precursor to homelessness. Simply, these women all have no or very limited income, at/below the poverty line, that has created or exacerbated their housing insecurity. That is my real starting point. Table V1.3 shows the participants’ income – all sources. Poverty is essentially a foundation or root cause of homelessness, this research explores other critical variables, such as gender, urban unsafety, housing insecurity, key demographics, spatial inequity. This broader model is fundamental to our discussion on how do homeless women perceive and navigate unsafe urban space?
Figure II.1 Poverty, Homelessness, Gender, Urban Unsafety

Examples of outliers to Figure II.1: An individual does not need to be in poverty to be homeless, and some people in extreme poverty can be housed through various
programs, e.g., Section 8. My primary focus is the relationship between Homeless Women (Section A) and their self-identified locations of Urban Unsafety (triangles), the area within the violet dotted line.

**A. Homelessness and Poverty**

To successfully research the ties between homeless women and urban unsafety, it is critical to have a rudimentary understanding of the history, contributing factors of homelessness, as well as the lived experiences of unhoused women in the United States.

Homelessness in the United States is, for the most part, a manifestation of extreme poverty and shares many of poverty’s historical dimensions, such as, marginalization, structural or individual contributing/causal factors, movement (trajectories) in and out of homelessness or poverty, and an absence of effective, sustainable solutions; the lack of adequate or accurate measures of both poverty and homelessness is another challenge. There is a long history of homelessness from the tramp (1890 – 1920s); the Great Depression (1930s); skid row (1940s – 1970s); deindustrialization with welfare protections wiped out (1980s); and the neoliberal period (1990s – current) (DePastino, 2003; Lee et al., 2010; Mitchell, 2012). Hopper (2003) sums up the chronicles of U.S. homelessness as “a tangled tale of contempt, pity, and curiously, blank disregard” (p. 26).

The homeless problem remained relatively small in scale until the mid-1970s. “Beginning in the late 1970s and accelerating in the 1980s, the nature of homelessness in the U.S. altered significantly, leading to a more diverse, and
much larger, street population than in previous decades” (Mitchell, 2012, p. 934). Structural factors produced a massive wave of new homelessness in the late 1970s – 1980s; such contributing reasons included:

- Uneven recovery, e.g., geographically, demographically, from the deep recession of the 1970s.
- A rapid slide into a new recession in early 1980s,
- Massive deindustrialization and the related resulting migration of jobs, populations, and monies to the suburbs, which often left the remaining metro urban residents without sufficient jobs, transportation to new jobs in the suburbs, or access to local monies.
- Urban development resulting in the destruction or closing of over 1.1 million Single Room Occupancy (SRO) units, where economically marginal people had often lived for decades (Arnold, 2004).
- The defunding of public housing and welfare programs.

From the 1990s on, homelessness continued to be defined in academic and popular writings as a set of individual characteristics and choices with the emphasis on individual responsibility (Mitchell, 2012). “The rise of neoliberalism seemed to be demanding a new, more commensurate legal order: new rules on welfare recipients…; laws governing the behavior of homeless people (enforced sobriety, as a condition of shelter, laws against sitting on the sidewalk)” (Mitchell, 2012, p. 946). In most U.S. cities there is now a large, visible street population of homeless individuals and families. Efforts to eradicate or reduce poverty or homelessness have simply failed both at an individual and structural level. There is also a population of homeless individuals, typically women, who wish to maintain a state of relative invisibility, as they believe their personal safety depends on it.
Mitchell (2012) endorses a structural perspective as the cause of homelessness: “The visible homelessness is a chronic...condition, is an inevitable feature of American-style capitalism...and is structurally determined” (p. 950). In the classic investigation of homelessness and women, Finfgeld-Connett (2010) agrees with Mitchell and further specifies that the key causes of homelessness are an increase in poverty in concert with a growing shortage of affordable housing. Some social scientists (Creswell, 1996; Harvey, 1982; Massey, 2005; Mitchell, 2012; Rose, 1993) posit that the systematically disadvantaged and disenfranchised groups, such as the homeless or women of color, are created and determined by processes such as “changes in the labor markets, the minimal rise and thorough evisceration of the welfare state, the destruction of low-cost and public housing through disinvestment, gentrification, and the neoliberal shift towards market solutions for low-income housing” (Mitchell, 2012, p. 950). Throughout history the explanation of, and the assignment of responsibility for, poverty and homelessness move from individual to structural factors and vice versa. Wright (2000) declares that structural explanations of homelessness are merely descriptive unless they are linked to the broader social, political, and economic factors of why these inequities exist. Paradis (2006) suggests that to understand and explain women’s homelessness, a framework of power relations, such as colonization, patriarchy, and globalization, is essential.

Like the experiences of poverty, the lived experiences of the unhoused are unique to the individual, yet clearly demonstrate an overarching pattern in which
marginalized groups, such as non-whites, women, the elderly, and the disabled, have higher rates of homelessness and a greater likelihood of chronic homelessness. Interestingly, traditional methods of measuring poverty levels (most often based on household income) never capture the poorest of the poor. Homeless individuals are not typically part of a household as defined by the census and often do not have a source of reportable income.

Those individuals or families who are in deep poverty are more likely to fall into an unhoused situation, e.g., through job loss or eviction. There is a fluidity of movement between individuals being housed but living in deep poverty and being unhoused: Individuals may become homeless but upon finding employment, they often locate housing as well, but they can once again become homeless if they lose their jobs and cannot pay their rent. The homeless community are “off the grid” in terms of these patterns and their stories are not reflected in cross-sectional statistics. That is, marginalized as a group, the homeless are excluded from such data which are foundational in academic research, public policy, funding decisions, and service provision.

Although homeless women…have existed since the beginning of recorded history, they have been politely ‘not seen’…Consequently, very little is known about their experiences (Martin, 1987, p. 33).

Any discussion regarding homeless women should include the concept of gender: Gender “is defined as a constituent element of social relations based on perceived differences between the sexes, and as a primary signifier of power creating unequal access to resources. It is societal and structural in nature”
(Bennett & Daly, 2014, p. 15). Furthermore, the literature on gender demonstrates “how market-dominated housing policies disadvantage women, particularly female-led households, based on a gendered division of labour, in terms of a segmented labour market and responsibility for familial care, and widespread sexist and racist discriminatory practices, including various forms of violence against women” (Wekerle & Nova, 1991, p. 2). The discussion of homelessness and women clearly takes place within the realm of a structural perspective.

To assist in explaining the phenomenon of homeless women, critical themes include marginalization and exclusion, invisibility, and violence with resulting trauma. These themes occur within and are an intrinsic part of the hegemonic structural framework where males have power and privilege and women do not. Such relationships based on power enable the ongoing production and reproduction of marginalization, domestic violence, gendered spaces, and the unfair and inequitable experiences of unsafety. These are logical and understandable manifestations of extant structural institutions and processes. This is our starting point and the basis from which my research begins.

B. Unhoused Women: Marginalization and Invisibility

Bassuk (1993) maintains that poor women experience marginalization in society, and their issues are compounded when they lose their housing. “Many homeless women have inadequate education, poor earning power, limited job opportunities, overwhelming child care responsibilities, and fragmented support
networks” (Bassuk, 1993, p. 340). Finfgeld-Connett (2010) nicely sums up the reality of being an adult homeless woman:

Homeless women are ill-prepared to prevent and resolve homelessness. Resolution of homelessness involves overcoming complex interconnected stressors...These women grapple with an array of physical and mental health problems, including sub-clinical anxiety and low self-esteem, substance abuse, mood disorders, and psychosis. Homeless women must cope with unmonitored pregnancies, sexually transmitted diseases, malnutrition, and chronic conditions (p. 462).

Homeless women have long been a forgotten demographic and/or have become a point of reference to illustrate such “phenomena as the feminization of poverty or the negative results of neoliberal social policies” (Klodawsky, 2006, p. 366). Bullock (2013) suggests:

Homeless men and women in the United States face many of the same challenges – lack of affordable housing and widening gaps between earnings and rents—but for women, barriers to secure housing are intensified by the same factors that heighten vulnerability to poverty – low wages, the devaluation of women’s work at home and in the workplace, single parenthood, a safety net that has failed to keep pace with expenses, and violent, abusive relationships (p.8).

From an academic perspective, marginalization and invisibility are often interchangeable and therefore not delineated as separate dimensions of women's homelessness. The literature suggests that homeless women are less noticeable than their male counterparts. In addition, there is substantial evidence that women’s homelessness is more likely to be ‘hidden’ (Kappel Ramji Consulting Group, 2002; Novac et al., 1996; Watson & Austerberry, 1986). One study notes that “Street homeless women typically disappear into the shadows of both the housed and the homeless city” (May et al., 2007a, p. 125). In their classic
ethnographic research on unhoused women, Liebow (1993) estimates that for everyone visibly homeless woman, there are ten or twenty less visible homeless women. Edgar and Doherty (2001) suggest that "reports indicate that the typical form of homelessness among women is 'hidden' homelessness" (p.231). In their innovative study on homeless women in Canada, Klodowsky (2006) states: “There is considerable evidence that women’s homelessness is more likely to be ‘hidden’…meaning that homeless and unstably housed women have been less visible on the street” (p. 368).

Watson (2000) claims that the definition of homelessness can determine if women are excluded and invisible from, for example, statistics utilized in policy decisions, and service provision. Edgar and Doherty (2001) concur: “If homelessness is defined as rough sleeping, or as single homelessness, then women’s homelessness becomes invisible. Therefore, it is not counted and is underestimated” (p. 168). Furthermore in a similar fashion, homeless woman are often overlooked in academic research: There are “first a paucity of research on homeless women in their own right and… second the lack of studies which examine underlying reasons for residential instability from homeless women’s own perspectives” (Tomas & Dittmar, 2007, p. 493).

Significant swaths of research show that homeless women more frequently adopt informal strategies for survival, such as staying with friends or attaching themselves to housed men (Klodawsky, 2006; Liebow, 1993; Mayock & Bretherton, 2017). An exploratory study by Tomas & Dittmar (2007) demonstrates
that many homeless women choose to leave a housed situation in order to avoid ongoing verbal or physical abuse occurring in the home. Interestingly, this research suggests that housing may be the problem and homelessness a solution to domestic violence, which counters most research findings that the homelessness of women is the issue and housing the solution. Finally, unseen homelessness among women may also result from the adoption of their specific survival responses in response to visible homelessness (Edgar & Doherty, 2001; Watson, 2000).

A further intriguing and innovative contribution to the discussion of visibility of homeless women was made by May et al. (2007) – drawing on in-depth interviews of 19 visibly homeless women, the study delineates four alternative cartographies of homeless women. Each category describes an extremely different gendered identity, and furthermore anchors their analysis of these identities to the geographic spaces the women live in. This approach is strongly supported in these words: “the axes of identity…never operate aspatially but are bound up with the particular spaces and places within which, and in relation to which, people live” (Bondi & Rose, 2003, p. 232).

The four aforementioned cartographies are categorized between those homeless women who: 1. distance themselves both mentally & physically from homeless spaces and identities; 2. exist in the shadows of the street (i.e., visible) homeless; 3. are clearly observable and hence labelled directly as homeless; or 4. though sharing homeless spaces, have been understood not “as ‘homeless’ at all
but marked with a quite different identity” (May et al., 2007, p. 126). The authors’ juxtaposition of identity with space illustrates research concepts critical to this project, such as the ideas of:

- **Perception** -- the dominant assumption that street homelessness is male
- **Activity** -- the “unacceptable” way in which a homeless female enters into or traverses across established public, private, or other boundaries. These movements have been termed *transgressions* (Creswell, 1996, 2004).
- **Space** -- the awareness of strongly male dominated spaces
- **Responses** -- the activation of strategies or responses by women to avoid specific difficulties and dangers.

**C. Unhoused Women: Trauma**

As is well known, there is a prevalence of trauma and violence among marginalized, poor women – specifically and especially homeless women. Jasinski et al. (2010) state that nearly all research on violence against vulnerable women has been primarily focused on establishing the fact that the offense occurred, rather than “exploring the context and experience of this violence, especially in terms of contributing factors, the role of violence in the etiology and dynamics of homelessness among women, or the consequences of violence in other areas of these women’s lives” (p.1). Research has focused more on the statistics of the crime than the human experience; this dissertation examines the lived experience and perception of unsafety more closely.

Domestic violence (DV) is a very under reported crime: in the United States alone, the National Coalition Against Domestic Violence (n.d.) estimates that 1 in
3 women and 1 in 4 men have been made victims of physical violence by an intimate partner in their lifetime. According to statistics compiled by the National Law Center on Homelessness and Poverty (2008), nearly 25% of all women have experienced domestic violence, with homeless women having a rate closer to 40%. Jasinski et al. (2010) reviewed research on homeless women and victimization over the past 20 years or so, finding common patterns such as:

- 90% of homeless women experienced one or more violent events.
- 61% of homeless women experienced major violence perpetrated by a male partner, a much higher rate than that reported by poor but housed women.
- 34% of the homeless women experienced major violence in the year before the interview.

“The average homeless woman in the Los Angeles study experienced as much major violence in one year as the average American woman experienced in her entire lifetime” (p.3).

For the purposes of this dissertation, *trauma* is the range of responses to an overwhelming event or series of events that contribute to a person becoming helpless or powerless with a threat of bodily harm. Trauma appears to be the underpinning for many of the perceptions and/or responses of homeless women to the travails of urban unsafety. *Domestic violence* is violence, physical or otherwise, enacted by one person against another in a domestic setting. Domestic Violence Resource Center Victoria (2012) suggests that “it [domestic violence] is a pattern of abusive behavior which a person seeks to control and dominate another person” (para.2). This is not a single incident, but rather a pattern of
ongoing behavior manifesting in many ways, e.g., physically or sexually assaulting a victim, isolating them, diminishing their self-worth, intimidating or threatening them, controlling their monies (Domestic Violence Resource Center Victoria, 2012).

Statistically speaking, women are much more likely to be victims of sexual assault than men (Belknap, 2007). Studies have found that homeless women report exceptionally high rates of sexual and physical assault when compared to the general population (Anderson et al., 2003; Paradis, 2000). Others show that violence is a primary cause of homelessness among women, youth and families (Kappel Ramji, 2001; Novac et al., 1996). In addition, some researchers suggest that trauma itself directly links violence and women's homelessness (Goodman et al., 1991). These studies posit that many homeless women are trauma survivors, that homelessness itself is traumatic, and that ingrained responses create continual problems interfering with a women’s ability to get or keep housing, a job or to even carry out daily activities. To ensure that homeless women who participate feel and are safe and comfortable, this research project has embedded a trauma-informed care approach into the research framework – a method not explicitly executed by other studies of marginalized women.

D. Unsafety and Women’s Experiences

This section explores the concept of unsafety first and then women’s experiences and responses to unsafety.
What is Unsafety?

Jacobs (1958, 1961) asserts that sidewalks are the one thing that makes a city safe or unsafe. When people claim that a city “is dangerous or is a jungle, what they mean primarily is that they do not feel safe on the sidewalks” (Jacobs, 1961, p. 34). Jacobs (1961) claims that sidewalks, whose main purpose is circulation, are intended and designed as a well-organized way to get people around on foot. The more public places (e.g., businesses) present in the urban landscape, the more of the populace who will use the streets, which creates additional public places bringing more people. Through this cycle, sidewalks and urban spaces become safer. Loukaitou-Sideris & Ehrenfeucht (2011) consider sidewalks to be spaces where citizens display various identities allowing for interaction among those in the neighborhood, which fosters a safer, more usable, more desirable urban landscape. Key themes of urban safety include people walking through and being visible in urban space; neighbors and businesses interacting with each other; space not being deserted or empty; and the type of urban space (public, private, hybrid, etc.).

For this research project on homeless women and urban unsafety, the following definitions are employed:  *Fear of crime* is when a subject feels less protected in public space – exhibiting fear, insecurity, or vulnerability while simultaneously sensing that their personal safety is at risk (Tandogan & Ilhan, 2016; Visser et al., 2013). *Feelings of unsafety* are feelings individuals have that
other people will harm them (Visser et al., 2013). These concepts, along with *urban unsafety*, shall be used interchangeably.

Loukaitou-Sideris (2006a) suggests that fear is an emotional response of anxiety to actual crime or the perception of such, finding a directly causal relationship between fear and perceived risk. Ferraro (1995) argues that “to produce a fear reaction in humans, a recognition of a situation as possessing at least potential danger, real or imagined, is necessary” (p. 4). This distinction is critical for understanding urban unsafety and hence for this research project: that *safety or unsafety can be perceived or actual*. Objective criterion (e.g., crime rates in a neighborhood) and perceptions affect and shape individual actions, beliefs, and behaviors (Ferraro, 1995). Thus far the literature has treated fear of crime and feelings of unsafety in a static manner, not properly reflecting the complex and dynamic, constantly changing and progressing, nature nor the spatialization of unsafety. Violence (perceived or actual) permeates and is an intrinsic dimension of the environments in which women live, work, traverse through, and pursue life activities.

The literature, e.g., (Doan, 2010; Koskela, 1997; Loukaitou-Sideris, 2004, 2006; Loukaitou-Sideris & Fink, 2009; Pain, 1997; Valentine, 1989) shows that features of public space perceived to be unsafe by women include:

- *Large, open space* -- e.g., parks, empty lots
- *Closed spaces* with limited exits where concealment is possible -- e.g., parking garages, subways, alleys
- *Deserted open spaces* – e.g., empty basketball courts
• *Public transit* – e.g., transit stops, buses
• *All night businesses* – e.g., laundromats
• Streets or locations where there might be a *larger number of men*
• Most places at *night*, and
• New, unfamiliar locations

Note that my research terms these characteristics of unsafe space as “categories of reasons for unsafety.”

**Women’s Experiences - Responses**

We must cease to perceive the city as a dangerous and disorderly zone from which women -- and others -- must be largely excluded for their own protection...it is the male-female dichotomy that has so damagingly translated itself into a conception of city culture as pertaining to men. Consequently women have become an irruption in the city, a symptom of disorder, and a problem: the Sphinx in the city (Wilson, 1992, p. 9).

Gender and public versus private space represent critical differentiating factors regarding how an individual responds to and experiences urban safety and unsafety. Women and men have different fears, responses, and actual experiences of violence. Females have a lower victimization rate (i.e., reported crimes) than do men, yet are more fearful than men (Gilchrist, 1998; Pain, 2000; Whitzman, 2007). Women’s experiences of violence or unsafety “often remain known only by women themselves” (Stanko, 1990, p. 10). Harassment and other threatening situations serve as a constant reminder to women of their vulnerability, which can cause additional fear (Koskela, 1997; E. Stanko, 1990). Women are often taught to fear all men or all strangers, while men learn to fear those who appear to be threatening (Abelsom, 2014). “For example, while women will avoid leaving the house at night altogether, men will venture out but will avoid walking
past a particular bar because rowdy drunk men are out front” (Abelsom, 2014, p. 54).

There is also an interesting public versus private space dimension to women and urban unsafety. Research data show that the vast majority of sexual assaults on women are carried out by men they know, often in domestic (private) spaces (Palin, 1997); nonetheless women fear sexual assault from strangers in public space (Koskela, 1997; Elizabeth Stanko, 1995) more so than from acquaintances in private space. “Feelings of vulnerability cannot be expected to be spatially divided; in women’s mind there is often no opposition between private and public dimensions of fear” (Koskela, 1997, p. 313). While not part of this paper, the type of space can be challenging to clearly determine. For example, some locations can be private but with access available to the public – e.g., many parking lots to private businesses. Other space is termed public but can have extensive restrictions on access and use of the public space, such as public parks.

The findings are clear that women’s perceptions of harassment (sexual, physical, verbal), assault, rape, etc., in a public space makes that space more dangerous for them. This pattern may seem counter intuitive yet is foundational in understanding women’s perceptions of unsafe urban space. Valentine (1989) finds that most women have had at least one frightening experience of harassment (sexual or otherwise) in a public place, such as being followed, having insulted or sexist remarks made, or being groped. Yet it is not just the potential violence in public spaces that causes fear, childhood experiences in private spaces can also
exacerbate a woman’s fear of public urban space (Pain, 1991). That is, as discussed in Chapter VI Demographic Analysis, my research project delves into some of childhood trauma experienced by the participants, unhoused women; such experiences often intensify women’s feelings (perceptions) of vulnerability. This fear leads them to adapt their behavior, including avoidance, in public spaces (Abelsom, 2014; May et al., 2007). Yet as Koskela (1997) notes, if women restrict their mobility because of fear, “this may reduce the number of attacks on women, but it does not reduce their risk [real or perceived] of attack if they go out” (p. 304).

When I’ve felt threatened [in urban space], space suffocatingly surrounds me with an opacity that robs me of my right to be there…Space almost becomes like an enemy itself” (Rose, 1993, p.143).

Such awareness of perceived or actual violence “is a part of women’s everyday lives and surges up in places where they pursue their ordinary activities” (Condon et al., 2007, p. 113). In their cross-national comparative study of fear of crime and feelings of unsafety, Visser et al. (2013) postulates that crime, fear of becoming a victim, and feelings of unsafety can have damaging effects on individuals, social networks, neighborhoods, and societies as a whole; Hale (1996) concurs. Fear of crime is strongly correlated with lower levels of self-reported health (Jackson & Stafford, 2009) and with a lowering of trust in others, as well as less participation in social activities overall (Stafford et al., 2007).

