



Life-Space Mobility and Aging in Place

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LIFE-SPACE MOBILITY AND AGING IN PLACE

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16. Abstract Research on older adults explores the notion of surroundings, to live in their own homes and of the built environment. Mobility is the ability to relate to quality of life. Thus, mobility is essent In transportation research, mobility is often re However, in other fields, including public healt to broaden the understanding of the environm from home to a final destination via walking, p about, understand, and make meaning of their reference guide their ability to be able to age in conduct semi-structured interviewes with 25 of Western region. Given that interviewees alread interested in their life-space mobility and which basis and springboard for studying further geo mobility disparities. 17. Key Words Older adults, transportation, accessible modifi neighborhood, Salt Lake County, Portland, OR	ommunities. But oftentimes one's o meet the basic needs to access ge ial to older adults due to their lim garded in terms of travel behavio ch, it refers to the relative ease and ublic transit and/or driving. We de experiences and conditions related n place. To achieve these aims, we der adults who have participated dy have engaged in some level of s ch opportunities they might see to graphies and discussion about po	ability to sta bods, activitie ited, or gradu r and it is mea d freedom of r ility in differe ocument and de to life-spac developed a in home acce self-determina improve thei licy initiative	y or leave, particularly in old a es, services, and social interacti- ually reducing, physical and cog- asured by the number of outsic movement in all of its forms. The ent life spaces, from one's bedr l examine 1) the ways in which the mobility and, 2) how these fr life-space mobility assessment essibility modification program ation to improve their lives at l ir auto sufficiency. Our work pi es to effectively and equitably a cion Statement ins. Copies available from NITC	ge, depends on ons as they mitive abilities. le-home travel. his study intends oom to sidewalk, older adults talk ames of tool and s in the U.S. home, we are ovides both a ddress growing	
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EXECUTIVE SUMMARY

1.1 DESCRIPTION OF THE PROJECT'S PROBLEM/BACKGROUND

Aging in place is most simply defined as staying in your home as you get older; common agingin-place concerns include home and community mobility, social activities and connections, safety, physically accessible environments, and care assistance (National Institute on Aging, 2017). Anthropologist Katherine Newman (2003) suggested that older urban dwellers experience aging in their homes and communities differently based on their social, economic, and residential stability. The experiences of those groups across their life course have led to many low-income older adults aging in inaccessible, continuously deteriorating homes and neighborhoods that may lack access to transit and other amenities; community partners in Salt Lake County and the City of Portland serve many of these older adults with home accessibility modifications.

The need for providing improved care for older adults—and the social and economic benefits of supporting their ability to age in a familiar surroundings—was bolstered by concerns related to the quality of life in nursing homes, changes in health care reimbursements, and a shifting U.S. political economy (Cattell, 2002; Wiles et al., 2012; Penney, 2013). The goal of "aging in place," however, must be addressed not only by adequate homes and environments (physical and social), but also through improved mobility and multimodal transportation planning, as many older adults have differing transportation needs as they age—some can still drive, others need paratransit, others can take public transit, and most would like to go for a walk (or roll, if using mobility devices) in their neighborhoods, if they have the functional ability to do so.

This study seeks to better understand lower-income older adults' ability to age in place, as well as their home and community mobility, after their homes have been modified for increased physical accessibility.

1.2 APPROACH

Our approach was to develop a life-space research instrument informed by gerontologists, is relevant to the fields of architecture, planning and transportation, and is able to answer the following questions: (1) How have modifications changed the mobility of older adults?; (2) How do older adults experience mobility in their homes and neighborhood?; and (3) What does "aging in place" mean to older adults?

1.3 METHODOLOGY

Researchers partnered with community organizations to develop a research method that integrated existing research instruments and would lead to improved understanding of life space mobility among older adults who received a home modification. A total of 50 older participants were interviewed: 25 from Salt Lake County, 25 from Portland, OR. The survey was composed of new interview questions in additional to three existing surveys: (1) Neighborhood Environment Walkability Scale (NEWS) (Sallis and Owen, 1998); (2) Instrumental Activities of Daily Living Scale (IADL) (Lawton and Brody, 1969); and (3) Life Space Assessment (LSA) (Peel et al., 2005).

1.4 FINDINGS

1.4.1 Quantitative

The demographic and built environment characteristics of participants in Salt Lake County and the City of Portland were somewhat different. When compared to those in the Portland sample, Salt Lake County respondents were slightly older (77.84 to 72.48 years), whiter (96% to 68%) and more Hispanic (32% to 8%), had lower household monthly incomes (\$1,438 to \$1,580), and were more likely to live in single-family homes (88% to 56%). The Portland sample included more respondent living in townhomes (8% to 0%) and mobile homes (36%), and had a higher average WalkScore (53.72 to 45.08).

Although IADL and LSA scores were associated with transit use in both regions, there were relatively more transit users in Portland; this may be the result of participants in Portland being moderately more independent and mobile and living in neighborhoods with a higher WalkScore. Older adults in Salt Lake County showed more reliance on automobiles or their family and friends who can drive them to get around. Respondents in Salt Lake County were also concerned more about access to transit stops and transit stop conditions, while those in Portland were more interested in safety, ease of getting on/off transit, service frequency, and price.

Regarding perceived environmental barriers, overall participants noted accessibility of streets and sidewalks as their primary barrier, but Portland-based responses included more practical variance due to higher use of transit and walking. Although transit users reported satisfaction with their shopping and entertainment options and connection to family and friends, non-transit users predominantly mentioned satisfaction based on close proximity to grocery stores.

Based on hand-drawn perceived neighborhood boundaries, respondents used two types of neighborhood boundaries, circular and street-bounded. Although the street-bounded type was more common in both regions, some unique trends were noted at each site. In Salt Lake County, those who lived in the denser neighborhood tended to draw street-bounded type neighborhood boundaries and live in higher TransitScore areas. In Portland, transit users, frequent walkers, and those who lived in the denser neighborhood tended to view their neighborhoods as smaller.

1.4.2 Qualitative

1.4.2.1 Aging in Place

When asked, "What does aging in place mean to you?" most respondents either knew the term or were able to articulate a meaning that was close to the definition commonly used: "Remaining living in the community, with some level of independence, rather than in residential care" (Davey, de Joux, Nana and Arcus, 2004, p. 133).

Most respondents expressed a preference to age in their current homes and communities; only a few reported that they only had a limited time remaining in their home due to declining functional ability or affordability issues. Common responses to the aging in place question included: "I'd like to stay here as long as I can," or "I'm going to stay here until the day I die." Although some respondents described aging in place as specifically related to their homes, more understood the concept as related to both aging in their home and their community.

Reasons cited for wanting to age in place included: established social connections with neighborhoods and family; attachment to home and place (including pride of homeownership); having an accessible home and community; staying in a desired location (e.g., familiar, desirable neighborhood); and access to services (including transit and faith-based institutions).

With respect to established social connections, interviewees detailed the presence of neighbors, friends, and family members; they also discussed the importance of receiving social supports. When discussing attachment to home and place, many residents expressed a strong connection to their homes and neighborhoods, whether they lived in a single-family home or a mobile home community. Multigenerational histories were also cited as a reason for place attachment. Several respondents noted a desire to stay in their current location because of location, home design (e.g., single-level living, access to natural light) and a sense of familiarity with their environments.

Accessible homes and community features were noted as enabling aging in place. This was particularly important as 68% of respondents used mobility devices (i.e., canes, walkers and/or wheelchairs). As our populations continue to age and more people experience disabilities, accessible environments will become more important for aging in place. Interviewees detailed proximity to services and amenities as an important aging-in-place factor and access to transit was noted as important to some; however, private automobiles were also cited as an important reason people could age in their homes and communities.

Barriers to aging in place included: lack of access to services and amenities; crime and safety; and lack of affordability. Lack of access to services and amenities included walkability barriers (e.g., no sidewalks) and transit-related barriers (e.g., cost and fear of crime on transit). Several respondents also detailed concerns related to crime and safety; however, although a few respondents were victims of crime, fear of crime was more commonly reported. Affordability concerns were raised by several respondents, including rising housing costs (e.g., rents, taxes, insurance), home repairs, or being unable to find an affordable place if forced to move.

1.4.2.2 Mobility

Respondents provided insight on their mobility experiences across the life-space levels, from bedrooms and bathrooms, throughout their homes, into areas immediately outside the home, neighborhoods, the local municipality, and the region. Overall, life-space mobility across all levels was compromised by respondents' functional limitation, albeit to varying degrees. Home modifications were often sought based on declining functional ability and those modifications had varying degrees of impact on the residents' mobility, both in-home mobility and mobility into and outside of one's home (i.e., ingress and egress).

In-home mobility was commonly affected by the presence of stairs; several respondents noted that homes with multiple levels were not entirely unused or were partially neglected. Railings on stairs were reported to increase in-home mobility and independence, while grab bars, replacing showers with bathtubs, and adding raised toilets improved independence and to a certain respect, mobility; however, for some, these same modifications were less useful, especially to those with the need for caregiver support. Mobility aids (e.g., canes, walkers, wheelchairs) were noted as important for transitioning between rooms and for egress and ingress, as described below.

Life-space mobility outside the home (e.g., one's yard, neighborhood, city) were markedly improved for many who had home modifications such as ramps and grab bars that assisted with ingress to and egress into and out of the their homes. Mobility aids and caregiver supports

(formal or informal) were also reported as important factors in outside-the-home mobility. One important finding to note: physical access provided by home modifications also contributed to increased social participation and improved access to services and amenities, for some.

Mobility, from the neighborhood to regional levels, was greatly affected by transportation options ranging from walking and biking, to personal automobiles, to fixed-route and paratransit options. For pedestrians, neighborhood infrastructure was incredibly important for their mobility, especially those using mobility aids. In both project sites, automobiles were considered important to respondents, even to some using public transit. In fact, driving was noted by some respondents as critically important to their mobility, whether they drove themselves or relied on other drivers. Respondents who discussed paratransit reported it to be a good option, in general. A small number of respondents at both sites reported cycling as a regular mobility option.

Barriers to life-space mobility included: declining physical and cognitive ability, inclement weather, inaccessibility of community infrastructure (e.g., the absence of sidewalks, curb cuts, lighting, crosswalks), and the availability and proximity of services and amenities. Additionally, respondents noted barriers to changing transportation modes (e.g., from driving to transit) that stemmed from safety concerns, complicated enrollment in paratransit services, cost of transit, and the difficulty of accessing some fixed-route stops, even when close to their home.

1.4.2.3 Defining and Understanding Neighborhood

During administration of the survey, respondents were asked to define their perceived neighborhood boundary on a map. Sometimes this was represented by major streets, other times it was a general catchment area for frequented destinations. The answers to interview questions provided additional details about factors that led to respondents' defining and understanding of their neighborhoods such as existing barriers, specific services and amenities, attachment to one's neighborhood or neighbors, and mobility limitations. Barriers that changed perceived neighborhood boundaries included a lack of pedestrian infrastructure (e.g., no sidewalks or crosswalks), poorly maintained infrastructure, and limited social connections.

Perhaps the most important aspect of perceived neighborhood boundaries emerged from the location and presence of services and amenities, including walking and biking infrastructure, grocery stores, shopping, and restaurants. Interestingly, medical and health services were not frequently detailed within defined neighborhood boundaries. Also, when using an automobile to access services and amenities, respondents tended to expand the neighborhood catchment area.

Additional factors affecting the defining and understanding of respondents' neighborhood boundaries included the presence of social connections with neighbors and respondents' limited beyond-the-home mobility. With respect to the former, certain neighbors were factors in getting respondents out of their home and into the neighborhood, and/or providing social visit in their home; however, a lack of social connections was identified as a factor in defining a small/limited neighborhood boundary (this could contribute to social isolation). With respect to those with limited outside-of-the-home mobility, their neighborhood boundaries tended to be smaller and they were reliant on others to access certain destinations, such as medical services.

1.4.2.4 Interviewee Functional Ability

As detailed above, interviewee functional ability was determined by administering the IADL Scale which measures an individual's functional ability to go shopping, do the laundry, take

medications, handle finances, use the telephone, prepare food, perform housekeeping tasks, and travel outside of their home. All respondents lived independently—some received formal or informal assistance—and displayed a range of functional ability, from dependence on mobility aids to full independence.

Several respondents detailed health issues and concerns when discussing their functional limitations. This included temporary illness, decreased ability to perform previously routine functions (e.g., walking), and the presence of co-morbidities (i.e., the simultaneous presence of health conditions and/or chronic diseases). It is important to note that age is positively associated with the presence of a disability and the majority of people aged 80 and older have some form of disability, regardless of race/ethnicity, housing tenure, and income (Joint Center for Housing Studies of Harvard University, 2014).

The most common barrier to functional ability was the presence of stairs within the home or leading into or outside of one's home. As noted in the mobility section above, this hindered some respondents' ability to use parts of their home, engaging in social activities, and accessing services. The presence of stairs exacerbated disabilities and altered individual function due to increased pressure on individuals with lower levels of physical. Additionally, respondents noted their reliance on caregivers—both formal and informal—in navigating barriers in their home and community, as well as assisting them with Activities of Daily Living (i.e., eating, bathing, getting dressed, toileting, transferring and continence) and IADLs (e.g., cleaning, finances).

1.4.2.5 Home Modifications

Most study participants detailed that home modifications improved their lives in terms of mobility, social connectedness, independence, and aging in place. However, limited and/or scattered resources pertaining to home modification programs was a barrier. Many respondent heard about home modification services from others who received services, but few learned from senior/community centers or directly from organizations. Thus, those who have limited mobility and/or who need home modifications, seem to have limited access to the available programs.

For older adults who needed improve physical environments to support everyday living, grab bars were the most frequently installed home modifications. Handrails along ramps and stairs provided critical life space mobility assistance within and out of their home and helped prevent falls. The variation in respondents' functional ability also led to differing use of mobility aids, which require different features to enhance mobility such as ramps for electric chairs and wheelchairs, wider halls and doorways, swing-clear hinges, or low-rise steps. Once older adults received home modifications, they became more aware that home modifications could facilitate improved mobility and socialization, and mitigate environmental barriers.

1.4.2.6 Future Expectations

Although most older adults want to age in place, they face myriad barriers and concerns as they look into their futures. Among the most prevalent concerns are declining health and fears about financial instability and/or rising costs of living. Other future challenges to aging in place noted by respondents include: maintaining their home, frequent housekeeping, and receiving assistance (formal or informal). Respondents' expectations for their future care included: hope that their children/family would be caregivers when needed; a preference to indefinitely age in place, independently; and, only a few considered assisted living or other long term care options.

1.4.2.7 Services

Organizations like ASSIST Inc. and Unlimited Choices that provide home modifications that support aging in place, were valued by respondents who received them. Home modifications facilitated aging in place by improving mobility (e.g., ramps, handrails), as well as increasing comfort from general home maintenance (e.g., fixing leaky roofs). Low-income older adults not only rely on modification services for aging in place, but they also rely on services and supports from other community organization (e.g., meal and grocery deliveries), family members, neighbors, and others; respondents most important everyday activity appeared to be meals and groceries. In regard to transportation services, public transit and paratransit were important to many and ride sharing options (e.g., Uber and Lyft) have offered additional mobility options.

1.4.2.8 Equity

It is important to note that all participants were low-income, which is an equity consideration due to limited access to resources that aid aging in place (e.g., paying for home maintenance, modifications, rent, property taxes, or transit options). Older adults living in low-income neighborhoods also reported having less quality infrastructure, lower levels of security, and inadequate transportation options and access to services and amenities. Other equity-based considerations for aging in place include the higher prevalence of disabilities and how one's sexual orientation led to discrimination while walking in one Portland neighborhood.

1.5 CONCLUSIONS AND RECOMMENDATIONS

Aging in place requires adequate homes, neighborhood infrastructure and supports, and regional mobility options. Aging in place is best accomplished when foresight is used by older adults, their families, and service providers, including: seeking accessible and adaptable homes, locations that are near services and amenities, and adequate social supports. The reality facing older adults in this study and beyond is that they live in imperfect homes and neighborhoods and rely on programs and services as they age (especially those with limited means). Home modifications are both needed and are vital to future quality of life, mobility, and the ability to age in place.

As our society continues to age and the so-called "population pyramid" changes forever (e.g., the rectangularization, or inversion, of the population pyramid), pressures on government, neighborhoods, and service providers will only continue to grow. As evidenced in the health promotion movement, there is a need for moving interventions upstream, including the development of research instruments and data analyses approaches; furthermore, knowledge, new models, and tools are needed that can be used practitioners and community partners. This study has provided a new life-space mobility instrument, data analysis approaches, and partnerships that are elder-centric and promote well-being.

Based on the findings from this research, several recommendations have emerged that are relevant for researcher, policymakers and practitioners:

Research:

• The integration of validated research instruments and semi-structured interview question provides a starting place for life space mobility research pertaining to older adults and people with disabilities.

- Approaches to defining neighborhoods can be refined further to better understand how individual-level differences (e.g., income, ability, race) may affect defining of neighborhood boundaries.
- Equity was used in the coding of the qualitative data; however, a more robust equity lens could be incorporated into future research.
- Future research pertaining to how environmental barriers affect life space mobility and social isolation is needed.

Policy/Practice:

- Neighborhood boundaries vary greatly and the service catchment areas should be consider with respect to less mobile older adults and people with disabilities.
- Home modification programs are effective; however, knowledge of modification programs is limited and additional advertising and outreach is needed.
- Home modifications clearly support aging in place.
- Home modifications not only improve physical environments and accessibility, but they also affect social connections; this includes getting neighbors into homes, but enabling residents to engage with their communities in a more independent and frequent manner.
- As our population continue to age in a rapid and unprecedented manner, proactive funding of home modifications program can enable aging in place and may lead to lower costs associated with long term care options.
- Home modifications related to comfort (e.g., temperature of the home, leaky roofs) can also contribute to aging in place, although that was not a primary focus of this study.

2.0 INTRODUCTION

This study sought to explore the "environmental convoy" of older adults living in homes and neighborhoods of Salt Lake County (Utah) and the city of Portland (Oregon) who are in the Third Age (i.e., aged 65 and older), but have already engaged in adaptive accommodation of their home environment. This adaption reflects a sense of proactivity toward maintaining independence. We sought to understand these older adults' life-space mobility, the barriers that they have overcome and the ones that they still experience. Building from our extensive partnership with community organizations, we lead a community-based research project to understand the experiences and perspectives of older residents on their life-space mobility. The intention is to ultimately develop effective strategies and policies to offset the mobility barriers that older adults might have, from getting from their bedroom to their porch and from their porch to the bus stop.

The root of the research is a "life-space mobility assessment" instrument that can be used to collect wide-ranging data that can inform and engage local stakeholders regarding patterns of older adults' access to community amenities (e.g., public transit, neighborhood destinations) and home features that may facilitate aging in place (e.g., ramps, grab bars). We interviewed 50 older adults so we could understand the environmental barriers they have been able to overcome (e.g., through home accessibility modifications) and the ones that remain. Our work will provide both a basis and springboard for further discussion about policy initiatives to effectively and equitably address growing mobility disparities, drawing from community partners that are already working on these areas to further strengthen their endeavors.

One of the objectives of this project is to develop and employ a life-space mobility evaluation instrument and framework that is useful for architecture, planning, and transportation organizations. The objectives of this research are of interest to ASSIST Inc and Unlimited Choices, our community partners, and we hope it will benefit them and similar organizations across the country. The specific objectives of this research are to document and examine 1) the ways in which older adults talk about, understand, and make meaning of their experiences and conditions related to life-space mobility, and 2) how these frames of reference guide their ability to be able to age in place.

The collaboration for the research was developed between the University of Utah and Portland State University and their partner organizations: ASSIST Inc in Utah and Unlimited Choices in Portland. Building from their extensive partnership with ASSIST Inc—a non-profit Community Design Center founded in 1969 by the Graduate School of Architecture at the University of Utah—interdisciplinary faculty at the Department of City and Metropolitan Planning (Ivis Garcia) and the School of Architecture (Keith Diaz Moore), lead this community-based research project to understand the experiences and perspectives of older residents on their life-space mobility. ASSIST Inc was involved in designing the life-space mobility survey, recruiting participants, analyzing data, connecting us to other stakeholders, and disseminating the findings locally and nationally.

Portland's age-friendly initiative began in 2006 when Portland State University's Institute on Aging joined the World Health Organization's Global Age-friendly Cities project. Since 2013, when Portland began implementing the Action Plan for an Age-friendly Portland, committees focused on age-friendly transportation and housing have worked to improve the home and

community environments for older adults in the city and region. Alan DeLaTorre, co-coordinator of the Age-friendly Portland initiative, worked with Unlimited Choices in gathering input for the life-space mobility survey and recruiting participants; the findings will be shared with local partners, including stakeholders in the local age-friendly initiative and policymakers in Portland.

To achieve the objectives, the research team engaged in qualitative research (semi-structured interviews) and developed a life-space mobility assessment with people who had participated in home accessibility modification programs. The collection of interviews enabled an examination of how distinct opportunities across the life span set the stage for the current livelihoods of residents. Particular attention was given to how these residents describe and interpret their course into U.S. urban life and into elderhood, especially how they talk about growing older in U.S. cities, and how their current home and local setting shapes the aging process. Semi-structured interviews were used to study the extent to which their retrofitted homes make possible the development of resiliency—that is, social strategies and community networks to serve as support systems within a rapidly transforming urban landscape. Given that interviewees already have engaged in some level of self-determination to improve their lives at home, we are interested in their life-space mobility and which opportunities they might see to improve their auto-sufficiency.

With the benefit of advances in health care, and as the Baby Boomer generation ages, the growth rate of the U.S. elderly population is projected to increase considerably between 2010 and 2030, and their numbers in metropolitan areas will continue to rise (more than 75% in 2000 and 81% in 2011) (Vincent and Velkof, 2010). Given the growth that we expect to see among the elderly population in the United States, we believe that metropolitan planning organizations, public health agencies and aging organizations will be interested in this kind of research.

We believe that our research will be of interest to scholars in architecture, planning, transportation and gerontology. Although there is growing research and advocacy on behalf of Baby Boomers in the field of architecture, urban planning and transportation, it is scarce. Until very recently, in the urban planning field, cities have not been regarded as environments that foster healthful aging. Studies of urban aging have emphasized the range of adversities faced by older residents. Some attention might be given to related factors that impact individual physical health, such as limited services and substandard housing in residentially underserved and underresourced communities. Existing scholarship on housing and neighborhood has focused on the vulnerability of individuals in regards to being able to maintain their homes (with threats including eviction, deterioration or displacement), but has not necessarily focused attention on older adults who are able to stay in their home or neighborhood because of receiving home modification assistance and how they might be able to overcome environmental barriers and increase their life-space mobility. Our study would be valuable to scholars interested in older adults, especially in regards to the connections between home, neighborhood, and mobility. This kind of research has not been undertaken yet in an interdisciplinary manner linking architecture (the home) with planning (the neighborhood). Therefore, it is of significance to organizations like ASSIST Inc and Unlimited Choices Inc., nationally and internationally, as well as policymakers at the local and state levels that are utilizing and/or considering home modifications in response to the aging of populations.

3.0 LITERATURE REVIEW

3.1 MOBILITY IN LATER LIFE

One of the key components of maintaining well-being is optimal mobility, defined as "relative ease and freedom of movement in all of its forms" (Satariano et al., 2012). Often forms of mobility are conceptualized as simply the ability to perform tasks such as walking. Yet mobility is purpose driven and thus often overlooked is that while many older adults may be able to walk, the places to which they would walk may be limited by environmental barriers such as distance or connectivity of sidewalks and crosswalks. Much as healthy social relations are conceptualized as occurring within a convoy of social support (Antonucci, Ajrouch and Birditt, 2014),we conceptualize optimal mobility as occurring within an environmental convoy, involving home, neighborhood, transportation systems (e.g., sidewalks and transit) and destinations. Within this environmental convoy, individuals may find barriers or certain affordances that constrain or enhance their likelihood of achieving optimal mobility. As such, there are environmental determinants of the adaptive capacity each older adult may achieve depending upon the environmental convoy in which they happen to dwell.

This project asserts that the concept of optimal mobility must begin with understanding the goals of the mobility desired and subsequently how those goals are (or are not) achieved. Within environmental psychology, the concept of "behavior circuit" means to convey the series or systems of activities one engages to achieve a goal. Concerning mobility this may be moving from one's home to the doctor's office. This implies the ability to achieve all the micro-level accessibility throughout the house and then exiting it, entering onto some exterior path of travel and utilizing whatever means of transit to arrive at the doctor's office with a subsequent achievement of micro-accessibility within that environ. True optimal mobility could be thwarted anywhere along that behavior circuit.

One current approach to this phenomenon is the work on life-space mobility (c.f. Baker et al., 2003; Rantanen et al., 2012) which is defined as "the spatial area an individual move(s) through, the frequency and need for assistance." This current approach has been operationalized in a very coarse measure called the life-space assessment. Weaknesses of this approach include all three key variables (life space, frequency and independence) are operationalized in a simplistic manner, overlooking the importance of goals, perceptions and nuances of independence as a complex social psychological phenomenon.

3.2 LIFE-SPACE MOBILITY

In literature about aging, life-space mobility was introduced to measure a broad scope of mobility experienced in different spatial locations in daily lives. As it has been mostly used for the studies of older adults' mobility in nursing homes or community dwellings, May et al. (1985) first measured specific life space as five different concentric zones: the bedroom, home, outside the home, block and outside locations, with the Life-Space Diary recorded every day for a month. The University of Alabama at Birmingham Study of Aging Life-Space Assessment (LSA) facilitated the process in a single interview by measuring the frequency of travel in five levels of life space (Figure 1) and the degree of independence during four weeks ahead of the interview (Peel et al., 2005). Regarding the bedroom as level 0, they measured life space from

home, outside the home, neighborhood, town, and outside of town. The total score was calculated in metrics with multiplying levels, frequency, and independence (Figure 2).

Although there are ongoing discussions on the logic of the LSA (Baker, Bodner and Allman, 2003), the life-space concept can be adapted to broaden the understanding of the environmental factors on mobility from one's own home to the neighborhood and geographic region. Evaluating the transitions between different life space can capture the specific environmental barriers and challenges for older adults and potentially guide toward the related policy interventions.

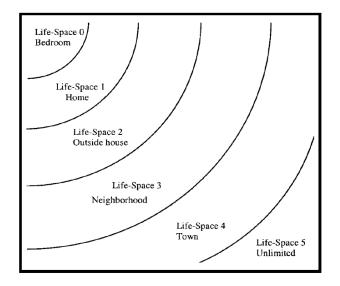


Figure 1. Life-Space Concept (Peel et al., 2005)

Date: Name: These questions refer to your activities just within the past month. INDEPENDENCE SCORE LIFE-SPACE LEVEL FREQUENCY Did you use aids or Level equipment? х How often did you get During the past four weeks, Did you need help Frequency have you been to . . . there? from another Х person? Independence Less 1-3 4-6 Daily Life-Space Level 1... Yes No times = Personal assistance than 1 times 1 Other rooms of your 1.5 = Equipment only /week /week /week home besides the room 2 = No equipment or where you sleep? 0 personal assistance 1 2 3 4 1 6 1 4 1.5 х х Level 1 Score 1224 Score Life-Space Level 2... 1-3 Daily Yes No Less 4-6 An area outside your Personal assistance than 1 times times home such as your porch, /week /week /week 1.5 = Equipment only deck or patio, hallway (of 2 = No equipment or an apartment building) or personal assistance garage, in your own yard 2 0 3 1 2 4 or driveway? 12 2 4 1.5 х х cz: Level 2 Score Score Less 1-3 Daily Life-Space Level 3... 4-6 No 1 = Personal assistance Yes than 1 times times Places in your /week /week /week 1.5 = Equipment only neighborhood, other than 2 "No equipment or your own yard or 0 1 2 3 4 personal assistance apartment building? 3 9 3 2 1.5 х Х 100 Level 3 Score Score Less 1-3 4-6 Daily Life-Space Level 4... Personal assistance Yes No than 1 times times 1 Places outside your /week /week /week 1.5 = Equipment only neighborhood, but 2 = No equipment or within your town? 4 0 2 3 personal assistance 1 4 8 4 2 х х 255 Score Level 4 Score 4-6 Less 1-3 Daily Life-Space Level 5. . . Yes No than 1 times = Personal assistance times 1 Places outside your 1.5 = Equipment only /week /week /week town? 2 = No equipment or 5 0 3 4 personal assistance 0 2 Level 5 Score 0 х х Score 35 TOTAL SCORE (ADD) Sum of Levels

Figure 2. Example of Scoring of the Life-Space Assessment (Peel et al., 2005)

4.0 METHODOLOGY

4.1 STUDY DESIGN

This study focused on improving understanding of the experiences of older adults who had received adaptive accommodation of their home environment in Salt Lake County, UT, and Portland, OR. Data were collected during interviews conducted by faculty and students at the University of Utah and Portland State University, as well non-profit community partners ASSIST Inc (Salt Lake County) and Unlimited Choices Inc. (Portland). For Salt Lake County, 415 customers from ASSIST Inc's client database aged 65 and older received accessibility-related home modifications between 2008 and 2017; in Portland during the same 10-year period, 806 people aged 65 years and older received similar accessibility-related home modifications from Unlimited Choices Inc. In an attempt to select a sample that addressed mobility-related modifications, of the 200 clients in each of the two regions that were chosen to receive recruitment letters, letters were sent to three times as many individuals with exterior modifications as compared with those who had received interior modifications in a random sampling of 200.

Participants for this research were recruited between December 2017 and July 2018, until 25 participants were interviewed in each project location. Initially, researchers sent recruitment letters to 100 individuals in the sample (75 receiving external modifications, 25 receiving internal modifications) that requested interested participants contact a member of the research team by phone to learn more about and sign up for the study; during that call or a follow-up call, a home visit was scheduled with one to two researchers from the study team. During each home visit, a series of research protocols (i.e., surveys, interviews, mapping exercises) were carried out, which took approximately one and a half to two hours. All participants received a \$25 gift card to a local grocery store. Salt Lake County began data collection first and, after exhausting the first list of 100 potential interviewees, mailed recruitment letters to the final 100 potential interviewees of 25 in each region, 50 across the two project sites.

4.2 RESEARCH PROTOCOL

This study exclusively targets a sample of 50 older adults who have participated in home modification programs in Salt Lake County and Portland. The research team contacted by phone older adults who have received their assistance and asked them if they wanted to be part of the study, meaning completing a survey and an interview. Researchers followed up by phone to officially recruit participants for the study and decide on a date and time for a home visit. Each home visit took between one and a half to three hours. Older adults were offered an incentive of \$25 cash to take part in the study. Participants could choose to be anonymous.

Participants responded to a series of survey questions regarding their perceptions of life-space mobility within their home, neighborhood and beyond. The survey was composed of our own questions as well as three well-established surveys: (1) Neighborhood Environment Walkability Scale (NEWS) (Sallis and Owen, 1998); (2) Instrumental Activities of Daily Living Scale (IADL) (Lawton and Brody, 1969); and (3) Life Space Assessment (LSA) (Peel et al., 2005). LSA is a particular focus of the project, which measures mobility in a series of concentric areas that radiates from one's bedroom out to the community while capturing data pertaining to an individual's frequency of the movement, their degree of independence, and their use of assistive devices within four weeks from the time the data were collected.

This survey became the basis for an interview that used semi-structured questions to collect more in-depth narrative regarding their mobility experiences. The semi-structured interviews included open-ended questions to encourage conversation and meaningful responses (Patton, 1990). The semi-structured interviews used the following format: What do you think about...?, How would you explain...?, What do you suggest...?, etc. The semi-structured interviews were focused on three distinct topics: home modifications, mobility experiences, and aging in place. These interviews followed prescribed questions and afforded the opportunity to open the flow of conversation between interviewers and interviewees; this part of the research protocol has the most extensive variation on respondent content and length of responses.

Among the several research protocols used to collect information from interviewees, older adults were asked to draw the boundary of their neighborhood on pre-prepared maps printed on tabloid or legal-size paper; additionally, main streets and essential amenities frequently used were identified. Understanding that the definition/concept of neighborhood varies among individuals, interviewers offered the following definition of a neighborhood (Coulton, Chan and Mikelbank, 2011).

"By neighborhood, we meant the area around where you live and around your house. It may include places you shop, religious or public institutions, or a local business district. It is the general area around your home where you might perform routine tasks, such as shopping, going to the park, or visiting with neighbors. Please take a look at this map of the area. Study it for a moment and use this pencil to draw the boundaries of what you consider your neighborhood."

This exercise gave respondents an opportunity to both think about how they define their neighborhood's physical boundaries—a critical element in the study—and it also encouraged them to consider essential destinations and mobility-related infrastructures such as roads and sidewalks. The prepared maps were created from Google Maps and identified their home and major roads in their community.

We employed participatory research strategies; this means that the survey and interview questions were designed with community partners (Bergold and Thomas, 2012). Two staff members became certified by CITI so they can take part in the interviews and analysis. To increase validity, two members of the research team at first conducted the survey and interview together (Fifić and Gigerenzer, 2014). After the interviews were completed the team conducted a peer debrief on audiotape about what they learned from the interviews and discussed their interpretations (Lincoln and Guba, 1985). All interviews were transcribed. The debriefs were not; these were used more to be on the same page. Researchers uploaded interview transcripts memos to Atlas.ti 8.0—a qualitative research software program that supports teamwork efforts.

Information was then open coded and queried by theme in order to ensure that all data on a particular topic and point of view was included and considered in the analysis (Corbin and Strauss, 2007). At first to increase validity, the research team coded the same interviews. A total of nine codes were developed: (1) Aging in place/features & barriers, (2) Defining/understanding neighborhood, (3) Interviewee functional ability, (4) Home modifications, (5) Future expectations, (6) Mobility experiences/systems, (7) Social networks/social participation (8) Supports and services (non-mobility) and, (9) Equity.

In a meeting, researchers and staff discussed those codes to come to a common understanding of what the codes mean, to eliminate or add codes, and so on. Researchers employed descriptive, interpretive codes, etc. (Elliott and Timulak, 2015). After using the same codes, the research

team came together and revised a second time around. Interviews and other documents were divided among researchers for coding. To ensure reliability, each interview was coded by two researchers: one who attended the interview and another who did not (Krippendorff, 2004). A research assistant merged the work together.

This research attempted to remain as close as possible to the data by heavily using the quotes from interviews in the narrative text. We included direct quotes in the narrative and/or key interview transcripts in the report to ensure reliability and transparency—in that way, readers will be able to judge our interpretations (Marshall and Rossman, 2010). Once the research concluded, recordings were erased. De-identified transcripts will remain as well as the clips used for a future short video documentary.

5.0 FINDINGS

5.1 QUANTITATIVE

5.1.1 General Summary

The demographic and built environment characteristics of the participants between the two regions were somewhat different. Older adults who participated in Salt Lake County were comparably older than those in Portland by approximately five years, on average (i.e., 77.84 to 72.48 years), had a larger proportion of the population identifying as white (i.e., 96% to 68%) or Hispanic (i.e., 32% to 8%), as well as a smaller proportion with educational attainment levels beyond high school (i.e., 48% to 84%). While all the participants in Salt Lake County lived in one's own or family's house, 22% of those in Portland lived in rented houses. Average household size in both regions was similar, around 1.72 to 1.80, but the average household income of the participants in Portland was higher than those in Salt Lake County (i.e., \$1,580 to \$1,438).

According to Instrumental Activities of Daily Living (IADL) and Life Space Assessment (LSA) Scores, older adults who participated in Portland were slightly more independent in daily lives (i.e., 6.16 to 6.00) and more mobile (i.e., 20.54 to 18.90) than those in Salt Lake County. Also, more participants in Salt Lake County used some kind of assistive devices (i.e., 80% to 56%) and about a half of them used a cane or walker.

While 88% of the participants in Salt Lake County lived in single-family housing, only 56% of those in Portland lived in single-family housing, and 36% of them lived in a mobile home (i.e., 8% in Salt Lake County). The neighborhoods of the participants in Portland had a higher WalkScore (i.e., 53.72 to 45.08) and perceived residential density (i.e., 204 to 189) when compared to those in Salt Lake County.

Neighborhood satisfaction—measured using Likert scale response categories ranging from strongly disagree to strongly agree—were higher among Portland respondents (i.e., 3.72 to 3.12). In terms of aging in place, most participants responded that they strongly want to age in place, while those in Portland showed a stronger desire to age in place than those in Salt Lake County.

Table 1. Descriptive Statistics of the Participants

Variable	Range	Total	Salt Lake County, UT	Portland, OR
	i un ge	(N=50)	(N=25)	(N=25)
Demographics				
Age	56 - 96	75.16	77.84	72.48
% Female	-	70%	72%	68%
%White	-	82%	96%	68%
% Hispanic	-	20%	32%	8%
% Higher Education	-	66%	48%	84%
% Home owner	-	94%	100%	88%
HH Income	\$0 - \$5,000	\$1,509	\$1,438	\$1,580
HH Size	1 - 4	1.76	1.80	1.72
Physical Ability				
IADL Score	0 - 8	6.08	6.00	6.16
LSA Score	5 – 32	19.72	18.90	20.54
% Assistive Devices User	-	68%	80%	56%
Cane	-	42%	48%	36%
Walker	-	42%	52%	32%
Wheelchair	-	24%	24%	24%
Electric Chair	-	12%	12%	12%
Housing				
Single-Family Housing	-	72%	88 %	56 %
Townhouse	-	4%	0 %	8 %
Apartment	-	2%	4 %	0 %
Mobile Home	-	22%	8 %	36 %
Neighborhood				
WalkScore	9 – 87	49.40	45.08	53.72
Residential Density	174 - 293	197	189	204
Land Use Mix: Diversity	1 - 3.61	1.79	1.88	1.71
Land Use Mix: Access	0 - 4	2.83	2.72	2.93
Street Connectivity	1 - 4	3.09	3.16	3.02
Infrastructure & Safety for Walking	0 - 4	2.94	3.01	2.87
Aesthetics		3.03	2.92	3.14
Traffic Hazards		2.81	2.91	
Crime	0 - 4	2.06	2.24	1.88
Satisfaction				
Home Satisfaction	1 - 4	3.66	3.56	3.76
Neighborhood Satisfaction		3.42	3.12	3.72
Aging in Place				
Aging in My Current Home	1 – 4	3.88	3.80	3.96
Aging in My Neighborhood		3.76		3.80
independence is Important		3.98		
Aging in Place Even if Seriously Ill		3.54		

5.1.2 Using Public Transit

Moreover, there were a relatively high proportion of transit users (52%) in Portland compared to the lower fraction of transit users (28%) in Salt Lake County. Exploring the result by transit use of the participants, the LSA score was higher in transit users than non-transit users in both regions. In Salt Lake County, the IADL score was also higher in transit users. Transit users in Portland showed that they were more satisfied with the neighborhood they reside in than non-transit users.

Table 2. Characteristics of the Participants by Transit Use

	Salt Lake County, UT			Portland, OR		
	Transit User (n=7)	Non- Users (n=18)	р	Transit User (n=13)	Non- User (n=12)	р
Age	75.29	78.83	0.275	72.31	72.67	0.914
% Female	71%	72%	0.968	54%	83%	0.202
% Higher Education	71%	39%	0.202	85%	83%	0.930
IADL Score	7.43	5.44	0.066	6.46	5.83	0.445
LSA Score	25.21	16.44	0.009	23.92	16.88	0.046
WalkScore	51.86	42.44	0.182	57.62	49.50	0.301
Neighborhood Satisfaction	3.29	3.06	0.399	3.85	3.58	0.162

Significant between-group differences were estimated via Pearson's Chi-Square test/Fisher's exact test for frequency data or independent t-test/Wilcoxon rank sum test for continuous data; significance set at p < 0.10 (unadjusted for multiple comparisons)

Table 3. Mode of Travel of the Participants by Region

	Salt Lake	Portland, OR
	County, UT	
Drive	56%	40%
Get a ride	76%	56%
Paratransit	8%	40%
Bus	8%	44%
Light rail	24%	32%
Streetcar	4%	16%
Commuter rail	8%	0%
Heavy rail	0%	4%
Bike	8%	16%
Walk	44%	64%
Taxi	0%	8%

The participants in Salt Lake County relied heavily on the automobile whether they drive by themselves or a friend or family member gives them a ride to get to some places. On the other hand, the study participants in Portland actively used public transportation. Among different mode of public transit, light rail was most used in Salt Lake County, while both bus and light rail were the preferred modes of travel in Portland. Also, paratransit was preferable in Portland, showing the participants' independence, but older adults in Salt Lake County might be more dependent on their family and friends who can drive them to get around. Overall, older adults in Portland used mixed modes of travel, which might address the accessibility issues of older adults in Salt Lake County.

With this different share of travel mode, on the question asking what would make you ride public transportation more often, the answers varied between the two regions (Figure 3). While access to transit itself was the critical concern in Salt Lake County, participants in Portland addressed various issues such as safety, ease of getting on and off, service frequency, and waiting places, as well as the access to transit.

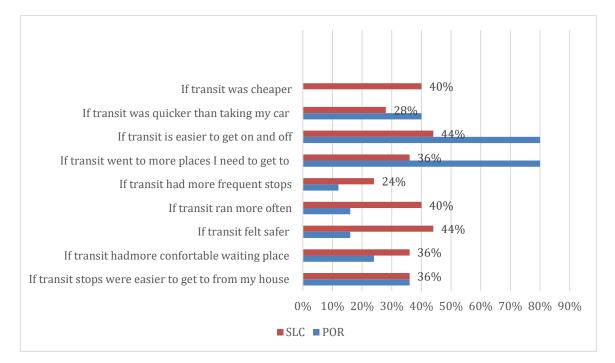


Figure 3. What Would Make You Ride Public Transportation More Often?

5.1.3 Environmental Barriers and Access to Amenities

For the perceived environmental barriers to getting around in the neighborhood (Figure 4), overall answers between the two regions were similar; the accessibility of streets and sidewalks was the primary barrier. However, the participants in Portland counted the absence of sidewalks

and sitting or resting places, high traffic speed, and climate/weather as significant barriers. Since there were more transit users in Portland, the answers were more detailed and practically varied.

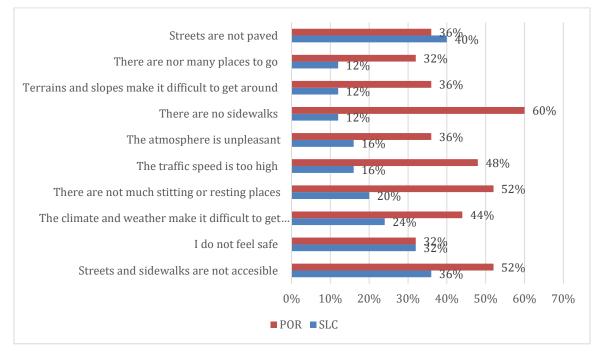


Figure 4. Perceived Environmental Barriers to Outdoor Mobility

We also asked the question on what the participants like most about their neighborhood and explored by region and by transit use (Figure 5). It is notable that transit users were mostly satisfied with their choice of shopping and entertainment options and their connection to family and friends. Compared to that, the answers from non-transit users were concentrated on their closeness to grocery stores, but this can be interpreted as they are not well-accessed to other amenities except the necessities. In Portland, public transportation was highly counted as their neighborhood satisfaction for transit users. In Salt Lake County, faith-based institutions and places to socialize were also significant for their neighborhood satisfaction.

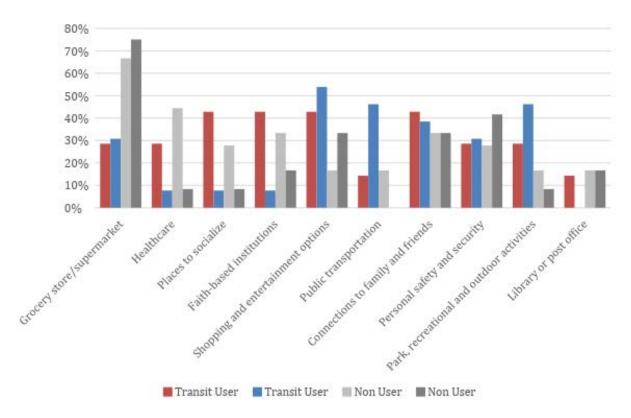


Figure 5. Amenities for Neighborhood Satisfaction by Transit User

5.1.4 Neighborhood Boundary

Among all of the 50 participants in the study, 17 in Salt Lake County and 16 in Portland drew their perceived neighborhood boundaries on the paper map. Some were physically unable to proceed to this part of the study due to visual or physical impairments, and others skipped or misconducted the mapping task during the interview as the interviewers prioritized the comfort of the participants over an extensive process of interview and survey.

The drawn maps by participants were digitized by tracing the boundaries in ArcGIS. As the first noticeable finding, while tracing, we categorized the perceived neighborhood boundaries into two main types by shape: circular type and street-bounded type (Figure 6). We explored the relationship between perceived neighborhood boundary types, neighborhood scale, and individual and neighborhood characteristics.





Circular Type

Street-bounded Type Figure 6. Neighborhood Boundary Type

Table 1 Democry of Neighborhood	Coole by Marchhard D.	and any Tring
Table 4. Perceived Neighborhood	Scale by neighborhood b	oundary ivde

		n	Mean Area	Min. Area	Max. Area
Total		33	1.232	0.030	8.501
Salt Lake	Total	17	1.227	0.030	3.921
County, UT	Circular	6	1.033	0.030	2.474
01	Street	11	1.332	0.038	3.921
Portland,	Total	16	1.238	0.033	8.501
OR	Circular	6	0.307	0.033	1.376
	Street	10	1.797	0.179	8.501

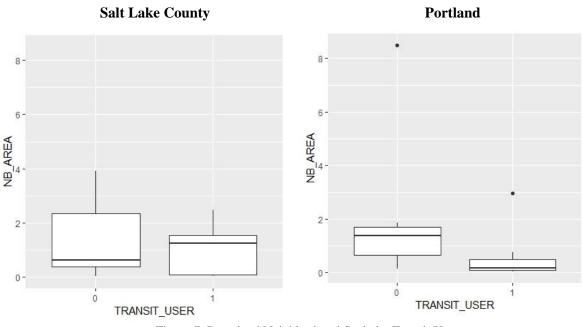


Figure 7. Perceived Neighborhood Scale by Transit Use

The participants in Salt Lake County perceived their neighborhood scale larger than those in Portland. By and large, the perceived neighborhoods with street-bounded types were more significant than those with circular types, and we found the same trend in both regions.

In Salt Lake County, participants who lived in denser neighborhoods tended to describe their neighborhood as street-bounded shapes, possibly related to better access to goods and services. Confirming these exploratory findings, those who perceived their neighborhood as a street-bounded type lived in a neighborhood with a significantly higher TransitScore, although TransitScore was not available for all neighborhoods in Salt Lake County. The findings in Portland show the relationships between the perceived neighborhood and older adults' mobility. Transit users, frequent walkers, and those who lived in denser neighborhoods tended to view their neighborhood scale smaller in Portland. Also, the non-Hispanic, white population tended to perceive their neighborhood as a circular shape in Portland.

Further research is needed to better understand how individual-level differences (e.g., race, income) affect understanding of neighborhoods and boundary representation. A larger sample would provide more strength in the analysis and more generalizable results. Additionally, an alternative method for collecting neighborhood-boundaries for people with physical limitations would allow researchers to dive deeper into the connections between functional ability and size of perceived neighborhood since many respondents with physical limitations did not participate in the exercise.

5.2 QUALITATIVE

5.2.1 Aging in Place

5.2.1.1 Understanding "Aging in Place"

Aging in place is a popular term among gerontologists, policymakers, and practitioners focused on housing, transportation, service provision, community development, reducing social isolation, and other areas. Aging in place has been defined as "remaining living in the community, with some level of independence, rather than in residential care" (Davey, de Joux, Nanaand Arcus, 2004, p. 133). In a recent U.S.-based study, approximately 77% of those aged 50 and older agreed that they would like to age in their community for as long as possible; 76% agreed that they would like to age in their current residence for as long as possible (AARP, 2018).

As detailed in the AARP research mentioned above, it is important to understand the concept of aging in community, not just aging in one's home. Thomas and Blanchard (2009) support the idea of thinking about aging in place as beyond one's home (or institution)—they explain that one can succeed in remaining in their home, yet still experience emptiness, loneliness, and less-than-desired quality of life—and to age within a community context that offers accessible environments, community supports, interdependent relationships, and social engagement opportunities. Wiles and colleagues (2012) support the idea that aging in place in a phenomenon that occurs beyond one's home and suggest that it is also important to understand aspects of aging in home or community such as the sense of attachment to one's home and community, perceived security and actual safety, and aspects of autonomy and independence.

5.2.1.2 Preferences to Age in Place

Most respondents who discussed their preference for aging in place (the term used in our research protocols) preferred to age in their current home and community, although a few expressed an understanding that they only had a limited time they could stay in their home due to declining functional ability or affordability. These findings support the AARP (2018) study mentioned above. Common sentiments related to aging in place from respondents can be summarized by two responses: "I'd like to stay here as long as I can," or "I'm going to stay here until the day I die." For the small number of respondents who saw their time in their current home as limited, they offered perspectives such as, "It's a challenge," or "I'd like to stay here as long as I can, but I'm getting to the point where I might [leave] at any time."