Thus, overall women are more vulnerable to physical attack than men, are less able to defend themselves, have less control over their personal and private space compared to men (Pain, 1993, 1991), suffer more routine sexual harassment which leads to higher levels of fear (Stanko, 1990), and experience
higher rates of rape and sexual assault than do men (Whitzman, 2007). The experience of violence is also dependent upon elements of individual identity, e.g., gender, age, ethnicity, sexuality. Day (2001) states that “fear in public space is shaped by one’s identity – including race, class, and gender. It is misleading to speak of women’s fear as if it were uniform” (p. 118). d’Arbois de Jubainville & Vanier (2017) suggest that, for instance, “older or less educated women experience insecurity during the day, whereas those who are younger or more highly educated feel unsafe at night” (p. 184). Stanko (1990) and Pain (2001) suggest that gender is not the critical distinguishing factor in perception of unsafe urban space, rather point to economic and social powerlessness and its associated exclusion as determining factors. In Spatial – Un safety Analysis (Chapter VII), the analysis clearly identifies social stratification among the participants and related impacts, e.g., their use of space.

More vulnerable groups, e.g., homeless women, have adopted a space-based and/or time-based restrictive use of public space. When they consider travelling through unsafe urban spaces, “women easily react by limiting their mobility...their social experiences turn out to have spatial consequences” (Koskela, 1997, p. 313). My Pilot Research (Appendix A) suggests that a place perceived to be unsafe by homeless women is not universally viewed as such; it depends on who else is in that space, what other activities are going on within the physical parameters, time of day, etc. Utilizing an ethnographic research framework in their study of hybrid space, Perry (2013) interviews and hangs out
with patrons who frequent a 24-hour donut shop: the housed use this shop during daytime hours, the unhoused coming in only at night. Perry (2013) concludes that while some urban spaces serve dual roles, the homeless adopted a time-based restriction of the donut shop. “The relegation of the homeless to limited types of space [and at restricted times] is a spatial manifestation of their more general marginality” (Lee et al., 2010, p. 505).

There can be diverse responses from women regarding their perception and adaptation to unsafe urban space. Avoidance is far and away the predominant strategy or response adopted by women when in unsafe urban places. “Avoidance is defined as distancing oneself from places, times, or individuals perceived dangerous (d’Arbois de Jubainville & Vanier, 2017, p. 185). Various studies (e.g., Koskela, 1999; Loukaitou-Sideris, 2004) propose that women in public space typically adopt a defensive vigilance, that is, “always being aware of others (usually of the sex or of other’s race) who are using the same space” (Loukaitou-Sideris, 2004, p. 104).

When perceiving unsafe space, marginalized women respond in ways such as:

- Avoiding the unsafe space,
- Sticking to more well traversed streets and locations,
- Changing the times and means of travel,
- Avoiding lines and public transit,
- Choosing alternate bus routes or simply changing locations,
- Moving about the city in the day light,
- Travelling with companions, especially at night,
• Going outside less and often reducing communications with others (Tandogan & Ilhan, 2016),
• Reducing walking distances, and
• Tending to stay near their home.

Avoidance behavior can also be related to demographic characteristics such as age and education. D'Arbois de Jubainville & Vanier (2017) conducted a study of how and whether female passengers in the Ile-de-France region between 2010 – 2013 changed their routines when feeling unsafe in the transit environment. Results showed that education, previous victimization, and perceptions of unsafety are consistently associated with time-based and space-based avoidance. Specifically, they found that women with less education are less likely to develop any type of avoidance behavior, while more educated are more likely to. Females with ages 66 and over are more likely to have time-based and space-based avoidance actions.

“Time-based avoidance is more frequent than space-based avoidance” (d'Arbois de Jubainville & Vanier, 2017, p. 194). Yet all responses result in a restricted use of public space by women, especially marginalized women, which can be characterized as spatial inequity (Lobao et al., 2007). Yavuz and Welch (2010) propose that “women’s fear of public space limits their freedom and enjoyment of public life and restricts their ability to benefit from opportunities and convenience” (p.2491). In an interesting conclusion, Doran and Burgess (2011) suggest that analyzing avoidance responses (time-based or space-based)
produces “spatially explicit” results. Findings from my research address spatial inequity Chapter VII.

E. Adapted Framework: Women’s Responses to Unsafty

There is no widely accepted framework for urban unsafety and women’s responses. I reviewed and adapted three research frameworks used in studies on safety and women. These are representative of the literature and offer a foundation for a significant component of my research. I provide a brief review of these three studies, followed by a table with a summary of key dimensions that I pulled out, and then the Adapted Framework of Women’s Responses to Unsafty.

First, Visser et al. (2013) conducted a study to examine fear of crime and feeling of unsafety. Their framework includes individual, structural, and mediating (e.g., individual perceptions or emotions) factors which can impact their two defined outcomes: fear of crime and feelings of unsafety. Key findings include:

- **Structural factors** -- Actual crime rate is an important determinant of the level to which people fear crime but does not correlate with feelings of unsafety. People who show higher levels of distrust feel less protected in public space (fear of crime) and are more afraid that other people will harm them (feelings of unsafety).
- **Individual factors** -- Victims of crime tend to have higher fear of crime and feelings of unsafety than those who have not been victimized. Women more than men tend to be such victims and show higher levels of both fear of crime and feelings of unsafety than men. Women with more resources such as higher education or income tend to show lower levels of feelings of unsafety as compared with women with fewer.
resources. Also fear of crime and feelings of unsafety are higher among people who are older or isolated.

Second, social work has a substantial literature, both academic and practice-oriented, on safety planning. Lindhorst et al. (2005) state: “Traditional safety planning is a vital component of helping battered women in crisis to achieve safer situations. Safety planning is a crisis-oriented approach that focuses attention on immediate safety needs” in women’s environments (p. 331.) In a program which supplied direct services to battered women, these researchers gathered data, developed a framework, and later pushed the framework out for use by practitioners. I am most interested in their framework of appraisals (perception and evaluation of a threat, response options), strategy for multiple harms, and action.

Phase one involves developing the awareness of a threat and the individual evaluation of its potential for harm. The next phase focuses “on what can be done about the troubling event” (Lindhorst et al., 2005, p. 335). Step three entails the assessment and prioritization of options. The final phase involves taking safety related actions, involving adaptive responses. I utilized their concept of phases but had two adoptions to their model: Phases take place in a dynamic fashion, not in a static manner as their model shows, and further as Visser et al. (2013) propose, all of this occurs within an integrated framework of individual, structural, and mediating factors.

Third, Loukaitou-Sideris (1999, 2004, 2007, 2009) has written extensively on safety – e.g., walking in a neighborhood, women’s fear of victimization and
crime in cities, safety around bus stops, neighborhood unsafety affecting physical activity, and the influences of built and environmental factors. Much of her research focuses on design and policy interventions to enable safer neighborhoods; her research is typically mixed methods. Loukaitou-Sideris conducted two studies, the first which examined women’s fear of victimization in urban transportation settings (2009) and the second which explored unsafe walking, leading to death, in urban streets in Los Angeles (2007). The themes I am interested in are safety factors while walking in a neighborhood and related, women’s fear of victimization and crime. I modified Loukaitou-Sideris (2006) conceptual framework in two ways: First, they are concerned with the nexus of health and physical inactivity, especially among marginalized groups, which is not my focus. Further, I added two steps to her framework to better illustrate change in perception and strategy adopted.

I include here a summary and synthesis of these three research frameworks (Lindhorst et al., 2005; Loukaitou-Sideris, 2006; Visser et al., 2013) to illustrate how I derived my Adapted Framework. Across the top are the research frameworks and my research; down the left are different dimensions or elements from the dissection and synthesis of these. Table II.1 displays this.
## Table II.1 Adapted Framework: Summary and Synthesis

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Discipline</td>
<td>Sociology</td>
<td>Social Work</td>
<td>Built Environment &amp; Physical Activity</td>
<td>Urban Studies, Sociology, &amp; Geography</td>
</tr>
<tr>
<td>Research Method</td>
<td>Mixed Methods</td>
<td>Practitioner-Oriented</td>
<td>Mixed Methods</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Integrated Framework:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Factors</td>
<td>Yes</td>
<td>No</td>
<td>Yes, to an extent primary focus on environmental factors</td>
<td></td>
</tr>
<tr>
<td>Individual Factors</td>
<td>Yes</td>
<td>No</td>
<td>Yes, to an extent a focus on socio-demographic and socio-psychological factors</td>
<td></td>
</tr>
<tr>
<td>Mediating Factors</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic Framework</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on Women?</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Phases for Responding to Unsafty?</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td>Yes - My research did not include men.</td>
</tr>
<tr>
<td>Unsafe Actual Reported Crime?</td>
<td>Yes, to an extent</td>
<td>No</td>
<td>Yes</td>
<td>Reported crime data was not used in my research, these crimes may have had an impact on homeless women's perception of unsafe</td>
</tr>
<tr>
<td>Unsafe Perceptions/Feelings?</td>
<td>Yes, to an extent</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes - Perceptions &amp; Feelings</td>
</tr>
<tr>
<td>Utilized GIS?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes - GIS</td>
</tr>
<tr>
<td>Mental Maps?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes - Mental Maps</td>
</tr>
<tr>
<td>Unsafe Urban Space terms used?</td>
<td>Fear of Crime;</td>
<td>Threat; Potential Harms</td>
<td>Fear of Victimization; Fear of Crime</td>
<td>Unsafty</td>
</tr>
<tr>
<td></td>
<td>Feelings of Unsafty</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
F. Gaps

Critical gaps exist in the literature on urban unsafety and homeless women. These include but are not limited to the exclusion of homeless women from
research, urban unsafety, use of mental maps, incomplete or misleading conceptualizations or research framework, and ethical considerations.

First, a critical methodological flaw involves the failure to notice and include homeless women in research and policy. “Historically, women and girls both as victims and offenders were usually left out of the studies or if included, were typically done so in sexist and stereotypical ways” (Belknap, 2007, p.5). Earlier studies focused on men’s experiences and simply substituted women for men without any modification or adjustment due to gender. Daley & Chesney-Lind (1988) have dubbed this the “add women and stir” approach.

Recall our discussion above of the near invisibility of homeless women. Homeless women are a challenge to locate to participate in research. I have access to this population and seek out women who are nearly invisible to standard social research; the normal approach to social research is not effective with this subset of the homeless population. Via mental mapping, interviews, and GIS, my investigation concentrates on these "almost invisible" women and tries to describe the way that they construct their own practical worlds daily.

An additional omission in the literature encompasses the definition of urban unsafety. It has been framed in ways such as actual reported crime statistics (e.g., Lopez & Lukinbeal, 2010), fear of becoming a victim (e.g., Hale, 1996), and as feelings of unsafety (e.g., Visser et al., 2013). Jasinski et al. (2010) notes that research on homeless women and unsafety has focused on establishing that the violence did occur (objective), yet has not explored contributing risk factors, how
violence shapes the etiology and dynamics of homelessness, the consequences of violence in other dimensions of the women’s lives, or women’s perceptions of and responses to urban unsafety. As mentioned previously, safety or unsafety can be perceived or actual; this is a critical distinction. Thus, my dissertation documents the lived experiences of homeless women and unsafe urban space and focuses on their perceptions and feelings of unsafety.

The next gap is the lack of mental mapping utilized in mainstream literature. To be clear, there have been some excellent studies using mental maps such as:

- Using a mixed-methods approach combining mental maps with GIS, participant observation, and interviews, Lopez and Lukinbeal (2010) investigated the differences in perceptions of crime and safety between residents and police officers in a Phoenix neighborhood. Some of the participants lived in deep poverty, a few were homeless.
- Using mental maps and focusing on feelings (e.g., fear, stress) of their neighborhood, Matei et al. (2001) studied the perception of urban space as comfortable or fearful as an outcome of the participating residents’ perceptions of their residential area. There were no homeless participants.
- In a classic study Orleans (1973) used mental maps to explore the differences in knowledge of their neighborhoods and city of various groups in Los (i.e., White, African American, Hispanic). The White participants had detailed knowledge of the city and neighborhood; African Americans were significantly less familiar with their geographic area, primarily the main streets leading into their neighborhood; Hispanics presented the least knowledge of the city and neighborhood, mostly of their immediate neighborhood, City Hall, and the bus depot.
I suggest that Townley et al. (2016) have carried out top shelf research in their utilization of participatory mapping (mental mapping) and GIS to examine the activity spaces of homeless youth. The mental map is a relatively well-established tool for gathering information, often from marginalized populations. My research also afforded an often-invisible group an opportunity to make themselves and their stories more visible through the “radical” aspect of mental mapping. Furthermore, using mental mapping as a research tool with vulnerable participants can be an act of agency and power as they create the research by articulating their stories. This study has utilized mental maps in a way that has not been done previously.

The next gap involves the lack of a clear definition of “homelessness.” “There has been remarkably little consensus among policy makers, researchers, local authorities and voluntary housing organizations as to how to define the term ‘homelessness’” (Watson & Austerberry, 1986, p. 60). Further, Watson (2000) suggests that homelessness is a “historically and culturally specific phenomenon and a relative concept, like poverty” (p. 165). The range of definitions used in policy and research reflects a continuum from:

- **Narrower** – such as: “An individual who lacks a fixed, regular, and adequate nighttime residence” (Homeless Emergency Assistance and Rapid Transition to Housing Act of 2009, P.L. 111-22, Section 1003, 2012), to
- **Broader** – e.g., “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability,
widowhood, old age or other lack of livelihood in circumstances beyond his control” (United Nations, 1948, sec. 25).

These research frameworks of homelessness can also range from a structural-failings model (e.g., Marxist, feminist) to an individual responsibility (e.g., neo-liberal). Such varied definitions and approaches make a systematic review or analyses of research and policy on homelessness challenging, if not impossible.

I have employed a relatively broad and inclusive conceptualization of homelessness: The homeless, for the purposes of this dissertation, shall be defined as those who do not have a daytime or nighttime residential space that is their own from which they do not have to involuntarily move or leave. Yet as my findings have shown, a more comprehensive understanding of homelessness must include the notion of housing insecurity: Housing insecurity encompasses individuals and families who are homeless living Outside (in tents, in vehicles, or on the streets) or living Inside (in shelters, in recovery/supportive programs, couch surfing, or in temporary housing with vouchers.) One of the themes which emerges from my research is housing insecurity.

Finally, a common methodological shortcoming of current research on homeless women is the failure to explicitly acknowledge homeless women as a vulnerable population. Many researchers do not discuss the proper research steps required to ensure that homeless women are protected, that is, that they feel safe and comfortable during their research participation. In their wonderful ethnographic study of street and sheltered homeless people, Wasserman and Clair (2010a) wrote of the homeless’ marginalization and narratives. However, they did
not explicitly incorporate or talk of ways in which they would ensure that these individuals were protected during the research. In their classic ethnographic research, Liebow (1993) clearly addressed the extreme vulnerability and fragility of his population, women living in an overnight shelter, but also did not incorporate or talk about ways of protecting the participants during the research process. I find this a critical research shortcoming when involving vulnerable groups such as homeless women. I have taken steps to address this issue, such as embedding a Trauma Informed Care approach into my research framework.
CHAPTER III: ETHICAL CONSIDERATIONS

Ethical considerations include the safety and protection of the research participants, my positionality as researcher, and the narrative voice. Researchers (such as Fine, 1992; Mulvey, 1988; Serrano-Garcia, 1990) have called for social science research to better support the interests of marginalized groups. Furthermore, research ethics should prevent exploitation of the research relationship, (e.g., (Grossman et al., 1997; Townley et al., 2016; Wasserman & Clair, 2011), and should enable the research to promote the interests of the marginalized groups (Paradis, 2000; Rappaport, 1990). My research explicitly embraces this approach.

A. Trauma Informed Care Framework

Homeless women are a vulnerable group; to ensure that these participants feel safe and comfortable, I adopted a trauma informed care approach (TIC). Key definitions include:

- Trauma: As discussed above, trauma is an overwhelming event or events that contribute to a person becoming helpless or powerless and which creates a threat of harm or loss. “Traumatization occurs when both internal and external resources are inadequate to cope with the external threat” (Van der Kolk, 1989, p. 404).

- Trauma informed care: TIC is a strengths-based framework grounded in an understanding of and responsiveness to the prevalence and impact of trauma. TIC emphasizes physical, psychological, and emotional safety for both providers and survivors and can create opportunities for survivors to rebuild a sense of control or empowerment.
Activated or triggered: These responses/behaviors occur when the stress response system has been agitated by an environmental or human encounter.

Research integrating a TIC approach has clear boundaries; privacy and confidentiality; and respect for diversity, cultures, genders, ethnicities, and sexual (Berzoff & Kita, 2010; Hopper et al., 2009; Jennings, 2004; Substance Abuse & Mental Health Services Administration, 2012; Trauma Informed Oregon, n.d.; Volk, 1989).

I established a field research advisory group (FRAG) of subject matter experts (SMEs) who guided and advised me regarding the participation of homeless women in my research. These SMEs had different levels of experience and engagement with a traumatized, vulnerable population. The objectives of FRAG were to ensure that:

- The research followed agreed upon community guidelines and protocols,
- The guidelines and protocols followed a basic trauma-informed care (TIC) approach,
- Research participants were and felt safe,
- Research participants were comfortable enough to share their lived experiences, and
- Proper ad hoc advice was given to the researcher.

Such an advisory group is like community advisory boards in community-based or participatory research (Cammarota & Fine, 2008; Cosgrove & McHugh, 2000; Loewenson et al., 2014; Mount Sinai Hospital, n.d.; Newman et al., 2011). These
community advisory boards typically formalize an academic-community partnership such that community members (participants) have representation in and/or control over research activities.

While the scope of my FRAG was more informal and narrower than community advisory boards, nonetheless they provided ongoing advice, guidance, and insights to me on various aspects of the research process which became questions or concerns for me. I had regularly scheduled calls and many ad hoc discussions with FRAG. FRAG was a critical component in my research process to ensure the systematic quality of trauma informed practices, which led to the amazing quality of stories from the participants.

The research process initially utilized a method called the Tap Out Method for a participant to signal to me that they were feeling triggered or uncomfortable during the interview; this method is used extensively in outreach work with homeless individuals. Tap Out involves a visual signal to me with the use of two hands; the woman does not have to mention the reason for feeling triggered.

**Figure III.1 Tap Out Method**

<table>
<thead>
<tr>
<th>Participant Feeling</th>
<th>Possible outcome</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Slight</em> triggering or uncomfortable feeling</td>
<td>Needs to pause a moment</td>
<td>Participant will use one finger from one hand to tap the palm of the other hand</td>
</tr>
<tr>
<td><em>Moderate</em> triggering or uncomfortable feeling</td>
<td>Needs to pause a moment. Perhaps needs to stop talking about the current topic</td>
<td>Participant will use two fingers from one hand to tap the palm of the other hand</td>
</tr>
<tr>
<td><em>Intense</em> triggering or uncomfortable feeling</td>
<td>Needs to stop talking about the current topic; Perhaps needs to cease participating in the research questions altogether</td>
<td>Participant will use three fingers from one hand to tap the palm of the other hand</td>
</tr>
</tbody>
</table>
Note: I did not use the Tap Out Method extensively, as it was too cumbersome. The participant and I developed a close, almost intimate relationship and I visually assessed if a break was needed.

B. Positionality

Positionality “reflects the position that the researcher has chosen to adopt within a given research study” (Savin-Baden & Major, 2013, p. 71). This impacts both what is studied and how research is conducted (research process), outcomes, and findings (Rowe, 2014). Positionality can be viewed as the degree of relation of the researcher to the study participants along dimensions such as culture, race/ethnicity, gender, age, sexual orientation, lived experiences (Rowe, 2014). Core to this are the notions of:

- insider – outsider, a common theme in human geography. The researcher is an outsider while the research participants (often called community) are insiders.
- power. The closer the researcher is situated to participants, the more likely that there are common expectations and more equitable power relationships.

I came to my research project as an outsider and with privileged status with extensive field outreach with marginalized groups, most recently with homeless women in Portland, Oregon. I was on the board of a local non-profit called Advocacy 5, whose mission is “to improve the health and quality of life of the houseless community, and to advocate on their behalf.” I have never lived as an unhoused woman nor have had the extensive traumatic experiences many homeless women have experienced. My feminist, social activist lens allows me to
look from the perspective of a feminist, to closely analyze how women are portrayed and presented, to be perceptive of power relationships where women are typically those with less or no power, and to advocate for structural social changes which benefit marginalized populations. Rose’s (1997) notion of “transparent reflexivity” can lead to an understanding of power and agency in the research relationship. Power in the research relationship is shared and dynamic; most importantly, participants [should] control “the degree to which they are open and honest with a researcher throughout the research experience” (Wasserman & Clair, 2010b, p. 31).

C. Narrative Voice

I am part of the research, in time and space. Many social scientists believe that the narrative voice should be impartial, detached, objective. Brown (2015) disagrees, and I fully endorse their perspective:

the writer, like everyone else, is rooted in a time and place, which greatly constrains what the researcher can see and how he or she sees it... The third-person voice is a very comfortable one in which to reside. Permanently. The intimacy of the first person takes down borders between the author and the subject, borders that are considered by many to be healthy in [academic research] (p. 11 - 12).

In short, my research has three components: “positioning the place,...locating the narrator in the place of the intellectual quest with all its compromising, skewed qualities, and being there in the narrative” (Brown, 2015, p. 13).
CHAPTER IV: METHODS

Typically, research questions drive what methods are appropriate to use. Recall that the overall aim of this study is to investigate how homeless women perceive and navigate unsafe urban space. The specific research questions are:

1. What does housing insecurity look like for an unhoused woman?
2. In what ways is mental mapping a robust tool for gathering the stories (data) of vulnerable populations such as unhoused women?
3. What does the spatialization of unsafe locations look like and are demographic groupings dissimilarly affected?
4. What are the critical reasons for unsafety identified by participants?
5. How do homeless women respond to urban unsafety; that is, what strategies do they utilize?

I used a two-step mixed methods of mental maps drawn by the unhoused women followed by interviews with these participants about their maps.

In this chapter I present my phenomenological research framework and provide an in-depth discussion of mental maps, including the development of the idea of mental maps, application of mental maps to social research, and the radical possibilities of mental mapping research. I then provide key details about my study area, sample size, access, and recruitment and end the chapter with an overview of my primary data collection methods, mental maps and then interviews.

A. Research Framework

At a high level, phenomenological research is an approach that focuses on the commonality of an experience within a particular group. “A phenomenological study describes the meaning for several individuals of their lived experiences of
a…phenomenon” (J. Creswell, 2006, p. 53). The purpose of phenomenological study is to “illuminate the specific, to identify phenomena through how they are perceived by the actors in “a situation” (Lester, 1998, p. 1). This approach consists of “what” they experienced and “how” they experienced it (Moustakas, 1994). According to Creswell, “the type of problem best suited for this form of research is one in which it is important to understand several individuals’ common or shared experiences of a phenomenon. It would be important to understand these common experiences in order to develop practices or policies, or to develop a deeper understanding about the features of the phenomenon” (J. Creswell, 2006, p. 60).

Finally, Gallagher (2012) provides an excellent, practical understanding of phenomenology as a research method:

> a method that attempts to give a description of the way things appear in our conscious experience. *The way things appear in conscious experience* may be very different from the way things are *in reality*. But the phenomenologist, on this definition, is not concerned about how things are in reality; the phenomenologist is rather concerned about how we experience things (p.8).

The unit of analysis is the individuals sharing the common experience, such as, unsafe urban space. The primary data collection methods are mental maps and interviews with a defined group of individuals, such as, homeless women, who have first-hand experience and knowledge of the phenomenon; “documents, observations, and art may also be considered” (Creswell, 2006, p. 72). These type interviews focus on: What have you experienced in terms of the phenomenon? What contexts have typically influenced your perceptions and experiences of the phenomenon (J. Creswell, 2006; Moustakas, 1994). In a similar analytical process
Creswell (2006) and Moustakas (1994) call for significant statements, meanings of statements, and themes of meanings; Saldana (2009) describes first cycle coding, second cycle coding, post-coding, all of which begins from the narratives. From this iterative process a description and understanding of the phenomena evolve.

A phenomenological framework makes sense and is appropriate research focuses on how homeless women navigate unsafe urban space, involving their perceptions, lived experiences, and responses. The group is homeless women; the phenomenon is their perception of and navigation through urban unsafety. I want to understand their common experiences “to develop a deeper understanding about the features of the phenomenon” (J. Creswell, 2006, p. 60).

B. Mental Maps

Idea of mental maps

Tolman (1948) created the term cognitive map in studying how rats learn. These studies are often cited as the beginning of mental maps in modern times (Gotz & Holmen, 2018). An early concept of mental maps is offered by Sarre (1973) as a prototype of an individual’s world (internal and external) created over time in the individual’s brain. Reviewing the perception literature, Goodey (1971) stated that they were focused on “the world outside and the images in our heads” (p. 1). In their classic writing, Gould and White (1974) claim that our images are “the maps and models of the world we carry around with us” (p.192). Wood (1970) comments that those images are the points of connection or interaction between people and their surroundings. For him the environment is the sum of all factors
and conditions in one’s surroundings impacting lived experiences. Bordessa (1969) offers a summation of mental storage and images: “The perceptions or mental image of the world that is held by individuals is at the root of all studies of perception conducted by geographers” (p.1).

Yi-Fu Tuan has taken the broader approach to the analysis of images and mental maps. Tuan (1975) maintains that human actions are guided by mental images and maps and further maintains that the study of mental events “contribute fundamentally to the understanding of human activities in space (p. 207). They state that a mental map is a unique type of image, specifically, “an image is doubly a construct: it originates as a percept, and then suffers further transformation under the pressure of the occasion that prompts its recall” (Tuan, 1975, p.209). Tuan defines a percept as “sustained by the information in the environment: we see what is before us” (Tuan, 1975, p. 208). Images, on the other hand, are things that the individual “sees” when “the environmental stimuli do not appear to justify it… [that is,] an image is a percept of the past” (Tuan, 1975, p. 209).

Tuan (1975) claims that mental maps have functions related to geographical knowledge and human actions, including: 1. making it possible to give directions, 2. rehearsing spatial behavior in the mind, and 3. making it feasible to structure and store knowledge. I suggest that Tuan has clarified the process of a mental map: it begins as a percept (what we see in our immediate environment); that knowledge is structured and stored in the mind; when recalled, an image (percept of the past) is created; and that recalled image is then interpreted. In essence a
mental map enables the storing of spatial information in our minds, which can then be recalled. All of this is done as the result of active attention (Tuan, 1975).

Stea (1969) claims that a mental map is an image of the larger environment, which “provides for the orientation, comfort and movement of man within his environment” (p. 230). Stea further states that knowledge of the area (space) is critical to the formation of mental maps (Stea, 1969). Lynch (1960) uses image in the narrower sense of how people restructure in some type of output (e.g., words, maps) the visual images of places that they have directly experienced. Graham (1976) believes that geographers (e.g., Gould & White) tend to see mental maps primarily as 1) cartographic representations of how people differ in their evaluation and memory of places, and 2) freehand maps that people can draw. The keys here seem to be mental, map, mental storage, images, and knowledge of the environment/space. In other words, mental maps are both mental images of one’s environment and physical representations of those images that others can see.

The approach of Kevin Lynch (1960) is more focused on representatives of mental spatial images. They argued that people in urban space orient themselves through mental maps; the method involved asking each participant to create a map for people not from their city: “Make it just as if you were making a rapid description of the city to a stranger, covering all the main features. We don’t expect an accurate drawing- just a rough sketch.” (Lynch 1960, p 141). From these Lynch (1960) claims that our perceptions of an urban space are not sustained, rather partial and fragmentary.
“In the process of wayfinding, the strategic link is the environmental image, the generalized mental picture of the exterior physical world that is held by an individual. This image is the product both of immediate sensation and of the memory of past experience, and it is used to interpret information and to guide action” (Lynch, 1960, p.4). Lynch claims that these mental maps consist of five elements: 1. paths (routes people use), 2. edges (boundaries), 3. districts (space with common characteristics), 4. nodes (strategic points for orientation), and 5. landmarks (easily identifiable physical objects). According to Lynch, paths are the most critical as they are foundational for urban mobility. They hypothesized that knowledge of an urban area is based on “that quality in a physical object which gives it a high probability of evoking a strong image in any given observer” (Lynch, 1975, p. 9). Further, such knowledge “depends on “the ease with which its parts can be recognized and can be organized into a coherent pattern” (Lynch, 1960, pp. 2–3).

Continuing, Lynch claims that an image (recall the discussion on Tuan above) of the environment has three components: identity (elements as separate entities), structure (relationship of elements to other objects and the observer) and meaning (practical and emotional worth to the individual). Images are dynamically created each time upon recall. Lynch would say that mental maps contain these three components. (Not directly germane to this discussion, nonetheless quite interesting, Lynch was a precursor to concepts such as objective representations
of space & subjective experiences of lived space and Lefebvre’s notion that space is always socially produced.)

Gould and White (1974) investigate people’s spatial desires. They begin from the position that each person’s mental map is unique and proceed to demonstrate how spatial generalizations can be generated and mapped. The authors ask of participants: “Suppose you were suddenly given the chance to choose where you would like to live— an entirely free choice that you could make quite independently of the usual constraints of income or job availability. Where would you choose to go?” (Gould & White, 1974, p. 15). The authors use their findings to create a surface of desire for various areas of the world; a surface of desire shows people’s environmental preferences and regional biases, conclusions drawn from the mental maps. Gould & White encourage geographers to conduct more in-depth studies on ‘invisible’ human geographical (spatial) behavior, e.g., mental maps.

**Application of mental maps to social research**

As discussed above, mental maps have been consistently employed in spatial research. Research using mental mapping benefits geographers in the following ways (Borneman, 2014, para. 5):

- not only can researchers study how people interact with and explain the world around them to others but can analyze how people feel about certain parts of a city and correlate that with crime rates, ethnic populations, environment, and more. Researchers can look at the physical geography of a location and see what people think of those regions, and even look deeper into the human and behavioral aspects of mental maps to track fear, stress, and excitement regarding different places worldwide.
There is not a single definition of mental maps, as the *process* of mental mapping is quite convoluted, multi-disciplinary, and without clear agreement. Psychology offers a basic definition of cognitive map (i.e., mental map) as a type of mental representation which enables an individual to acquire, code, store, recall, and decode information about the spatial locations and attributes of a phenomena in their environment. The (National Geographic Society, n.d.) states that “mental maps are a mix of objective knowledge and subjective perceptions: precise knowledge about the location of geographic features as well as impressions of places, rough estimates of size and location, and a general sense of the connections between places” (para. 1). This reflects my perspective and analysis.

I suggest there are three components to the construct of mental maps. First, Gotz & Holmen (2018) offer a practical definition: “a mental map, rather than being [objective], is a theoretical construct not observable in its original repository – the human brain. It is accessible to scrutiny only when reified via behavioral, oral, textual, or graphical acts” (p. 158). Next, I would add to this an explanation by Tuan (1975): It begins as a percept (what we see in our immediate environment); that knowledge is structured and stored in the mind; when recalled, an image (percept of the past) is created; and that recalled image is then interpreted. Third, when used in spatial-social research, mental maps can often be connected to or reflect social constructs such as class, ethnicity, or fear. Such constructs can reflect and reproduce hegemonic power relationships, especially with marginalized, vulnerable groups. From my perspective, given that my research
population will be homeless women, this component is a critical and ethical requirement of my utilization of mental maps. This represents the construct of mental maps that this research project will adopt.

The mental map is a powerful tool for inclusionary research, for hearing and capturing the stories of a vulnerable population. Let me provide a few examples of such research completed with mental maps; this is not a literature review per se, rather a demonstration of the legitimacy of mental maps as a data collection tool for my research. Note that Geographic Information System (GIS) is utilized often with research involving mental maps and that qualitative data from the mappings can be spatialized in GIS. My research project also utilizes such an integration with GIS.

Orleans (1973) maintained that everyone has inner maps of their urban environments; these maps reflect collective values and can vary a great deal based on the social position and location of the individual. Orleans illustrated this with a study conducted in Los Angeles. “He questioned a wide range of groups in the city, and from their responses constructed composite maps showing how the intensity of their knowledge varied over urban space” (Gould & White, 1974, p. 17). Upper class, white participants from Westwood had a detailed knowledge of their city and its surroundings, while African American participants in Avelon near Watts, were significantly less familiar with their area. For them, only the main streets leading into the city (i.e., their local streets) were prominent, while “other districts
were only vaguely 'out-there-somewhere,' with no interstitial information to connect them with the area of detailed knowledge (Gould & White, 1974, p. 17).

However, the small Spanish-speaking minority in the vicinity of Boyle Heights did not have the detailed or extensive knowledge of the city as did the other groups. They had an overview of their immediate neighborhood, City Hall, and the bus depot, which represented “the major entrance and exit to their tiny urban world” (Gould & White, 1974, p. 17). The social differences in this urban space are immediate and stark in these mental maps.

Bunge (1973) who was both a cartographer and community activist, produced “radical” maps of Detroit in the 1960s and early 1970s. Classically, mental maps are a mixture of objective knowledge and impressions/perceptions of a location, its features, and connections, that is, of spatialization; there is, of course, a distinction between fixed (objective) cartographic and mental map (objective and perception) representations. Bunge did not conduct classical mental mapping, rather combined cartography and mental maps. These maps are simply amazing, in my estimation.

Radical mapping is “the practice of mapmaking that subverts conventional notions in order to actively promote social change” Bunge focused on places that while discovered or known were nonetheless overlooked and marginalized; Bunge’s maps “demanded social equality for a community that was ignored and abandoned” (Wisniewski, 2013, para. 3). In this manner, they were radical cartography.
Examples of their maps included:

- “Where Commuters Run Over Black Children on the Pointes-Downtown Track,” where the child death statistics from a Detroit police report on children’s pedestrian deaths were used,
- “Region of Rat-Bitten Babies,” where Bunge mapped frequent rat sightings in Detroit with confirmed rat bites, which mainly occurred in the slum, and
- “Direction of Money Transfers in Metropolitan Detroit,” showing how funding (private and public) transferred from the slums to the middle class and affluent suburbs. The assumption in this map was that money moves “in same direction as speeding cars” from slums out. Some of these funding streams going from the slums out to the suburbs included Transfer of Rental Profits, Slum Rents and Mortgage Money, and Taxes for Services Not Rendered (Schools and Parks).

I suggest that if one investigates the process of how Bunge produced these maps, that process follows the steps laid out by Tuan (1975) as described above. Mental maps can show the spatialization of inequality, marginalized populations, and even urban unsafety; in this manner, these mental maps are radical.

Some studies have been conducted with mental maps that focus on the quality of the environment (collective) in terms of feelings of the participants, e.g., fear, desire, stress; the study by Matei et al. (2001) is a good example of such research. They studied the perception of urban space as comfortable or fearful as an outcome of their connections to their residential area communication infrastructure. Two hundred fifteen mental maps were obtained from participants to a multilingual survey of seven ethnic residential communities in Los Angeles.
The methods of GIS modeling and spatial-statistical analyses were used to process these mental maps. As with Bunge above, I highlight this study, which supports the method of mental mapping for my research. Its results showed that people's perceptions of fear in Los Angeles are not associated with actual crime rates (as expected) but rather with a concentration of certain ethnicities in a given area. That is, the main source of discomfort was people's perceptions of the presence of Nonwhite and non-Asian populations. Mental maps, the main source of data, showed that geographic areas of concentrated ethnicities were identified as places to avoid; that is, the participants' perceptions of fear of non-Whites and non-Asians led to their perceiving that urban space as unsafe.

Lopez and Lukinbeal (2010) used a mixed-methods approach combining mental maps with GIS, participant observation of the community, and interviews to produce perceptions of crime and safety from residents and police officers in a neighborhood in Phoenix. The authors drew on the literature where mental maps were used to elicit perceptions of safety and unsafety. For example, in Ladd's (1970) research, black children were asked to draw mental maps depicting their neighborhood and were then interviewed about their perceptions of safe and unsafe areas, based on race. Ley's (1974) work in a neighborhood in Philadelphia mapped residents' perception of fear into an isoplethic stress surface.

Lopez and Lukinbeal’s research questions were: “(1) How do the perceptions of crime and safety differ between residents and police in Garfield? and (2) How do these views differ from crime statistics of that area?” (p.34). 38
residents, 5 police officers and one volunteer from the neighborhood patrol were asked to draw their perceptions of safe/low crime and unsafe/high crime areas on base maps. Data were then georeferenced, coded, and aggregated for analysis in a GIS system. Aggregated spatial perceptions between the two groups were compared to crime data. Results showed that police perception of safe space was heavily influenced by reported crimes, which was not the pattern with residents’ perceptions of unsafety. That is, the residents perceived and identified some areas as unsafe even though there were low crime rates. The implications to this pattern are startling.

What are the key factors that can be distilled from these three last studies (Bunge, 1973; Lopez & Lukinbeal, 2010; Matei et al., 2001)? I suggest the following:

- Results showing fear and/or identification of urban unsafety were primarily dependent upon the participants’ perceptions or feelings, rather than objective data,
- All three involved research populations that could be viewed as marginalized or overlooked,
- These clearly illustrated spatialization of inequality, e.g., slums, where ethnicities lived, and
- Because of these factors, these mappings can be considered radical. (See discussion above.)

Summing up re maps and research, mental maps can provide opportunities for marginalized groups to address the hegemonic narratives of exclusion, to incorporate multiple perceptions of reality, and to draw attention to persistent
silences in data. They can also show the spatialization of inequality, fear, and unsafety, (Bondi, 1998; Bunge, 1973; T. Creswell, 1996; Gould & White, 1974; Lopez & Lukinbeal, 2010; Matei et al., 2001; Orleans, 1973; Townley et al., 2016). Homeless women are a vulnerable group, and it is critical that the research methods be inclusive, not exclusive, of their perceptions and experiences of unsafe urban space. Further as a research tool, mental mapping with vulnerable participants (i.e., homeless women) can be an act of agency and power as they create the research, their stories. Mental maps are a robust research method for my research questions. The two-step data collection (mental maps, interview questions) is an innovative, unique way, I believe, of exploring how homeless women identify and navigate through unsafe urban space.

C. Study Area, Sample, Access

The study required a target area with relatively high levels of homeless, relatively high crime levels, and a varied built environment with residential areas, commercial streets, and parks. Two key factors that framed the decision regarding my research study area. First, by combining police and fire calls for five years, the Portland Police Bureau and golocalpdx.com have produced data of neighborhood safety in Portland using actual reported crimes/911 calls (City of Portland, 2019; Golocalpdx, n.d.; Portland Police Bureau, 2018). By using these data, I chose a study area of two neighborhoods in Southeast Portland, Foster-Powell and Lents. The golocalpdx.com data noted that Foster-Powell is ranked the 7th most unsafe neighborhood and Lents the 2nd.
Next, these two neighborhoods border SE 82nd Avenue, on the east for Foster-Powell, and on the west for Lents. As homeless advocacy groups, such as Clackamas Service Center and Advocacy 5, have indicated, SE 82nd Avenue is a highly used arterial for the transit of homeless individuals. Further, this area has many encampments of homeless people, currently and historically, and the Springwater Corridor, a 43-mile bikeway and pedestrian path from central Portland to outer southeast suburbs that is frequently used by homeless folks, cuts across this area. As will be seen in our analysis, it became clear that unhoused women travel more broadly than I expected and certainly outside of these two neighborhoods. Therefore, a comparison of these two neighborhoods did not provide any helpful insight into my research question. See Figure V.1 for Lents and Foster-Powell Neighborhood maps of the study area.
My research participants were homeless adult women, who lived in, had lived in, or travelled in the Lents or Powell-Foster neighborhoods, over the age of 24. The interviews were conducted and completed from July 2019 through January 2020, prior to the COVID-19 pandemic, which has certainly worsened living situations of unhoused folks.

Specifically, there are two key factors in my age requirement of 25 or over. First, many homeless children have been involved with the Oregon Foster Care system and, the state can retain adjudication oversight of them up to age 24. Second, for some federal, state, or local programs, the cut off age for youth services can typically go up to age 24. In the Portland metroplex youth services
can include shelter/transitional housing, meals, therapy, connections to medical/mental health case workers, GED classes, and job programs, each offering a different combination of services. Such organizations include Porch Light & Street Light Youth Shelters, New Avenues for Youth, p:ear, Janus Youth Programs, Youth Resources, Insights Teen Parent Services, Emmanuel Community Services, Youth Builders, and Home Plate Youth Services. Thus, due in part to the Foster Care age-out and in part to the large number of services specific to individuals under the age of 25, women over the 25 and older were more fully aligned with my research goals.

What is the sample size necessary to answer my research questions within a phenomenological framework? In qualitative research, the sample size should be “large enough to obtain enough data to sufficiently describe the phenomenon of interest and address the research questions” (Statistics Solutions, n.d., para. 1). In some studies, a consideration of qualitative researchers is the notion of saturation. “Saturation occurs when adding more participants to the study does not result in additional perspectives or information” (Statistics Solutions, n.d., para. 2); for our purposes here, that means that no new or critical themes are being uncovered and no more data collection is necessary. Because there is no agreed upon method to determine saturation, I monitored themes produced by my data and decided on a stopping point. I did this during my interviews with the participants to see what themes had emerged and what looked interesting to further pursue. One example of this was the built environment; it became evident
partway through that many of the participants mentioned some dimension of the built environment (e.g., lack of lighting, poorly kept up streets) as a factor in their perception of a space as unsafe.

For phenomenological studies, Creswell (1998) recommends five to twenty-five participants and Morse (1994) suggests at least six participants; however, these recommendations both tie back to the notion of saturation. In their ethnographic research, Wasserman and Clair (2010) interviewed approximately 30 homeless people, although they also interviewed others, not homeless, who were actors in the homeless cycle, e.g., caseworkers. With these in mind, I completed 30 mappings and interviews with homeless women. In addition, I gathered unsafety and demographics data from six additional homeless women without mappings or full interviews.

Access to any research population, especially those who are vulnerable and possibly less visible, is a dynamic, challenging process; access is not a single hurdle, rather an iterative process. I had been doing mobile outreach to homeless people, especially women, in Southeast Portland/Gresham for several years; I had a network of advocates and homeless women already in place, which greatly assisted me. I had a positive reputation in the outreach community; this also helped with my access to this population. Finally, I was a Director on a nonprofit organization which focused on the unhoused population.