5.2.1.3 Defining "Aging in Place"

Respondents were asked the question, "What does aging in place mean to you?" Some of those interviewed were either not familiar with the term or offered responses such as: "Not a thing," "I don't know," or "I don't know how to answer." Others who were interviewed were able to figure out the definition, even though they did not have previous knowledge of the term. As one respondent stated simply, "I'd rather stay here than go anywhere else." A respondent from Salt Lake County came up with the following definition: "I think it would mean staying in a place, a home that's comfortable, that's very secure."

For some respondents, they were able to immediately respond to the question as the term "aging in place" seemed to be inherently understood, something that they had been thinking about,

and/or a phrase that they were aware of based on the title of the research project that was communicated to them in recruitment and the informed consent process. Overall, interviewees offered descriptions that included: staying at home as long as possible; living at home until they died; living comfortably and safely in their home; living independently or with minimal supports; being able to access local services and amenities; and having social supports to assist them, when needed. One respondent's answer provided a number of important characteristics that match with the academic descriptions offered previously:

"I think, to me, it means being able to not only live in my home and feel safe, say, taking a shower or something like that, but also to be able to go to the grocery store...and be able to come back....Mainly, aging in place is whether I can live comfortably and safely in my house but also be able to go to other places or even have...somebody come get me and take me [somewhere]."

Overall, some respondents described aging in place as specifically related to their home environments, while others expanded their description to what gerontologists described as aging in community (Davey et al., 2004; Thomas and Blanchard, 2009).

5.2.1.4 Aging in Place Features

Questions asked as part of the interview pertaining to aging in place led to several respondents offering reasons to age in their home and community. Reasons respondents desired to age in place included: established social connections with neighborhoods and family; attachment to home and place (including pride of homeownership); having an accessible home and community; staying in a desired location (e.g., familiar, desirable neighborhood); and access to services (including transit and faith-based institutions).

5.2.1.5 Established Social Connections

It was clear that established social connections were important to many respondents and contributed to their desire to age in their community. Comments included: "Everybody watches over everybody [in the mobile home park]," "I do have a lot of neighbors that I'm friendly with," "I would definitely want to stay in the neighborhood...a lot of kind people [here]," and "I love this neighborhood. I love my neighbors. I have good neighbors." One resident with a disability received support that allowed her to cope with her disability: "My neighbors, even though I'm handicapped, they check in on me, take care of me."

Family connections were also mentioned: "[I] live in this general area, just because of people who live nearby...my son [and] my dad." One Portland resident offered a useful perspective on the connection with their neighbors:

"This neighborhood is very interactive with each other, very close. Especially in the summertime when we all have our picnics or barbecues...The neighborhood gets out from around over here....right down the street [is] another big group of families and we've been doing this for over 25 years. We all started pretty much at the same time. It just catches on...For Thanksgiving, it's hard to park your car [because] there's so many families that have their meetings over here, their family gatherings over here." Respondents also mentioned how neighbors assisted them in things like home maintenance; an older adult in Salt Lake County mentioned, "I have a couple of neighbors on both sides, and they're very good and helpful at shoveling [snow]. But it gives me a sense that—a little more confidence that—maybe that's [good]."

When an interviewer arrived at one Portland home to interview a research participant, a neighbor serendipitously approached with food that had been delivered from Meals on Wheels. She mentioned that she had knocked on the door but assumed that their neighbor was napping in a back bedroom. Another respondent mentioned how a neighbor sometimes runs errands for her:

"Everybody's just really nice. [My neighbor] lives over in that green house with the pickup truck there. He's like a son to me. If he's going to go to Safeway or something he gives me a shout and says, 'I'm going to Safeway anything I could pick up for you?' He keeps me in the loop."

For one Portland respondent, his connection to the neighborhood was so strong, even the local bus drivers knew him. His caregiver told the interviewer how moving away from his neighborhood would affect his happiness and comfort;

"He does have a lot of people in the neighborhood and the shops that we go to that know him. If he loses those people that say, "Hey [John]", then I wonder how that would affect him emotionally or socially to lose that kind of connection he has with that map, the yellow. Both neighbors know [John]. Even bus drivers. We know many of the 71 line."

Some respondents themselves assisted neighbors and connected with them socially: "I do have a lot of neighbors that I'm friendly with. There's a lady that lives down the street and she's in a wheelchair, so I go down there, well, a couple of a times a month, and just take her cookies. She's so housebound."

5.2.1.6 Attachment to Home and Place

Many respondents felt an important and deep connection to their home and neighborhood. This was true for respondents who lived in a traditional single-family home, as well as those who lived in mobile home parks. One person interviewed stated: "I'm very happy here. This is a great community, this mobile home park." For some of those who owned their homes, they expressed a sense of pride. For example, a Salt Lake County resident described the process of fixing their home, "This place was a dump when I bought it...then my son and his friends came in and put new cabinets, tile, carpet....I love it." In addition, some respondents expressed attachment to their things, with the thought that it would be difficult to move: "I can't move all [my] things. My art stuff." A quote from a Portland respondent summarized his attachment to his home and what he saw as an undesirable alternative:

"[Aging here] means the world to me. I feel very blessed and fortunate to have what I have. Incredibly, emphatically blessed. Never complain. I have a house for me and [and my dog] and I make it work. It's just a world of difference between being here and people that are developmentally disabled and pushing a cart, collecting garbage. Poor people, I feel for. I feel blessed." Another aspect of place attachment emerges from homes that have a multigenerational history. When homes have been in a family for a while, it can create a stronger connection for the resident and their family members. One Portland respondent, who was being interviewed with the assistance of her son, said, "I like home because my kids are here." Her son added, "Now she just wants to be here, have the kids come over, the grandkids or great grandkids…we have had like five generations come through this house in our family. So, it's been part of the family, like the meeting place. The center point."

5.2.1.7 Accessible Home and Community

As described in the mobility section below, the respondents in this sample scored high on functional ability (i.e., IADL Score), but the majority of respondents (68%) used assistive devices such as canes, walkers, and/or wheelchairs. Those using mobility devices benefited from homes and community environments that were accessible, whether they were inherently accessible homes (e.g., barrier-free entrances), home modifications they received (e.g., ramps, grab bars, walk-in showers) and added themselves (e.g., higher toilets), or extant community features that supported their mobility (e.g., sidewalks, curb cuts).

Findings related to home modifications, mobility—both within the home and outside the home and access to services are detailed below. However, it is important to understand how environmental accessibility positively affected respondents' ability to age in place. One example that enhanced aging-in-place opportunities was detailed by one respondent:

"I had really gotten to the point where taking a shower, I dreaded...I've got bone-onbone in my knees, I've got stenosis, I've got all kinds of sciatica and stuff. So, to swing my leg up over the tub and then get in there, I'm just shaky the whole time. So, I would try to wait 'til somebody came, but I can't do that, you need to take showers. I hated it, I just hated it and it made me nervous all the time. Now it's totally different. Now I just walk in, take my shower and walk out."

Overall, without accessible home and community features, respondents who had lower levels of functional ability and/or those who used mobility devices would be forced to consider home- and community-based supports and services. Those who detailed the presence of accessible home and community features that allowed them to age in place were able to extend the time they were aging in place and delay the time that they may need services or move to a new location, including institutional settings.

5.2.1.8 Staying in a Desired Location

Somewhat related to the section above, which focused on attachment to home and place, was the desire expressed by respondents to stay in one's home or neighborhood. Many respondents expressed their desire to stay in their current residence and detailed important features—beyond accessible environments, social supports, and caregiving assistance— that stood out, including home amenities (e.g., presence of a washing machine, single-level living, natural light inside the home) and a sense of familiarity with their surroundings.

Regarding home amenities, some design-related features are important to highlight. A Salt Lake County respondent described important aspects of their home:

"When I was looking for this house...I wanted [it] to have the bathroom and bedroom and the washer and dryer on the main level....The other thing I wanted [was] southern exposure [so] like right now, the sun starts pouring in. This is kind of my workroom. I have a sewing machine back here. And the sun comes in and I can just really enjoy it. As you can feel, it gets a little cool. But it's just very nice with the sunshine."

Familiarity with one's surroundings was also noted as an important aging-in-place factor. One Portland resident explained, "I like my neighborhood. It's familiar." Another explained, "Familiarity brings contentment and peace to you while you're very ill. I'd rather stay at home as long as I can."

5.2.1.9 Access to Services and Amenities

Although mobility is covered in a later section, it is important to note that several respondents felt that the presence of various transportation options was important to aging in place. Also, several of the older adults interviewed who drove themselves felt that their ability to drive themselves was important to aging in place. One respondent clearly stated the importance of their automobile: "I have a car. I wanna do what I wanna do. I want to be independent as I possibly can...I've always had a car." Besides personal vehicles, respondents also utilized several modes of transportation that facilitated aging in place, including riding transit (buses, light rail, commuter rail, and paratransit) and walking; two people interviewed rode bicycles to get around and access services. One Portland respondent explained, "I depend on buses and walking. That's one of the reasons I moved to Portland." A resident of Salt Lake County felt transit was an important factor for aging in place: "I don't want to [move], not without my bus."

Access to important destinations was also mentioned as an important factor for aging in place. Those interviewed offered comments such as: "Everything's easy to get to," "Pretty much everything I do is right around here," "Everything is right here. You, you couldn't ask for better." One Salt Lake County respondent discussed health care as important: "I will stay there as long as I have to...there's a good medical [facility] there and I'm eligible because of my husband." Faith-based institutions and friends from the congregation were also mentioned, such as: "I love being here....My church is here...I've got a lot of friends."

5.2.1.10 Barriers to Aging in Place

5.2.1.10.1 Lack of Access to Services and Amenities

Regarding mobility-related barriers to aging in place, some respondents noted numerous barriers that hindered walkability or access for someone using a mobility device. For example, a Portland older adult described their surrounding streets: "There's no sidewalks...The traffic is too fast...There's quite a few people out here....People don't cut back their bushes....There are no curb cuts around here, none." Another Portland respondent had issues with speed bumps:

"I don't think anybody likes them. They're horrible. They don't stop the people that speed;" and another discussed sidewalks and streets that were in disrepair:

"We had a dirt walkway out front. I fell....It split my nose wide open. Broke both my dentures. Knocked me out colder than a mackerel."

It should be noted that these comments detailed the environment within a mobile home community. The fall triggered sidewalk and street repairs that have been a positive for walkability and aging in place.

In addition to pedestrian access, several transit-related barriers were noted across the Portland and Salt Lake County sites that created challenges to aging in place, including: the cost of purchasing a transit pass while on a limited fixed income with little extra spending money, and, the fear of crime on transit and from the transit stop to one's home.

5.2.1.10.2 Concerns of Crime and Safety

Several respondents talked about their concerns related to crime and their safety. Although a few people detailed a crime that happened to them (e.g., "I've had so many things stolen... I've actually caught the neighbors...in my shed."), the majority of comments were related to perceived lack of safety or fear of something that could happen. An example came from a Salt Lake County respondent: "I was not safe anymore...I felt, like, very unsafe...I have a big yard and a patio...anybody could walk up there...I didn't feel safe."

Safety on transit was also noted. A Portland respondent explained: "Nowadays [public transit is] scarier. I'm sorry to say it. It's scary." Another Portlander explained that they preferred paratransit (i.e., TriMet LIFT) over fixed-route service: "I'm leery with riding the bus or the light rail. You hear so much about...safety...That's what bothers me mostly. If I can get the LIFT, or some other way, I would do that."

5.2.1.10.3 Lack of Affordability

Several respondents discussed the rising cost of housing and the lack of affordable options if they were to want to move. One Portland respondent was being pushed out of her home due to financial trouble; she had recently sold her home to her children but would not be able to afford to live anywhere near her current neighborhood: "I thought Portland was going to be the answer for decades. Like I said, I'm not 25 anymore. I don't have money. So, it's not going to be here. I've never thought about it, not being in this house, but that's become a reality. I'm houseless, I'm not homeless." Another respondent discussed how staying in her home was the most affordable option, as long-term care would be costly:

"It's the cheapest place [but] if I want to age in place the state would have to pay a lot of it, Medicaid and whatever. And the price they want for [long-term care] now! Where [my friend is] it's 40-something-hundred a month...\$4,000 a month...come on, it's not right."

Some respondents noted that homes that were in disrepair were costly or other expenses were mounting. One Portland respondent talked about mounting home repairs needed (note: some repairs were completed by community organizations such as Unlimited Choices):

"[It was] tough and worrisome. I didn't know what I was gonna do. If we had to have the roof repaired I was thinking about taking a loan out on the house. Of course, I didn't want to 'cause the house is almost paid [and] I don't want to take a loan out on it again. But, I thought if I had to save the house, I would. I was really worried about that and I was worried about the leak, and I thought well, I'm sure it's going to cost \$6,000 or more to fix all of it. So, anyway, I was really happy when they called me up and said, 'we're gonna put on a new roof...and how about let's fix your water leak too?' I said, 'really?' I was shocked. I was really happy they did."

Although the comments above ended in a good resolution because of home repair programs, they highlight the difficulties that some have aging in a home that will give them shelter without causing them to go into a financial hole. Homeowners also discussed mounting costs, such as: "With the house [we see] the cost of insurance is going [up]...medication goes higher...It's like, what do you live without?"

Finally, one issue that was discussed by a couple of respondents concerned being left without options if they were forced to move (e.g., if a mobile home community was being redeveloped or their rents increased too much). Portland and Salt Lake County are destinations for people to move and home prices and rents have increased.

5.2.2 Mobility

5.2.2.1 In-home Mobility

Overall, life-space mobility is compromised within one's home by declines in individual functional ability. Home environments become more limited to a resident over time with new mobility impairments that can lead to declining access to one's home, and increased need for supports and home modifications.

Stairs within the home were the most reported barrier to in-home mobility. Respondents commonly detailed, "Stairs are a barrier." As people aged in their homes and their functional ability changed, their feelings were apt to change about stairs: "When we moved, bought this house, I thought it was wonderful to have those stairs. I used them for exercise. I'd go up and down and up and down. And now it's an effort. It really is hard."

Several respondents mentioned unused or neglected areas of their homes such as levels of the home other than the main level: "I don't go downstairs too much." This led to some respondents altering aspects of their home, such as where the washer and dryer were located: "My granddaughter had the washer and dryer moved up[stairs]." One respondent moved his mother into the lower level of their home as it did not require the use of stairs and provided access to the garage and outside; however, that led to her not using the main level of the home and not being able to take advantage of changes that had been made: "There's a lot of improvements [upstairs] she hasn't seen. I tell her about it all the time." Changes to in-home mobility can represent a loss that needs to be accepted, as described by one resident who owned her own home: "Let's face it, I'm not going to be going up[stairs] to play the piano."

5.2.2.2 Home Modifications

Mobility within the home was important to and well-addressed by respondents. As one respondent noted: "As long as I am able to be mobile in my home I would like to stay here." Home modifications received included railings on stairs, grab bars in the bathroom, and ramps

that replaced stairs. Most modifications addressed existing physical barriers in the home that were difficult to navigate and created safety concerns: "I had really gotten to the point where taking a shower, I dreaded." Some modifications were also preventive.

Many respondents described the need for modifications as based on declines in their functional ability with statements such as: "I couldn't get in and out of the tub anymore" and "it's really hard for both of us to go up and down the stairs." Many functional ability changes noted were based on physical declines, but cognitive decline was raised as a concern by proxy respondents who served as a caregiver.

Modifications had varied impacts on individual life-space mobility, with some respondents noting improvements in key areas within their home: "[The modifications] really helped with accessibility and getting out of bed...and the bathroom, too." Bathroom modifications such as grab bars, showers that replaced tubs, and raised toilets were the most commonly noted within-home modification that led to improved mobility.

5.2.2.3 Mobility Aids

Mobility aids used by respondents included canes, walkers, and wheelchairs—these aids were used within homes, for transitioning from within the home to automobiles and transit options outside the home, and for outside mobility (i.e., walking or rolling). One respondent described their need for a mobility aid: "[I have] a heck of a time [with my walker] because I'm in pain in my legs. My knees don't navigate like knees would if you had cartilage in them...I have a lot of pain all over because of the arthritis stems in my lower lumbar and radiates out to everything."

The most commonly reported mobility aid was a wheelchair, with limited mentions of manually operated wheelchairs and more mentions of electric wheelchairs—some smaller versions were referred to as "scooters." Although there was one mention of a barrier to in-home scooter use due to wide halls and doors, most respondents who mentioned wheelchairs discussed using them outside as it helped their independence and mobility: "I can't go anywhere by myself. I need an electric wheelchair."

An interviewee detailed their experience using a motorized scooter: "Oh yeah, the curbs. Getting down off of them. After you fall on this [motor scooter], I've fallen about five times, you get a little paranoid. My in-home therapist [said] 'You realize you're leaning to the right side all the time?' Every time it falls over it's to the right."

A noted barrier that pertained to life-space mobility was the transition from inside one's home to outside and vice versa. In particular, if there was no way to get a wheelchair or walker into or out of one's home, mobility differed at the point of egress or ingress which could create differing mobility for a person. One proxy respondent discussed the person for whom he was caring for: "With the ramp and the garage door [she] could now get in and out of her home with her electric scooter, whereas before she had to leave it outside and enter the front door."

Once outside the home respondents confronted many additional barriers to mobility when using mobility aids such as a lack of sidewalks (e.g., "there's hardly any sidewalks"), uneven/non-

existent paving (e.g., "Uneven pavement sidewalk," "Some areas not developed don't even have a sidewalk"), and obstructed sidewalks (e.., "people don't cut back their bushes," "roots coming up"). A respondent noted barriers when exiting the bus: "It's got too many poles and benches and stuff like that are too close. I actually got stuck under one of their friggin' poles."

5.2.2.4 Mobility-related Assistance

Assistance with mobility-related activities varied among respondents. As noted above, there was a range in functional ability as measured by the IADL Scale; that range in functional ability was related to respondents' dependence or independence, which was also found in qualitative responses. On one hand, respondents noted their ability to walk and ride a bicycle to meet their day-to-day mobility needs. On the other hand, there were respondents who were completely dependent on a formal or informal caregiver to meet their mobility needs, both inside and outside the home.

The range of mobility-related assistance varied among those with needs for day-to-day support. One respondent was dealing with pain and physical constraints but remained independent even though they had numerous challenges, such as: "My whole body is in pain because I have osteoarthritis and fibromyalgia and I have no cartilage in my knees, I have glaucoma and I had a partial cataract surgery last September and it didn't quite turn out the way we had hoped it would, because I could see better before the surgery." Another respondent was incredibly mobile inside and outside the home, but needed supervision based on their cognitive impairment, and another was able to move around within their home but needed assistance leaving their home or accessing community services outside the home. Ramps and grab bars were useful to those transitioning from inside their home to outside, regardless of whether they were only going into their yard, immediate community, or service-related destinations that required a trip on transit or in an automobile. Additionally, some respondents were mobile and independent enough to get in and out of their home, but did not use transit or paratransit services and relied heavily on informal care driving them in an automobile to access services such as grocery stores, government services, and other outside-the-home services and amenities.

Overall, mobility-related assistance varied among respondents based on their functional ability, their houses' accessibility, home modifications present, familiarity and comfort with using transit, availability of a caregiver (informal or formal), and mobility aids.

5.2.2.5 Outside Mobility

In-home mobility is a key aspect of home modifications, but optimal mobility should consider the goals of mobility and how mobility goals are achieved (or not). This is particularly relevant to the installation of handrails on stairs or the replacement of stairs with a ramp. Although ingress and egress to the home are important, our findings point to additional mobility goals that include social participation and access to services and amenities. One respondent articulated their mobility experiences inside and outside the home: "I can live comfortably and safely in my house but also be able to go to other places or even have…somebody come get me and take me [out]." Respondents discussed how railings on external stairs, or ramps that replaced stairs, had improved their outside-the-home mobility: "[With the ramp] I can come and go more easily." Modifications to the entrance of the home also improved access for visitors: "[The railing is] nice to have for other people if they come to visit me because I have a lot of elderly friends that need it also."

Other factors also influenced outside mobility. Inclement weather was noted, even though there was an understanding, "that's something you can't control." Changing physical environments was noted as a barrier: "Downtown has all changed...I used to know downtown like the back of my hand. 30 years in-between changes things. Plus, the trees were about 30 feet. It's like a forest in the middle of the city." Additionally, changing physical abilities changed access to environments: "My eyesight is not good so I couldn't do landmarks [to navigate]."

Infrastructure in the community was also an important factor that affected respondents' outsidethe-home mobility. Respondents noted the absence of sidewalks, lighting, and crosswalks as major barriers to their mobility; one person also noted an issue with newer versus older driveways: "Driveways now are at a lot less of an angle. Going over some of these old ones and I feel like I'm [leaning too far]." Sidewalks that had been lifted or altered by roots or were obstructed by limbs and branches were problematic. One interviewee suggested the need for a "lighted crossing, better sidewalks [or] sidewalks, period." A Portland-based older explained their experience with inaccessible infrastructure: "They just put that new sidewalk in. Prior to that we had a dirt walkway out front. I fell. I don't know what happened... I spent two weeks in the hospital. When they took me there I was unconscious...It split my nose wide open. Broke both my dentures. Knocked me out colder than a mackerel."

Another respondent discussed their experience navigating without sidewalks: "It makes it hard for me to navigate around. I can't navigate the rock and the holes and the mud and all that. People will go along and they'll call you names and everything because they're mad you're a little bit in the street...How would you like to be me [with] my walker trying to walk and having a heck of a time...I grit my teeth when I'm walking because I'm in pain...My knees don't navigate like knees would if you had cartilage in them."

5.2.2.6 Service and Amenity Destinations

Service and amenity destinations are a key component of understanding a respondent's life-space mobility. Mobility is purpose driven and best understood when a respondent had destinations that they felt able to travel to, either on foot or by another form of transportation. This exercise gave respondents an opportunity to think about how they define their neighborhood's physical boundaries—an important element in the study—and it also encouraged them to consider important destinations and mobility-related infrastructure such as roads and sidewalks. While most respondents were dependent on automobiles or public transit, some respondents walked to nearby services like grocery stores and pharmacies; "I would say [I go to the grocery store] at least three or more times a week. I have to carry everything...Getting off and on buses. I can only carry enough groceries for a couple days." A Salt Lake County respondent felt that their neighborhood was easily walkable; "Pretty much everything I do is [walkable] right around here...I have Smith's. I have all the—Walmart. Everything is right here. You, you couldn't ask for better."

One Portland respondent mentioned that she would be more likely to go for walks just for the exercise if she had opportunities to rest in scenic places. "Yeah, benches. When I walk I like to sit down and rest. I wish they'd have it along the path by the water. That would be really nice because you can sit there and look at the water. I'd sit over there." Other respondents felt that there were not enough close destinations that would incentivize them to travel to or give them a reason to go out: "There really isn't anything to do in this neighborhood. Very, very quiet. And you don't see a lot of people out. And so, I just don't go." This could be due to the finding that non-transit users (those who drove personal vehicles or were driven by others) tended to be concentrated on their closeness to grocery stores, but this can be interpreted as they are not well-assessed to other amenities except the essential necessities. A Salt Lake County respondent felt that there were no amenities, such as parks and shopping areas, within walking distance: "You know, like I say, I don't travel that much. I don't go anywhere that much. So, I just don't—to me, personally, I don't have no need for it right now."

5.2.2.7 Transportation

In the survey, respondents were asked about their use of different transportation options, including walking/pedestrian travel (unassisted or with the use of mobility aids); bicycle; driving a car themselves; being driven by friends, family or caregivers; ride share (Uber/Lyft); fixed-route transportation (bus/light rail/streetcar/heavy rail); as well as the use of paratransit and medical transportation.

Overall, amongst respondents there was a relatively high proportion of transit users, 52%, in Portland compared to 28% in Salt Lake County. In all categories of transit—including bus, streetcar, light rail, and paratransit—Portland respondents were more likely to use public transportation. The exception is the use of commuter transit, while a few select areas of the Portland metro area are connected with the light rail system (MAX), Portland does not have a traditional "commuter rail" transit system. Salt Lake County has a commuter rail system called the Frontrunner. A few Salt Lake County respondents mentioned using the Frontrunner to visit children in other areas or to access downtown Salt Lake City.

Exploring the result by transit use of the participants, the LSA score is higher in transit users than non-transit users in both regions. In Salt Lake County, the IADL score is also higher in transit users. Transit users in Portland showed that they are more satisfied with the neighborhood they reside in than non-transit users.

5.2.2.8 Automobiles

Automobile use was frequently identified as significant by respondents, many of whom were still drivers themselves while others utilized the cars of children and other family, caregivers or friends. Of the Salt Lake County respondents, 56% still drove themselves, while 40% of Portland respondents used a personal car. Among the Salt Lake County respondents, 76% also reported receiving a ride in a personal car from a friend, family member or caregiver compared to 56% of Portland respondents. Many respondents were uninterested in giving up the independence their

car provided: "I have a car. I wanna do what I wanna do. I want to be independent as I possibly can to do what I wanna do. If I didn't have a car, then yeah, I would. I've always had a car." Other respondents were very clear that their reliance on their personal vehicle was due to a dislike of public transit options: "No. I don't like [public transportation] ...I like being able to drive. That's a habit you can't give up. You can change your mind. You can't do that on the bus." One respondent identified that they had never used public transit as they utilized an informal caregiver's use of a personal vehicle, "I never used a bus. No. But I haven't been able to drive. [Name] does the driving. He takes me to my doctors, my appointments, picks up my prescriptions, pick up groceries when I can't go. Yeah. He's, he's my lifeline, really."

While some were still using their car, they recognized that their age may prevent them from using it in the near future and they were becoming dependent on getting rides from others. "Well, I've got a car. And I mean I don't know. I like to drive my car. So, I would prefer to keep driving it. But at this age who knows how long I'll be doing that." A Salt Lake County respondent had a similar response "I don't know how soon I'm going to have to stop driving. I'm going to be moving down with my daughter in Solana Beach this summer sometime." One respondent relied on her grandson's support after he had taken her personal vehicle, "I don't have a car. And my grandson took my car when I was 92. He said, 'Grandma, you can't drive anymore.' So that's why I don't have a car. But people will shop for me. And, oh, they'll take me to my doctor appointment." Some respondents had also given up their personal vehicle due to financial concerns. "Yeah. I had to give up the car because a car's expensive if you're on a low income."

Other respondents noted that as they aged, they may not be able to drive themselves or be driven by others and would have to transition into taking public transportation. A Portland respondent did not have a personal vehicle but was driven by friends who were of an advanced age: "I know I'll have to [take the bus] because I don't drive anymore. I have a couple of nice friends that have been [driving] me but I know that's not going be forever either. She's also in her 90s. Both of them are, come to think of it." A Salt Lake County respondent noted how the car she and her husband had been using for many years had deteriorated to a point where her family was concerned about their use of it to get around. Without family to rely on to help them with their errands, they were forced to use the car until it suddenly lost the power steering on a trip to the grocery store. Her husband, who had advanced dementia, drove the car home. "…. And from Trader Joe's all the way to here, he drove that car with no power steering. And so that was the last time the car was driven, and it was Walter who did it. And he got us home. And it won't go anywhere anymore. That was just three weeks ago—two weeks ago, about the car. But before then, we were taking the bus. And We were happy about the bus. And I was, like, telling you that I really liked having the bus. And I didn't feel agoraphobic anymore."

5.2.2.9 Buses

About 44% of respondents in Portland reported use of the bus whereas only 8% of Salt Lake County respondents reported use. For those that utilized fixed-route bus service, many were quite positive about the experience "With the bus [I have] everything [I need]," another respondent said about frequent ridership. "[I ride the bus] about every other day or probably every day. Quite a bit. I use a bus pass." Some were extremely positive about bus ridership and had no issues around it. "[The bus stop] is right out by the first driveway where you guys came in. There's a bus stop. I would say [I ride] frequently. There're places I go and the weather and all the above. I have to use the transit system. I like it. I ride the bus and occasionally the [MAX]."

Though many respondents had positive things to say about utilizing the bus, there were a large number of respondents who detailed their experience with barriers in using the bus. Some of the major issues were centered on the bus system not having convenient lines and requiring transfers; "Every place I go on the bus, I have to take three buses. The 6, the 75, just to go to Fred Meyers," The son of a respondent mentioned the difficulty in transfers while trying to do things like shop for groceries and other errands: "It's the grocery store. I have to transfer if I go to Albertsons or Safeway. I have to make a transfer and have to wait. It would be raining and I couldn't take mama.... it's like 45 minutes and if you walk there it's 20 minutes away. But it's 45 minutes if you catch the bus."

Some respondents who utilized mobility aids such as wheelchairs and electric scooters were less enthusiastic about bus ridership as the lack of ease in the boarding process and finding space for their devices as well as ageism and discrimination from other riders. "Well, it's real nice they designate the front seats for the disabled people. But if I can't get this scooter in there and turn it around right away so I can come off easier, there's no side view mirrors on this. I can't turn around that far to see." The caregiver of a respondent mentioned difficulties in getting the respondent seated on the bus, "What happens is, I don't mean to be ageist, but generally folks that are younger in either high school or in that age don't really seem to like . . . they look at [name], or they don't even look, they're on their devices. They're not cognizant of, this gentleman might need help, or, yeah. Sometimes to the naked eye he might seem like he's fine. He has trouble with his balance and it doesn't register for them. They're doing the best they can, I understand. But, it's older people and they generally tend to support . . . even when the bus is crowded."

5.2.2.10 Trains

About 32% of Portland respondents mentioned taking the light rail (MAX) compared to 24% of Salt Lake County residents who mentioned use of their light rail service (TRAX). Some residents noted that their homes being in close proximity to a light rail stop was a factor in their choice to live there. "The MAX was brand new. Everything was very convenient....Those were my considerations. It was close to everything. They got the MAX. When my father lived in Chicago I could get on the MAX and it would take me to the airport." A Salt Lake County respondent identified a similar sentiment: "The TRAX comes on Second West right down the street. Like this is—is this Main? West Temple and then Second West, there's a TRAX down the street. Oh, yeah, that's the first thing that this [home] was advertised with. There's stores all around here and TRAX too, yeah."

Several Salt Lake County residents enjoyed the convenience of using the TRAX to visit downtown Salt Lake City without needing a personal vehicle. "Well, maybe if I have a particular thing to go into town for, I'll drive over to the bus stop and then get on light rail and take that into town and back out." Not needing to find a parking space was another convenience: "My daughter and I usually go park at West Valley. And then we take TRAX downtown...It's just so much easier. You don't have to find a place to park." Another respondent also found taking the TRAX easier than driving themselves, "We take TRAX downtown once in a while. Buses were

kind of awkward...Parking is an issue." Taking grandchildren for explorations of sites downtown like the Salt Lake Mormon Temple was also a destination made simpler by using the TRAX: "We have driven down the hill to the Trax station...to go downtown to Temple Square. [Name] likes to go to Temple Square." One respondent had nothing but positive things to say about using the TRAX: "I take [the TRAX] because I feel quite safe. I don't have to drive on the freeway, you know, or on the city street. That's, you know, to me, I, I do feel quite safe in taking the TRAX. I just, it's just more convenient to take the TRAX...You don't have to fight the traffic. It's cheaper than driving your car up there and paying to park it."

Though there were very few quotes from respondents mentioning use of the MAX, a few Portland respondents mentioned the ease of accessibility being something they enjoyed about the MAX. With the MAX, riders can push a button that pushes out a ramp for access by wheelchair or other mobility device. "That's one of the things I kind of like about the MAX. They have the little [ramp] that just kind of shoots out there. If [the bus] had something that kind of shot out there, that'd be cool." Another respondent mentioned an additional feature of the MAX, "Well, it's real nice they designate the front [areas] for the disabled people."

Only 8% of Salt Lake County respondents reported taking the commuter rail in their area known as the Frontrunner. Most respondents mentioned visiting family and friends who lived outside of the area: "I go down and see my grandkids on the Frontrunner." Another respondent mentioned enjoying using the commuter rail; "I'll take the FrontRunner. That's very convenient for me...it's really a lot of fun too, and it's—I've taken it a lot of times too." It should be mentioned that although 4% of Portland respondents reported using Amtrak service to connect to other cities like Seattle, there is no formal commuter rail that compares to the Frontrunner in the Portland area. The MAX connects most Portland metro area towns together.

5.2.2.11 Paratransit

Overall, respondents had mostly positive comments about the use of paratransit. "I usually take the LIFT service everywhere.... I find that very convenient. I don't know what I'd do really without it. It's really a godsend for us." The son of a Portland respondent identified that using paratransit was the only way that his mother would leave the home since her most recent stroke. "I have to get the LIFT for her. But, if she needed [the bus] it was only two blocks away. She used to do it before she was in the wheelchair [after her second stroke]." Most respondents used paratransit services for getting to and from medical appointments. "I have [used] medical transportation...takes me to and from some of my appointments... If I can get the LIFT or some other way, I would do that." One respondent in Utah identified that he and his wife utilized paratransit so as not to burden friends and family members for rides to necessary appointments: "Oh, they'd come pick us up for doctor appointments. And my wife still does use them occasionally for her doctor appointments. My doctor appointments, I'll call a week—Get a ride from them, so I don't have to ask people for a ride."

Though most respondents had positive views of paratransit and utilized it for necessary errands some respondents, especially in Portland, were displeased with certain aspects of the paratransit system. A few respondents discussed that the LIFT paratransit service in Portland does not operate on a convenient schedule and often relies on users to share transportation which can lead to inequitable service. "[I would take LIFT] before, with Health Share, I would get the transportation for medical. Now I don't. So, basically, I take the bus. I take it because the other

transportation can come so early. You have to be ready. Then when they pick you up, you could be sitting there a long, long time. I remember when there was one person that I would see waiting. She would be waiting and waiting and waiting. I thought I could get home by bus faster than that." Another respondent identified an issue around using the LIFT service to be picked up from the grocery store but, due to a medical issue, would need to use the restroom and would not hear the intercom announcement that his bus had arrived. "Most of the time I call up the LIFT service, but they've been kind of pissing me off lately. When they show up you've got to be ready within five minutes or they leave you. They put you on the waiting list." The issue around scheduling was also a concern for another respondent, "You have to set [paratransit] in advance. You gotta know what time you want to be picked up to come home and we don't always know that. They don't really encourage you to have two or three stops on the way." This lack of flexibility often either forced respondents to seek out other transit options or left them isolated.

5.2.2.12 Bikes

Bicycle ridership was not something that respondents frequently discussed as a mode of transportation. Only 8% of Salt Lake County respondents mentioned riding a bike while 16% of Portland respondents used a bicycle. One Portland respondent rode his bike frequently though he was struggling with what seemed to be early signs of Parkinson's. "...Supposedly that's what happens with other people with Parkinson's. They fall and stumble. I can get on the bike and ride for miles." This same respondent also mentioned trouble when trying to bring his bike on fixed-route buses: "I have a little bit of trouble sometimes putting my bicycle on [the rack on the bus]. I mentioned that to the drivers a couple times [and] left a message at TriMet. I don't know why they can't just leave that [rack] down. It wouldn't be in the way or anything. Anyway, [the rack is] pretty heavy. I have trouble lifting it up and putting it down sometimes."

A few other Portland respondent mentioned using their bikes in fair weather, during the summer. "In the summer time I will [ride my bike]. Yes...I will probably ride it very often. So, I would say a couple times a week. Not every day." Another rode his bike around his mobile home park to visit neighbors: "Once in a while, my bike. It's only around here, too. I don't go out on the street with it very much. I guess I have to wear a helmet now and all that garbage. I lived when I was a kid without one."

5.2.2.13 Barriers to Public Transit (Cost, Park and Ride, Complexity, Safety)

5.2.2.13.1 Cost

Difficulties around cost associated with transit passes (even with an honored/senior citizen discount) was something that respondents frequently identified: "[I would ride the bus] I could squeeze [the cost] into my budget." In one particular case, the cost and difficulty associated with obtaining a pass had almost completely isolated one respondent and her son. As her son explained, "You have to have the badge, the [Hop card for TriMet] ...We gave up on it...[we] don't have [my mom's] current ID. That's about 50 bucks to get current ID. [We] don't have that much money." In addition to the cost associated with obtaining her current ID and a Hop card, the respondent also had difficulty in affordability for paratransit services. "I don't think I could afford [TriMet LIFT]. I don't know what it costs, I don't know anything about it. Nobody will tell me and I can't get through to TriMet. They're useless, they're no good. They're rotten, horrible."

5.2.2.13.2 Safety

A recent incident that occurred on a Portland MAX train where an altercation between three individuals resulted in the death of two men seemed to have affected many of the respondents we spoke to and their perceived safety in using the MAX trains. "I used to ride MAX and go downtown. I'd drive to Gateway and then [ride downtown]. That was before it got so bad...the MAX just got too dangerous. It's too scary. You feel so vulnerable. I'm not a scaredy-cat, but when you see some of the people...you know." General concerns on safety in all public transit included fears of vulnerability around other riders. "I don't ride the bus…you hear so much about [the] safety thing…it's scary." A Salt Lake County respondent felt similarly about being uneasy on the bus. "And you don't know who's sitting behind you with what, if they got a gun or knife. We got a lot of gangbangers out this way, big time." When asked about bus ridership, one Portland respondent was concerned around incidents he had heard about where riders had been violent with one another and against the driver. "I hate the bus. I did it when I was kid and I hated it then and I hate it now…the people on it."

5.2.2.13.3 Accessibility

When asked about the location of public transit stops, a frequent complication identified by respondents was the distance walking from their home to the nearest stop. "Why I don't use [the bus]? Because it's really not accessible. You'd have to walk from here over to there." A Salt Lake County respondent mentioned that even with a mobility aid her husband could not walk to the nearest transit stop: "There's not a prayer [my husband] could walk from here to the Trax stop. Even with a walker, he couldn't do that." In the case of one Portland respondent, issues around walking from a transit stop prevented her from attending her preferred church: "I'd rather go to Holy Redeemer. The 6 goes straight up there and then you get off, but I have to walk five blocks or six blocks." Due to the difficulty with walking, she attended a different church as a friend could give her a ride in a car directly there.

In addition to walking, making transfers between fixed transit routes is another difficulty around accessibility. For one Salt Lake County resident, the compound issue of walking between transfers poses an issue: "Yeah, fewer transfers and you still have to walk. For me, it's hard to walk." A Portland resident discussed her difficulties in getting to appointments: "If I have to go to the doctor, that's the one I take three buses. If I drove it would be 15 minutes and I'd be there. I don't have a car." Another Portland resident mentions how difficult it is to run errands necessary for him and his mother: "It's the grocery store. I have to transfer if I go to Albertsons or Safeway. I have to make a transfer and have to wait...it's 45 minutes if you catch the bus."

5.2.2.13.4 Changing Modes

Survey respondents were asked about all modes of transportation they used, whether regularly or irregularly. While most respondents identified many different modes of transportation that they utilized, a few respondents mentioned how their declining ability had changed their use of modes like public transportation to being driven by family or paratransit. "I wouldn't be able to use [the bus] at this point, I don't think. It would be very hard. I could because there are people that use it with a cane. But it would be hard." One Portland resident could no longer use the light rail: "There's just too much walking [to park and ride at] Gateway. I have to park the car, then I have to walk over to the train, then when I get off the train downtown, there's walking. It really has isolated me."

Another concern was that taking public transportation would require traveling alone and possibly being stuck without assistance. "But not, not just walking alone. I, I couldn't do it. Yeah. Yeah. I, I know I couldn't because sometimes I park my car on the side here. And I struggled to get from here to there." Another Salt Lake County respondent mentioned trouble with an electric mobility device being a deterrent to traveling alone: "You know, if somebody's with me, maybe I wouldn't be (afraid of taking the bus), but if I'm not—you know, in those electric chairs that you take, and the electric goes out, you don't have—you can't move them."

5.2.3 Defining and Understanding Neighborhoods

When drawing lines on a map to define their neighborhoods, respondents would often draw either circles or squares in the area around their home that showed a perceived boundary that represented either major streets or catchment areas for destinations. "Generally [I walk] in this area...that's 33rd over there, 33rd South." Some respondents defined their neighborhood by what they could easily walk, either for light exercise or to get out of the house. "This is where I walk and what I think of as my homing area." In some cases, if the respondent drove a personal vehicle, their neighborhood boundaries may be larger(e.g., to include a preferred grocery store or shopping center)than other respondents who walked to a transit stop or did most of their errands as a pedestrian. A respondent detailed their catchment which relied heavily on using their car: "Truthfully, I don't wander around my neighborhood because there just isn't [a lot nearby]. I just normally just stay home...if I go someplace, I get in the car and go."

5.2.3.1 Barriers

Some respondents detailed physical barriers that limited where they traveled in their neighborhoods, such as sidewalk maintenance: "Some areas...there's no sidewalk and I have to get into the street...I'm really, really leery about that." Another person, in Portland, noted that a lack of protected crosswalks limited their neighborhood catchment area: "On 82nd [Avenue], for people that are walking, that are trying to cross 82nd, it would help if they had flashing lights." Respondents also expressed concerns about safety in their neighborhoods which deterred them from traveling into unfamiliar places, or out at night. "Right here, like a block over, we've had break-ins." One Salt Lake County respondent had experienced theft and this led to concerns about safety: "I'm surrounded by criminals. I've had so many things stolen."

5.2.3.2 Services and Amenities

Most respondents easily identified services and amenities in their neighborhood they frequented: "I walk [my dog] four times a day up to the park and I ride my bike down to Safeway, sometimes three or four times a day." Other respondents used errands like grocery shopping as an excuse for regular extended trips outside the home, "I go shopping by myself....I'm gone for two to three hours at a time, and sometimes I go just to walk. I've got to walk."

Mobility devices played a large role in allowing some respondents to visit close-by amenities. "Normally, like today, I'd get on my scooter. I had to take care of some business and I went to Fred Meyers [grocery store]." One respondent mentioned that the use of a walker allowed her to get around: "We go everywhere, but we use a walker. I need a walker. Not because of my legs but because of dizziness...And then I can sit down. And that's—two miles. Pretty much. In and out and walking around and going through stores and walking across parking lots to Jo-Ann's [craft store]." When asked to identify the locations of amenities like the closest sit-down restaurant or other non-service-related destinations, some respondents had difficulty: "There's nothing in this neighborhood. There's a movie theater that I can't afford to go to. There's no good Chinese restaurant close enough." As expressed in this quote, some respondents discussed that amenities in the neighborhood were out of their budget range or were unreachable due to accessibility concerns or distance. A few Portland respondents mentioned using a grocery store that was close to them, though several preferred to use a different, less expensive grocery store that was further away.

5.2.3.3 Neighborhood/Neighbors Attachment

Many respondents mentioned having a strong connection to their neighborhood through their neighbors, which helped to define their neighborhood boundary. "I know all my neighbors. Yeah, they're real friendly." In some cases, this strength of community inspired the respondents to regularly leave their home to engage in social contact with their neighbors. "I visit [my neighbor] and there's some people who moved in over here and there's some kids who live up the block that come over and visit me, so I go over and visit them when they're outside sometimes...So, the street knows me."

Some respondents' boundaries were very small, mainly due to mobility limitations. One Portland respondent was almost entirely homebound and, due to accessibility concerns, could not leave the basement of her home which severely reduced her neighborhood boundary. However, as her son explained, her connection to neighbors was something that inspired her to go out on nice days. "She'll let me take her around the corner. She likes to see the house and then she'll talk to [one woman]. She'll talk to [the man] across the street who is a doctor downtown and she'll go to this corner over here and I'll push her around the corner to [another woman's] house. Then she'll say hi to [another man]. It's just within, I would say, 200 feet."

A lack of social connections was present among a limited number of respondents which translated to a very small neighborhood catchment area. One Salt Lake County respondent had become isolated due to a lack of social connections to his neighborhood: "I don't go around this neighborhood. I don't know anybody on that street anymore...when the sun goes down, I don't even go out of my yard [and] the last three or four months...I haven't even been outside."

Some neighbors also facilitated neighborhood boundary expansion for respondents, by proxy that is, they performed errands that allowed respondents to stay at home but have access to nearby services: "[My neighbor] is like a son to me. If he's going to go to Safeway or something he gives me a shout and says, 'I'm going to Safeway, anything I could pick up for you?' He keeps me in the loop."

5.2.3.4 Respondents with Limited Beyond-the-home Mobility

Though respondents had varying degrees of outside-the-home mobility, there was a small group that no longer ventured outside of their home or property. "Truthfully, I don't wander around my neighborhood...I just normally just stay home." Another respondent provided more details: "I never visit [anyone] or go shopping. I stay home." Interestingly, many respondents reported limited instances of leaving their home for social or service destinations even though they had an automobile, ride from another person, or ability to ride transit or paratransit; nonetheless, they did not spend much time outside of their home or property.

A few respondents identified services they frequented in a limited manner only, such as leaving their home for a visit to the doctor. Another explained that a lack of regular exercise began to have an impact in their mobility: "I don't do too much, I'll be honest with you, because I do not get much exercise, and that's my fault...and so I can't walk for a long distance." Medical visits were not always captured as part of one's neighborhood boundary, especially when being accessed by automobile.

5.2.4 Interviewee Functional Ability

5.2.4.1 Mobility Characteristics of the Sample

In order to understand the functional ability of the population, interviewers asked a series of questions from the Lawton-Brody Instrumental Activities of Daily Living (IADL) Scale. The IADL Scale is considered as best practice by the Hartford Institute for Geriatric Nursing, as it is an easy-to-administer assessment instrument that provides self-reported information about the functional skills necessary to live within a community (Graf, 2007).

IADL's measure an individual's functional level to: go shopping, do the laundry, take medications, handle finances, use the telephone, prepare food, perform housekeeping tasks, and travel outside of their home (Lawton and Brody, 1969). A summary score ranges from 0 (low function, dependent) to 8 (high function, independent) for women and historically from 0 (low function, dependent) to 5 (high function, independent) for men with the exclusion of the functional abilities of food preparation, housekeeping and laundering (Graf, 2006). "This poses a problem of systematic gender bias and is most likely why the original Lawton IADL is not used all that much anymore, but does continue to be the backbone of many other instruments. However, in trying to assess whether this instrument has the ability to measure function in elders, it was realized that in Rasch analysis, it accounts for missing data and only scores the clients on what they are able to do" (Fisher, 2008).

It should be noted that in this study the full eight functional abilities were assessed and scored for all respondents in this survey. "While current practice is to include all eight domains for members of either sex, it may be useful to remember Ward and colleagues' observation that no IADL scale is right for every person, and 'individualizing measures to only those activities which a person needs and wants to perform is a way of ensuring clinical relevance for individuals'" (Ward, Jagger and Harper, 1998; Graf, 2008). All respondents in this survey were living independently, some with the assistance of formal or informal caregivers. Respondents did also exhibit a range of ability, some dependent on mobility aids or home modifications to maintain their independence, but for the most part were able to perform most, if not all, functions of daily living themselves. In reference to the gender bias explained above, many of the male respondents were living completely alone, without a spouse or partner, and performed all tasks on the IADL with some range of ability.

As noted above, the IADL score across all 50 respondents was 6.08 out of a maximum score of 8—Salt Lake County respondents scored 6.0 and Portland respondents scored 6.16. In general, this represents a sample that maintains fairly high functional ability. It is important to note that differences existed when comparing transit users and non-transit users. In Salt Lake County, transit users scored 7.43 and non-transit users scored 5.44. In Portland, transit users scored 6.46 and non-transit users scored 5.83. Also important to note was that the majority of respondents (68%) across both communities used assistive devices (i.e., canes, walkers or wheelchairs). In

Salt Lake County, walkers were the most commonly reported assistive device (48%), followed by canes (48%), and wheelchairs (36%). In Portland, the most commonly reported assistive devices were canes and wheelchairs (36% each), followed by walkers (32%).

Interviewers also asked a series of questions related to the University of Alabama at Birmingham's instrument on Life Space Assessment (LSA). The LSA looks at the range of mobility based on how far and how often a respondent travels in a series of levels (0-Bedroom, 1-Home, 2-Outside the home, 3-Neighborhood, 4-Town/city, 5-Outside the town/city). "The LSA scores are associated with a person's physical capacity and other factors that may limit mobility. These scores can be used in combination with other tests and measures to generate clinical hypotheses to explain mobility deficits and to plan appropriate interventions to address these deficits" (Peel et al., 2005).

Of the 50 respondents across both project sites the average score on the IADL Scale was 6 and their Life Space Assessment Score was 19. For women, in Utah the average IADL score was 5.93 and in Portland it was 6.45. For men, in Utah the average IADL score was 6.1 and in Portland it was 5.63. For women, in Utah the average LSA score was 18.6 while in Portland it was 19.8. For men, in Utah the average LSA score was 19.4 and in Portland it was 21.4.