My field research advisory group (FRAG) and other informed members of the homeless advocacy community recommended and connected the homeless
women and me. The initial recruitment of the participants was carried out via my Field Research Advisory Group (FRAG) and other informed members of the homeless advocacy community from their outreach connections to unhoused women in the Lents and Foster-Powell neighborhoods. The estimate from outreach advocates in the Portland area is that approximately 75% of adult homeless people have their own mobile phones; further, all could access an “Obama” phone if they can fill out the rather complicated form. Note that a mobile phone is a top priority for homeless people right behind food and is also part of their safety. My initial contact with potential participants was by phone (from a recommendation from an advocate), by contacting a village/rehab center (e.g., Kenton’s Women Village) to inquire if any women might be interested, or by going to places where a meal was provided to the unhoused women (typically by a faith-based group, e.g., PDX Saints Love in the Streets at Lent’s Park Fridays at 1:00 pm, a church serving a meal every Wednesday evening.) I said the following:

*Hi! I am a Ph.D. student at Portland State University and am conducting a study as part of my dissertation research. The topic of the research involves how unhoused women perceive and navigate through unsafe urban space. If you agree to participate, you will be asked to draw a map from memory (including streets and/or geographic landmarks) of where you live, of your home, of your activities, and of your feelings of specific unsafe urban space. After that, we will discuss your map in more detail. Our discussion will occur in a place where we both feel safe and comfortable which is easy to access, like a room at the Multnomah County Library. When our meeting is over, you will receive a gift card as compensation. Your participation will take 2 – 2.5 hours.*
Do you have any questions? Do you think you would like to participate in this research?

In addition, those women who participated recommended and connected other participants, a technique called snowball sampling. That is, “existing sample members helped recruit future sample members” (Wasserman & Clair, 2010b, p. 38). The advantages of snowball sampling are twofold: First it allows studies to take place where “otherwise it might be impossible to conduct because of a lack of participants” (Glen, 2014, para. 2). Second, snowball sampling “may help you discover characteristics about a population that you weren’t aware existed” (Glen, 2014, para. 2). The downside to this type of sampling is that inferences about a population (e.g., homeless women) based on the sample selected will be quite limited. Wasserman and Clair (2010) used an additional method of sampling called maximum variation. They asked respondents to “recommend people they specifically believed had different perspectives” (Wasserman & Clair, 2010b, p. 39.). This technique allows a broader array of perspectives from homeless women on urban unsafety and became another tool in my research toolkit, which I did employ.

D. Data Collection

I present here an overview of my primary data collection methods, mental maps and then interviews. My other methods included my field notes, audio recorded interviews (if given permission), transcriptions (only if the interview is recorded), coding process, and GIS for statistical analysis and presentation of unsafe locations and demographic data. My pilot study (Appendix A) endorsed
the viability of my two-step process (i.e., mental maps, then interviews in the same session). During this pilot I tested other data collection methods such as focus groups and a more structured interview; feedback from participants strongly indicated that one on one sessions and flexibility in the questioning were much better for them. The participants in the pilot study also indicated that they enjoyed drawing and discussing their mental maps; this feedback was direct and nearly unanimous. FRAG advised me that the methods of mental maps and interviews are a preferred, safe way of obtaining the stories of the homeless women.

The venue for the mapping and interviews was a mutually agreed upon space for both the participant and researcher. The overall characteristics of the appropriate space for the research included a space:

- agreeable to the participant and researcher,
- neutral, publicly accessible, and confidential,
- conveniently located and accessible for the participant,
- handicapped accessible.

We met in a variety of places, including 6 at their vehicles in Ventura Park, 5 at Kenton Women’s Village, 4 at fast food restaurants (McDonalds was preferred over Burger King), 4 in a SW rehab center, and 3 in churches. I never went to their camp, any space where they lived, or into any vehicle.

To begin, I explained the overall research, their role in the project, and the informed consent process. During the informed consent process, the participants had complete control over whether to participate at all in the research or in part of it; I also emphasized that during our conversations. See Chapter IV.B for a
discussion of the Trauma Informed Care steps I implemented to better ensure that the participants were safe and comfortable during the data collection.

I chatted with each participant that if they felt uncomfortable with some of the questions, we would use the tap out method. There were three women who indicated that they needed to pause for a moment but were able to complete the interview. The tap out method was not useful as designed, as the women simply showed or indicated they needed to pause. I also asked two other women if they wanted a short break, but they said they were fine. Note that a list of community, medical, and counseling resources was included in the information provided to the participant during informed consent process. Once the initial discussion and paperwork were completed and the individual agreed to participate, I asked them if I could use their first name on their map and interview; I never asked for last names. Two women gave me other names to use. (With these two, it was a bit funny as I accidentally used their real names when talking to them; they laughed.)

I then provided them with blank paper, colored pencils, erasers, and a high-level map of my study area for their reference. I then gave them the following instructions re mental maps:

“There is no right or wrong mental map; artistic talent or mapping skills are not needed. Using this paper, I would like you to indicate or draw your home, the activities you normally do, and what places you feel or know to be unsafe for you. If it applies to your map, please indicate three levels of unsafety – low, medium, high – all defined by your perception, experience, or knowledge. I would also like you to put in street names, as best you can. When the map is completed, we will talk about it and I will ask a few questions. How does that feel? Do you have any questions or concerns?”
I indicated that I would answer any questions or concerns before, during, and after the session. I stayed with the individual as they drew their map; the average times for completing the mental map was 30 - 45 minutes and the interviews was 60 – 75 minutes. The mapping and interview were carried out in a single session. Four of the participants were initially no shows but I was eventually able to connect with them for the mapping/interviews. (Note these four did not have a mobile phone.) Respecting the time commitment required, I initially planned on providing participants with either a TriMet month bus pass (~ $28) or a day spa pass to the Mt. Scott Community Center (~ $10). However, that simply turned out to be very impractical; each woman received $10 cash compensation from me. FRAG confirmed the use of actual cash.

After the mental map was completed, I would say, “Okay, so we have finished with the mental mapping. Do you want to proceed with talking about your map and answering some questions?” If affirmative (all were), I would then ask, “I know we discussed this during the informed consent; is it okay if your interview is recorded, that is, audio taped?” If yes, I would setup the device for recording and say, “Okay, let’s talk about the map.” No woman refused recording the interview; some/many would have refused had I tried to video it.

I used a semi-structured interview. During the interview the participant and I reviewed their mental maps; I asked questions to clarify some items on the mental map and to delve more into their stories of navigating unsafe urban space. I asked
the core/contextual questions of all participants. I also offered each participant a copy of these questions but only a few wanted it.

**Figure IV.2 Interview Questions:**

*Note: Interview Questions will be completed after the Mental Map is finished.*

First, tell me about your map.

**A. Core Questions**

1. **Tell me about where you live.** Tell me about your home.
2. **Tell me about areas on the map you marked as unsafe.** What makes the locations you have mapped unsafe?
3. **How have you or did you respond to the unsafe location you have mapped?**
4. **How are your activities affected when you perceive or experience unsafety?**

**B. Contextual Questions**

1. **Let us document your housing history over the past 6-12 months or so.**
2. **What lead to you being unhoused?**
3. **From your perspective, which resources or services:**
   a. **Were you comfortable with?**
   b. **Were easy to access?**

**C. Would you mind answering some basic demographics about yourself?**

1. **Age range:**
   a. 25-39  b. 40-59  c. > 60
2. **Race-ethnicity:**
   a. **White**  b. **African American**  c. **Hispanic**  d. **Native American**  e. **Other**
3. **Disabled:**
   a. Yes  b. No

*If yes, would you feel comfortable describing your disability?*
Based on their mental maps and responses, our discussions delved into stories of their lived experiences, particularly as it involved urban unsafety. Mental maps and interviews were the sole source of data for my analysis. In conclusion, my research methods focused on “almost invisible” women and on trying to understand and describe the way they construct their own practical worlds. I creatively combined ethnographic (mental maps, interviews) and GIS methods.
CHAPTER V: DEMOGRAPHIC ANALYSES

This chapter presents the analysis of the demographic data (such as age, education, income), the identification and creation of key categories from these data (e.g., experience with the justice system, trauma), and the emergence of themes (e.g., housing insecurity.) I also discuss the analytical method I used with these data, categories, and themes. Note all these data were collected from the mental maps and interviews; there was no secondary source of data used.

A brief discussion is needed on the representativeness of my sample and hence of the data collected. As with qualitative research and data, one has to be cautious about the extent that results can be generalized from the sample to the whole population. Clearly my sample was not random, which is a cornerstone for generalizations to a broader population. However, these participants lived or had lived experiences all over Portland; I collected data from participants in Southwest and North Portland as well as Southeast Portland (all had experience in Southeast while unhoused).

What might be some generalizations that can be made to homeless women in the Portland area? First, I suggest that the reasons for and responses to unsafety are generalizable. This is discussed in detail in Chapter VII.E Reasons for Unsafety and Chapter VII.F Responses to Unsafety. My findings match those in the literature, but also extend these reasons and responses. Second, some of the participants’ demographics (e.g., untreated trauma, White/NonWhite, housing types, limited family contact, and housing insecurity) are also noted in the
literature. Thus, I would suggest that reasons, responses, and demographics are generalizable to the Portland area and perhaps beyond. Further, my participants reminded me of some of the women in the research of Liebow’s *Tell Them Who I Am* (1993) and Wasserman and Clair’s *At Home on the Street* (2010). These are common stories from women in Washington, DC, (Liebow, 1993), in Birmingham, AL, (Wasserman and Clair, 2010), and in Portland, OR (Roberson, 2021).

I believe that the words of the participants illustrate that their lived experiences in the Lents/Foster-Powell neighborhoods are similar to the experiences of unhoused women in other parts of Portland.

**Words from Participants:**

Paige, 48, Kenton Women’s Village:

”…I have been homeless on and off for several years… I have lived in my car all over Multnomah and Clackamas counties. It is always the same—harassment by housed people, inability to get a job or housing, being among in the midst of all these people, but yet I'm alone by myself. ”

Teri, 52, living in a vehicle in Ventura Park:

“We stayed out in Beaverton and we stayed out in Newburg, we stayed out in, you know, Lincoln City for three months, we stayed, you know, everywhere pretty much the same.”

Val, 56, living in the streets/tenting

"I have lived in 3 states and been homeless… When you’re homeless and you’re-- Especially a woman, you have to be really careful because there are people that would come out…[and] Will go after you to use you for what you have. Always the same."
I used the coding method described brilliantly by Saldana (2009) which includes analytic memos, first cycle coding, second cycle coding, post-coding prior to writing; these coding cycles simply reflect that it is an iterative process. “Coding is the transitional process between data collection and more extensive data analysis” (Saldana, 2009, p. 29). Through coding and recoding of the data, patterns, categories, and themes emerged that helped to understand, and illuminate how homeless women navigate through unsafe urban space, the core research focus.

A. Demographic Data Method

Below are the process steps involved with the Demographic Data Coding/Stats Method (Figure V.1). Again, the two sources of all these data are the mental maps and the interviews.
As one can see from Figure V.1 Demographic Data Coding & Statistics Method, Steps DD-2, 3, 4, and 5 were all stages in coding these data into categories, schemas, and themes, as they emerged. I explored several methods, e.g., for transcription, for coding, for database/alternatives, and landed on the
combination which was likely the most time consuming. I coded manually and iteratively; I entered and maintained all data (demographic and spatial – unsafety) and did the initial analysis in Excel. Steps DD-6 and 7 involved the calculating statistics for demographic data and the graphing of these statistics.

B. Demographic Analysis

This section analyzes demographic and other base data and offers a more in depth understanding of these data. That is, what do these data mean and why? I first want to briefly frame the analysis of demographic data and behavior. Home (2001) explains that: “The quintessential determinants of demographic behavior are sex, age, and cohort or calendar period, and other typical individual-level factors are race, social and family background, ethnicity, religious orientation, labor-force participation, and educational attainment” (p. 3430). [Emphasis added.] Hoem (2001) continues: “There may also be contextual determinants, such as institutional settings, laws and regulations (including public policies), and other collective…[and aggregate] features that individuals face.” (p. 3430). Recall that my interviews gathered both individual demographic data and more contextual factors. Figure V.2 Interview Questions show individual, core, and contextual questions discussed with the participants. Also, in Figure III.1 Integrated Framework of Urban Unsafety & Women, which I developed from main streams and gaps in the literature, the discussion focuses directly about individual, contextual, structural, and mediating factors which have an impact on vulnerable
populations’ (women) perception and evaluation of unsafety, responses, and adaptive behavior.

This analysis includes individual (e.g., race/ethnicity, age), contextual (e.g., neighborhood harassment-enforcers, housing insecurity), and collective or aggregate (e.g., built environment) factors or features which participants face and which contribute to their demographic behaviors. The demographic factors and behaviors that I examined included:

- Race/Ethnicity,
- Education,
- Income (all sources),
- Medical Insurance Coverage,
- Experience with the Justice System,
- Drug Use,
- Sex Work.

Two themes emerged during the analysis: Age & Living in a Vehicle and Housing & Housing Insecurity.

At the end of this section, we will have a better understanding of the demographics and behaviors of unhoused women, specifically as it relates to the two research questions: First, the overarching question -- how do unhoused women navigate through unsafe urban space? Next, what does housing insecurity look like for an unhoused woman? I have also added in words from or about the unhoused participants which provides a better sense of their lived experience vis a vis these factors. The spatial and unsafety data are presented in Chapter VII Spatial and Unsafety Analysis.
Race/Ethnicity

As with all these data, race/ethnicity, education, and age were all self-reported by the women. In terms of race/ethnicity most participants (n= 20) were white (56%) with seven Native American (19%), seven African American (19%), and two Hispanic (6%). While my research is not an in-depth analysis of homelessness per se, nonetheless the data from my study illustrates current trends across the United States and in Portland of statistically increasing numbers of homeless women, Native American and African American women, and people older than 55 (e.g., Census Bureau, n.d.; Donohoe, 2004; Gornick & Boeri, 2016; Mostowska, 2019). Given that Portland is a predominantly White city, I was delighted to have a diverse participant population by race/ethnicity. For the analysis, I combined Nonwhite race/ethnicity categories (African American, Native American, Hispanic) into a single category of Nonwhite. Thus, Whites comprise 56% of the participants, Nonwhites 44%.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/Ethnicity</td>
<td>White</td>
<td>20</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Nonwhite</td>
<td>16</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Native American</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>African American</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

Words from/about participants

Santina, 30, Nonwhite, resident of a village, previously lived in cars all over East Portland:
On picking the location where to park their car for the night: “The houses were kept up. Not to be racist or anything. But a nice Caucasian area is just safer. Make sure that like the area was okay. Not a lot of people walking around and other cars sleeping out. Just somehow quiet, where there is not a lot of movement.”

**Education:**

Of the total number of participants (n = 36), 61% did not graduate from high school or get a GED. There were eleven women who attained a HS diploma or GED (31%) with 3 having some college. All eight who graduated from HS did so in the standard fashion, going from elementary to middle to senior high school without extensive absences from school and graduating around age eighteen; seven of these women are older than 55. The three who earned a GED did so in their 20s.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education (highest level attained)</td>
<td>Some High School</td>
<td>22</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>High School Diploma</td>
<td>8</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>GED</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Some College</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

These children (n=22) who left school before graduating or getting a GED did so for an assortment of reasons including being expelled by the school for drugs/fighting (n=4) or for excessive absenteeism (n=3). The children themselves dropped out due to hating/no engagement with school (n=4), not getting along with anyone at school (n=3), having feelings of major depression and very low
self-esteem (n=3), being homelessness or family having no permanent housing and frequently moving (n=3), and to others (n=2).

I suggest that a foundational factor or cause of these behaviors was childhood trauma that was not addressed or treated. In an interesting, informal set of questions, I asked the participants if as children, if they had ever been exposed to trauma and/or had directly experienced significant trauma. (Recall our discussion on trauma in Chapter IV. A Trauma Care Framework.) These questions posed to the participants were yes or no. Ten of the participants (33%) indicated that they had both been exposed to trauma and had also directly experienced it significantly as a child. Eight (27%) talked about having some exposure to trauma as a child but had not personally experienced significant trauma. Twelve women (40%) indicated that they had not been exposed to trauma and had not experienced it significantly as a child. While this represents a qualitative method, nonetheless 60% (n=18) of the participants talked about their painful memories from some type of trauma during childhood. Sixteen of the twenty-two who dropped out of school were among the 60% who had painful memories from childhood trauma.

**Income (all sources)**

I asked each participant if they had a source of monthly income and if so, what was the source. Note that I, as do the participants, include SNAP Food Stamps as a source of income; Food Stamps can be shared or sold for cash. In these data there are 13 participants receiving Food Stamps, with an average of
$192 with a range of $16 - $352. The category of None/Irregular (n=9) includes those who have no source of monthly income and those who might do irregular work, such as canning. Government benefits (n=6) primarily consist of those receiving Social Security, most often their husband’s, or Disability Income (Social Security Disability Income, Supplemental Security Income - Social Security, or state). Sex work (n=4) as a source of income is self-explanatory. The category of Other (n=5) includes participants receiving alimony, family inheritance paid quarterly, and regular GoFundMe efforts. Three (n=3) have full-time with adequately paying jobs.

As can be seen in the table below, 21 of the participants (70%) live on less than $700 per month, with nearly half living on less than $250 per month; 9 women (30%) have no monthly income. Consider these data and the reality of these women’s lives: How does one live on less than $250 per month (including food stamps)? There are some resources available to low- or no-income individuals – e.g., free meals at various locations, often churches, or delivered to some camps; clothing “stores” with free donated clothing; boxes in front of some homes with food and nonfood supplies for these folks. While well intentioned, these are simply a patchwork and during the pandemic these resources dwindled a great deal. Further, the schedule for clothing and food locations can vary, and women often have a hard time getting to these locations. There is also an amazing amount of sharing of supplies among unhoused individuals; many consider their neighbor next to them or passing by as family.
I was surprised with the range of SNAP benefits that there was little difference in the total monthly income of individuals receiving Food Stamps and those who don’t ($590 vs $530). Finally, there are a few individuals who have regular work and earn up to $2,800 per month. Most individuals who are working and have a regular, good-enough income are now housed, but there are those (approximately five or six) who choose to remain outside, even with an income of $1780 monthly. This is a choice that does not appear to make sense to outsiders, those not involved with the unhoused or outreach. Some who have a decent monthly income do not want to share an apartment with anyone, do not want a single room in an SRO, have Post Traumatic Stress Disorder (PTSD) and cannot really live inside, are not willing to pay out so much money for rent, and have not been “lucky” enough to gain permanent housing.

Table V.3 Income - all sources

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/ Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income/ Sources</td>
<td>SNAP</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>None/Irregular</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Gov’t Benefits</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Sex Work</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Job</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

**Average Monthly Income (with Food Stamps):** $590  
**Average Monthly Income (w/o Food Stamps):** $530  
**Monthly Income Breakdown:**  
- $0: 6 (20%)  
- >$0 - <$250: 8 (27%)  
- $250-$700: 7 (23%)  
- >$700: 9 (30%)
Figure V.2 below shows that the income (all sources) of Whites is significantly higher than Nonwhites. This income difference even among unhoused women is not surprising and reflects the historical gap between White and NonWhite incomes in the United States.

A note on this graph and others similar: the purple shading shows the average of whatever variable we are analyzing (in this case, total income); the dots show the actual distribution of individuals with variable under discussion, in this case, their individual total income.

**Figure V.2 Total Income by White/Nonwhite**

![Graph showing total income by race, with purple shading indicating average and dots showing individual income levels.]

**Words from/about Participants:**

Ruth, 61, NonWhite, unhoused for some 6 years, lived in an old RV for several years, worked all their life, now in a rehab support program:

- Their words show the fragility of untreated trauma in terms of normal life activities, e.g., working. “I had gotten a job at … and I felt this is my dream
job...it was in Accounts Payable too. It was union, it was but … I had not dealt with the PTSD or the mental breakdown or any of that stuff. I wind up not being able to do that job because it was just too much mentally for me.”

Medical Insurance Coverage

Participants were asked if they had any type of medical insurance coverage. I was quite surprised to see that nearly all the women had medical insurance (n=26 out of 30), either Medicare or Oregon Health Plan (which is Medicaid).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Coverage?</td>
<td>Yes</td>
<td>26</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>4</td>
<td>14</td>
</tr>
</tbody>
</table>

However, a much smaller proportion of women consistently or regularly utilized covered medical services to which they were eligible. By far the most frequently used medical service was an Emergency Room visit, usually without an admission to the hospital. From the ER visit, the participant would typically be released with various follow up appointments, often at different locations, and with phone calls to confirm or setup the appointment. One can easily see the challenges with this process: 1. getting to different locations on different dates; 2. having a phone; 3. simply remembering which appointment, its location, and date.

It is also common that after a woman has been released (either from the ER or the hospital) that they would end up back at the ER for the same condition a few weeks later. Finally, the ER is utilized because the women typically do not
have a Primary Physician Provider (PPP). Getting a PPP can also pose challenges for the women: unclear referrals from the ER; doctor locations not close to the hospital; lack of a phone; transportation to/from the office.

**Experience with the Justice System**

Participants were asked if they had a criminal record (felony or misdemeanor) as an adult; that means an actual conviction with or without time in jail or prison. This does not include the scenario of a woman being arrested and jailed, but later the charges being dropped; in this case they do not have a criminal record from that incident. There are fifteen participants with criminal records (50%) and an additional six women who have no criminal record but were arrested with charges ultimately dropped. The type of incidents that can lead to a woman being incarcerated are typically nonviolent. There were arrests for drugs (n=6), prostitution (n=4), theft (n=3), riding the MAX without paying (n=2), assault (n=2), and custodial interference with their child (n=1). Note this list is not comprehensive, rather intended to highlight the nature of the crimes.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criminal record?</td>
<td>Yes</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Experience with justice system: those with criminal records plus those who were arrested but but had charges dropped, hence no criminal record</td>
<td>Yes</td>
<td>21</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>30</td>
</tr>
</tbody>
</table>
Three women were currently (at the time of the interview) in adjudicated probation with community-based supervision for specified periods of time; several other women had completed their probation. The probation and supervision are often viewed as a “hassle” by the woman on it. They believe that some of the Probation Officer’s (PO) requirements are not workable. Such examples include entering a drug rehab to get clean -- when the woman is claustrophobic, possibly with PTSD; staying away from others who use illegal drugs – when this is the space the woman lives in; having a therapist for counseling – when the woman simply is fearful of counseling; attending meetings with the PO every few weeks – it would require two buses to get to the office and the woman has no money for bus fare.

A common example is that fare evasion is a violation under ORS Chapter 153. Currently, those caught riding TriMet buses or trains without a valid fare are subject to a $175 fine in Multnomah, Clackamas, and Washington Counties; an unhoused woman typically does not have the funds to pay. With these and other fines (e.g., payment from jail time), nonpayment and/or missing payment due dates are considered a violation and can lead to a warrant for their arrest.

Overall, unhoused women are at risk of being in and out of the legal system. While typically wanting to be less noticeable, they are nonetheless visible in public spaces, often which they consider to be unsafe. Two patterns emerge: 1. Unhoused women live in and navigate through the liminal spaces between the legal and not so legal, rather like visible and invisible. Their chances of interacting
with the justice system are high, as our data indicates. 2. As with most individuals
with criminal records, these participants with records experience the challenges of
finding a job or a stable living space, getting food stamps, services, or even IDs,
etc.

**Words from/about Participants**

Sierra, 38, had been outside for 5 years:
- They rarely see their two children who live with their dads’ families.
- They are a very heavy drug user, a sex worker, and a hustler (money deals.)
- They have warrants out for missing probation meetings.
- Their Probation Officer wants them to go into an inpatient drug recovery program (lockdown).
- They cannot be due to PTSD and wants to do outpatient rehab, which their PO will not approve.

Deona, 57-year-old Nonwhite, lived outside, was in and out of the justice system, all for nonviolent crimes – e.g., drugs:
- "...My grandkids right now are the most important… breaks my heart
  more than anything, that I can't see any of them [because of
  involvement with the police and being homeless]."

**Drug Use**

Participants were asked if they have ever used drugs, if they used drugs previously, and if they currently are using. The questions specified the type of drugs, i.e., alcohol, methamphetamine (meth), heroin, opioids (pills), all drugs, or no drugs. Results show little difference by type of drug. Nearly all used alcohol (n=25), so I excluded alcohol from these results. In each interview, I also specifically excluded marijuana from drug questions. Alcohol and marijuana are
not considered illegal drugs; hence the participants typically were not concerned about law enforcement. The other drugs are certainly considered illegal drugs.

Twelve (40%) have never used illegal drugs. Eighteen participants used drugs previously, but only twelve (40%) currently consider themselves drug users. Participants were not worried regarding their safety if people were on heroin (brown, which is the street name for heroin) but did become apprehensive if they were around people using meth. Meth users can quickly become aggressive or violent, often without warning; heroin users typically fall asleep. Note that heroin tends to be cheaper and is more available than meth.

There were several instances during the interviews when a participant would step outside or go to the rest room to take a hit of their drug. I was perfectly accepting of this and when they returned, we completed the interview. There was one interview where the individual was quite high, but over time did complete the mental map and the interview questions.

<table>
<thead>
<tr>
<th>Table V.6 Drug Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Previous drug user?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Current drug user?</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
**Words from/about Participants**

Heather, 35, White, a resident in a rehab support program for some 6 months:

- "...every dollar I got I spend on dope."

Brandi, a 52, unhoused for over 3 years, in/out of rehab, now has a permanent housing voucher:

- “…it [heroin] is evil. It steals your soul… turns them [people] into something I don't want to be or be around.”

Kris, 47, White, recovered from drug addiction, now does faith-based outreach to the unhoused:

- "I was so ashamed… there was no going back in those years of using… I had lost everything."

**Sex Work**

During the interview, I asked women if they engaged in sex work. They talked openly about sex work. I learned the term that most prefer for their job is “Sex Worker”. There was no embarrassment or shame that I could detect, rather it was like discussing a business or making money. They talked about locations to find clients, media outreach for new customers, places for completing the transaction, price, payment options, and safety. There are nine of the participants who currently do sex work (30%) and thirteen who have been sex workers (43%).

**Table V.7 Sex Work**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever a Sex Worker?</td>
<td>Yes</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>Current Sex Worker?</td>
<td>Yes</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>21</td>
<td>70</td>
</tr>
</tbody>
</table>
There appear to be three patterns which emerge from these talks. Often a woman would have a client, usually a male, rent a motel room for a few days; the transaction here is inside living (and possibly food) for sex. In this case there usually is no exchange of money. In another scenario there is sex work in cars for actual money; SE 82nd Ave. between SE Powell Blvd and SE Duke St. was often mentioned as a place for this type of hookup. A third pattern is that women will do sex work on and off or as they need to (for money). Among these participants, none was a full-time sex worker.

A concern regarding sex worker is the safety of the woman herself. There were a few incidents recounted wherein different clients assaulted the woman, tied them up in a closet, and did not pay for the transaction. Two women had to go to the Emergency Room, and one was hospitalized for two weeks. No one contacted law enforcement, as they said that nothing would happen and even were concerned, they themselves might come under scrutiny by the police. Here are clear instances of women’s safety failed by the institution of law enforcement.

**Words from/about participants**

Cita, 58, uses social media for advertising sex worker, ran it like a business:

🌳 They were brutalized during one sex work job: "...and I turned around, my bleeding so bad... I put my bloody handprint right next to his front door... I wanted everybody, the whole world, to see how much he had hurt me..."

Mandy, unhoused on & off for nearly 18 years, an occasional sex worker:
They talked about being badly hurt while being a sex worker: "I almost lost my life three times to strangulation. I had broken ribs three times… black eyes a couple of times… bruises on my body…"

**Theme: Age & Living in a Vehicle**

Here I integrated two factors about unhoused women: age and living in a vehicle. The age of the women living in their vehicles is surprising and has not been mentioned in any of the literature. Let me discuss age first; the data shows that the average age (in years) of the participants is 54 with a range of 25 – 84.

A graphic provides another view of the distribution of age:

**Figure V.3 Age of Participants**
Here one can see that there are quite a few participants who are over 55, with three between 76 and 84 (15%) and thirteen > 55 (65%). The number of older women is surprising but supports the trend of increasing numbers of seniors who have become homeless. The 2019 Point-in-Time for Multnomah County (2020, p.25) shows:

**Table V.8 2019 Point-In Time Multnomah County – Age**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2017</th>
<th>2019</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18</td>
<td>382</td>
<td>192</td>
<td>-49.7%</td>
</tr>
<tr>
<td>18 - 24</td>
<td>335</td>
<td>284</td>
<td>-15.2%</td>
</tr>
<tr>
<td>25 – 54</td>
<td>335</td>
<td>2.582</td>
<td>-0.5</td>
</tr>
<tr>
<td>55 - 69</td>
<td>772</td>
<td>862</td>
<td>11.7%</td>
</tr>
<tr>
<td>70+</td>
<td>44</td>
<td>77</td>
<td>75%</td>
</tr>
<tr>
<td>UNKNOWN</td>
<td>49</td>
<td>18</td>
<td>-63.3%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4.177</td>
<td>4.015</td>
<td>-3.9</td>
</tr>
</tbody>
</table>

I highlighted the two trends that are interesting and confirm the pattern with the age distribution of the participants. That is, there is a significant increase in the number of unhoused in Multnomah County (2017 to 2019) of those 55 and over, and especially those 70+. Note that these data include both women and men and are not broken down by age and gender, another limitation on research and statistics on unhoused women.
The literature (e.g., Anderson et al., 2003; Bondi, 1998; Bullock, 2013; Gilchrist et al., 1998; Institute for Women’s Policy Research, 2016; Morrell & Nelson, 2007; Klodawsky, 2006) does not focus specifically on older unhoused women (over 55, with a particular emphasis on 70+) and their perceptions and responses to unsafe urban space. The literature typically does not break down ages for unhoused women; also recall that most of the research on unhoused individuals involves males, not females. The experiences of interviewees for this research thus help to fill a gap in the literature.

I now want to pivot and look at the category of participants living in their vehicles. Participants were asked both if they had ever lived in a vehicle and if they currently lived in a vehicle. The length of time each lived in a vehicle spanned from six months to ten years with an average of 3.25 years. Table V.9 displays these data.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever lived in a vehicle?</td>
<td>Yes</td>
<td>18</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td>Currently living in a vehicle?</td>
<td>Yes</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>21</td>
<td>70</td>
</tr>
</tbody>
</table>

Of the nine women living in their vehicles at the time of their interviews, a unique and surprising theme evolved: older women living in their vehicles, often times in the same parking lot(s). Note the literature is completely silent on this theme; the
research has not delved into how unhoused women live in unsafe urban space, let alone in their vehicles. I myself was rather astounded at this finding. Here is a graphic of the age distribution of the women living in different housing situations. Most of those who live in their vehicles are over 60.

There are several interesting dimensions to this theme which provide insights into the lived experiences of unhoused women, especially older women. A discussion of the stories of the six or seven women who formed a loose community in Ventura Park, SE 113th & SE Stark Ave, Portland, can illustrate these. Figure V.4 shows the age distribution of participants by housing type.

**Figure V.4 Age by Housing Type**
Below are three separate figures that provide an intimate look at women’s lived experience in a vehicle: the parking lot, the loo, and their vehicles. The parking lot bordered a small street with houses; the relationships between the unhoused and housed spanned from quiet acceptance to outright, explicit harassment; several housed frequently called the police because they wanted the women to move their vehicles. Some of the women living in their vehicles felt harassed by a few of the residents.

The Loo was critical for three reasons: bathroom, running water, and heat; it closed during the winter months. I heard several refer to it almost as a luxury.
The owners of the two vehicles below reflect a range of independence to dependency. Independent Nora, 84, unhoused for three years with a monthly income of $1,950, lived in a truck (Figure V.7 below). Nora had the interior immaculate and well-organized interior; for example, there were clothing, food, and other essentials in baskets inside the back of the truck which were moved for Nora to sleep in their bed. Nora was the “mother” to most of the women in the parking lot, and suggested additional unhoused women to be interviewed, most of whom lived in vehicles.

Figure V.6 Portland Loo
Lynne, 67, unhoused for two years with a $1,056 monthly income, was much more dependent; they lived in the small car below (Figure V.8 Lynne’s car) which was essentially not drivable. Note that vehicles which unhoused individuals live in usually do not have valid license tags or insurance; these women often do not have any valid driver’s licenses. Lynne had major medical issues and could barely get out of the driver’s door even to walk their dog; we completed the interview with me sitting on one of Nora’s camping chairs by Lynne’s open driver’s window.
The women who lived in their vehicles in Ventura had “assigned” parking slots or at a minimum the order of their parked vehicles was clear; this involved a form of class. Those who were not getting along with each other might change positions to get further away from the other. They would check in, often daily, to see how each other was doing and what assistance might be needed (e.g., food, water, errands, car issues, transportation). They often visited in each other’s cars and shared meals. When they were forced to move their vehicles from the parking lot, they had two or three other nearby places where they would go; in a few days they would meander back to Ventura Park. They looked out for each other. They had what was in effect a village, not organized as Kenton Women’s Village, but a small community, nonetheless.

Finally, aside from the age factor, the demographics and behaviors of these women living in their vehicles included:

- Very few were using drugs,
- Many (six out of nine) had completed high school,
- Their typical response to any threat of unsafety or violence was to avoid or walk away,
- They exhibited an unusual amount of self – confidence in their ability to take care of themselves,
- Only one had a prison record (from drugs),
- They had little contact with their families or children, and
- It was important to them to present themselves (appearance and actions) as not being unhoused.
**Words from / about Participants**

Lynne, 67, unhoused for 2 years, living in a broken-down car (Figure V.8):

"There's nothing I can do. I can't leave..."

Sam, 81, unhoused for two years, living in a van:

"...it's very hard for me to get in and out of the car..."

Lauren, 57, vet, unhoused for 2 years, some HS, sees their adult child often:

"I was so uncomfortable; I could not get into a comfortable position and I was like I would wake up and certain parts of my body would just be arching. Because of the stress throughout the night, I could not find a comfortable position. My car was not a safe place, especially at night. Anybody could look in the widow and see me. I try to cover up myself completely."

Teri, 60, unhoused for 3 years, living in a vehicle:

"...But most of the people that I know now don't have housing... they just don't...I just-I can't let them take my truck. No matter what... I'll leave the city, state, whatever they want... but they cannot take my truck from me right now."

They kicked me out [of Ventura Park] for bad tags, that's-that's the only reason they can kick me out. They- you're not allowed to be here past 10 o'clock or whatever but they don't kick anybody out for that, they just kick people out who have bad tags, you know, or staying here."

Marie, 54, NonWhite, some HS, unhoused for 3 years, resident of a village:

On living in a car: “It is rough. It was cold, it was uncomfortable. You don't really sleep because there are so many homeless in that area too. A lot of crimes that you don't really sleep, sleep you kind of nap. Extremely uncomfortable even though it was decent sized car, it was two grown adults with the back full of stuff and a cat. It was difficult and cold a lot.”
Theme: Housing & Housing Insecurity

During the interviews, participants indicated their current living situation, and many also talked about different locations/places and lengths of time at each. The discussion here focuses on their current living situation, at the time of the interview; their housing history provides rich, contextual understanding for us.

I then categorized their current living situations into Housing Types. To be clear, the use of the word “housing” may seem unusual when discussing homeless women. It is not, rather gets to the core of the misperception of homelessness and home. There are two critical points here: housing and home for individuals who are unhoused. First a tent is housing, as is a vehicle and a village; these are a form of dwelling or shelter; I specifically use the word housing to refer to these. Next involves the notion of home: homeless implies that those who are homeless do not have homes. The intent here is not to provide an in-depth discussion of the concept of home, rather to refute the statement that unhoused individuals do not have homes. Most of the participants indicated to me that whatever is their current housing is their home; I take my guidance from that. Here are words from two women on the notion of home:

- Angelina, 59, unhoused for 8 years, living in different vans: “…no matter what your situation is… whether it’s a car… whatever… your home is where you are.”
- Heather, 35, unhoused for 4 years, in a rehab support program: “… My car was a home, my tent was a home.”
Much of the research presents a perspective that housing in a conventional fashion (e.g., brick & mortar) is the differentiator between being unhoused and housed and that home belongs to those who are housed.

The Housing Types included the following categories:

**Table V.10 Housing Types**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing Type</td>
<td>Vehicle</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Apt/House</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Village</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Tents/ Streets</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Rehab</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Motels/Shelters</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

Nine (30%) were living in their vehicles; this theme (age and living in their vehicle) was discussed above in Chapter VI.C. There were about the same numbers of participants living in apartments/houses (20%), villages (17%), tents – street (13%), and rehab programs (13%) with just 7% living in motels/shelters. A brief description of these categories is needed. The category Vehicle is straightforward – living in a vehicle. Apartment/House shows participants who were living or sharing an apartment or house but did not include couch surfing. The women may or may not be on the lease; housing vouchers provided the basis for some of the apartments. The category Village is an organized, physical camp with infrastructure, individual pods, services onsite, rules, often with some level of resident self-management of the camp, and overall oversight by an external nonprofit. Kenton Women’s Village meets this definition, and I conducted some interviews there. The tenure there was approximately a year.
Tents/Streets is a category that includes all people living outside, e.g., in a tent, on the streets. Rehab includes rehabilitation programs (often for drugs) with a limited time for the stay; some rehabs were for two to four months, while others took a longer-term view of the individual rehab process, allowing for more time. Finally, Motels/Shelters often involved vouchers for motels and overnight shelters where typically the women left at 7 AM the next morning. There are some shelters which operate 24/7, where women can stay day and night. Vouchers and shelters provided temporary living situations.

Delving a bit deeper into this housing picture, I combined these categories into two broader schemas: Inside or Outside Housing, defined as the participant living inside or outside. Inside Housing included the categories of Apt/House, Village, Rehab, and Motels/Shelters. Outside Housing was comprised of Vehicle and Tents/Streets. Table V1.11 below shows that seventeen of the participants (57%) lived inside with thirteen (43%) lived outside. Our analysis thus far has provided a context to better understand and explain homeless women and housing.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category/Response</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>Inside</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Outside</td>
<td>13</td>
<td>43</td>
</tr>
</tbody>
</table>

Let’s look at what Inside – Outside shows demographically. Figure V.9 below shows that there are about equal numbers of White versus NonWhite living
Inside. Nonwhites are much less likely to live Outside than Whites.

Figure V.9 Inside/Outside by White/Nonwhite

The next graph Figure VI.10 Inside/Outside by Age shows that women living Outside are older, both by average and distribution, than those living Inside.
The summary from these two figures is that NonWhites are much less likely to live Outside than Whites and that women living Outside are older than those living Inside.

Let’s explore these slightly counter intuitive patterns. From my outreach experience, discussions with FRAG and other advocates, and my conversations with the participants, there are specific resources available to NonWhites and to younger women that may not be as prevalent for Whites and older women. For
example, several organizations focus on NonWhites, including Advocacy 5, Native American Youth and Family, Northwest Portland Area Indian Health Board, Oregon Department of Human Services Office of Tribal Affairs, North by Northeast Community Health, African American Health Coalition, Urban League, and Union Gospel Mission. Some of my participants have utilized these resources, which may account for the higher rate of NonWhite participants Living Inside.

Finding that younger participants are more likely to live inside than older participants may also reflect that some resources are directed to younger participant. I discussed these in Chapter VI.C in accounting for the participant age requirement of 25 or older. Such resources for younger participants include Rose Haven Day Shelter, Kenton Women’s Village (to an extent), Portland Rescue Mission, Bradley Angle (specializing in domestic abuse), West Women’s & Children’s, Willamette Shelter, and Blanchet House. It appears to me that there are also younger women in the drug rehab centers, which can offer services and resources other than drug related. This may offer some insight into my finding of younger women living inside and older women outside, but more research is needed to better understand these patterns.

The next step in this analysis involves the concept of housing insecurity. Often invisible to the public, the many scenarios of homelessness fall under the umbrella of housing insecurity, which extends beyond those unhoused. Housing insecurity includes several dimensions of housing issues, such as affordability, safety, quality, insecurity, and loss of housing. Cox et al. (2017) put forward a
workable and frequently cited definition of housing insecurity: “Limited or uncertain availability of stable, safe, adequate, and affordable housing and neighborhoods; limited or uncertain access to stable, safe, adequate, and affordable housing and neighborhoods; or the inability to acquire stable, safe, adequate, and affordable housing and neighborhoods in socially acceptable ways” (para. 8).

However, housing insecurity is broader than simply situations facing the unhoused. It encompasses circumstances such as the working poor, elderly, under/unemployed, living in certain geographic areas in inner cities, individuals with an inability to move around (for example, due to insufficient public transportation), and episodic homelessness. Further, not normally associated with housing insecurity yet who are housing insecure, are individuals and families who might be behind on their rent or mortgage payments or may not be able to make their current housing payments.

Let me return now to our participants, their housing situations, and housing insecurity. Recall that the average monthly income of the participants was $590 with a range of $0 to $1950 (individual) and $3800 (two wage–earners in a family). See Table VI.4 Income - all sources. All those who live Outside (n=13) are housing insecure. Of the remaining seventeen individuals who have some type of inside housing twelve are still housing insecure. These twelve have inside housing which is not permanent, e.g., residents of a village or rehab program with a specific period for their stay, individuals who have housing vouchers which expire in, e.g., three, six, twelve months; those in shelters; and those with insecure living arrangements,
e.g., staying in a room of someone’s apartment or house. In these scenarios these individuals can be excluded at any time from their inside housing for not following the rules; family visits typically are not allowed. The remaining five individuals have more permanency and stability in their housing situations:

- two individuals belong to a two wage-earning family whose income is more than sufficient for stable housing, and
- three individuals have permanent housing vouchers from various sources. I did hesitate somewhat including this latter group as part of the more permanently housed as I was not able to get a clear understanding of the funding sources were for these permanent housing vouchers. I am not fully convinced of the permanency of such vouchers.

In summary, of the thirty participants, twenty-five (83%) are housing insecure, even if living inside; five (17%) have housing security. This is a theme which evolved from the data; the literature has not addressed the housing and housing insecurity of homeless women to this level of detail overall, I suggest that this theme demonstrates from a different perspective how vulnerable and marginalized unhoused women are; we also clearly see the array of temporary living situations and experiences.

**Words from/about participants:**

Cita, unhoused for 3 years, occasional sex worker:

“**It [the housing voucher] was going to be good forever but then they took it away from me. They said you have to get another probably by this date… So, I lost the voucher. At first, I was told we will keep renewing your voucher as long as it takes until you get a place. Then I was told later on you got to get it by such and such a time or you**
are going to lose it permanently. We will never renew it for you again.”

Margaret, 56, White, unhoused for over three years:

“So, then my unemployment finally run out and my boyfriend said I’m not paying rent anymore and he was paying groceries and meeting all the expenses and we kind of split up. I came to Portland homeless.”
CHAPTER VI: ANALYSIS OF MENTAL MAPS

The section in Chapter IV on Methods – Mental Maps presents different research frameworks for understanding how mental maps are used in social science research, especially as that research aligns with my own. Mental maps and interviews were the primary data collection methods; the mental map process provided the initial conversation between participant and researcher and established the research relationship. Drawing their map with streets, unsafe locations, and other aspects of their lived experiences helped participants come to understand that they owned their story and were able/willing to share it. During the mental map process, I experienced the dynamics of women’s agency and power as they helped to create the research with their stories and maps.