5.2.4.2 Steps and Falls/Balance

Respondents discussed how steps had become an issue in their functional ability: "As I get older it's been a challenge for me, steps." Other respondents mentioned avoiding their steps altogether: "Both of us had problems getting up the front steps, especially if it was wet or snow. So, we just didn't go that way. We would come around and go in through the garage."

Along with issues using things like steps, balance and falling ("I slip and fall too much.") were concerns that many respondents discussed. One respondent mentioned compound issues with steps and balance which lead to falls. The respondent explained misstepping while using stairs to access basement storage. "I probably fell like the second—you know, misstepped. Yeah, I did a couple of times. But that wasn't major. I didn't fall back to hit my [head]—because I kind of stumble and just fell like a step or two away from the last one. But it was nothing." Fears around falling and past injuries were identified by multiple respondents. "I was always afraid I was going to fall....[My husband has] fallen several times, all around the house. He's fallen down the basement stairs three times. And he's fallen in the bathroom once. I fell in the garage once."

Another respondent mentions falling and how it has changed their personal perspectives on their functional ability: "I fell several times, but once it was very scary. I ended up going to the doctor to make sure I was okay. That really made me feel like I'm getting older now and I have to be more careful. I can't turn and move. I have to pace myself."

5.2.4.3 Caregiver Dependence

Independence related to mobility was something frequently discussed in most interviews. Most respondents were living independently or with a partner or spouse. Some had adult children living with them that needed care. Several respondents mentioned needing the assistance of either a formal or informal caregiver to maintain their at-home independence and well-being.

Some respondents discussed the need for assistance in home maintenance: "I sure do need more things, more help. Like I can't clean the gutters anymore. Some [tree] trimming I can't do. I can do some, but I can't do it all." One respondent needed assistance with trimming an overgrown

yard: "I wish that I'd have somebody that could come out and do my yard work for me. I think once they go through and do it then I can keep it up."

Others need the assistance of a caregiver to maintain their personal hygiene or health: "I just barely had to tell that nurse that comes in that I had to have somebody help me. I can't wash my back. I can't get my arm back there." Another respondent was dependent on a caregiver to assist them into the shower; however, this person only comes once a week which frustrated the respondent to not be able to shower more often: "I have a person who comes once a week. The main thing they have to do is help me into and out of the shower.... I don't want to subject my son to [helping me]."

5.2.4.4 Compound Issues

Many respondents mentioned issues surrounding compounding health issues and how this impacted their functional ability. One respondent mentioned several health conditions that caused her a great deal of pain, but she remained independent and cared for her adult son: "[Moving around is] hard on me. It hurts, my whole body is in pain because I have osteoarthritis and fibromyalgia and I have no cartilage in my knees, I have glaucoma and I had a partial cataract surgery here last September and it didn't quite turn out the way we had hoped it would."

Another respondent mentioned how her compound issues were preventing her from using her tub to take a shower: "Well, it was really tough. I had really gotten to the point where taking a shower, I dreaded. The problem, I've got my knees, I've got bone on bone in my knees, I've got stenosis, I've got all kinds of sciatica and stuff. So, to swing my leg up over the tub and then get in there, I'm just shaky the whole time."

Another respondent mentioned their frequent health issues which required the intervention of an informal caretaker to get them proper care: "I've been sick. I had pneumonia, I think, three years ago. I was so sick....Then I had a, a gout attack, which I didn't know I had. And I had it on my knee....And they sent me to the hospital because I had, they said I had a real bad virus in my stomach. I had a urinary tract infection, and I had double pneumonia."

5.2.5 Home Modifications

5.2.5.1 How They Learned About Home Modification Services

First of all, regardless of whether they are qualified for the services from our community organizations, which is for low-income households, older adults, in general, have limited sources of information about home modifications. Not only where they need to contact to get help and ask for information, but also what sorts of home modifications would be required or available concerning individuals' specific needs. Most of our respondents learned about the services from their family, friends, or neighbors who have already received the services. Some people get informed through some other related organizations or municipal services. A few of them had chances to get resources from the senior/community center. It is crucial to enlarge the overall access to available knowledge and resources to older adults about home modifications to assist their well-being and aging in place. In the case of Salt Lake County, resource books are targeting the aging population to get information about a variety of issues including home modifications. However, as we could find only a few older adults who could access the resources, it seems that more accessibility and educational efforts need to be implemented.

5.2.5.2 Types of Home Modifications

Most frequent home modifications that the respondents received were grab bars, usually installed in the bathrooms and bedrooms that are closely related to the direct support for older adults in everyday lives to get in/out or up/down. This is a popular item of home modification, not only because of easy installments and low cost but also because it provides the essential assistance that older adults need due to their declining stability and functional abilities. Considering many of older adults are afraid of falls, grab bars provide the right support in the most needed spaces.

Along the same line, other popular items of home modifications are handrails both inside and outside the house to support mobility, which is crucial for independence. Also, railings, especially on the stairs and ramps outside, are necessary assistance for older adults to facilitate social connections and access to goods and services.

With the increasing needs of assistive devices such as walkers, wheelchairs, electric chairs and canes, the installment of ramps can enhance the mobility of older adults at the very beginning of their way outside. Due to the ease of access with some assistive devices, some people need to widen doorways or swing clear hinges.

Sometimes replacing the standard steps with low-rise steps can help older adults with arthritis problems, which is one of the common symptoms people experience while aging. This kind of health problem is also related to the installment of lever handles or door handles for their ease of use without much effort.

For those of more limited mobility, some prefer to have a curb shower, roll-in shower, or tub cut instead of a bathtub, which is hard to get in and out of. However, installing grab bars and using transfer bench were more often used among our respondents.

As declining vision is associated with increased chances of falling, some older adults get help to light dark places. They often require an increased illumination level such as on staircases and at entrances.

With their limited mobility, some older adults are afraid of using stairs and ended up occupying the main floor as their primary space. For those, moving the washer/dryer from the basement to the first floor helps a lot so they don't have to rely on someone else to do basic things.

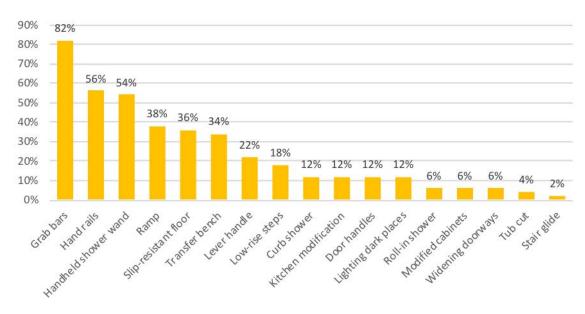


Figure8. Types of Home Modifications Received

5.2.5.3 Life Before and After Modifications

About 93% of the respondents said that home modifications had improved their lives regarding mobility. They were satisfied and grateful about the services they received, and the support from modifications such as railings or grab bars prevent them from falling. Home modifications have been beneficial to the caregivers, mostly family members, as well because older adults can be more independent with getting around and performing daily activities.

And many of them also answered that home modifications improved their ability to meet/contact their family and friends. Interestingly, a lady pointed out that handrails helped her to not only go out but also allowed her friends of similar ages to visit her house. "The only thing is I always just come in the back door because I had the railing there, you know, that gave me support. So, it's nice to have it out front. And it's nice to have it for other people if they come to visit me because I have a lot of elderly friends that need it also."

5.2.5.4 Additional Needs for Home Modifications

Mostly, the respondents answered that they are quite satisfied with what they got and they are helpful. Although many of them haven't felt the need for any further modifications, they acknowledged that things are getting limited for them as they are getting older and more fragile. It is interesting to notice that once they had made some adjustments, older adults became more conscious about what other changes could facilitate their daily lives and sought those changes. This could be another positive effect of home modifications.

"Well, all the modifications that's been done up to today is great. It's helped me in every way possible. But the one we're waiting on, the complete renovation of the home to be opened up where I can get around in my chair, is very important, and that's what we're hurting and waiting for." "And so, I can't raise my arms up. So, it makes it really hard to do things in my kitchen. I need to have something that I can climb up on that I would feel safe. But I don't know what it'd be."

"Well, at this point, getting in and out of the bathtub is pretty hard. And you know, to get a couple of grab bars would help. So that's about it. I go up and down the stairs probably—okay. You're not going to get it any softer. I go up and down the stairs like once. I come down in the morning, go back up at night, so I don't use the stairs that much. And it's not that hard using the stairs. So that would be the main thing."

5.2.6 Future Expectations

Above all, many older adults have worries and fears about their declining health. While some are afraid of particular diseases such as dementia or Parkinson's, others expressed overall fears about declining health conditions. Most of them worry about falling because it could happen unexpectedly and cause lots of additional problems. Declining health also challenges older adults to maintain their home, and housekeeping is another concern.

The next thing they worry about is their financial instability in the future. Considering that we interviewed low-income older adults, it is a crucial issue for them to age in place, maintain current situations, or find suitable living spaces. Financial issues and declining health are key issues that affect one's ability to age in place.

Many of the respondents prefer to age in place, and only a few respondents are considering a move into assisted living facilities because they heard good things about it from their friends who already reside there. However, many older adults showed negative and uncomfortable feelings with those places. And most of them have expectations of their children as caregivers for the future when they need help. But, some still do not want to rely much or longer on their children, and they try to live independently and age in place as long as they can.

"I would not go to assisted living. My son would probably have me move in with him if I move from here."

"Like I say, especially if something happens to my husband, I don't think my kids will leave me alone."

"Here and then I'll go to my daughter's. Hopefully, I'll drop dead before [laughing.] It won't be a bother to her or me....Just 'til I can't get around. Who knows? I expect to stay here for a long time. Now you can have the groceries delivered. My daughter and my granddaughter and my friends will bring stuff if I need it "

There are some people see the situation in more positive ways. A respondent shared her ideas on how to use the space in the house to help people who need accommodations. Although this idea is limited to her acquaintances, this brings up the opportunity of accessory dwelling units (ADUs) within the existing built environment. Renting some space, whether to family and friends or other people, could be a good source of income. This also creates an opportunity to live with caregivers on the same site. Depending on the type of ADU, the residents could be ensured with independence and privacy as well.

"But the opportunities, I think, will be that there will be a place here. If somebody needs a room or something, needs to stay, we've got room that we could help somebody else that need it. He's got a couple friends that, you know, have—he's down in Highland. And he would come up to the hospital up here. And so, he would stay here with us for a couple days while he was doing his appointments. So, it's nice to have the space to help other people out. That's been a blessing."

5.2.7 Supports and Services

This study has confirmed that most people prefer to age in their own homes. Therefore, it is becoming increasingly necessary to preserve the autonomy and quality of life of older adults as long as possible. However, falls in the home are a significant cause of injury. Recognizing their growing physical limitations, many older adults seek to improve accessibility and security. This is where the design of houses specially conditioned for the elderly becomes an ever-increasing need. Currently, there are numerous programs that can redesign homes and allow older adults to stay at home. ASSIST Inc and Unlimited Choices are among these programs. They offer great support for older adults by way of creating a space that is designed to accommodate the elderly, promoting their independence and their well-being. Other organizations in the region help older adults too, such as Community Action in Salt Lake County and REACH CDC in the greater Portland region.

These organizations also help older adults with fixing their homes, which is an integral part of being able to age in place. As an older adult expressed, "I think, another thing I think that the ASSIST did, either ASSIST or Community Action, they sprayed underneath the house. They sprayed for insulation. It took them all day long. I mean, they, they paid other guys to do it. Like, experts came, and they sprayed under the whole house, so yeah. And then, they were on my roof too. They put a new roof on." Although not directly related to mobility, as this quote above shows, weatherization is an essential element of being able to age in place. Similarly, another older adult in Portland stated, "My daughter works at Wells Fargo, so she got the application, and because we had a bad leak, we had a [Inaudible] that was leaking to the ceiling and all that. She got an application to the bank." We found older adults that learned about the services because they had a leak in the roof but then they ended finding out about Assist and Unlimited Choices, and this is how they learn about the possibility of accessibility home modifications.

The fundamental element of aging in place includes both a home that is well-maintained (nonleaky roof and with a functioning heater, etc.) and accessible (with handrails, ramps, etc.). Regarding the accessibility modifications, the goal is that older adults can stand and sit without the help of another person and only with the means in the house. The rails provide support and security, and they can be installed on the stairs and other points of the house. Handrails and accessible home design (e.g., lots of plugs, etc.) are understood as a way of supporting older adults to be able to perform everyday tasks. As described by an older woman, "[This home is] designed for older people, because I'll show you the bathroom. It does have handrails on the side. But they don't have very many plugs in there. You know, like maybe there's only one plugin, where I have like one, two, three, four, five, six up here in the kitchen. That should have also been designed with three or four plug-ins. And the tissue—where you sit to use the bathroom is very far away from where you have to put the—they put the toilet paper holder. No. Whoever did that—and that's the first thing that I told my daughter—she says, 'Gal, you should have been an architect or a designer.' I say, 'Well, being an older adult,' I say, 'That's the first thing you look for.'"

Even if older adults can age in place, the outside world could be challenging. Perhaps most common older adults' everyday activity outside of the home is to get the groceries. Some older adults go out to get their groceries, but most times they get assistance from family. Now that there are services available to shop online and receive the groceries at home, they take advantage of that. A resident of Portland was thrilled with this service: "We've been getting groceries delivered. I found a way to do it where it's not expensive. It's free, actually. Safeway....It has a pretty expansive delivery system. It goes everywhere. It's been good. All these stores are going to start having it. It's the future, everyone's doing everything online. We haven't had to go as much as we used to."

Older adults are supported and also give support to others aging in the household. One respondent said, "I have my son get them. He's my go-between. If I need somebody or something, he'll do it. And then I do have a couple of ladies from the church that comes over and they'll want to know is there anything we can do for you?" Most often they receive support from immediate family members such as a spouse, son, daughter, and grandchildren. But in many locations, they receive assistance from family friends and neighbors. Older adults also feel supported by their neighborhood because it is familiar to them. An older adult in Portland expressed, "I like my neighborhood. It's familiar....I'm trying to be open-minded about what is best for me and having others to help me."

Most older adults feel that their car gives them the independence to go to where they need to go such as doctor's appointments, to visit a family member or get groceries. Many feel that transit is not a great option because the bus does not take them where they want to go and so on. Nonetheless, they like to know that public transit is there if they need it. They feel this is an excellent service to have. Of course, for those who are transit dependent, they could not go without. This group might think that transit is a necessary service that cities and counties need to provide and keep improving. LIFT is also a way that older adults feel supported, "Yeah, [I have LIFT] take me to and from some of my appointments. I've had that in the past. I'm leery with riding the bus or the light rail. You hear so much about . . .Yeah, safety thing. That's what bothers me mostly. If I can get the LIFT or some other way, I would do that."

Access to services and amenities such as sidewalks, bus stops or policing are perceived differently by older adults. One of the respondents expressed, "When I think of distance for safety, we're kind of out of the loop. We're on the fringe. We never had a problem in calling the police or the fire department out here. They've always come real quick. But, it's a way away. It's a long way away....Yeah. Sometimes I worry about that. They seemed to have showed up fairly quickly."

Most considered services to be adequate. However, if older adults were going to report an issue in their neighborhood, they would not know where to turn. An older adult in Salt Lake County would like to get sidewalks in the community: "If they would get sidewalks out here, that would help." This person did not know how to make this petition or if it even worked that way.

5.2.8 Equity

5.2.8.1 Affordability

All of the individuals who participated in this research live in poverty. They have scarce resources to maintain an adequate standard of living and might struggle to pay to maintain and keep their homes, pay taxes, pay rent or pay for transportation such a car, paratransit, LYFT, etc. An older adult in Portland expressed his concerns,

"I thought Portland was going to be the answer for decades. Like I said, I'm not 25 anymore. I don't have money. So, it's not going to be here. I've never thought about it not being in this house, but that's become a reality. I'm houseless, I'm not homeless.... I know there's other housing setups, it's just going to be much less space. Much less freedom of movement. There may not be a car involved. I'm still driving, but that car is almost 30 years old. It may not stick together much longer. I can't see putting out thousands of dollars for a car right now. So, I'm not quite sure what I'm going to have to look forward to. Is it going to be a group home? Is it going to be a boarding house?"

All of the older adults we interviewed as part of this study were low income and most were homeowners. Older adults might struggle to pay for housing if they leave their home. In the case of this woman she sold her home to her son and now she rents in older adult homes, but she keeps moving from apartment to apartment because rent is unaffordable. Many older adults might not be able to afford the rental market today:

"And you'll see it's going to go according to my income. I will not be paying \$500 or \$600. I was paying \$800 over here where I moved to here. So, I will be paying over there like \$300 and no utilities. And these utilities are really high here, because I've got central air, and it takes a long time to warm up the place."

This means that aging in place could also be a strategy of not having to pay rent if one owes free and clear. When addressing the issue of gentrification in the central areas of the city, one of the controversial points is the displacement of long-term residents, many of whom are older adults. In Salt Lake City this was a problem mostly for those living in mobile home parks. In Portland speculation is a major issue, as an older adult explained:

"Yeah. Where am I gonna go? That was the whole thing. Because everybody was getting put out. Everyday somebody calls me trying to buy this house. That's what they're doing. Where would I go? I'm not going to live as comfortably as I'm living here.... No, if I don't live here, I have no idea. I'd probably go out of state.... I can't see myself moving anywhere else. The people right here are getting ready to sell this. They've got 500,000 offers for that house. I don't think they paid 50 for it. They're going to move and I'm so afraid that they're going to make a high rise like they have down at Fred Meyers."

In both Salt Lake County and Portland people felt they could not move anywhere because prices are too high. If they sell their home they would not be able to buy another home or rent for

assisted living. Like an older adult in Portland put it, "I don't know how long I got...The mortgage is too high. But we can't afford to move."

5.2.8.2 Low-income Neighborhood, Services, Access, and Security

In general, low-income neighborhoods have lower quality infrastructure and levels of security, and inadequate transportation or services such as supermarkets, clinics, etc. Older adults might perceive equity as the personal access they have or don't have to transit services (e.g., a bus stop nearby). For example, an older adult in Salt Lake County said, "I used to have it stop right out in front of our house, but they took it away."

Living in a low-income neighborhood might mean reduced city services, including lights on the street and policing. In the case of an older adult in Salt Lake County, someone shot at the lights (a criminal activity). According to the respondent the police usually don't come to investigate: "We did have the yard light working, but some of the neighbors around here thought it was cute to use it, use that light as target practice, this yard light out here. And if you say anything to the law enforcement, they won't even do a—they won't even come out and investigate." This incident happened 10 or 15 years ago and the lights are still broken.

Low-income neighborhoods tend to have higher levels of crime and many older adults feel that they could be victimized. They act upon this fear by not going outside at night, not walking outside if they do not have to or taking the bus. An older adult in Portland generally perceives the neighborhood environment as not safe:

"When I think of distance for safety, we're kind of out of the loop. We're on the fringe. We never had a problem in calling the police or the fire department out here. They've always come really quick. But, it's a way away. It's a long way away...sometimes I worry about that. They seemed to have showed up fairly quickly."

5.2.8.3 LGBTQ+ Concerns

Several gay, older adults reported problems with verbal harassment on the streets. In Portland, an older adult discussed an aggression while walking with their partner:

"Being gay, I run into barriers all the time. Name calling and stuff like that, occasionally. It's pretty rare. I get along pretty good with the neighbors. Walking Boise Street, a lot of people see me walking with [my dog] and it's quaint so they've befriended me. It's just occasional yell, "faggot" or "homo." You just keep on trucking. That's all. But, that's the only real barrier."

6.0 CONCLUSION AND RECOMMENDATIONS

Life-space mobility has been often ignored in the field of urban planning and architecture. Our intention then is to operationalize life-space mobility and draw policy implications for the architecture and urban planning fields that will support aging in place, for all older adults, but especially those who are low income. In addition, this kind of work may be useful in assisting in the recruitment and retention of elders in community-based studies that seek to expand and diversify research and resources on healthful aging.

This investigation contributes to and extends previous research in four important ways. First, it explores the connections between home, neighborhood, and mobility in the field of architecture and urban planning using an interdisciplinary lens. Second, scholarship on elderhood has particularly focused on the vulnerability of individuals as opposed to how they have been able to overcome their barriers—that is, empowerment. Third, whereas past scholarship has been preoccupied with middle- and higher-income residents living in the suburbs and their ability to age in place, our study examines life within and beyond an urban-suburban-only schema and includes lower-income, older adults often ignored in the aging-in-place literature. Fourth, unlike previous research, which has emphasized studies of large urban areas like New York and Chicago, this work attends to the social and spatial practices of those in later life in medium-sized U.S. cities and counties (with available, but limited mobility (e.g., public transit)). This examination of lower-income, older adults in medium-sized cities is especially significant at a moment in which the urban core and the U.S. elderly population are witnessing impressive growth.

In this study we also engaged in methodological innovation. First, we developed a life-space mobility instrument that speaks to the relationship between architecture (home) and the urban planning field (neighborhood). Second, this instrument was developed in close partnership with community organizations and other community stakeholders. Third, for this, we employed a mixed-methods approach including a survey and interviews.

In this study, demographic and built environment characteristics of the participants in both regions, Salt Lake County, UT, and Portland, OR, were moderately different. There were a significantly higher proportion of transit users in Portland, and this was related to the fact that transit users were more mobile, independent, and lived in high WalkScore neighborhoods with higher neighborhood satisfaction. Accordingly, perceived environmental barriers and access to amenities were also differently presented in the two regions. Although the built environment and physical and cognitive conditions were related to people's perception of barriers and opportunities to get around their neighborhood, the basic need of access to amenities, family and friends were the same for all. Since we relied heavily on the perceived built environment in this study, further study can examine more objective conditions of the built environment as well.

Most respondents understood the term "aging in place." They detailed a preference to age in their current homes and communities, which supported the literature on the topic. Common responses included: "I'd like to stay here as long as I can," or "I'm going to stay here until the day I die." Reasons respondents cited for wanting to age in place included: established social connections with neighborhoods and family; attachment to home and place; having an accessible home and community; staying in a desired location; and access to services.

Respondents detailed the presence of neighbors, friends, and family members as important reasons for being able to age in place. Many in the study expressed an attachment to home and a strong affinity for their homes and neighborhoods, whether they lived in a detached single-family home or a mobile home community. Several of those interviewed also said that familiarity with their environments was important. Accessibility of homes and community were clear factors that enabled aging in place, which seemed important as 68% of respondents used canes, walkers and/or wheelchairs. Respondents also noted that proximity to services and amenities were important aspects of aging in place, as were access to transit and maintaining their ability to drive.

Barriers to aging in place included: lack of access to services and amenities (e.g., walkability and transit-related barriers; concerns of crime and safety (both exposure to crime and perceived safety); and lack of affordability due to the rising cost of housing, home repairs, or being unable to find an affordable place if forced to move.

Future research is needed to better understand how home and community design affects aging in place across different populations (e.g., race and ethnicity, socioeconomic status). Additionally, the relationship between factors that enable or inhibit aging in place and social isolation must be explored. Finally, since it is clear that home modifications and accessible community infrastructure enable aging in place for some, investments in home modifications seem like a good investment for government, especially considering the high costs of long-term care options.

Respondents described their mobility experiences across life-space levels, from within their home to regional destinations. Mobility was compromised by functional ability to varying degrees and home modifications were sought based on mobility needs within the homes of those in the study and on the exterior. Modifications such as railings on stairs, grab bars, replacing showers with bathtubs, and adding raised toilets were reported to increase in-home mobility and, for some, their independence. However, it should be noted that for some, those same modifications were less useful, especially to those with the need for caregiver supports.

Life-space mobility outside the home was reported to be improved for many who had home modifications such as ramps and grab bars to assist with ingress to and egress from the home. Mobility aids and caregiver supports (formal or informal) were also reported as important factors in outside-the-home mobility. Home modifications that led to improved ingress and egress also contributed to increased social participation and improved access to services and amenities.

Transportation options were reported to affect mobility, including walking, biking, personal automobiles, and transit options. Neighborhood infrastructure was particularly important for mobility, especially those who used mobility devices and aids. Transit users were more likely to have higher life-space assessment scores in both Portland and Salt Lake County. Automobiles were considered important to respondents, and driving was associated by some respondents as critically important to their general mobility. Barriers to mobility included: declining physical and cognitive ability, inclement weather, inaccessibility of community infrastructure, and the availability and proximity of services and amenities. Respondents also noted barriers to changing transportation modes (e.g., from driving to transit) that created safety concerns and difficulty in accessing fixed-route stops and enrolling in paratransit services.

Overall, mobility matters for older adults and barriers in their home, neighborhood, and systems can result in difficulty accessing services and social connections. Home modifications were found to be incredibly important in supporting and enabling mobility, and should be seen as an

inexpensive solution to increasing mobility and reducing social isolation when functional ability declines. With the aging of our populations, increased funding for home modifications should be considered at the federal, state, and local levels.