This section examines my research sub question: *In what ways is mental mapping a robust tool for gathering the stories (data) of vulnerable populations such as unhoused women?* It also describes and evaluates a few actual mental maps and the process of creating them to better understand their efficacy as a method for gathering the stories of such populations.

The mental maps produced in this research were quite diverse and illustrate the flexibility of maps to individual participants. “A good Mind Map shows the "shape" of the subject, the relative importance of individual points, and the ways in which facts relate to one another” (Mind Tools Content Team, n.d., para. 4). There is no "bad" mental map per se, yet some certainly are aligned more with the description above than others. Also, the actual way the woman produced their
map can be of interest. Recall that each participant was given one or more blank pages (8.5 x 11 inches) and a set of colored pencils. I do not identify these maps with the women’s names, rather their Participant IDs; there is a possible personal safety issue associating names with their geographic locations. (Note that I have manipulated, e.g., cropped, these maps somewhat for key features of maps to be visible and fit within the page.)

But first I want to provide a brief discussion on why mental maps and how to properly code and analyze the physical maps.

**Mental Maps: Why and How**

First, why mental maps as my research method? I evaluated different field research methods for the collection of unsafe urban locations from homeless women, specifically focus groups, surveys, and mental maps. The exploration of these methods occurred immediately before my Pilot Research (Appendix A.) “A focus group is a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research, which [generates] rich details of complex experiences and reasoning behind [their] actions, beliefs, perceptions, and attitudes” (Powell & Single, 1996, p. 499). I did select a few unhoused women for this exercise; overall it became apparent that the women did not “enjoy” being in a focus group and further that this effort did not produce the detailed, nuanced data I needed.

I developed a mini survey and gave it to 2-3 unhoused women; the only way they completed it was by me entering their responses. As with focus groups, the
surveys simply did not provide the quality or depth of information I expected and needed. My third review of a research method involved mental maps. As with the other two methods, I sat with three unhoused women while they completed their mental maps. There was a great deal of information collected and on a side note, these women were so excited and engaged in completing and discussing their maps. Based on this mini review, I selected mental maps as the research tool for my Pilot Research (Appendix A.) Using mental maps and interviews, the Pilot Research confirmed that these methods did produce data that was able to answer my research questions.

Next, how does one initially approach and analyze completed physical mental maps? The literature e.g., (Doan, 2010; Koskela, 1997; Loukaitou-Sideris, 2004, 2006; Loukaitou-Sideris & Fink, 2009; Pain, 1997; Valentine, 1989) shows that certain features of public space are perceived to be unsafe by women, including:

- *Large, open space* -- e.g., parks, empty lots
- *Closed spaces* with limited exits where concealment is possible -- e.g., parking garages, subways, alleys
- *Deserted open spaces* – e.g., empty basketball courts
- *Public transit* – e.g., transit stops, buses
- *All night businesses* – e.g., laundromats
- Streets or locations where there might be a *larger number of men*
- Most places at *night*
- *New, unfamiliar* locations
These factors helped to inform my initial approach to coding of the mental maps. I went through many, many rounds of iterative coding, as described by Saldana (2009). Note that during the interviews, the participants and I discussed their mental maps, which provided additional insights and information about the maps. Through this process, patterns, categories, and themes emerged.

I detailed these steps in Figure V.1 Demographic Data Method: Coding, Statistics, & Graphs. Further, in Figure VII.14 Unsafety Data Method: Locations, Reasons, & Categories, I outlined the steps involved in my coding process of mental maps for unsafety. Finally, Table VII.1 Examples: Locations, Reasons, Categories of Unsafety shows how I coded the participants’ responses for an unsafe location (from the mental map) into initial categories of reasons for unsafety and finally into the four final categories of Built Environment, Too Many People, Enforcers/Harassment, and Crime. I suggest this brief description shows a robust approach to the coding process and analysis of the data from the mental maps.
Exceptional Mental Maps

At the one end of the continuum of mental maps are a few that are simply exceptional and align with the description above. These three provided exceptional data and perspectives and vastly different ways of completing the maps.

Figure VI.1 Mental Map: Participant 105

P105 created a map with remarkable details, including correct names and addresses of businesses, streets, the Willamette River, employment and housing history, and a key to the map; their recall was astounding. They were not willing to begin the interview until their map was perfect, which required about an hour to complete. Their details were directly tied to their activities (e.g., work, daycare, temporary housing) in the five geographic microcosms (silos) on their map. They
had few connections or overlaps between or outside of these microcosms. Finally, the consistent thread throughout their stories was their social relationships; they in essence had five stories, five microcosms, each set in a different time and location.

The next exceptional map (P117) is full of details and information but with challenging directional orientations. They so enjoyed this “art project” (their words) and sang while mapping. They completed the center of the map first and drew the other stories out from the center, as they recalled them. Note that they placed themself in the center with an X and bold lettering and was quite pleased with that. They suffered extreme domestic abuse for years but did talk about those experiences.
The third exceptional map is P107 below. This map is the most logical and complete one produced, as if drawn by a cartographer, almost like a Lonely Planet guide to homelessness in the Lents and Foster-Powell neighborhoods. I show one page only but there were almost three pages of such mapping. This
participant had completely turned around their life, away from drugs and crime, had a stable family situation, and offered faith-based outreach services in the Research Study Area. They were a great help to me in recommending unhoused women to participate in the research.

**Figure VI.3 Mental Map: Participant 107**
Fascinating Mental Map

The next mental map (P122) here is one I term “fascinating.” This participant drew this unique map in a circle from their living experiences in shelters, cars, and a village. It was an unusual experience for me to watch them draw in this manner, turning the paper around and around in a circle. The map had implicit locations from the places they mentioned on the map but is directionally way off. Their interview was similar in that they talked about the locations on the map but not necessarily in any logical order that I could perceive. Mapping and talking more to themself than to me, they rocked back and forth. They seemed to become one with the mapping process. Just fascinating!
Challenging Mental Maps

These final two mental maps (Participants P108 and P128) were completed by women who had no/little orientation to streets, directions, landmarks, left/right relationships, etc. Each woman made several attempts at mapping but were simply not able to complete; they did not seem to grasp that while living in a world of routes, these did not have a relation to each other on the landscape.
P-108 had an adequate interview and added details without many specific geographic locations; they had been unhoused for eight years and lived in several different vans. They captured the unsafety aspects of living in a vehicle. P128 wrote their mental map and had a fantastic interview with details and stories.
around locations; they had just received a permanent housing voucher and were quite delighted. There was one mental map which was simply not usable; again, some spatial and unsafety particulars emerged during the interview. Without clearly drawn mental maps, as with these three, gathering unsafety information was more time consuming and complicated. To be clear, however, the mental mapping process, even if the map itself was challenging, provided an opening for the participant to feel safe and comfortable enough to share their lived experiences.

**Theme: The Art of Mental Mapping**

I suggest that the above discussion has clearly demonstrated that mental maps are a robust and powerful tool for gathering the stories of vulnerable populations. These maps not only provided the data for the analyses but also revealed their perceptions, stories, and lived experiences of a marginalized and/or overlooked population; mental maps in essence are a tool which provides an opportunity for “almost invisible” women become discernible. Through these data, I have uncovered and discussed patterns and themes about unhoused women, their perceptions, responses, and movement through unsafe urban space.

From my observations the mental maps revealed the following:

- My mental maps combined both objective knowledge of places (e.g., businesses) and locations (streets) in addition to subjective perceptions (e.g., unsafety.) Recall that individual perceptions are a key dimension to my concept of urban unsafety.
• Data: The mental maps obviously are a rich source of data, both qualitative and quantitative, from the participants on our variables of interest, e.g., unsafe locations. As I mentioned previously, the evolution from the physical maps to coding/categorizing to quantitative data is very time consuming, but I suggest that is the only way to retain critical nuances, which are reflected in the maps and data. These data were the foundation and basis for the analyses, results, and themes.

• Clearly, these maps displayed a vast array of individuality, uniqueness, diversity, and lived experiences.

• A few maps had challenges, e.g., incomplete, little/no directional orientation, few streets identified, yet even these had some data germane to the woman’s story and perceptions of unsafety. In some ways the soul of the participant seemed to emerge during mental mapping.

• The actual maps and the mapping process itself both were integral to my understanding of how unhoused women perceive and navigate through urban unsafety. I have not per se analyzed these different ways of producing maps, rather have chronicled and bounded it with individual information. This approach reflects the ethnographic nature of my mental mapping. Finally, I did not expect that the process itself would provide such interesting insights.

• Mental mapping helped to establish the initial relationship between researcher and participant in an equitable, safe manner. It was the foundation for my research and for the amazing stories gathered. Mental mapping is a fabulous way of collecting the stories of vulnerable populations and of helping these individuals feel sufficiently safe and comfortable to share their lived experiences. Maps can provide opportunities for marginalized groups to address the hegemonic narratives of exclusion, to incorporate their
perceptions of reality, and to challenge the persistent silences in the literature/data. Mental maps also show the spatialization of income/gendered inequality and of unsafe urban space.

Homeless women are a vulnerable group; it is critical that the research and methods be inclusive, not exclusive of their perceptions and experiences, for example, of unsafe urban space. As the discussion on gaps in the literature showed (Chapter II.D), vulnerable women are typically not included in the academy’s research and mental mapping has not been utilized extensively to gather their stories and perceptions. I utilized mental maps in this manner which has not been done extensively. On a side note, I can attest that mental mapping is both a rewarding and challenging research method to use. The inclusion of the women in the research process, their agency, and the unparalleled results confirm the robustness of mental mapping as a research method with vulnerable populations.

Mental mapping, as a research art form, is powerful, robust, revealing, and in some ways, radical.
CHAPTER VII: SPATIAL AND UNSAFETY ANALYSES

This chapter presents the spatial and unsafety data methods and analysis. Central to this analysis are three research questions: What does the spatialization of unsafe locations look like and are demographic groupings dissimilarly affected? What are the critical reasons for unsafety identified by participants? How do homeless women respond to urban unsafety; that is, what strategies do they utilize? To explore that rather broad topic, the analysis has five components:

1. Spatial and unsafety data methods. These data methods were used to prepare and manipulate the qualitative data, all collected through mental maps and interviews. These methods detail how these data were systematically prepared, or “cleaned,” for accurate analysis.

2. Unsafety in terms of key demographics,

3. Spatial movement analyzed through Centroid Maps,

4. Women’s reasons for unsafety, and

5. Women’s responses to unsafety.

A theme also emerges from the analysis in this chapter: Spatial Inequity.

A. Spatial Data Method

The Spatial Data Method (Figure VII.1) below provides the overview of the methods used to manipulate the spatial data.
Figure VII.1 Spatial Data Method: Maps

Step SU-3: Exclusion of data outliers

Step SU-1 and SU-2 are straightforward: moving data from Excel into ARC GIS and geocoding location points of unsafety. As Step SU-3 outlines, the total number of unsafe locations (including all levels of unsafety – Low, Medium, and High) was 234; as shown in Figure VII.2 Unsafe Locations: Study Area these points were spread all over the Portland Mero area with the vast majority in SE Portland, my main geographic focus. One can surmise from this map that it is not
uncommon for unhoused women to move around or travel beyond their immediate housing area.

**Figure VII.2 All Unsafe Locations**

Figure VII.2 above shows *all* unsafety points identified by participants. Figure VII.3 below displays the unsafe locations that were *included* in the Research Study Area. Points were *excluded* (n=33) because they were geographic outliers, with large distances away from my focus, SE Portland. There are no points included:

- West side of the Portland Metro, specifically, no locations west of the Willamette River,
- East side – Gresham, and
- Far north Portland.
These data points are not included in the analyses and not shown on maps; overall the physical characteristics of those excluded were fairly like those included except those in downtown Portland centered around unsafe public transit. In this way the Study Area has spatial boundaries which define the area of my analysis. Note these included locations also align with the initial Research Study Area (Figure V.1).

**Figure VII.3 Unsafe Locations: Research Study Area**

![Map showing unsafe locations in downtown Portland](image)

Locations by Levels of Unsafety: Research Study Area (Figure VII.4 below) shows the breakout of unsafety levels. The small number of Low Unsafety points (n=20, 10%) are primarily clustered within the interior of the triangle formed by SE
Foster Road, SE Powell Blvd, and SE 82nd Ave./SE 92nd Ave. and around the Mall 205 parking lot. Neither of these clusters are on main arterials, rather within the more residential community and relatively “safer” parking. The other two levels of unsafety (Medium, n=67, 33%; High, n=114, 57%) are dispersed all over the map. Going forward, I combined these three levels of unsafe locations into a single measure of Unsafety and did not conduct analysis by level of unsafety. The reasoning behind this decision is twofold: The distribution of the unsafety points did not allow for good analysis if split into the three levels. Further I was not confident that the designations of the three levels by participants was solid enough for comparison by these subgroups. I was quite assured that if a location was identified as unsafe, regardless of level, then that location was not safe. That point became critical in my analysis.

Figure VII.4 Locations by Levels of Unsafety
Step SU-4: Maps from Attributes

Continuing the explanation of the Spatial Data Method: Maps (Figure VII.1) Step SU-4 involves creating maps from various attributes, e.g., participants' demographic data, categories such as the level of unsafety, reasons for unsafe locations, built environment, crime, people/drugs, and enforcers/harassment. An example of a map integrating unsafe locations with attributes is: Unsafe Locations: Inside – Outside and Unsafe Locations (Figure VII.5 below.) We will discuss these and other maps in our Spatial – Unsafty Analysis.

Step SU-5: Centroid Maps

The final step of the Spatial Data Method: Maps is Step SU-5, the creation of Centroid Maps. All unsafe locations (even those initially excluded) were included to initially look at the spheres of movement for participants. After that review, only Centroids within the Research Study area were included in the analysis with three excluded. Centroid Analysis uses point data (single layer), which for this research are the unsafe locations. Using each unsafe location a woman identifies, the spatial area for that participant is calculated using the Minimum Boundary Geometry Tool, geometry type Convex Hull. The center of each area is calculated using the Centroid Tool, representing the middle of the polygon (average) position of the area. This approach uses the spatialization of each woman’s identified unsafe locations as a proxy for their actual movement. It provides an interesting perspective on their spatial movement.
B. Spatial Analysis: Key Demographics

The research question discussed in this section is: What does the spatialization of unsafe locations look like and are demographic groupings dissimilarly affected? The demographics presented here include those that proved interesting or noteworthy in our Demographic Analysis: Inside/Outside Housing, Non-Sex Work/Sex Work, White/Nonwhite, and Age categories.

Inside/Outside Living

**Figure VII.5 Unsafty & Inside/Inside Housing**

In the graph above (Figure VII.5) there are 164 unsafety data points (locations) from those with Inside Housing having 99 (60%) and Outside Housing having 65 (40%). A few noteworthy patterns include:
Outside Housing

The first unsafe area for those living outside is the I-205 Multi Use Path, a bicycle, jogging, and pedestrian path, running north/south along I-205 and connecting to various public transit including the MAX. Many of the participants considered this to be essentially unsafe. I interviewed one participant on this path and did not feel very comfortable with the high walls, lack of lighting, and narrow pathway; there seemed to be no viable escape. I suggest that the two photos offer a visual explanation of this unsafety.

Figure VII.6 Photo #1: Un safety & I-205 Multi Use Path
The second pattern of unsafe space among those living Outside are the Mall 205 parking lots and around Ventura Park (See Theme: Age & Living in a Vehicle.) The women, often those with vehicles, moved between these two open and large areas, e.g., after they were told to leave by City of Portland Park Police or security guards. Due to these enforcers, woman often perceived these areas to be unsafe, but also had no other place to go to. The women did not feel secure and felt that their parking spot was quite temporary. Unsafe space, impermanent living area, and housed Outside are the sources of ongoing trauma to these women. In addition, at Mall 205 several participants talked about male predators walking through the parking lot, banging on their doors, shouting, asking about sex, etc.
Inside Housing

The first interesting pattern for those living Inside (blue on Figure VII.7) involved north/south on SE 82\textsuperscript{nd} Ave., a main arterial in the Lents -Foster neighborhoods. Some of the unsafety involved the 82\textsuperscript{nd} Ave. bus stops and buses; women did not feel safe on these but had had to use the public transit system to get places. When they walked on 82\textsuperscript{nd} Ave, waited at the bus stops, or travelled on the bus, the women experienced constant harassment, physical and verbal, from men, most of whom were housed (from their perspective.) These women often could not walk home without this harassment.

A second pattern for those living inside involved the western and north-western part of the Figure VII.5 map. All of these unsafe locations are blue, meaning those living inside travel there; there are no unsafe locations in these areas identified by women living outside. What pattern might be suggested here? As indicated by the unsafe locations, those living Inside appear to travel much further than do those living outside. It might be that the outsiders do not feel comfortable in these areas or simply it is too much of a hassle to take public transit to more geographically spread-out or just new, unfamiliar locations.

I would suggest that this analysis shows that in terms of unsafe locations, those living Inside enjoy a more wide-spread geographic area than those living Outside.
Sex Work

I had not intended to have a separate discussion on Sex Workers, but the similarity in the patterns between Inside/Outside and Sex Worker is rather surprising. Below is a map of Unsafety and Sex Work (Figure XII.16); there were 85 unsafe locations identified by women who were currently sex workers. One can see approximately 6-7 unsafe points on SE 82\textsuperscript{nd} Ave., yet the majority were concentrated on SE 92\textsuperscript{nd} Ave./I-205 Multi Use Path (approx. 18) and around Mall 205 and Ventura Park (approx. 14). It appears that most of the sex work was carried out in the areas where unsafe locations were concentrated. An interesting note also is in our previous examination on Inside/Outside Housing, most unsafe locations identified Outsiders were concentrated in the same unsafe geographic areas indicated by Sex Workers. One can see a correlation/relationship between these two groups of unsafe locations, but the specific connection between Sex Workers and Outside Living is another deep dive research effort (with mental maps). Also visible as a pattern is that non-Sex Workers travel more extensively than do Sex Workers.
White/Nonwhite

The map below (Figure VII.9) shows 201 unsafety locations by White/Nonwhite. Whites have identified 111 (55%) unsafe data points, Nonwhites 90 (46%). (Note this is quite similar to the percentage breakdown of White/Nonwhite participants, 56% to 44% respectively.) Two patterns emerge: First, Nonwhites’ unsafe locations are on the main arterials and clustered in the triangle of my research study area, that is, SE 92\textsuperscript{nd} Ave/I-205, SE Powell Blvd, and SE Foster Ave, especially around SE Holgate Ave. Unsafety on arterials is understandable, as there are businesses, public transit, many more people present, yet the interior of the triangle is a bit surprising. I might suggest that
Nonwhites do not consider the interior, the more residential area, as safe space. The second pattern involves the apparent more widespread movement of Whites compared to Nonwhites, especially north of Division St., in the northwest and eastern areas of the map. This appears to be the same spatialization pattern with Insiders, Non-Sex Workers, and Whites travelling more extensively than Outsiders, Sex Workers, and Nonwhites. Quite intriguing!

**Figure VII.9 Unsafty & White/Nonwhite**
**Age (Categories)**

The final demographic map we review involves Age Categories. There are two outstanding patterns: First, women over 55 certainly travel more broadly than do other age groups. Recall that this is looked at by the unsafe locations identified by each woman; in essence, the wider area of unsafety points is a proxy for their actual movement. The second interesting pattern involves those under forty (white dots): Nearly all of the unsafe locations identified by women under 40 are within the boundaries of the Lents and Foster – Powell neighborhoods, the triangle I have referenced previously. Further, unsafe locations are not on the main arterials, rather in the more residual interior of the triangle. Those over 55 travel more broadly than those under 40, showing a difference in the women’s spatial movement. I would suggest two possible explanations for this difference by age category. First, those residing within the residential area of the triangle (mainly, those < 40) simply do not travel out much; they have their housing (inside or outside), social networks, places for food, etc., and seem to stay within the area of what they *know*. Second, those over 55 overall shows more self-confidence that those under 40 and tend to avoid situations which pose some level of risk. Participants over 55 are simply not afraid. More research is needed to better understand and explain this difference by age category.
C. Spatial Analysis: Centroid Maps

This discussion focuses on the use of Centroid Maps which are based on the unsafe locations identified by each participant. Recollect from the discussion in Chapter VIII.A that Centroid Analysis uses point data which are the unsafe locations. A polygon is drawn to each unsafe location a participant identifies and the spatial area and the middle (average) of the polygon is calculated. Centroid Maps use this average position as a proxy for a participant’s actual movement. Figure VIII.7 shows the Centroid Map for the Spatial Area for All Participants. We discuss the spatial areas for Age categories and White/Nonwhite.
Of the 27 participants here, 23 (85%) have a movement area of ten miles or less. Eleven (40%) have a spatial movement area of less than two miles; very interesting is that this area for all but two women is within the boundaries of the Lents – Foster-Powell triangle. Only four (5%) travel more than ten miles; none of these largest blue circles are within the triangle and are dispersed primarily in the northwest part of the map.

Figure VII.12 shows the centroid spatial area by age category. This Centroid map indicates that movement is greater (> 10 miles) for women over age 50 when compared to those under 50 but especially under age 40. There are differences in geographic movement areas: women living within the triangle travel
much less than those outside of the triangle and women over age 50 have a wider travel area than those in age categories than those under 40.

**Figure VII.12 Centroid Spatial Area Map: Age Categories**

Centroid Maps by White/Nonwhite (Figure VII.13) shows that in the geographic area less than two miles there are more Nonwhites (n=7, 26%) than Whites (n=4, 15%). Whites have a much broader range of travel, especially in the 2 – 10-mile geographic area, than do nonwhites; Nonwhites remain within the triangle and on average travel less than two miles. As with older versus younger Age categories, there are apparent patterns of spatial inequity of Whites versus Nonwhites. Let us delve into possible reasons for these disparate spatial patterns in the next section.
D. Unsafety Data Method

To understand the spatialization of unsafety, there are five overall steps to determine and integrate locations, reasons, and categories of unsafety. These steps are described in the Unsafety Method (Figure VII.14) below:
Step LRC-1 was a quite manual process of reviewing the mental maps and reading the transcripts for any identified unsafe location. Determining these addresses or geocodes frequently required looking through Google and other maps, business directories, etc.; this was a laborious task. The next step LRC-2 involved adding the specific participant to the unsafe locations, all done in Excel.
The final three steps (LRC-3, LRC-4, and LRC-5) entailed classic qualitative data coding and analysis. Step LRC-3 involved two parts; first I read through the mental maps and interviews for each participant for words or passages for their reasons for identifying a location as unsafe; this was in essence line by line coding, and iterative process. I then entered the participant's actual words (or a summary) for the reason for unsafety *for that specific location* into Excel; hence there now was spatial data for reasons of unsafe locations, by participant. In Step LRC-4 the reasons were classified into initial categories of Built Environment, Neighborhood Character, Lighting, People, Men, Drugs, Enforcers, Harassment, and Crime. The final step LRC-5 involved combining the initial categories into four broader categories or schemas. For a baseline reference, there were 201 unsafe locations and approximately 246 reasons for unsafety in the Research Study Area.

Examples of transforming data from Locations to Reasons to Categories are included in Table VII.1. Note reading this table from left to right shows the steps in the transformation of these unsafety data. Our analysis and mappings utilize the Final Categories, light yellow, far right column.

**Table VII.1 Examples: Locations, Reasons, Categories of Unsafety**

<table>
<thead>
<tr>
<th>Location ID</th>
<th>Words from Participants: Reasons for Unsafety</th>
<th>Initial Category: Reasons for Unsafety</th>
<th>Final Category: Reasons for Unsafety</th>
</tr>
</thead>
<tbody>
<tr>
<td>P113_L124</td>
<td>Horrible condition with too many potholes</td>
<td>Built Environment</td>
<td>BUILT ENVIRONMENT</td>
</tr>
<tr>
<td>P117_L158</td>
<td>Streets and sidewalks in very bad condition, hard to walk or drive.</td>
<td>Built Environment</td>
<td></td>
</tr>
<tr>
<td>P103_L024</td>
<td>Skanky neighborhood</td>
<td>Neighborhood Character</td>
<td></td>
</tr>
</tbody>
</table>
This section has described the overall Unsafety Method and the progression from single unsafety data points (locations) to reasons for each unsafe location to categories of reasons to broader categories/schemas. This is the foundation of our analysis of reasons for unsafety. The next section analyses reasons for unsafety.

E. Reasons for Unsafety

The research question explored here is: What are the critical reasons for unsafety identified by participants? The reference table for this discussion is Table VII.1 Examples: Locations, Reasons, Categories of Unsafety above. The four schemas or categories of reasons for unsafety include:

1. Built Environment (n=77, 31%),
2. Too Many People (n=73, 30%),
3. Enforcers/Harassment (n=55, 22%), and
4. Crime (n=41, 17%).

**Figure VII.15**

(below maps are summarized categories for the reasons for unsafe locations)

**Figure VII.15 Categories of Reasons for Unsafe Locations**

An analysis of these categories should yield interesting patterns or insights into why certain space is considered unsafe by unhoused women.
The first two categories, Built Environment and Too Many People, account for 61% (n=150) of the unsafe locations. The Built Environment Unsafety (Figure VII.16) includes issues such as insufficient/no lighting, streets with potholes, no paved streets, no or damaged sidewalks, houses and yards poorly maintained, trash around. With little surprise these locations are on the main north - south streets, SE 82nd Ave and SE 92nd Ave/Multi Use Path, but not so much within the more residential area. These are key routes for pedestrians/transit riders. SE Duke St. also has quite a few unsafe locations; that street has few lights and poorly kept up houses. Overall, the built environment for the Study Area was characterized by a participant as “Lousy. Unsafe. There was no sidewalk…No streetlamps and like it was really dark….and all of the drug houses… the curtains
were gone, and the garbage was on its side. I really didn’t feel safe walking especially at night.”

**Category: Too Many People**

Reasons for unsafety in the category Too Many People include too many people, too many individuals with drugs, too many men; the notion here is simply many unhoused women do not like to be around large groups of people, especially men; this often results from their untreated trauma and PTSD. This map (Figure VII.17) shows that all the vast majority of unsafe locations (32 out of 73, 44%) within the triangle and two of its arterial boundaries (SE Foster R. and SE Powell Blvd. There are outliers grouped on SE Flavel St./I-205 Multi Use Path.
**Categories: Enforcers – Harassment and Crime**

These two categories combined account for approximately 39% (n=96) of the reasons women provided for unsafe locations. Enforcers – Harassment category includes incidents such as Portland Park police or security guards telling them to move their vehicles, police ticketing them for expired tags, housed folks screaming and threatening them, housed men harassing (verbally, physically) them as they walk on the sidewalks, housed neighbors calling the police on them, restaurant managers telling them to leave. Figure VII.17 below shows that these reasons for unsafety are centered in two places: in the triangle, both within the more residential parts and on the arterials and also in the Ventura Park/Mall 205 area. Crime category involves occurrences where the police are called, and arrests are made; these arrests may not necessarily be the unhoused participants. Very interesting – compare VII.18 (Enforcers – Harassment) with VII.19 (Crime): Crime unsafety locations are for the most part on the arterials of the triangle and not within the more residential area. This is a somewhat reverse pattern with Enforcers – Harassment.

This analysis of the spatialization of reasons for unsafety is exploratory; no other research mapped the geographical spatialization of unsafety, that is, by combining GIS and reasons for unsafety. Some of these patterns are logical, such as: Crime unsafety occurs on the busier streets where there are more businesses, public transit, and pedestrians. Most of the unsafe locations for both Too Many People and Enforcers/Harassment occur within the more residential parts of the
triangle. Certainly, with all these categories of reasons for unsafety, it seems clear that unhoused women face challenges in different types of locations and space. We now have a small glimpse into how unhoused women perceive, categorize, and act upon urban geography in terms of unsafety.

**Figure VII.18 Unsafety: Enforcers/Harassment**

**Figure VII.19 Unsafety: Crime**
F. Responses to Unsafty

The data for participants’ responses to Unsafty is not as comprehensive or methodical as for demographic, spatial, and unsafety data. There are no tables, graphs, or maps, but there are the women’s stories about how they perceive and respond to unsafe urban space. There are four components that provide a context for us to better understand responses: the research question, responses mentioned in the literature, responses identified by the participants but not in the literature, and the Adapted Framework (Figure II.2). I weave the women’s actual words about their responses throughout.

Our pertinent research question here is: *How do homeless women respond to urban unsafety; that is, what strategies do they utilize?* Recall the discussion in Chapter II.C Women’s Experiences and Responses. Figures VII.20 Responses: Identified in the Literature and VII.21 Responses: Not Identified in the Literature compare responses from the literature and responses from my study. Rather interesting.
### Table: Figure VII.20 Participants’ Responses: In the Literature

<table>
<thead>
<tr>
<th>Res. to Unsafety Identified in the Literature</th>
<th>Res. to Unsafety Identified by my Participants</th>
<th>Words from Participants re the Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Avoiding the unsafe space</td>
<td>Predominant response identified by half of the participants</td>
<td></td>
</tr>
<tr>
<td>2. Sticking to more well traversed streets and locations</td>
<td>Noted by 5 participants</td>
<td></td>
</tr>
<tr>
<td>3. Changing the times and means of travel</td>
<td>4 participants changed the times of travel, but not the means</td>
<td></td>
</tr>
<tr>
<td>4. Avoiding some public transit</td>
<td>Participants cannot avoid public transit but are very aware what seat they take on the bus or MAX</td>
<td>&gt;Even in the day time or at night, the black men always bothering you especially in the Max. It’s worse, it’s really bad on the Max. I don’ feel safe at all on the Max. I move, I always move away from them by changing seats</td>
</tr>
<tr>
<td>5. Moving about the city in the daylight</td>
<td>3 participants adapted to more travelling during the daylight hours</td>
<td>&gt;Both at night and even in the day time because anything can happen anytime. Day time is safer for us</td>
</tr>
<tr>
<td>6. Travelling with companions especially at night</td>
<td>Noted by 4-5 participants</td>
<td>&gt;We also move in groups... we always move together to stay safe outside</td>
</tr>
<tr>
<td>7. Tending to stay near their home.</td>
<td>9/30 noted that they stayed close to their housing (Inside or Outside)</td>
<td></td>
</tr>
<tr>
<td>8. Going outside less and often reducing communications with others</td>
<td>Not mentioned by participants</td>
<td></td>
</tr>
<tr>
<td>9. Choosing alternate bus routes or simply changing locations</td>
<td>Not mentioned by participants</td>
<td></td>
</tr>
</tbody>
</table>

As you can see, of the nine mentioned in the literature, my participants confirmed seven as their own response to unsafety. These confirmed responses make sense and involve both time-based and space-based avoidance. The two
responses (#8 and #9) not mentioned by participants are 1. going outside less and often reducing communications with others and 2. choosing alternate bus routes or simply changing locations. As nearly half of the women live Outside (n=13, 43%) and 25/30 are housing insecure, going outside less seems not to be an option nor does choosing alternate bus routes. Note this might reflect that research has typically surveyed/interviewed women about unsafety in urban areas but has not included unhoused women.

The more interesting findings are the women’s responses (n=5) not mentioned in the literature but identified by the participants. See Figure VII.21 below. Their responses (#1, 2, 4, and 5) below are somewhat analogous involving the appearance of not being homeless, super vigilance, a certain way of walking, and the display of self-confidence. These are adaptations participants make to be or feel safer. The third response was a bit surprising: the participants go or return to known locations which they believe to be safe; these would be locations where they themselves feel safe.
### Figure VII.21 Participants’ Responses: Not in the Literature

<table>
<thead>
<tr>
<th>Responses to Unsafty Identified by my Participants</th>
<th>Words from Participants</th>
</tr>
</thead>
</table>
| 1. Maintaining a super awareness when outside     | > I want my own place where I can relax, let my guard down.  
> There’s nobody to protects you 100%. They can cut the fence and get in; we can get raped. |
| 2. Displaying a certain posture and attitude when walking outside in unsafe space | > Absolutely fast and straight not giving my attention or paying, giving too much attention to any activity around me because you don’t want to draw attention to yourself. So, I’m definitely walking as fast as I can in a hurry pace but trying to make it as unnoticeable that I’m walking that fast... Also, every once in a while, I would take a full body turn to look around everywhere to make sure that I could proceed with that and know if someone is walking behind me, what’s on the side, like, what’s going on and then back. I don’t know how many yards it was till I turn around again, but you have to do that every once in a while.  
> The last thing you want to do is look like a victim. Do not walk around looking afraid, do no walk around looking at the ground. Don’t be afraid to look people in the eye because that is what they look for. They know you are afraid; they’ll take everything you’ve got... if you’re lucky |
| 3. Staying in or returning to known locations      | > [I parked] in the same area because it’s still where I felt most safe, because I was most familiar with it. |
| 4. Presenting themselves with not having the appearance of being homeless. | > I would, you know, put my shoes on and you know, if I-- My hair was a little longer, I put a little water on it and make it look good and then, you know, put all my clothes that I would go out in public in, um, and then go in, wash up my face and stuff like that, sit down, get a cup of coffee and start looking for work on my computer. This is how I was safest -- fitting in, looking like a normal, housed person. |
| 5. Showing self-confidence in one’s own abilities to be safe and make the right decisions | > You’re worth it. You can have a normal, healthy life if you want... Don’t give up and don’t settle for men or situations that are not safe or healthy |
Theme: Spatial Inequity

We have discussed spatial inequity across different factors in this chapter; I suggest it is important to further analyze Unsafety and Spatial Inequity. Wright (2000) declared that structural explanations of poverty and homelessness must be linked to the broader social, political, and economic factors of why and how these inequities exist. Marxist geographers (Mitchell, 1997; Rose, 1993) argued that the social inequalities pervasive to capitalist societies result in spatial inequalities, with regional and local differences. Lobao et al. (2007) suggested that there are four keys to understanding or framing spatial inequality:

- Space intersects with social status markers such as race/ethnicity, gender, and age, which includes not only how individuals are distributed across space, but also "how space is used and experienced by different social groups" (p.10),
- Space can channel inequality processes and can constrain and/or augment their effects,
- Space itself is created through inequality processes, and
- "Space and inequality processes can be treated as casually intertwined" (p.10). To understand how macro processes such as industrial restructuring or removal of the safety net cause inequality requires understanding how these are embedded in spatial settings.

I embed the discussion of spatial inequality into Lobao et al.'s (2007) framing of spatial inequity.

This paper is not an exploration of spatial inequity per se. This Chapter is framed by three research questions: What does the spatialization of unsafe locations look like and are demographic groupings dissimilarly affected? What are
the critical reasons for unsafety identified by participants? How do homeless women respond to urban unsafety; that is, what strategies do they utilize? The discussion has analyzed maps with unsafe locations by demographic group (e.g., age categories) and by individual participant (Centroid Maps) and also reviewed reasons for and women's responses to unsafety. We now have clearer insights into what unsafety and its spatialization look like, how demographic groupings are impacted differently and unequally, and reasons and responses to unsafety.

I want to explore these analyses in terms of possible systematic spatial inequity. I want to also be clear about the limitations of my research design and findings. The limitations of this research project and for qualitative data overall might include that these findings and analysis apply to the group of women who participated; that is, conclusions are not generalizable. Related, these data may not be statistically representative of the overall population. There may be difficulty in estimating the extent of the phenomena (unsafety and unhoused women). And finally, there may be low reliability (consistency of measures.)

Disparate patterns are observable in the maps presented in this Chapter. A summary of spatial patterns involving the key demographic and spatial analysis of Inside/Outside Living, Sex Worker/Non-Sex Worker, Whites/NonWhites, Age, Unsafety Reasons, and Responses to Unsafety includes:

- **Inside/Outside Living**: Those living inside have a much more widespread geographic area than those who live outside. I suggest that those living inside enjoy a better living situation and possibly feel safer
going out than those living outside, who have a more transitory housing situation.

- **Non-Sex/Sex Workers**: Participants who are not Sex Workers do travel more extensively and in a larger geographical area than do Sex Workers. Sex Workers have indicated to me that they never feel safe when travelling, in part because Sex Workers tend to travel more often than Non-Sex Workers into areas where unsafe locations are concentrated. This may be tied to the nature and locations of their work.

- **Whites/Nonwhites**:
  - Whites travel more broadly, especially in the two-to-ten-mile range, than do Nonwhites. A greater percentage of Nonwhites than Whites travel more often in the two-mile geographic area. Nonwhites have indicated that they do not feel safe going too far from their living situation. They have two markers that put them at risk: being unhoused and Nonwhite in a predominantly White and housed neighborhood and city.
  - Nonwhites more commonly travel on main arterials, not in the interior of the triangle, which is the more residential area of Lents – Foster Powell. Fear/avoidance of Whites and of housed individuals in the triangle might describe this specific pattern.

- **Age**: Women over age 55 also travel much more broadly than those under 40. Those under 40 tend to cluster and remain within the triangle. Recall the discussion of older women who lived in their vehicles (Chapter V). The older women (> 55) seem to exhibit very little fear and a more “realistic” self-confidence than the younger group. These women who are over 55 travels to locations, to see people, and to access services that they feel they need or want to. Those over 55 are not looking for problems and seem to know how to avoid unsafe situations and people without impacting their moving around. There are different
patterns of movement for those over 55 versus those under 40; this dissimilarity does suggest spatial inequity.

- **Reasons for Unsafety:** The Built Environment and Crime reasons for unsafety appear to occur on the main arterials with Too Many People, whereas Enforcers/Harassment takes place in the more residential area of the triangle. A clear pattern here is that the participants tend not to feel safe or welcome in the housed areas. Interestingly, there seems to be little space that is “safe” for the participants.

- **Responses to Unsafety:** By far, the predominant response from participants is avoidance of unsafe locations; this, of course, is not always possible or feasible. Whatever response is made certainly restricts unhoused women’s use or access to urban space.

How do these patterns suggest spatial inequity? I propose, as confirmed through the interviews, that those with a higher status include Living Inside, Non-Sex Workers, Whites, and Women over 55. Those with the lower status are their counterparts: Living Outside, Sex Workers, NonWhites, and Women under 40. As shown above, those subgroups with perceived higher status tend to enjoy both a much broader geographic area of travel and in certain areas than those subgroups with lower status. This suggests a restriction of geographic movement for those with lower status, reflecting spatial inequity.

The patterns in the reasons for and responses to unsafety further suggest spatial inequity, especially for those who are unhoused. They do not feel safe in the residential areas or even walking down the sidewalk. Any modification to a participant’s normal travel due to unsafety clearly illustrates “how space is used
and experienced by different social groups” (Lobao et al., 2007, p. 10). This topic of spatial inequity needs much further investigation.

In a fascinating way, this topic points directly to the concept of Lefebvre’s right to the city (Purcell, 2002). Lefebvre defined right to the city as a right of no exclusion from urban society from qualities and benefits of urban living (Purcell, 2002). In other words, “the right not to be alienated from the spaces of everyday life (Mitchell & Villanueva, 2009, p.667). Harvey (2008) adds that it is claiming a kind of shaping power over the ways in which our cities are made. Our discussion of spatial inequity clearly demonstrates the currency of right to the city for unhoused women. This connection, spatial inequity and right to the city, needs more focused research.

In this chapter, we have analyzed spatial - unsafety in terms of key demographics, spatial movement, likely spatial inequity, and reasons for and responses to unsafety. We have a better understanding of some of the spatial challenges facing homeless women; there are some interesting patterns in terms of spatial inequity. Note that this discussion also confirms the viability of my Adapted Framework: Unsafety and Women’s Responses (Figure II.2). But stepping back, these topics call for additional research to have more comprehensive data and a better picture of unhoused women and unsafety. In the next chapter (Chapter VIII) we discuss conclusions and offer suggestions for future critical and interesting research.
CHAPTER VIII: CONCLUSIONS & SUGGESTIONS

We now have a clearer understanding of how homeless women perceive and navigate unsafe urban space. On the path to this objective, I explored, analyzed, and presented descriptions and explanations regarding the five research questions and the emergent themes. Here are highlights from each question with connections to a specific theme:

- Research Question #1 -- Housing insecurity (Chapter V): Of the thirty participants, twenty-five (83%) have extreme housing insecurity, whether living Inside or Outside; only five individuals are housing secure with sufficient jobs, income, and services to be stable. The others’ lives indeed are full of uncertainty and insecurity in many ways. I did not expect to find such a clear indication of housing insecurity. The Theme of Housing Insecurity surfaced during this analysis.

- Research Question #2 -- Mental maps (Chapter VI): Mental maps are indeed a robust (even perhaps radical) tool for gathering the stories of vulnerable, marginalized populations. Through mental maps, unsafe locations were identified and discussed; mental mapping provides participants the agency of their own story and lives. The Theme of the Art of Mental Mapping emerged from this discussion.

- Research Question #3 -- Spatialization of unsafe locations and demographic groups impacted (Chapter VIII): The unsafe locations tended to be on the main arterials and within the more residential neighborhoods of the Triangle and differed by demographic groups. There is spatial inequity among different demographic groups of these unhoused women. These groups have different ranges of geographic movement, with those with higher status markers enjoying a larger spatial area. The findings involving the higher status include those who live inside, who are not sex workers, who are White, and who are over
age 55. The perceived higher status of Living Inside and Non-Sex Worker may be surprising. This analysis reflects our Theme of Spatial Inequity.

- Research Question #4 -- Reasons for unsafety (Chapter VIII): The Built Environment and Crime reasons for unsafety appear to occur on the main arterials, while Too Many People and Enforcers/Harassment take place in the more residential area of the triangle. Many of these reasons supported the literature, yet previous studies have not comprehensively explored why unhoused or marginalized women perceive a geographic location as unsafe. My research has provided a glimpse into how unhoused women perceive, categorize, and act upon unsafe urban geography yet without doubt there is much more that we do not know or understand. This discussion led to the discussion of Reasons for Unsafety.

- Research Question #5 -- Responses to unsafety (Chapter VIII): The high-level response, both in the literature and supported by my research, entails avoidance. The four of the five responses mentioned by the participants but not in the literature involve maintaining a super awareness when outside, displaying self-confidence, and an appearance and behaviors of not being homeless; the really interesting fifth response involved staying in or returning to known locations. Any response to unsafety restricts a women’s access or use of urban space; that is another form of spatial inequity. The analysis of responses to unsafety led to the discussion of Responses to Unsafety.