Neighborhoods are complicated as they are important to the residents living within them, yet difficult to understand. Although neighborhoods are objectively defined in many municipalities—Portland has 95 formal neighborhood associations—this project sought to better study how residents define and understand their neighborhood subjectively. The methods undertaken in this project sought to allow respondent to draw a boundary of their perceived neighborhood on pre-prepared maps and to discuss the day-to-day activities within their neighborhood. Respondents identified neighborhood-related barriers, services and amenities, connections with neighbors, and their own mobility limitations.

Neighborhood boundaries were influenced by mobility barriers (e.g., no sidewalks, no crosswalks), as well as service and amenity destinations (e.g., shopping, medical services). When automobiles were used to access services and destinations, neighborhood boundaries were sometime expanded, although not always. Interestingly, social connections among those with lower levels of functional ability appeared to both broaden and narrow the neighborhood catchment area with some respondents, with some people feeling pulled into the nearby community for interactions and others shying away from outside-the-home activities when there was no social connection to report.

Overall, the unique neighborhood defining method provided rich qualitative data to explore and a major takeaway is that subjective neighborhood boundaries vary based on respondents' functional ability, social networks, and mobility options (e.g., presence of a car, ability to walk). The research team has laid out findings that align with the administration of the survey (i.e., the NEWS scale, then the IADL scale, and finally the LSA); this approach allowed us ease into the more sensitive topic of functional ability and inform the Life Space Assessment at the end of the survey. Moving forward, we recommend that future researchers consider organizing findings in a manner that adheres to a theoretical framework such as a social ecological framework or the life space assessment which would allow for a focus from the micro (e.g., home), meso (e.g., neighborhood), then macro (e.g., regional/policy) environments.

Planners and policymakers should be careful in assuming the objectively defined neighborhood boundaries manifest in shared meaning and understanding of neighborhoods and should consider that individuals have a variety of experiences, even when living in the same general vicinity. Additionally, major streets and lack of infrastructure can confine some older adults to certain areas of a neighborhood, creating what might be considered unknown or invisible barriers that limit access to services, amenities, and social connections.

The sample of older adults in this study had high functional ability levels as measured by their IADL Score (6.08 out of a possible score of 8). Respondents from Portland had a slightly higher score (6.16) and lower use of assistive devices (56%), compared to Salt Lake County's IADL Score of 6.0 and assistive devices usage (80%). Non-transit users scored higher on the IADL Score in both Portland and Salt Lake County. All respondents lived independently; however, variations in independence existed as select respondents required caregiver assistance to leave their homes and/or did not travel outside of their homes unless required.

When considering that age is positively associated with disability, it was not surprising to learn that respondents detailed concerns regarding their health and functional ability. The barrier to

functional ability that was most reported was stairs, whether stairs leading into one's home or stairs within one's home. Stairs not only exacerbated disabilities but created the need for some respondents to receive support from caregivers, both formal and informal.

It was clear that home modifications mitigated some issues related to lower levels of interviewee functional ability. For example, ramps and handrails on the outside of one's home allowed for easier ingress and egress, which allowed some respondents to increase the life-space zones that they passed through (e.g., expanding from one's home to community was easier). Additionally, bathroom modifications within the home eased caregiver reliance for some respondents and enhanced their sense of safety.

Home modifications such as ramps and grab bars have the ability to be low-cost, high-impact changes that can enable some residents with lower functional ability to age in their home and community, as well as providing access to visitors who may also deal with lower levels of functional ability. As our populations continue to age—and rates of disabilities continue to increase among those populations—it seems that home modifications are a viable alternative for those who rely on mobility devices and/or have declining levels of functional ability.

Home modifications have improved the lives of older adults related to their mobility, social connectedness, independence and aging in place. However, not many older adults can easily access the resources about home modification and its possibilities. It is recommended that a more systematic approach is needed to inform them about the ways home modifications can support their mobility. And those could start from low-cost minor interventions such as grab bars or handrails, which are apparently the most favorable among older adults, to further modifications depending on one's physical and/or cognitive abilities and the use of assistive devices. We also found that older adults who received home modifications became more sensible about the possibilities and challenges they experience in everyday life and this could support their ability to age in place positively.

Despite their strong desire to age in place, most older adults have fear of declining health conditions from falling to serious illness such as dementia or Parkinson's. Some worry about their financial instability and getting assistance in the future. Many older adults expect their children and family to be caregivers when they need it, some still want to keep their independence in their own home, and only a few consider going to assisted living facilities. Considering these, there are some opportunities for accessory dwelling units to support aging in place, provide possible care support by living with family, friends, or other young people, and increase financial stability by renting some space in the house. This can also be a strategy to provide affordable housing within the existing structure (or some additions) and neighborhood characteristics.

Programs like ASSIST Inc and Unlimited Choices that allow older adults to redesign their homes and age in place should be further supported. The fundamental element of aging in place is to be independent. An accessible home design is a way to be able to stay at home. But we must not forget that maintaining the home is also important—that is, paying for taxes, having a roof that doesn't leak and having a working heater. Organizations like ASSIST Inc and Unlimited Choices helps older adults from these two ends. This is why it is important for towns, cities and states to keep supporting programs like this specially for low-income individuals. The state, however, cannot be the only one providing support. Individuals are supported by the community at large, which might include family members, neighbors and friends. In terms of policy implications, perhaps, community building efforts that encourage interaction between neighbors might be a good practice—from block parties to other community events.

There are services that are very beneficial to older adults like supermarket grocery delivery. Meals on Wheels delivers meals to low-income individuals who are homebound. Programs like this should be further encouraged and supported through the Older Americans Act. It is therefore important to keep advocating to be able to maintain the Department of Health and Human Services' budget, which has been continuously decreasing.

Older adults felt that they like to have multiple modes of transportation available to them including public transit, paratransit, and options such as Lyft. Transportation organizations might be able to rely on ride-share options such as Lyft and Uber to bridge the gaps in transit systems by helping low-income older adults to overcome their transportation barriers. For example, transit authorities might partner with these companies to request X number of free rides with the purchase of a transit pass.

Increasing the affordability of mobility systems to serve low-income older adults needs to be an important political objective. Issues such as equity in transportation, as well other dimensions of home and neighborhood, must be identified and treated within the framework of services that should by funded at the federal level and then provided by transportation organizations and organizations such as ASSIST Inc and Unlimited Choices (which received Community Development Block Grants). Low-income neighborhoods, low-income individuals as well as minorities, including people with disabilities, members of the LGBTQ+ community, should be prioritized when investing in quality infrastructure, higher levels of security, transportation improvements and other services such as availability of supermarkets, clinics, and so on.

Finally, in this research project we sought to give attention to the everyday practices of aging people that encourage and support healthful aging in their homes and communities. A healthful aging perspective considers not only how those subjected to a history of disadvantage are left heavily burdened and vulnerable to environmental and social health risks, but also it considers how older adults make sense of and negotiate responses to their circumstances. We hope that by offering some insight on the daily lives of people who have retrofitted their homes, and how these changes have impacted their life, this research can guide programs and policies to better address the needs and support the proactive, positive activities of older adults' lives.

7.0 **REFERENCES**

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8.0 **REFERENCES**

8.1 RESEARCH PROTOCOL

8.1.1 Recruitment Letter

Dear Client of Assist Inc.

The University of Utah Department of City and Metropolitan Planning in collaboration with ASSIST Inc. Community Design Center is conducting a research study on the effect that home accessibility modifications have on aging in place and mobility within neighborhoods and communities.

As a prior participant in ASSIST's home accessibility modifications program, we hope you will consider taking part in this study. One of our research assistants, Jordan Pieper, at the University of Utah, will be contacting you in the next couple of weeks to provide additional information and to invite your participation. If you like to participate in an interview right away, instead of waiting for a call, please contact Ja Young Kim at 801.995.2260 or jy.kim@utah.edu. If you agree to participate, we will set up an appointment to meet at your home and complete a series of survey questions together. We anticipate that the in-home visit will last no more than two hours.

At the conclusion of the survey, we will provide you **\$25 monetary compensation** in appreciation for your participation.

If you have any questions, please call Assist Inc. at 801.355.7085. You can also contact to Ivis Garcia, the principal investigator, for any questions or concerns you may have.

Principal Investigator's Name and Title: Ivis Garcia Zambrana, Assistant Professor

Department and Institution: City and Metropolitan Planning at the University of Utah

Address and Contact Information: 375 South 1530 East, Salt Lake City, UT 84112-0370/ 801.833.4073 or ivis.garcia@utah.edu.

8.1.2 Interview Phone Invitation Script

Hi! My name is OOO(name) and I am a OOO(job position) at the University of Utah

We previously sent you a letter about our research project on mobility and environmental barriers. We heard that you have received home modifications from Assist Inc. and we want you to share your experiences and perspectives on your home and neighborhood environment. If you are still interested in, we would like to set up the time to visit your house and do some survey and interviews on questions related to your housing modifications, neighborhood, and mobility. It will take approximately no more than two hours and we would like to audio tape or video tape the interview. In this research you can also choose to be anonymous. There will be \$25 monetary compensation when the survey and interview are completed.

In order to participate in this research, you must be over 60 years old. Are you older than 60?

Do you think you might be interested in participating? Would it be fine for you to invite the researchers at your place?

If "no" give thanks and hang-up the phone.

If "yes" explain to the person about more information and set up the meeting time.

Great! When would be the best time for you to have us visit your place? Can you check us with your address? On the day of survey and interview, you will first be provided with a consent form, explaining that taking part is voluntary, describing the risks and benefits of participation to help you to make an informed decision. You may ask any question before consent or now.

Thanks for your willingness to participate in this research!

8.1.3 Consent Form

BACKGROUND

You are being asked to participate in a research study that seeks to understand the older adults' life-space mobility and the environmental barriers and ultimately develop effective strategies and policies to offset the mobility barriers. Researchers are required to provide a consent form such as this one to tell you about the research, to explain that taking part is voluntary, to describe the risks and benefits of participation, and to help you to make an informed decision. Please take time to read the following information carefully and feel free to ask any questions you may have before agreeing to be part of the research project.

Principal Investigator's Name and Title: Ivis Garcia Zambrana, Assistant Professor

Department and Institution: City and Metropolitan Planning at the University of Utah

Address and Contact Information: 375 South 1530 East, Salt Lake City, UT 84112-0370/ 801-833-4074 or ivis.garcia@utah.edu.

You have been asked to participate in this study because you have received any forms of home modifications from Assist Inc.—a nonprofit Community Design Center founded in 1969 by the Graduate School of Architecture at the University of Utah. We will interview older adults so we can understand the environmental barriers they have been able to overcome (e.g. through home accessibility modifications) and the ones that remain. In conjunction with Assist Inc. we will define strategies for increasing mobility among Salt Lake County older adults both at the micro-level (home) and the macro level (neighborhood). Our work will provide both a basis and springboard for further discussion about policy initiatives to effectively and equitably address growing mobility disparities, drawing from community partners that are already working on these areas to further strengthen their endeavors.

STUDY PROCEDURE

If you agree to participate in this research project, you will be asked to take part in a survey and an interview. It will take approximately two hours in your house. During the study, you will have the opportunity to share your experiences and thoughts about the barriers to move around in your home environment and neighborhood. The researcher may record or collect artifacts by taking pictures, or sketching. The interview will be videotaped or audio-taped and the participants will be notified beforehand and asked for consent. You can refuse to be audio or video recorded and still participate in the research. Any information can be confidentially treated by request during or after the recording.

RISKS

The risks of this study are minimal. You may feel some discomfort talking about some issues personal to you. These risks are similar to those you experience when discussing personal information with others. If you feel upset from this experience, you can tell the researcher, and he/she will tell you about resources available to help.

BENEFITS

We cannot promise any direct benefit for taking part in this study. However, we hope the information we get from this study may help develop a greater understanding of the built environments to older adults.

ALTERNATIVE PROCEDURES

You have the option to not participate in this study. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time by telling me. You may also refuse to answer any questions you don't want to answer and still remain in the study. If you say something that you did not meant to say on the video or audio recording make sure to talk to the researcher so they do not include that information on the final transcript and other research related products.

CONFIDENTIALITY

* We will keep all research records that identify you private to the extent allowed by law. Records about you will be kept locked in filing cabinets or on computers protected with passwords. Only the researchers who work with this study will be allowed to access to your information.

* Video recordings will be used to craft a documentary and the raw footage will be kept only for the duration of this project. The raw video recordings will be kept secure, and will then be destroyed after the documentary is completed. The clips selected for the documentary will be available to the public.

* Audio recordings will be used for transcription purposes and they will be kept for the duration of this project. Text transcriptions and recordings will be kept secure, and will then be destroyed after the research is completed.

* If you decide not to use your real name under the "consent" session (this option is only available for those choosing audio recordings or notes only), I will assign you a unique pen

name. Your real name will never appear on the transcript or any other materials that we might publish at academic journals.

PERSON TO CONTACT

If you have questions, complaints or concerns about this study, you can contact Ivis Garcia Zambrana at 801-833-4073 or by email at ivis.garcia@utah.edu.

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

VOLUNTARY PARTICIPATION

This research is voluntary and you have the choice whether or not to be in this research study. You may choose to not be video or audio recorded or stop a recording at any time. If you choose not to be in this

study or stop being in the study, there will be no effect on your relationship with University of Utah or the status of the aid and assistance that you may receive from government agencies.

COSTS AND COMPENSATION TO PARTICIPANTS

There will be a monetary compensation of \$25 for the participation of the research study and it will be given after the survey and interview are completed.

CONSENT

By participating in the study, you are voluntarily agreeing to take part in this study and are giving permission for the investigator to use the information you have provided for research purposes. You will be provided with the opportunity to ask questions and given a signed copy of this consent form prior to start of the survey and interview.

I do / do not agree to participate in this research.

I do / do not give permission to video record the conversation.

I do / do not give permission to audio record the conversation.

I do / do not wish to use my real name in materials produced as a result of this interview (transcripts, publication, etc.). I understand that if I do not want to use my real name I will be given a pen name (pseudonym).

I have/ have not been given an opportunity to ask questions and my questions have been answer

I was/ was not given a copy of this consent form for my records.

Printed Name of Participant		
Signature of Participant	Date	
Printed Name of Person Obtaining Consent		
Signature of Person Obtaining Consent	Date	
WITNESS STATEMENT:		
The participant was unable to read or sign the	his consent form because of	the following reason:
The participant is illiterate		
The participant is visually impaired		
The participant is physically unable to sign	the consent form. Please des	cribe:
Other (please specify):		

I confirm that I was present as a witness for the consent process for this study. I confirm that the participant named above was read the information in the consent document and that the participant has agreed to take part in the research study.

Name of Witness

Signature of Witness

8.2 INSTRUMENTS

8.2.1 Instructions for Researchers

1) Survey Preparations

- a) Basic Information Research
 - The researchers need to fill out the form of Basic Information Preparation prior to visit the participant. The part of neighborhood characteristics can be checked either through online maps or during on-site visit.
- b) Consent Form
 - Bring two consent forms: one for the researchers and the other for the participant.
- c) Audio/Video Recorder
 - Bring a fully charged audio/video recorder and additional batteries or a charger.
- d) Colored Pens
 - For mapping exercises to differentiate neighborhood boundary and walk boundary.
- 2) Map Preparations

Each map is printed in an <u>11"x17" paper</u>. Please reference the attached sample of maps.

- a) Base Map for Neighborhood Boundaries (Map#1)
 - Bring a map presenting the participant's neighborhood, <u>one-mile around one's</u> <u>residence</u>, with a scale of <u>1 inch=0.2 miles</u>.
- b) Neighborhood Map (Map#2)
 - Bring a map presenting the participant's neighborhood, <u>a-half-mile around</u> <u>one's residence</u>, with a scale of <u>1 inch=0.1mile</u>.
 - The map should contain the <u>locations of the amenities</u> in the neighborhood.
 - Use **My Map in Google Map** to add locations of amenities (*List: See sample map #2.*). Use different colors for each category. Then, export the entire map to kml file.
 - In **ArcGIS**, with "kml to layer" tool, you can bring the layer of amenities in the map.
- c) City Map (Map#3)
 - Bring a map of the city where the participant resides in.

d) Region Map (Map#4)

• Bring a map of the Region where the participant resides in.

B. The Order of the Survey

- 1) Consent
- 2) Neighborhood Boundary Mapping
- 3) Interview
- 4) Survey
- 5) NEWS
- 6) Instrumental Activities of Daily Living Scale (IADL)
- 7) Life Space Assessment
- 8) Life Space Mobility Assessment
- 9) Socio-demographic Survey

8.2.2 Basic Information Preparation for Researchers

A. Preparation Information

1) Address:

From home modification application,

- 2) Month / Year of home modification received: _____
- 3) Types of home modifications received:

- 4) Gender of the head of household:
- 5) Household Income:
- 6) Ethnicity:
- 7) Race:

By searching with address,

- 8) Housing type:
 - a) Single family housing
 - b) Townhouse or condo
 - c) Apartment
 - d) Mobile home
 - e) Other: _____

From Walk Score website by using address or ZIP code,

9) Walk Score: _____

10) Transit Score: _____

11) Bike Score: _____

B. Neighborhood Characteristics

(within a 0.5 mile of the residence)

12) How common are the following types of residences in the neighborhood?

	None	A few	Some	Most	All
Detached single-family residences					
Townhouses or row Houses of 1-3 stories					
Apartments or condos 1-3 stories					
Apartments or condos 4-6 stories					
Apartments or condos 7-12 stories					
Apartments or condos more than 13					
stories					

13) How far would it be to get from the participant's house to the <u>nearest</u> businesses or facilities listed below?

	0.25 mile	0.5 mile	1 mile	1.5 mile	2 mile
Convenience/small grocery store					
Supermarket					
Hardware store					
Fruit/vegetable market					
Laundry/dry cleaners					
Clothing store					
Post office					
Library					
Elementary school					
Other school					
Book store					
Fast food restaurant					
Coffee place					
Bank/credit union					
Non-fast food restaurant					
Video store					
Pharmacy/drug store					
Salon/barber shop					
Bus or trolley stop					
Park					
Recreation center					
Gym or fitness facility					
Senior center					

Community center			
Faith-based institutions			
Healthcare			

8.2.3 Neighborhood Boundary Mapping

Instructions

- 1. Base Map for Neighborhood Boundary Mapping
 - Bring a map presenting the participant's neighborhood, <u>one-mile around one's</u> <u>residence</u>, with a scale of <u>1 inch=0.2 miles</u> in an <u>11"x17" paper</u> (Map#1).
- 2. Ask the participant to <u>draw the boundary of his/her neighborhood</u> in mind. (If one thinks it is larger than covered map area, please use the city map (Map#3).) To orient the respondent to the task, point to the location of the respondent's home and read the following statement:

By neighborhood, I mean the area around where you live and around your house. It may include places you shop, religious or public institutions, or a local business district. It is the general area around your house where you might perform routine tasks, such as shopping, going to the park, or visiting with neighbors. Please take a look at this map of the area. Study it for a moment and use this pencil to draw the boundaries of what you consider your neighborhood (Coulton, C., Chan, T., & Mikelbank, K., 2011).

- 3. Ask the participant to <u>draw the limit that he/she would walk or go with assistive</u> <u>devices</u>. Please use a pen with different color.
- 4. Ask the participant for the **<u>reasons why</u>** he/she would think so.

3.1.1 Interview Questions

A. Home Modifications

- 1. How did you learn about Assist Inc. and what made you to decide to contact them? Tell us about home modifications you received from Assist Inc.
- 2. How would you describe your life before and after the modifications? What mobility challenge did the modification address? What aspects are you satisfied and what are the limitations? If you could make any additional modification, what would it be?

B. Mobility

- 3. Tell us about your mobility in your neighborhood on a typical day. What are the barriers you encounter with respect to mobility in your neighborhood on a typical day?
- 4. Do you know where is the closest transit stop from your house and can you tell us where it is? How would you get there and how often do you ride a bus/train? If you do not use public transportation often, would you explain why not?

5. What would make you ride public transportation more often? What kinds of changes in the built environment will maximize your mobility?

C. Aging in Place

- 6. What does 'Aging in Place' mean to you?
- 7. Where do you want to live while you age? Please tell us what would be the key challenges and opportunities to age in place.
- 8. How long do you expect to live in your current home? If you were to leave your home, would you want to continue to live in your current neighborhood? What barriers exist to living in your home and community?

8.2.4 Survey Questions

A. Home Modifications

	Assist Inc.	Another Org.	Paid myself
Portable and/or permanent ramps			
Chair lifts			
Porch lift			
Low-rise steps			
Stair glide			
Transfer bench			
Tub cut			
Curb shower			
Roll-in shower			
Handheld shower wand			
Modified cabinets			
Kitchen modifications			
Hand rails			
Lever handles			
Door handles			
Grab bars in bathroom			
Slip-resistant floor			
Widening doorways or swing clear hinges			
Lighting dark places			
Other, please specify:	_		

1) Which home modifications have you received? And who helped you get those ones?

2) Have they improved your life in terms of **mobility**?

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

3) Have they improved your ability to <u>meet/contact your family</u>?

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

4) Have they improved your ability to <u>meet/contact your friends</u>?

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

5) Have they improved your ability to **<u>engage with the activities with others</u>**?

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

6) Have they improved your ability to <u>access the amenities in your neighborhood</u>?

1	2	3	4	5
Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	Not Applicable

7) Have they improved your ability to <u>use public transportation</u>?

1	2	3	4	5
Strongly	Somewhat	Somewhat	Strongly	Not Applicable
disagree	disagree	agree	agree	

B. Home & Neighborhood Satisfaction

8) **<u>How satisfied</u>** are you with your current <u>home</u>?

1	2	3	4
Very	Somewhat unsatisfied	Somewhat	Very
unsatisfied		satisfied	satisfied

9) <u>What do you like most</u> about your current <u>home</u>? (Please mark up to 3.)

- 1) Quality of housing
- 2) Accessible home design
- 3) Housing affordability
- 4) Personal safety and security
- 5) Aesthetics
- 6) Other: _____
- 7) Other: _____

10) If there are some things about your **home you wish they were different**, please mark up to

3.

a) Quality of housing

- b) Accessible home design
- c) Housing affordability
- d) Personal safety and security
- e) Aesthetics
- f) Other: _____
- g) Other: _____

11) How satisfied are you with your current **<u>neighborhood</u>**?

1	2	3	4
Very	Somewhat	Somewhat	Very
unsatisfied	unsatisfied	satisfied	satisfied

12) What do you like most about your current neighborhood? (Please mark up to 3.)

- a) Close to grocery store/supermarket
- b) Close to healthcare
- c) Close to places to socialize (e.g., community centers)
- d) Close to faith-based institutions
- e) Close to your place of employment
- f) Shopping and entertainment options
- g) Public transportation
- h) Connections to family and friends
- i) Personal safety and security
- j) Park, Recreational and outdoor activities
- k) Distance to Gym and fitness facility
- 1) Distance to library or post office
- m) Other: _____

13) If there are some things in your **<u>neighborhood you wish they were different</u>**, please mark up to 3.

- a) Distance to grocery store/supermarket
- b) Distance to healthcare
- c) Distance to places to socialize (e.g., community centers)
- d) Distance to faith-based institutions
- e) Distance to your place of employment
- f) Shopping and entertainment options
- g) Public transportation
- h) Connections to family and friends
- i) Personal safety and security
- j) Park, Recreational and outdoor activities
- k) Distance to Gym and fitness facility
- 1) Distance to library or post office
- m) Other: _____

C. Mobility

14) Which **types of assistive device did you use when you got home modifications**? And which **types of assistive device do you use now**? (Please check all that apply.)

	At the time of getting Home Modification	Now
None		
Cane		
Walker		
Electric chair		
Manual wheelchair		
Vertical platform lift/elevator		
Stair guide		
Ceiling track system		
Other:		

15) <u>How do you get around outside home</u> most days? And <u>how frequently</u> do you use each <u>mode of travel</u>?

	None	1-2 times /month	Less than 1 /week	1-3 times /week	4-6 times /week	Daily
I drive						
A family or friend drives me						
Paratransit						
Bus						
Light rail (TRAX)						
Streetcar (S Line)						
Commuter rail (Frontrunner)						
Heavy rail (Amtrak)						
Bike						
Pedestrian route						
Taxi						
Other:						

16) What would <u>make you ride public transportation</u> <u>more often</u>? (Please check all that apply.)