Thus far, in this chapter, I have woven together and summarized research questions, critical findings, and emergent themes. I now suggest an overall thesis of isolation that provides a slightly different perspective on the research questions.
and themes and then I offer suggestions on vital or interesting future research
directions.

**Thesis: Isolation**

Let me provide a workable framing of isolation. Somewhat simplistically, isolation is the state of being alone or separated from others. Isolation can contribute to “poorer overall cognitive performance and poorer executive functioning, faster cognitive decline, more negative and depressive cognition, heightened sensitivity to social threats, and a self-protective confirmatory bias in social cognition” (Cacioppo & Hawkley, 2009, p. 450). Individuals who feel isolated tend to be more negative with little self-satisfaction, a perhaps vicious cycle, where the individual becomes more and more isolated. The contributing factors listed in Figure VIII.1 are intrinsic to the lived experiences of unhoused women and support our conclusion of overall isolation.

Overall, these women live in isolation. The factors of isolation are inherent in their living unhoused; further, these lived experiences can exacerbate or contribute to their *existing* isolation. I suggest any woman who is unhoused is isolated, most likely before they become homeless. Figure VIII.1 illustrates their world of isolation, which I believe is a unique perspective. In a way, isolation provides an overall perspective on our research topic, a thesis which surfaced after the research was nearly completed.
I looked at isolation through several lenses. First, although not the main focus of my research, poverty and homelessness are nonetheless background conditions or circumstances that are part of the lived experiences for participants; gender is simply a given for these women. All the participants are poor, unhoused (or have had unhoused experiences), and women. These three factors alone can be isolating for the women from more “mainstream” experiences; as one woman told me, “It is what it is. I will never get out of this.” These factors reflect social inequity, which can affect isolation of a woman.

Further, as discussed in Chapter V, sixteen of the twenty-two who dropped out of school (72%) recalled painful memories of childhood trauma. I used the
same approach to analyze adult trauma. Twenty-five out of thirty participants (83%) identified specific traumatic events occurring when they were adults; they viewed these as impacting their personal, social, and work life. Trauma, particularly untreated, can be a lifelong condition of isolation for these individuals.

Next, I examined the notion of isolation during the interviews. My two indicators of isolation were two questions I asked each participant: How often do you see your parents or siblings and how frequently do you visit your kids (adult or minors)? Twenty-one of the thirty participants seldom see their families and of the 19 with children, only 4 individuals see their children regularly. I would suggest that this possibly reflects a lack of family network contributing to isolation. I used the word isolation when discussing this with the women; one participant said “Of course we are isolated. My family doesn’t want to be around me. They blame me and tell me I am at fault. Maybe they are right.” The participants’ own perceptions of and behavior towards their families and children reflect isolation.

All these factors and behaviours contribute to isolation. I did not start this research with isolation in mind, yet after the analysis was well completed, the concept of isolation emerged. Isolation is an umbrella way of pulling together and presenting much of our discussion. Through all my mental mappings and interviews, absorbing the words and stories of the participants, and analyzing and connecting the array of data and concepts presented here, I am struck by two conditions of these women: their isolation and their normalcy. We have explored isolation. In many ways these participants live a type of “normal” life within their
given circumstances; key here is that the researcher needs to perceive and understand these women as “normal.” I have included the participants’ words and stories throughout this document to provide a glimpse into their lived experiences, reflecting both their isolation and normalcy. This, I believe, is a proper concluding viewpoint.

Vital or interesting future research and policy directions evolve around three broad areas: mental maps, unsafety, and services. Figure VIII.2 provides an overview of these suggestions.
Figure VIII.2 Suggestions for Research and Policy: Summary

- More research utilizing mental maps, especially with marginalized groups. Use my study as the exploratory research and expand to participants in other locations. Goal: broader findings on unsafe urban space.

- Trauma Informed practices incorporated into the Research Framework. SHOULD BE REQUIRED

- Research and Policy Topics (from my study) –
  - How can urban space be made safer for women?
    - Built environment safer? E.g., adding more lights, fixing roads and sidewalks?
    - Public transportation safer? E.g., adding lights to bus/MAX stops, security on the bus?
      - Critical because women do not feel safe on public transportation and if not altered, will continue to be second class citizens with spatial inequity persisting.
  - How to address the fragmentation of services, transportation, and outreach?
    - Ask the women what would help them. Work with city agencies, non-profits, faith-based orgs, etc.
  - Interdisciplinary (e.g., urban studies, community psychology, geography, social work, policy, transportation, GIS) research on unsafe urban space, e.g., access, spatialization, harassment.
  - More studies of spatial inequity experienced by Nonwhite vs. White, Age, Housed vs. Unhoused. What of rights to the city?

In discussion, mental maps are a robust way of gathering the stories from marginalized populations; the method is inclusive and can be an empowering process for the participants. I would like to see more studies conducted with mental mapping with unhoused women or other marginalized groups of women,
more in-depth analysis of what makes urban space or urban transportation unsafe for marginalized women. The proposed research might concentrate on how to make space and transportation safer. For example, how can the built environment become safer for women – e.g., adding more lights, fixing roads, or providing more security on public transportation? The safety issue surrounding public transportation is critical: Portland’s Bureau of Transportation should examine and develop specific ways of addressing this. This type of research is crucial because as my research has suggested, unhoused women avoid certain unsafe locations and do not feel safe on public transportation. If these are not altered in some way, women will continue to be second class citizens in our urban community and spatial inequity will persist.

My final suggestion involves the utter fragmentation surrounding homeless women, such as lack of inclusive research and policy design frameworks. I certainly have showed that there is geographic fragmentation, but my focus here is on fragmentation of services and outreach. Research here could determine what might improve efforts when unhoused women are, for example:

- seeking medical, mental health, or dental help,
- needing and locating a case worker,
- reporting domestic or physical abuse,
- connecting to additional services (e.g., job search, living inside),
- arranging transportation to and from appointments,
- obtaining an ID,
- getting onto existing housing wait lists. There are many and these are very difficult to locate, and
• figuring out what services are available. There are many different providers of outreach and services, e.g., nonprofit; faith based; individuals; neighborhood, city, regional, state, or national levels.

When I contacted a neighborhood and state service providers for two participants, I was shocked that this effort led into such a convoluted maze. It was clear that there is fragmentation to the hilt, little documentation, no roadmap, and no subject matter experts.

The research emphasis also needs to be centered on what the unhoused women want and need and what they believe would help them. The location of the service is also critical as many services currently require two to three buses for the person to get there. What transportation would encourage the women to utilize medical services? A very interesting, almost radical, idea is in the long term, transit or agencies can possibly improve women's involvement in policy making, for instance, by increasing the share of female transportation planners, conducting safety walks in the transit environment, or implementing specific surveys among female users (Ceccato 2013; Loukaitou-Sideris and Fink 2009). My suggestion would be to use unhoused women as guides in such efforts.

I started and ended this project with unhoused women as my sherpani, their stories now resonate in my soul.
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APPENDIX A: Pilot Research

I conducted a small, preliminary study in Spring – Summer 2018 on homeless women and unsafe urban space. I present here several themes discussed above in terms of urban unsafety and women, including actual crime data; perceived urban unsafety locations; marginalized - invisible women; and responses to unsafe locations.

The research question was: What is the spatial relationship between crime statistics and homeless women’s perceptions in unsafety in a neighborhood? The two sub questions were: 1. What are the unsafe locations identified by participants? 2. How do homeless women respond to unsafe urban space, that is, what strategies do they utilize? My study area was the Foster-Powell neighborhood in Portland; the crime data was from the Portland Police Bureau crime data by neighborhood available from 2015 – 2018. In these crime data over a 4-year period for a large neighborhood with high crime, there were less than 5 rapes reported, reflecting the well-established pattern of the non-reporting of intimate partner violence. This pattern also reinforces our perception that public space is not safe but private is.

To gather the data on the perceptions of unsafe urban locations, I first asked the houseless women to draw a mental map of their home, of places that they know or feel are unsafe for them, and of activities they do in these spaces. See figure below.
Next, I reviewed the mental map with them and asked questions such as:

a. What makes a place unsafe for you? How unsafe?  B. What response do you have these unsafe urban places?  For example, avoid them; travel further to access a place that is safe; power through them; make sure you are not alone; change the time you go there. These data involved 6 houseless women who identified 47 unsafe locations (from Low to Med to High unsafety) in the Foster-Powell neighborhood. Here is a summary of the information from these interviews:

Table A.1 Examples of Data Gathered

<table>
<thead>
<tr>
<th>Participant ID</th>
<th>Address Description</th>
<th>Column 1</th>
<th>How unsafe?</th>
<th>Why unsafe?</th>
<th>Did you navigate that space differently?</th>
<th>Age Range</th>
<th>Race/ Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1500 NE 82nd AVE Portland</td>
<td>Point 3</td>
<td>Friend raped</td>
<td>Yes</td>
<td>25-39 White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>4900 SE 82nd AVE Portland</td>
<td>Point 3</td>
<td>Assaulted</td>
<td>Yes</td>
<td>25-39 White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3000 SE 75th AVE Portland</td>
<td>Point 3</td>
<td>Assaulted</td>
<td>Yes</td>
<td>25-39 White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3200 SE 80th AVE Portland</td>
<td>Point 2</td>
<td>Assaulted</td>
<td>No</td>
<td>25-39 White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>7100 SE FOSTER RD Portland</td>
<td>Point 1</td>
<td>Assaulted</td>
<td>No</td>
<td>25-39 White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3500 SE 79th AVE Portland</td>
<td>Point 1</td>
<td>Drugs</td>
<td>No</td>
<td>25-39 White</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Finally, using GIS platform, I spatially joined the crime data and the perceived unsafety data and mapped these to the Foster-Powell locations.
To interpret these data, I would suggest that there are several patterns supported by the literature. First, marginalized women stay to the main, more public arterials because of safety concerns. Next women typically do not travel through more residential neighborhoods, as they might perceive a higher risk in a housed space; they do not belong in this space and assess it accordingly. Of the perceive urban unsafety data, approximately 1/3 of places deemed unsafe by the participants were due to assaults (e.g., physical assault, sexual assault, rape, robbery) on that person, ¼ were due to drugs, almost 1/5 were due to friends of
the participant having an assault at that location. Participants did not have to have
been actual victims of violence to claim a space as unsafe. That is,

the fears that women declare are not necessarily linked to personal
experience of physical assault but rather gender-specific violence. This type
of violence does not have to actually be perpetrated to have an effect… Its
effect, however, is to constantly recall the risk of sexual attack (Lieber, 2002,
p. 55).

Finally, over half (26/47) indicated that they do navigate that unsafe space
differently with avoidance the most common response. To avoid an unsafe place,
they chose another route (or pathway) by bus and perhaps even a different
location. They often would not go to a location to a medical appt., e.g., because
the specific service providers were viewed as unsafe. The homeless women
preferred moving about the city during the day light for the most part. Also,
interestingly, a space perceived to be unsafe is not always considered unsafe; it
depends on who else was in that space, what else was going on there, and what
time of day it was. These appear to be some common themes in this mini study
and fully support the research design for my project.
APPENDIX B: Field Research Advisory Group (FRAG)

Judy H.:
With RN, DNP, PMHCNS-BC credentials, Judy H. has been a nurse educator, clinician, and consultant in the psychiatry/psychiatric nursing field for over 35 years. They received an MSN from University of PA and a DNP (Doctor of Nursing Practice) from Oakland University. They advocate for MH legislation, MH clients along with disenfranchised groups such as chronic mentally ill and homeless mentally ill persons. They serve on the Board of Directors of the Aurora Club, a community MH club and has been a member of the county crisis team. They have worked in the hospital, community, and university settings to offer education, therapies, consultation and research. Judy has published research and presented at national conferences. They integrate TIC (Trauma Informed Care) in her practice, has served on DBT Teams (Dialectical Behavior Therapy), and currently teaches BS nursing students at York College of PA.

Lisa L.:
Lisa L. is the Director of Advocacy5, a grassroots organization dedicated to finding long term solutions for houselessness in the greater Portland Metro area. With 40 years of social justice advocacy and activism under her belt, Lisa has led Advocacy5 in building protest houseless camps that have initiated outcomes such as the domestic violence centered Kenton Women’s Village and the ACLU investigating the City of Portland on human rights abuses. They hold the following certifications and trainings: QMHP, ASIST, TICM, TIDT, DART, Peer to Peer MHA. In her spare time Lisa volunteers with White Bird Rock Medicine out of Eugene, OR as a triage medic and MH crisis worker.

Valerie L.:
Originally from Chicago, Valerie L. worked her way Westward to Portland in 2005. A single mother with a long career in legal administration, she has tried to live with grace and compassion for others sharing this journey. Recently housed after several years experiencing life in the houseless community, Valerie is now advocating for those still suffering on the streets of our City.
APPENDIX C: Data Transformation: Some Challenges

The three data transformation methods I used are outlined and discussed in Chapter V.A Demographic Data Method, Chapter VII.A Spatial Data Method, and Chapter VII.D Unsafety Data Method. I discuss here a few of the challenges encountered in my data transformations. I include here for reference the specific steps outlined in these three processes. Below Figure C.1 Demographic Data Method; Figure C.2 Spatial Data Method; and Figure C.3 Unsafety Data Method were the framework of my data transformation. Note these figures are also contained in the above chapter referenced.

The goal of this appendix is not to repeat the analysis and discussion, rather to think about the challenges of the data transformation process. Some call this coding, but I suggest that word is too narrow and misleading and does not reflect the seemingly eternal iterations of transformation the data went through.
Figure C.1 Demographic Data Method

<table>
<thead>
<tr>
<th>Step #</th>
<th>Descriptions</th>
<th>Comments &amp; Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step LRC-1</td>
<td>Unsafe Locations</td>
<td>Determining the addresses or geocode for each unsafe location</td>
</tr>
<tr>
<td>Step LRC-2</td>
<td>Participants &amp; unsafe location</td>
<td>Attaching participants to their identified unsafe locations</td>
</tr>
<tr>
<td>Step LRC-3</td>
<td>Reasons for Unsafty</td>
<td>Determining the reason for unsafety</td>
</tr>
<tr>
<td>Step LRC-4</td>
<td>Categories of Unsafty</td>
<td>Grouping reasons for unsafety into initial categories</td>
</tr>
<tr>
<td>Step LRC-5</td>
<td>Broader categories or schemas</td>
<td>Merging initial categories into broader categories or schemas</td>
</tr>
</tbody>
</table>
Figure C.2 Spatial Data Method

- **Step U-1**: Excel to table to bring Participant data in as a layer
  - Participant data included ID, demographic data, manipulated data and categories (e.g. White / Nonwhite, experiences with justice system, Housing Insecurity)

- **Step U-2**: Geocoded locations of unsafety
  - Used a Python script and TriMet’s geocoder

- **Step U-3**: Excluded data points outside of study area
  - See figures VII.2, VII and VII4 below

- **Step U-4**: Used attributes to create maps
  - Maps. e.g. of unsafety levels, demographic characteristics of unsafety
    - Example: Figure VII.5 (below)

- **Step U-5**: Created centroid maps
  - Spatial areas where participants reported unsafety
**Challenge:** The hurdle I first encountered involved the integration of the physical mental maps and the 1800 pages of transcripts (of the interviews). I read/re-read and highlighted in different colors the transcripts for themes, interesting stories, unsafety, locations, etc. (I even mixed up the legend for the meanings associated with different colors.) I also compared/updated these data with the information on their mental maps. I also quite often returned to the

<table>
<thead>
<tr>
<th>Step #</th>
<th>Descriptions</th>
<th>Comments &amp; Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRC-1</td>
<td>Unsafe Locations</td>
<td>Determining the addresses or geocode for each unsafe location</td>
</tr>
<tr>
<td>LRC-2</td>
<td>Participants &amp; unsafe location</td>
<td>Attaching participants to their identified unsafe locations</td>
</tr>
<tr>
<td>LRC-3</td>
<td>Reasons for Unsafty</td>
<td>Determining the reason for unsafety</td>
</tr>
<tr>
<td>LRC-4</td>
<td>Categories of Unsafty</td>
<td>Grouping reasons for unsafety into initial categories</td>
</tr>
<tr>
<td>LRC-5</td>
<td>Broader categories or schemas</td>
<td>Merging initial categories into broader categories or schemas</td>
</tr>
</tbody>
</table>
recordings if I had some data that did not seem to align. Using these physical documents is not straightforward and is very time consuming. I did try coding software, but the quality and nuances of the data was lacking. The iterations, going backwards at times in order to go forward properly, all manually done. My overall approach was much more time consuming that I anticipated, yet the sole focus was on the quality and usability of the data.

**Challenge:** Where/how to store the data/categories such that I could run statistics, cut/paste, filter in various ways, etc.? After looking at some technology options, I chose to enter these into an Excel file by participant, including demographics, unsafe locations, reasons for unsafety, responses to unsafety, summary of their living, and actual germane or interesting words from the participants. Excel was in essence my database and while cumbersome, it worked. For example, it allowed me to collapse my unsafe locations (categorized by High, Med, and Low) into a single category of Unsafe Locations. The initial worksheet became huge, requiring baby spreadsheets for specific topics such as unsafe locations. I used Excel for all of my participants’ data, unsafe location, and various categorizations, e.g., Housing Types, All Income Sources. All of these data in my Excels were manually entered and manipulated.

**Challenge:** Geocoding and categorization of reasons for unsafe locations were a bit of a nightmare; geocodes were needed in order to run spatial analysis and mapping in GIS. Every participant had 6-7 unsafe locations listed on their mental maps or from the interviews. Yet quite a few did not have “real” addresses
or names of business or streets. This as above was the quite tedious and involved me looking at Google maps, business directories, and driving down to the locations, if needed. Table C.1 Examples: Locations, Reasons, Categories of Unsafety below shows the steps from unsafe locations which were geocoded (Column Name - “Location ID”) to assigning the reason for unsafety for each from the participant (Column Name - “Words from Participants”) to initial categories (Column Name - “Initial Category”) to four final categories for reasons for unsafety (Column Name - “Final Category”).
Table C.1 Examples: Locations, Reasons, Categories of Unsafety

<table>
<thead>
<tr>
<th>Location ID</th>
<th>Words from Participants:</th>
<th>Initial Category:</th>
<th>Final Category:</th>
</tr>
</thead>
<tbody>
<tr>
<td>P113_L124</td>
<td>Horrible condition with too many potholes</td>
<td>Built Environment</td>
<td></td>
</tr>
<tr>
<td>P117_L158</td>
<td>Streets and sidewalks in very bad condition, hard to walk</td>
<td>Built Environment</td>
<td></td>
</tr>
<tr>
<td>P103_L024</td>
<td>Skanky neighborhood</td>
<td>Neighborhood Character</td>
<td></td>
</tr>
<tr>
<td>P121_L184</td>
<td>Unkempt houses: yards need mowed, abandoned cars</td>
<td>Neighborhood Character</td>
<td></td>
</tr>
<tr>
<td>P101_L006</td>
<td>Not enough lighting</td>
<td>Lighting</td>
<td></td>
</tr>
<tr>
<td>P106_L059</td>
<td>Too many unsafe people hanging out</td>
<td>People</td>
<td></td>
</tr>
<tr>
<td>P128_P228</td>
<td>Approached by creepy men</td>
<td>Men</td>
<td>TOO MANY PEOPLE</td>
</tr>
<tr>
<td>P129_P230</td>
<td>Men banging on the van</td>
<td>Men</td>
<td></td>
</tr>
<tr>
<td>P107_L072</td>
<td>Camps of heroin &amp; meth users</td>
<td>Drugs</td>
<td></td>
</tr>
<tr>
<td>P127_L221</td>
<td>Neighbors complained of RV</td>
<td>Enforcers</td>
<td>ENFORCERS/ HARASSMENT</td>
</tr>
<tr>
<td>P128_P224</td>
<td>Police ticket for expired tags</td>
<td>Enforcers</td>
<td></td>
</tr>
<tr>
<td>P204_L423</td>
<td>Verbally hassled</td>
<td>Harassment</td>
<td></td>
</tr>
<tr>
<td>P204_L427</td>
<td>Sexually hassled</td>
<td>Harassment</td>
<td></td>
</tr>
<tr>
<td>P101_L004</td>
<td>Tent was set on fire</td>
<td>Crime</td>
<td></td>
</tr>
</tbody>
</table>

Table C.1 then led to an overall summary of reasons for unsafe locations, Table C.2:
Table C.2 Summary of Reasons for Unsafety

- **Built Environment** (n=77, 31%),  
- **Too Many People** (n=73, 30%),  
- **Enforcers/Harassment** (n=55, 22%),  
- **Crime** (n=41, 17%).

As with the other challenges, this is discussed in more depth in the body of the dissertation, specifically Chapter VII.E Reasons for Unsafety.

**Challenge:** In GIS, we carried out statistical analysis, created demographic graphs, produced spatialization maps, etc. The total number of these exceeded 700. We seemed to have drafts of drafts. How to sort through these to select the ones that were key or interesting? How to select the formatting and color of the maps/graphs? We did but it was time consuming and quite frustrating, to be truthful. I had many people just look at these to give me their opinion. That input helped me for sure, yet at times it did seem overwhelming.

By far, however, the most formidable challenge was my burden and honor to keep true to the participants’ stories and lived experiences.
APPENDIX D: Supplemental File: Dissertation Defense Document

The supplemental file, titled Jan Radle Roberson Dissertation Defense_3Dec2021 FINAL .pdf, is the document used for the defense of the dissertation, which occurred on 3 Dec 2021. The document was produced by Microsoft PowerPoint and the supplemental file is pdf with a size of 3,488 KB.