- a) If transit stops were easier to get to from my house
- b) If transit is more easier to get on and off (Please specify:_____)
- c) If transit had more comfortable waiting places
- d) If transit went to more places I need to get to
- e) If transit had more frequent stops
- f) If transit was cheaper

- g) If transit ran more often
- h) If transit felt safer
- i) If transit was quicker than taking my car
- j) Other: _____

17) What are the **barriers or challenges to get around on foot or with assistive devices** in your neighborhood? (Please check all that apply.)

- a) Streets and sidewalks are not accessible (ramps, rails, low-steps, lighting, etc.)
- b) Streets are not paved.
- c) There are no sidewalks.
- d) There are not much sitting or resting places.
- e) There is not much places to go.
- f) I do not feel safe.
- g) The atmosphere is unpleasant.
- h) The traffic speed is too high.
- i) Terrains and slopes in my neighborhood make me difficult to get around.
- j) The climate and weather make me difficult to get around.
- k) Other: _____

18) Overall, <u>what types of activities</u> would <u>encourage you to engage in getting around on</u> <u>foot or with assistive devices more often</u>: (Please mark your top 3 answers.)

- a) Accessibility improvements (Please specify: ______
- b) Safety improvements (more lighting, etc.) (Please specify: _____)
- c) Maintenance improvements (e.g. street maintenance, trash, etc.)

(Please specify: _____)

- d) Transportation improvements (e.g. crossings, transit options, connections to transit stops, sittings, accessible design, etc.) (Please specify: _____)
- e) Signage improvements (e.g. directions, transit info, etc.)

(Please specify: _____)

- f) Retail & Entertainment options (Please specify: _____)
- g) Public spaces (e.g. park, community gardens, plazas, etc.)
 - (Please specify: _____)

h) Other: _____

D. Aging in Place

19) How many years have you lived in:

	0-1	1-2	2-5	5-10 years	10-20 years	20 + years
	year	years	years			
U.S.						
State						
County						
City						
Neighborhood						
Home						

20) Level of agreement with the following statements.

a) I'd like to stay in my current <u>*home*</u> as long as possible.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

b) I'd like to remain in my *neighborhood* as long as possible.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

c) **<u>Independence</u>** is an important characteristic for where I live.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

d) I'd like to live at home even if I am seriously ill.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

8.2.5 Neighborhood Environment Walkability Scale (NEWS)

E. Types of residences in your neighborhood

1) How common are the following types of residences in the neighborhood?

	None	A few	Some	Most	All
Detached single-family residences					
Townhouses or row Houses of 1-3 stories					
Apartments or condos 1-3 stories					
Apartments or condos 4-6 stories					
Apartments or condos 7-12 stories					

Apartments or condos more than 13 stories			

F. Stores, facilities, and other things in your neighborhood

 How long would it take to get from your home to the <u>nearest</u> businesses or facilities listed below if you <u>walked</u> (or went with your assistive devices) to them? Please put only <u>one</u> check mark for each business or facility.

	1-5 min	6-10 min	1-20 min	20-30 mii	30+ min	N/A
Convenience/small grocery store						
Supermarket						
Hardware store						
Fruit/vegetable market						
Laundry/dry cleaners						
Clothing store						
Post office						
Library						
Elementary school						
Other school						
Book store						
Fast food restaurant						
Coffee place						
Bank/credit union						
Non-fast food restaurant						
Video store						
Pharmacy/drug store						
Salon/barber shop						
Your job or school						
Bus or trolley stop						
Park						
Recreation center						
Gym or fitness facility						
Senior center						
Community center						
Faith-based institutions						
Healthcare						
Volunteering activity						

G. Access to services

Please check the answer that best applies to you and your neighborhood. Both <u>local</u> and <u>within</u> <u>walking distance</u> mean within a 10-15 minute walk with or without assistive devices from your home.

3) Stores are within easy walking distance of my home.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly

disagree disagree	agree	agree
-------------------	-------	-------

4) There are many places to go within easy walking distance of my home.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

5) It is easy to walk to a transit stop (bus, train) from my home.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

H. Streets in my neighborhood

6) The distance between intersections in my neighborhood is usually short (100 yards or less; the length of a football field or less).

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

7) There are many alternative routes for getting from place to place in my neighborhood. (I don't have to go the same way every time.)

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

I. Places for walking and cycling

8) There are sidewalks on most of the streets in my neighborhood.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

9) Sidewalks are separated from the road/traffic in my neighborhood by parked cars.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

10) There is a grass/dirt strip that separates the streets from the sidewalks in my neighborhood.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

11) My neighborhood streets are well lit at night.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly

disagree	disagree	agree	agree

12) Walkers and bikers on streets in my neighborhood can be easily seen by people in their homes.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

13) There are crosswalks and pedestrian signals to help walkers cross busy streets in my neighborhood.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

J. Neighborhood surroundings/aesthetics

14) There are trees along the streets in my neighborhood.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

15) There are many interesting things to look at while walking in my neighborhood.

1	2	3	4		
Strongly	Somewhat	Somewhat	Strongly		
disagree	disagree	agree	agree		

16) There are many attractive natural sights in my neighborhood (such as landscaping, views).

1	2	3	4		
Strongly	Somewhat	Somewhat	Strongly		
disagree	disagree	agree	agree		

17) There are attractive buildings/homes in my neighborhood.

1	2	3	4	
Strongly	Somewhat	Somewhat	Strongly	
disagree	disagree	agree	agree	

K. Traffic hazards

18) There is so much traffic along <u>nearby</u> streets that it makes it difficult or unpleasant to walk in my neighborhood.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

19) The speed of traffic on most <u>nearby</u> streets in usually slow (30 mph or less).

1	2	3	4		
Strongly	Somewhat	Somewhat	Strongly		
disagree	disagree	agree	agree		

20) Most drivers exceed the posted speed limits while driving in my neighborhood.

1	2	3	4		
Strongly	Somewhat	Somewhat	Strongly		
disagree	disagree	agree	agree		

L. Crime

21) There is a high crime rate in my neighborhood.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

22) The crime rate in my neighborhood makes it unsafe to go on walks during the day.

1	2	3	4
Strongly	Somewhat	Somewhat	Strongly
disagree	disagree	agree	agree

23) The crime rate in my neighborhood makes it unsafe to go on walks at night.

1	2	3	4	
Strongly	Somewhat	Somewhat	Strongly	
disagree	disagree	agree	agree	

3.1.2 Instrumental Activities of Daily Living Scale (IADL)

- M.P. Lawton & E.M. Brody

For each category, circle the item description that most closely resembles the participant's highest functional level (either 0 or 1).

A. Ability to Use Telephone		E. Laundry	
1. Operates telephone on own initiative; looks up	1	1. Does personal laundry completely	1
and dials numbers, etc.		2. Launders small items-rinses stoking, etc.	1
2. Dials a few well-known numbers	1	8. All laundry must be done by others	0
3. Answers telephone, but does not dial	1		1
4. Does not use telephone at all	0		
B. Shopping		F. Mode of Transportation	
1. Takes care of all shopping needs	1	1. Travels independently on public transportation	1
independently		or drives own car	1
2. Shops independently for small purchases	0	2. Arranges own travel via taxi, but does not	1
3. Needs to be accompanied on any shopping trip	0	otherwise use public transportation	1
4. Completely unable to shop		8. Travels on public transportation when	1
	0	assistance of another	1
		4. Travel limited to taxi or automobile with	0
		assistance of another	
		5. Does not travel at all	0
C. Food Preparation		G. Responsibility for Own Medications	

	Plans, prepares and serves adequate meals independently	1		. Is responsible for taking medication in correct dosages at correct time	1
	Prepares adequate meals if supplied with ingredients	0	2.	2. Takes responsibility if medication is prepared in advance in separate dosages	0
3.	Heats and serves prepared meals or prepares meals but does not maintain adequate diet	0	3.	3. Is not capable of dispensing own medication	0
4.	Needs to have meals prepared and served	0			
D.	Housekeeping		I	H. Ability to Handle Finances	
	Maintains house alone with occasion assistance (heavy work)	1	L	. Manages financial matters independently (budgets, writes checks, pays rent and bills,	1
	Performs light daily tasks such as dishwashing, bed making	1		goes to bank); collects and keeps track of income	
	Performs light daily tasks, but cannot maintain acceptable level of cleanliness	1	2.	2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.	1
	Needs help with all home maintenance tasks	1	3	3. Incapable of handling money	
	Does not participate in any housekeeping tasks	0			0
	Score			Score	
	Total Sc	ore)		

3.1.3 Life-Space Assessment

- Peel et al., 2005

These questions refer only to your activities in the past month.

LIFE-SPACE LEVEL			FREQ	UENC	Y	INDEPENDENCE	SCORE
During the past four weeks, been to	have	•	bu How often did you get there?			Did you use aids or equipment? Did you need help from another person?	Level X Frequency X Independence
<i>Life-Space Level 1</i> Other rooms of your home besides the room where you sleep?	Yes	No 0	than 1		4-6 times /week 3	 1 = Personal assistance 1.5 = Equipment only 2 = No equipment or personal assistance 	Level 1 Score
Score			X			 X	-

Life-Space Level 2	Yes	No	Less	1-3	4-6	Daily	1 = Personal assistance	Level 2 Score
An area outside your home			than 1	times	times	2	1.5 = Equipment only	
such as your porch, deck or			/week	/week	/week		2 = No equipment or	
patio, hallway (of an							personal assistance	
apartment building) or							1	
garage, in your own yard or								
driveway?								
	1	0	1	2	3	4		
Score			Χ				X	
<u>Life-Space Level 3</u>	Yes	No	Less	1-3	4-6	Daily	1 = Personal assistance	Level 3 Score
Places in your			than 1	times	times		1.5 = Equipment only	
neighborhood, other than			/week	/week	/week		2 = No equipment or	
your own yard or							personal assistance	
apartment building?								
	1	0	1	2	3	4		
Score			Χ				X	
<u>Life-Space Level 4</u>	Yes	No	Less	1-3	4-6	Daily	1 = Personal assistance	Level 4 Score
Places outside your			than 1	times	times		1.5 = Equipment only	
neighborhood, but within			/week	/week	/week		2 = No equipment or	
your town?							personal assistance	
	1	0	1	2	3	4		
Score			Χ				Χ	
<u>Life-Space Level 5</u>	Yes	No	Less	1-3	4-6	Daily	1 = Personal assistance	Level 5 Score
Places outside your town?			than 1	times	times	-	1.5 = Equipment only	
			/week	/week	/week		2 = No equipment or	
							personal assistance	
	1	0	1	2	3	4		
Score			Χ				X	1
							Total Score	

8.2.6 Life Space Mobility Assessment

These questions refer to the participant's activities in the past month.

Instructions

- There are <u>three parts</u> in this assessment (<u>neighborhood, city, and region</u>). Use Map#2, #3 & #4 respectively to Table 1, Table 2, and Table 3 in Life Space Mobility Assessment.
- 2. While asking, please write down the specific name of the place (or address) and mark the locations on the map if possible.
- 3. In the neighborhood assessment, ask about <u>the typical route to go to each place</u> and help them to <u>draw those on the map</u>. And follow up with the questions.
- 4. In the City and Region assessment, please make sure locating the place by verification with Google Map on site. And follow up with the questions.

- 5. List of neighborhood amenities
 - 1) Places of learning (libraries, universities, colleges, trade schools, other community organizations)
 - 2) Faith-based institutions
 - 3) Places to socialize (clubs, centers or other organizations that provide for social activities, friendships or volunteer opportunities).
 - 4) Restaurants/coffee shops
 - 5) Food/grocers
 - 6) Shopping (clothing, home supplies, etc.)
 - 7) Health (doctors, wellness, massage, chiropractor, acupuncture, dialysis, etc.)
 - 8) Park & Recreation
 - 9) Services (post office, bank, etc.)

8.2.7 Socio-Demographic Survey

1)

What would you identify your gender?

- a) Male
- b) Female
- c) Other
- 2) Are you Hispanic or Latino?
 - a) Yes
 - b) No
- 3) Are you (Please check all that apply)
 - a) White
 - b) Black or African American
 - c) American Indian or Alaskan Native
 - d) Asian
 - e) Native Hawaiian or Pacific Islander
 - f) Some other race
 - g) Prefer not to answer
- 4) How old are you? : _____
- 5) What is the most recent (last three months) household gross income for all working individuals (including social security/retirement benefits/reverse equity mortgage)?:
- 6) How many occupants are in the home (living in the home for at least 6 months):
- 7) What is your highest level of education?
 - 1) Elementary school
 - 2) Some junior high school
 - 3) Some high school

- 4) High School Graduate
- 5) Some college
- 6) Associate's Degree
- 7) Bachelor's Degree
- 8) Post Graduate Degree
- 9) Prefer not to answer
- 8) Does your family own the house you live in? If not, are you a renter?
 - 1) Owner
 - 2) Renter
 - 3) Other
- 9) Overall, how was your survey experience? Do you have any suggestions or concerns that you want to address?

8.3 ANALYSIS

8.3.1 Quantitative

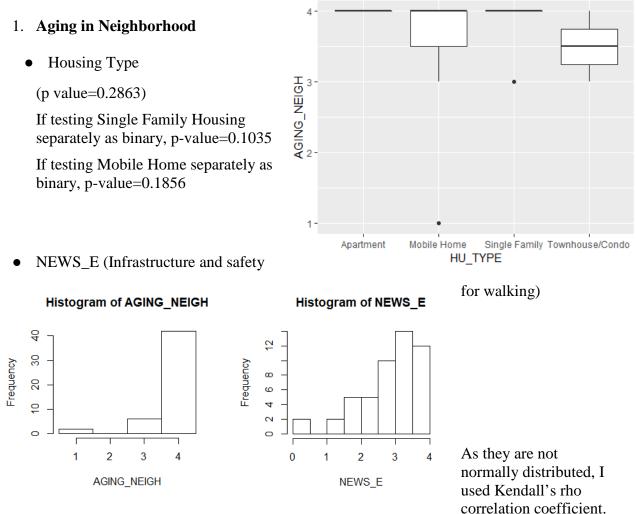
	All	Salt Lake County	City of Portland
	(N=50)	(N=25)	(N=25)
Age	75.2	77.8	72.5
% female	70%	72%	68%
% Hispanic	20%	32%	8%
% Nonhispanic White	66%	68%	64%
% higher education	66%	48%	84%
HH Income per month	\$ 1,509	\$ 1,438	\$ 1,581
HH Size	1.76	1.8	1.72
Tenure	94%	100%	88%

8.3.1.1 Demographic Summary

- ORG: OA in MC showed that there were more modification impacts on their access to amenity and public transportation than OA in SLC. And they are more concerned on the price when using public transportation, sidewalk conditions as hindrance to get around and maintenance is needed.
- HISP: Non-Hispanic ppl are not so satisfied with aesthetic of their neighborhood.
- SFHU: OA living in single family housing are more likely to live longer in their neighborhood.
- TOWNHU: OA living in townhouses/condo put less importance on independence while aging (X)
- NEWS_H (Crime): OA living in the neighborhood with higher crime more concern about their safety (O)
- IADL_S & LSA_S: IADL and LSA scores are highly correlated. (O)
- LSA_S: OA with high LSA walk more (O)
- ASS_DEV: OA using assistive devices walk less (O). Mostly they use cane and walker.

- MODIF_INT: OA who got interior home modification said that those did not affect much on their use of public transportation. (O)
- NEED MAIN: Those who requires maintenance improvement in their neighborhood tend to find getting on and off the public transit is hard and said that home modifications affect their use of public transportation.
- Home Satisfaction: Satisfaction of home and neighborhood are highly correlated.
 - Neighborhood Satisfaction: Satisfaction of their neighborhood is more related to their willingness to age in place than their satisfaction of home.
 - Those who want to age in their current home also want to age in their neighborhood as well.
- OA who answered that they like their neighborhood because of good transit access ride more public transit (bus and streetcar)
- PARA: OA who use paratransit said they cannot get around due to unpleasant atmosphere around.
- PUB: OA cares public transit frequency, more transit stops, and more comfortable waiting place together.
- NEED_SAFE: OA concerning the safety in their neighborhood want more frequent transit stops.
- OA who find barriers related to the sidewalks are often found difficulties for too much traffic.
- OA who feel unsafe to get around tend to perceive their neighborhood as unpleasant.
- OA who have lived less years in the state they reside in lives in low-density neighborhood.

8.3.1.2 Aging in Place

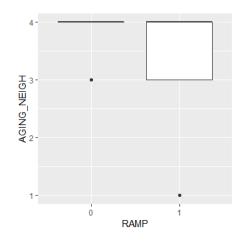


Correlation Coefficient is 0.247 and p-value is 0.03884, thus, there is a <u>weak positive correlation</u> between neighborhood with better (infrastructure and safety) conditions for walking and the number of older adults who want to age in their neighborhood.

• RAMP

Older adults who have a ramp installed in their house (assuming those are with a certain degree of physical limitations on getting around) tend to have <u>negative</u> <u>correlation</u> with aging in one's neighborhood.

P-value=0.017

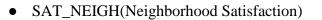


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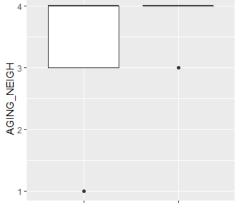
GRABBAR •

Older adults who have a grab bar installed in their house tend to have positive correlation with aging in one's neighborhood.

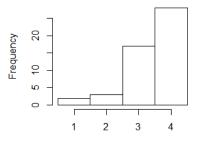
p-value=0.081



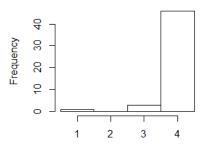
With Kendall's rho correlation coefficient, Correlation Coefficient is 0.234 and p-value is 0.084, thus, there is a weak positive correlation.



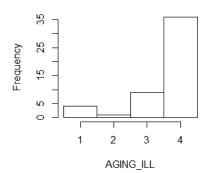
Histogram of SAT_NEIGH



Histogram of AGING_HOME



Histogram of AGING_ILL



Aging at Home

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With Kendall's rho correlation coefficient, Correlation Coefficient is 0.294 and p-value is 0.035, thus, there is a weak positive correlation.

Aging in place, even if seriously ill •

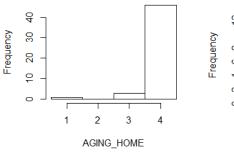
With Kendall's rho correlation coefficient, Correlation Coefficient is 0.328 and p-value is 0.016, thus, there is a weak positive correlation.

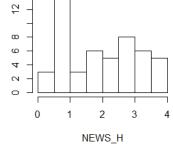
2. Aging at home

• NEWS_H(Crime)

Histogram of AGING_HOME

Histogram of NEWS_H



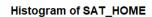


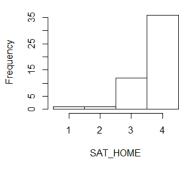
weak negative correlation between neighborhood with crime and aging at home. (correlation coefficient= -0.220, p-value=0.071

• SAT_HOME(Home Satisfaction)

positive correlation.

correlation coefficient=0.330, p-value=0.018



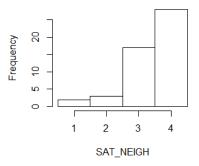


• SAT_NEIGH(Neighborhood Satisfaction)

positive correlation.

correlation coefficient=0.385, p-value=0.005

Histogram of SAT_NEIGH



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Mobility Summary

		Salt Lake County (N=25)	City of Portland (N=25)
Walk Score	49.4	45.08	53.72
IADL	6.08	6	6.16

8.3.1.3 Assistive Devices Summary

p-value=0.018

Older adults who said they need maintenance to say that they would like to age in place, even if they got seriously ill.

p-value=0.069

SAT_NEIGH

seriously ill.

p-value=0.086

•

weak positive correlation

correlation coefficient = 0.241

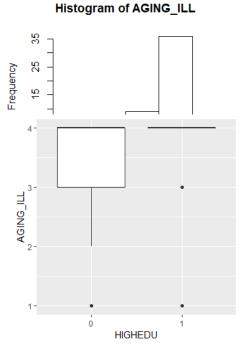
NEED_MAIN improvement in their neighborhood are more likely

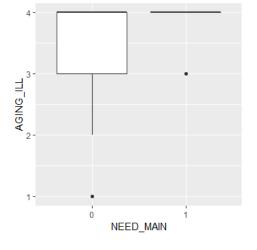
With Kendall's rho correlation coefficient, Correlation Coefficient is 0.302 and p-value is 0.028, thus, there is a weak positive correlation.

Aging in place, even if seriously ill

Older adults who got higher education tend to more say that they will age in place, even if they got

3. Aging in place, even if seriously ill HIGHEDU





LSA	19.72	18.9	20.54
NEWS_Residential Density	196.88	189.32	204.44
NEWS_Land-Use Mix: Diversity	1.79	1.88	1.71
NEWS_Land-Use Mix: Access	2.83	2.72	2.93
NEWS_Street Connectivity	2.94	3.01	2.87
NEWS_Infrastructure & Safety for Walking	3.09	3.16	3.02
NEWS_Aesthetics	3.03	2.92	3.14
NEWS_Traffic Hazards	2.06	2.24	1.88
NEWS_Crime	2.81	2.91	2.71

	All (N=50)	Salt Lake County (N=50)	Multnomah County (N=50)
CANE	42%	48%	36%
WALKER	42%	52%	32%
ELECC	12%	12%	12%
WHEELC	24%	24%	24%
LIFT	2%	0%	4%
STAIRG	2%	4%	0%
CEILING	2%	4%	0%
ASSISTIVE DEVICE USER	68%	80%	56%

8.3.1.4 Neighborhood Environment Walkability Scale (NEWS)

- Developed by multidisciplinary research teams led by public health and social scientists to capture perceptions of neighborhood environment quality, activity level, and experiences of walking in the neighborhood
- Category:
 - 1) residential density
 - 2) land use mix-diversity
 - 3) access to services
 - 4) street connectivity
 - 5) walking/cycling facilities

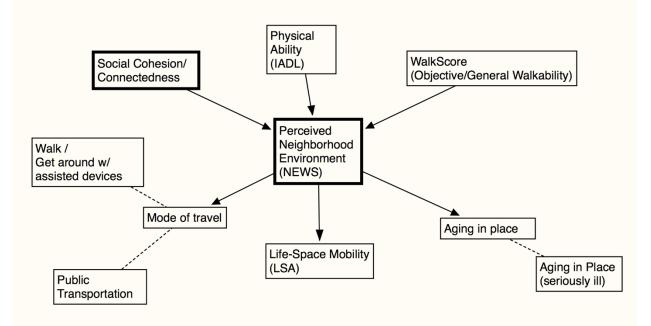
6) aesthetics

7) traffic safety

- 8) crime safety
- Scoring: 1(Strongly Disagree) to 4(Strongly Agree) *Reversed scoring in Traffic/crime safety
- How to use with small samples:

comparison between groups

• Our Research Question?



• Example (N=25):

	Public Transit Users	Non Users
1) residential density	188.71	189.56
2) land use mix-diversity	1.96	1.84
3) land use mix-access	2.90	2.65
4) street connectivity	3.07	3.19
5) walking/cycling facilities	3.31	3.08
6) aesthetics	3.07	2.86
7) traffic safety	2.71	2.98
8) crime safety	1.95	2.35

IADL Score	7.43	5.44
Life Space Assessment Score	25.21	16.44

8.3.2 Qualitative

8.3.2.1 Aging in Place

8.3.2.1.1 Utah

Aging in Place Definitions

Some people did not know what the phrase "Aging in Place" meant

Example 1

I2: What does aging in place mean to you?

R: Aging?

I2: Aging, like to age—

R: Getting old, getting-yeah, just learn to-

I1: Aging in place.

I2: In place.

I1: In place. That's a phrase, aging in place. What does that mean to you? What do you think that that means? Aging in place.

R: Aging in—totally aging, getting old, or whatever.

I1: But in place. In place. It's like a phrase, so it's kind of hard, you know. So what—what will it means for you—well, maybe I can give you definition. Aging in place, it means like the ability for you to be independent being in your own home. Right? So maybe we can just like ask for a reaction. What would you think about that, about the idea that somebody could age that wants to be independent as long as possible in a particular place? Is that something that you think that you would like for yourself? I don't know if that makes any sense. But it seems that you're pretty independent. Right?

R: Hm-hmm. Hm-hmm.

I1: And you said that you do things for yourself, right?

R: Yeah.

I1: You go to the grocery and get your medicine.

R: But it's not going to be for very, very, very long, because, like I say, you get tired. Like I go in the store and everything. And for me to—I've been doing that so long, even over at the other house. And I thought, you know, that's—even to go to my daughter's, I have to load some things. I get a lot of stuff that I need to take her. And I think—ah, to me, it's like a big job, like very hard. And if I had somebody—like told my daughter, "If you get your disability and they get you a home or something, maybe they can give you a two-bedroom place, and we can both move in together and help each other.

Example 2

I1: Okay. So our research is about aging in place. Aging in place. So what does it mean to you to age in place.

R: I don't understand what you—

I1: Our research is about aging in place.

R: In what?

I1: In place. Like, where you are.

R: Oh, okay.

I1: So what does it mean to you to age in place.

R: Not a thing.

I2: That's good. It's sometimes confusing to understand what that means. But the idea is that, you

know, you want to be able to stay in your home, for example, as you're aging.

R: Oh.

I2: Because a lot of people are displaced from their home as they age, because of mobility issues. R: Oh. I hope I don't.

I2: I mean, you seem very active inside your home.

R: For my age, I'm taking care of myself.

I2: Yeah. You're doing really well. Yeah.

R: Just don't take me to a retirement—

I2: Yeah. And that's what I mean by people are displaced from their homes into retirement home because they're not able to take care of themselves and age in their home. So that's the idea of our research, is how can we get people to reside in their home as long as they'd like? R: Yes.

Example 3

"To be honest with you, I don't know. I think it's something to do with—you just try growing older here and then kind of rely on things, you know, as we need to [...] Probably just here, here at home, where I am right now. Oh, there may be challenges. If it isn't too much of a hassle, I'll try to get by with what we have here. And if there's anything more, we'll sing out, you know, to somebody that they know what to do."

Example 4

I: What does aging in place mean to you?

R: Aging...

I: In place.

R: ...in place. There it is again. I don't know how to answer [laughs]. It limits you from doing things you love to do. No, that won't sound right. I don't know.

I: Oh, that's okay.

R: Some of those I don't—honestly, I don't know how to answer them.

I: That's okay. Where do you want to live while you age?

R: Here in my home.

Example 5

I1: The next questions are about aging in place. So what does it mean to age in place?

R: Age in place?

I1: Yeah. If you hear this phrase, like, what does that mean?

R: What's that mean?

I1: That's what I'm asking you.

R: Age in place?

I1: Yeah, yeah. Age in place.

R: You mean I'm supposed to stay in one spot?

I1: Aging in place.

R: Aging in my home?

I1: Yes. Yeah. Yeah.

R: Oh, great. I love it. I plan on dying here if that helps.

I1: Right, right. It's just a phrase, you know, that people use.

R: Oh, I've never heard it before.

[...]

R: What is that call? Stay-

I1: Aging in place.

R: Aging in place. Yeah.

I1: Aging in place, which is the home. Right?

R: That is my home.

I1: Well place is like not only the home, but it's also your neighborhood. Right?

R: Right.[...] Yeah. And I do have a lot of neighbors that I'm friendly with. There's a lady that lives down the street and she's in a wheelchair, so I go down there, well, a couple of a times a month, and just take her cookies. She's so housebound. It's so sad.

Example 6

I: All right. So these last sets of questions is about a concept which is aging in place. That's the concept. It's kind of like...

R: I've never been in one of them.

I: Well, it's not like a living concept, but would you say that that means? Like aging in place? R: I don't know. I went to one up here on 13th South. Kind of like the Neighborhood House. I don't know if you ever heard of it or not, but it's right up here.

Example 7

I1: Okay. Have you ever heard aging in place?

R: Have I heard what?

I2: Aging in place.

R: No.

I2: What does it feel like?

R: Pardon?

I2: Like, what does it sound like?

I1: Yeah. So, when you hear aging in place, what, what does that mean to you?

R: I'm not understanding, I guess.

I1: Sorry. So, the phrase—So, this whole study revolves around this idea of aging in place.

R: Aging in place?

I1: Aging in place, yeah. So, when, when we say that, what's the first thing that comes to mind? R: It's an old man.

I1: Okay. So, kind of maybe further define what aging in place means. Is—So, the idea is that we want, I think all of us want to age in a home that we're comfortable in, correct? [...]

I2: Where do you want to live while, while you age? Where do you want to live?R: I want to be in my house. I want to be able to go. I want to go, you know, downtown. I want to go to theatres. I want to do things, and I'm not able to do that.

Example 8

I1: Okay. So, next question is about aging in place. So...

R: Do what, honey?

I1: When you hear aging in place, what do you think about it? What, what would it be like? Aging in place.

R: I don't know.

I2: Like, just—whatever's going through your mind when we say aging in place. What, what comes to mind?

R: Just not being able to take care of myself, I think. Yeah. You know, you get to that stage of where you're so old that you can't, you can't take care of yourself. I mean, you can't. You know, and maybe someday I'll get there, but, who knows?

Some did not know, but figure it out

Example 1

I1: Okay. So, the next question, what does aging in place mean to you?

R: What does what?

I1: Aging in place.

R: I like this place.

I1: Okay. So, you like where you are?

R: Well, I've been here for I don't know how many years already.

I1: Hm-hmm [affirmative].

R: So, I can't say I don't like it.

Example 2

I2: Okay. Next questions are related to aging in place. So, what does aging in place mean to you? How do, how do you feel like that words, when you hear that?

R: I don't know. What does that mean?

I1: Well, it's kind of a question that we're asking you to define.

I2: Yeah.

I1: So, when we say, what does aging in place mean to you? I think, we can give you the definition. But we want to, we want to understand what you believe that phrase means.R: I think it would mean staying in a place, a home. That's comfortable, That's very secure. And, also, everything's easy to get to.

Example 3

I think—I think I can say that, yeah. Thirty-five years in the same place. I lived in that same house—we moved in there in 1943 until four years ago when I—when they took and sold, sold the house. I lived in that same house. So if you talk about age in place that was, that was. I don't know how better you can put it than that.

Example 4

I: Okay. So, I'm going to ask you questions about, like, "Aging, in place." What do you think that means, aging in place? R: What?

I: Aging in place? R: Aging? I: Yeah, in place? R: At home?

I: Yeah, at home. Yeah.

R: I'd rather stay here than go anywhere else.

Example 5

Aging in Place? I've never really heard that statement, but it probably means [pause]. I would say it probably means people that live in the same home and aging, what obstacles do they face, you know, what do they have to overcome? I don't know.

Example 6

I: Yeah. Now the title of our research is Aging in Place and what it means to age in place. So, when you hear that, what comes to mind when I say aging in place?

R: Aging in place. I really don't [laughter], don't comprehend.

I: Like, to age in place.

R: Oh, it is like aging in place. Oh yeah. Well, yeah, I guess I'll have to age right here, you know. [laughter] I don't have anywhere else to go. I'll have to stay in my house until the day it comes, you know. Cause I had to get a reverse mortgage on my house when my wife was in the nursing home to pay all the bills, \$3,000 a month. So, I got a reverse mortgage and got a little money out of it. So, now, I can't leave the house, stay in.

Example 7

I: So what does it mean to you to age in place?

R:I don't understand what you mean.

I1: The term aging in place?

R: Hm-hmm. [affirmative]

I1: That's, that's what the, the survey is titled. Without, like, further context just from what, what you're thinking in your head, what does it mean to age in place?

R: I think—I think I can say that, yeah. Thirty-five years in the same place. I lived in that same house—we moved in there in 1943 until four years ago when I—when they took and sold, sold the house. I lived in that same house. So if you talk about age in place that was, that was. I don't know how better you can put it than that.

Others knew immediately what the phrase refer to

Staying at home...as long as I can

- "Staying in my own home."
- "It means being able to stay in my own home for as long as I can."
- "Aging in place would be right here in my home, just getting older. And this is where I really want to be. I don't want to end up anywhere else."

Live at home until I die

- "[Expects to live in the home] Until I die. I don't know how long that's going to be. I'm 79."
- "I would like to live here until I die. I don't know. Like I say, especially if something happens to my husband, I don't think my kids will leave me alone."
- "I'm going to stay here until the day I die."
- "I figure forever (will be in the house). But the kids keep telling me that, mom, someday you're going to pass. I don't know. Another... 25 years, maybe."
- I: "How long do you expect to live in your current home?" R: "Until I die."
- I: "So, how long do you expect to live in your home? Your current home?" R: "'Til I die."

Live comfortably and safely in one house...but also be able to go to other places

- "I think, to me, it means being able to not only live in my home and feel safe, say, taking a shower or something like that, but also to be able to go to the grocery store or something like that and be able to come back. And now they have where you can order the groceries and just go pick them up. And I noticed on one of—maybe it was Smith's. It said something about even home delivery [...] And so once in a while, when it's really heavily snowing in past years, something like that would be able to—be good. So I think, mainly, aging in place is whether I can live comfortably and safely in my house but also be able to go to other places or even have, you know, like, somebody come get me and take me or something like that."
- "I think it would mean staying in a place, a home. That's comfortable, That's very secure. And also, everything's easy to get to."

Live Independently

• "What does it mean to me? Frankly, I am fiercely independent; I have a very, very hard time asking people to do things for me. However, I've always got friends that are willing to take me where I need to go."

Other reasons to stay at home

They like to stay home with their things

- "Yeah. I don't want to move. I can't move all this stuff [...] My things. My art stuff."
- "I'm saying, "Oh, yeah, right." [laughs] You'd have the biggest garage sale in history if you get that basement out [laughs]."

The pride of homeownership

- And this place was a dump when I bought it. And I paid 50,000 dollars for it. So... And then my son and his friends came in and put new cabinets, tile, carpet. Everything's brand new. So, to me it was... I love it.
- I've already got people want to buy the house and I said, "Well, I just moved in. I only been here a couple years." And he says, "Well the prices of houses have went up quite a bit." And I said, "So what happens?" I says, "You'll buy my house, then I got to turn

around and pay a bunch of money to get into a house close to it as I can," you know. Yeah, the prices of house—When I first start looking, I mean, you ought to know, if you get a house \$150 to \$200 thousand is a cheap house. For a hun—for a hundred grand you can get an outhouse [...] That house across the street is \$1600 dollars a month. It's the same size as this. This has got, like, one bedroom and one small room in there. That's it. [...] So it's—I thought what were they thinking when they made these houses? There's no kitchen. The kitchen is, like, right here. You have to sit down. Where would you put a table? But at the time that's all I could find for the price. So I just thought either I'm gonna add-on that way or add-on out, out at that way. So just enough room. [...] It's got a big backyard [...] And my grandkids like to sit—I really bought it for them, not for me. Because I mean, I don't know how much longer I'll be around. So I used to say, "You know what? You kids are going to have to add-on so that way you guys can all have a bedroom once you, you know, you guys live here.

Others mention not being able to afford going anywhere else

• "I don't have anywhere else to go. I'll have to stay in my house until the day it comes, you know. 'Cause I had to get a reverse mortgage on my house when my wife was in the nursing home to pay all the bills, \$3,000 a month. So, I got a reverse mortgage and got a little money out of it. So, now, I can't leave the house, stay in."

Most older adults want to live in their current home

- I like where, where I'm at, yeah, pretty much.
- I1: How long do you expect to live in your current home?
 R: At least 20 more years anyways.
- I2: Because a lot of people are displaced from their home as they age, because of mobility issues.

R: Oh. I hope I don't. [...] Just don't take me to a retirement (homes).

• R: Oh. Aging in my home? It's hard. It's a challenge [laughs]. When you're young, you don't ever dream all these things are going to happen to you. So it's—you know, you just learn as you go.

I: Okay. And then, how do you—how long do you expect to live in your current home? R: Until I die. I don't know how long that's going to be. I'm 79, so—

- I1:: Okay. So you expect to stay in your home as long as possible? R1: I'm going to stay here until the day I die.
- R: I'd like to stay here as long as I can, but I'm getting to the point where I might walk out at any time.
- "I want to stay here until I die, to be honest with you, that's what I want to do. I have several children that want me to come and live with them. So far, if I were to live here alone for the rest of my life, as long as my health is what it is now I'd get along just fine. I honestly say that. I get along just fine, because there's always family and friends that are willing to give me a ride to the store or whatever—take me to church, whatever—and so I do have that type of mobility. But I don't need to get out and do very much. I very seldom go shopping; if I go shopping I spend money. So that, that is—I'm going to—for want of a better term, that's the worst thing about having this macular degeneration, losing my eyesight to a point."

A home that provides their needs: washer, dryer, bedroom, hobbies and sun on the main level

- "Well, when I was looking for this house—my husband died about 22 years ago. And my • dad went with—I'd look at homes. And he'd—if it looked interesting, he'd come with me. But one of the criteria was we wanted to have-I wanted to have the washer and dryer on the main level. And so it had to have the bathroom and bedroom and the washer and dryer on the main level. And so [...] So when we looked at this house, the washer and dryer was in the basement. But there was a large closet right next to the bathroom. And I think, originally, when the house was built, it was more the entranceway into another bedroom. And somebody else had remodeled it and closed it up and made it into a big closet. But it was just enough to fit a washer and dryer in, which is very nice, because I'm not carrying dirty clothes, clean clothes, trying to balance and get them out. And so those things [...] And the other thing I wanted, because my dad, when they built their house, did it, is the southern exposure. So just like right now, the sun starts pouring in. This is kind of my workroom. I have a sewing machine back here. And the sun comes in and I can just really enjoy it. As you can feel, it gets a little cool. But it's just very nice with the sunshine [...] But I think the main thing is—and short of doing a lift. And I've seen where you go in and [makes humming sound] and it brings you up to the main level or something. That's—so right now, it's just me trying to keep active, moving and keeping active, and my own kind of exercises, even, like, going out and walking with my walker or something, so that I can stay as active [...]
- "And my dad, he turned 99 in August. And he still lives in the house. And my mother died about two months ago, at 98 and a half. And so they were able to live in their own house. They don't—they have the bedroom and the bathroom and everything on the main floor but the washer and dryer in the basement. And so she didn't go down and do laundry because that was too hard on her at her age."

Examples of how people are "doing it" even if is hard

R1: Aging in place would be right here in my home, just getting older.

R2: Being able to do what—

R1: And this is where I really want to be. I don't want to end up anywhere else.

R2: He's made it very clear that he wouldn't be a very happy camper if he had to be put in a home. He'd rather have somebody here. And everybody kind of harps at me, "You think you could do it?" Well, I'm doing it.

I1:: Right.

R1: She's doing a damn good job at what she's doing. She's taking care of me and that's what counts.

R2: The only thing I haven't been able to do is give him a shower. I'm not big enough. And I am smart enough. I might be old but I ain't dumb. But I can pick him up and put him in there.

R1:So what you're saying is you might be some dumb, but not plumb dumb?

R2: Yep. So I hired somebody to come in, and for right now when it's cold she comes once a week. When the weather changes it will be twice a week.

Challenges to staying home

General challenges/ becoming physically ill

- "Oh. Aging in my home? It's hard. It's a challenge [laughs]. When you're young, you don't ever dream all these things are going to happen to you. So it's—you know, you just learn as you go."
- R: Just what I'm doing I guess. You can't prevent getting old. Even though my spirit doesn't feel older, my body is unhealthy. That's the worst part. It's, it's not just age. It's all the other, all the health problems that result, come upon me. That's, that's the big problem. It's not getting older and wiser. It's getting unhealthy. [...] . It's not something you have a choice about. I mean, it's better than the alternative. I'm not ready to die. [...] I don't think there's anybody who has lived in any place, and I'm included, for any length of time that love where they're living, except in a favorable way, the whole idea of moving. I think perhaps, maybe, if people were—I just saw, saw a show yesterday about, about this depicting—They wanted to move this guy out of his home, and I don't think anybody wants to move.
- "I am on your side. I want to stay here until I die, to be honest with you, that's what I want to do. I have several children that want me to come and live with them. So far, if I were to live here alone for the rest of my life, as long as my health is what it is now I'd get along just fine. I honestly say that. I get along just fine, because there's always family and friends that are willing to give me a ride to the store or whatever—take me to church, whatever-and so I do have that type of mobility. But I don't need to get out and do very much. I very seldom go shopping; if I go shopping I spend money. So that, that is—I'm going to—for want of a better term, that's the worst thing about having this macular degeneration, losing my eyesight to a point. I don't know what you know about macular degeneration, but I was told that people who get it like I have it—and I've had it for about 12 years now—people who have this, their eyesight diminishes to a certain point, then it levels off. People like myself almost never go totally blind. Now, I've been going to an eye doctor, the eye doctor I was going to is money-hungry; he was always having me—he had eye tests and eye tests that Medicare would pay for. Here's how I test my eyesight: I've got a wristwatch here that talks [...] Okay. If I hold that right up to my eye, and if the light in the room is bright enough, I can tell you within one or two minutes what time it is. That's how my eyesight is; that's how it's been for the last three or four years. So I don't expect to go totally blind. I get around my house fantastically well. I memorize where things are, I can do my own cooking-besides all of the food my kids bring to me, they're afraid I'm starving to death. I get along; with my eyesight what it is I get along, I think, perfectly well.
- Referring to her dad, "He lives on his own. And when my mother was alive, we had hospice workers coming in and helpers, kind of aides coming in. And that really did help because somebody was changing the sheets and doing all that stuff, and the laundry [...] But right now, he doesn't have hospice. And so we have somebody who comes in every other week and changes the sheets and does the towels and wipes up and everything. But other than that, I'm—I do the laundry, his laundry. I do grocery shopping and go over and fix lunch for him. And so, right now, he is able to live on his own. And so we—I don't know that I'll be 99 doing that. But who knows?"
- "I don't want to move. But I will if I go nuts or something, you know."

I1: So what will be the key, like, challenges of, like, maybe staying here?
R: The only challenge I can think is if I get Alzheimer's, that's a scary thing. I think that most everything I can deal with. Excuse me. I don't want to become bedridden, because I'll kill myself. Really. So.
I1: So a challenge will be like if you were seriously ill?
R: Right. If I couldn't function on my own.
I1: Right. Yeah. If you were not independent.
R: Yes. [Crosstalk 00:04:32].
I1: But because of medical reasons is what you are saying?

R: Right. Yes.

Challenges related to the home itself when combined with their decrease wellness Basement and steps

- Referring to her dad, "And he still lives in the house. And my mother died about two months ago, at 98 and a half. And so they were able to live in their own house. They don't—they have the bedroom and the bathroom and everything on the main floor but the washer and dryer in the basement. And so she didn't go down and do laundry because that was too hard on her at her age."
- "Maybe something related to the steps. Or you have one floor, so that's not a challenge. A lot of people are—they have a basement, and they have to do, like, laundry, and they don't even use the basement."
- "I think the one challenge that I have living here, and I think it has a lot—well, I know it has to do with the architecture of the place. But I have the railing and a few low steps to get up onto the porch, the back porch. And I can easily get in the—inside. But I've got a step that's—that is maybe only about six inches or something. So this is where I come in the backdoor."
- "If there's nothing to hold on to, it makes it a real challenge."
- "My back started bothering me, and this leg, because I have a pinched nerve on this. And I hated to go downstairs, because it was so big, and I had my pantry down there or storage thing that I had down there, my blankets and dishes that I had stored down there or things that I needed for Christmas or for Halloween or something. [...] I probably fell like the second—you know, misstepped. Yeah, I did a couple of times. But that wasn't major. I didn't fall back to hit my—because I kind of stumble and just fell like a step or two away from the last one."
- "See, that's another thing. When you're young and you're remodeling everything, you don't think about, these days are coming that you need those kind of things, just like with the stairs. Of course, I hardly ever go up and down the stairs anymore. My son does everything for me that has to be done downstairs. And so I did have my washroom moved up, which I did myself because I was just so scared of going up and down carrying laundry. And we just built a little room there right off the kitchen, and it's been so wonderful."
- "Yeah. When we moved, bought this house, I thought it was wonderful to have those stairs. I used them for exercise. I'd go up and down and up and down. And now it's an effort. It really is hard."
- "Well, some—my house really isn't convenient because in order for me to go to the laundry room, I have to go down to sets of stairs. And so my plan is, when I get the—

when I get the Publishers Clearing House, I'm going to redo a bedroom downstairs and a bathroom with a walk-in shower, which will make it easier because almost everything you do comes from the bedroom into the laundry, you know, sheets, towels, whatever. And that's what I, you know, eventually, would like to do."

- "Well, to be able to go up and down the stairs easier."
- "Well, some—my house really isn't convenient because in order for me to go to the laundry room, I have to go down to sets of stairs. And so my plan is, when I get the—when I get the Publishers Clearing House, I'm going to redo a bedroom downstairs and a bathroom with a walk-in shower, which will make it easier because almost everything you do comes from the bedroom into the laundry, you know, sheets, towels, whatever. And that's what I, you know, eventually, would like to do."

Washer and dryer being on the basement

- R: I might not be doing my own laundry at some point and my daughter will.
 - I1: Right. Yeah. And that could be an opportunity, right? So in the future if like, oh, maybe-

R: Yeah. She actually does it for me a lot now.

I1: Maybe if the washer and dryer, if it were going to be moved here. That could be R: Hm-hmm [affirmative]. It could be moved if I had to.

Kitchen

- "And then the kitchen is a little higher. And so sometimes I think, "Ugh. Once I make it into the kitchen, I'm just fine."
- "The cupboards, because the cupboards were pretty high. They were old-fashioned and they were going to be remodeled. These people that sold me the house were going to remodel it. The cupboards were pretty high. They didn't replace those, because they only did the sink and they put shelves—the cupboard, the shelves on the bottom, but not the cupboards on top. I would have wanted those probably lowered."
- "The cabinets are pretty high. [...] It was not very well-designed for older people."
- "And so I can't raise my arms up. So it makes it really hard to do things in my kitchen. I need to have something that I can climb up on that I would feel safe. But I don't know what it'd be."

Cleaning

• "And if we were completely alone, if we didn't have Anna Jean, it would be—it's going to be a challenge to maintain the home, you know. Just cleaning every day, that could be a challenge."

Older adults want to stay in their neighborhood because of...

They like/love it

- "I love my neighborhood"
- "I would like to. Yeah. Yeah. I definitely would like to (live in my current neighborhood) if I, if I would have to do that, you know?"

The social community (e.g. church, friends and neighbors)

- "I'm very happy here. This is a great community, this mobile home park [...] we have a very tight community. Everybody watches over everybody."
- "I do have a lot of neighbors that I'm friendly with."

• "I imagine I could probably live here for another 10, 15 years, easy. Whatever happens. And I would definitely want to stay in the neighborhood. It's an amazing, kind—a lot of kind people."

• "I've got a lot of friends. My church is here, you know, and everything."

Access to family

• "I like this neighborhood. And there isn't really much around as a place—in fact, it would be great if they developed something like that. But I think, generally, in this area—because, as I say, that's 33rd over there, 33rd South. And my son, right now, is living with his family on 45th South. And so it's—I like kind of that area. And my dad, he turned 99 in August [...] So I'd like to kind of, I think, live in this general area, just because of people who live nearby."

Close bus stop

• Did not want to move "Oh, I don't want to—not without my bus."

Access to places (shopping, hospital)

- everything's easy to get to.
- R: Pretty much everything I do is right around here.

I2: In walking distance?

R: Oh, yeah. That's what's great about here. I have Smith's . I have all the—Walmart. Everything is right here. You, you couldn't ask for better.

- The neighborhood has a lot to do with it.
- I2: Do you think that you will be able to stay there as you age, in terms of, like— R: I will stay there as long as I have to, and, and I, I, there's a good medical, you know, Naval hospital down there and I'm eligible because of my husband to go there.

Church

• "I love being here. I like the Ward I'm in. That's another thing that was a plus for me. Because the Ward's just close. But now they just make, the state just made a cut off so our condos go to a different Ward. But it's been nice since I have to speak on Sunday."

Challenges to staying neighborhood

Concerns on safety and crime

- "Crime. And safety. I'm just... I keep telling my—my son fixed my windows so they don't open. I mean, if I had to, I know how to open them. But he said, and my police officer son said, "Well, if somebody wants to get in, they will." But I think... He said, but the only reason they'd come into your house is if you had drugs, they know you're a drug dealer. And I'm going... I don't think so. He said, or, you know, if somebody's mad at you. You know, people just do weird things. But he said, "Mom, you're pretty safe." Because I told him I wanted my gun."
- "I just, you know, and I'm, I would favorable of moving away from the evil around here. I've got criminals. I'm surrounded by criminals. I've had so many things stolen. It's just ridiculous, and I've actually caught the neighbors that were across the street, that little house there, in my shed and back here behind here."
- "I was not safe anymore in a big house. I felt like very unsafe, even in the back, because I used to go in the back in the evening. I have a big yard and a patio and everything. Anybody could walk up there. And then I had the kitchen door over here, and I would sit

out there. I didn't feel safe, because by certain time I felt like I wanted to come in the house."

Mobility

• I: Are there going to be any barriers to live in your, in your home and neighborhood? R: I'm just not able to get around. I, I—Without a wheelchair and ramp, I'm, I'm pretty much stuck here.

Staying in the community as a renter (less diversity on residential types)

- Unfortunately, in the community—like you had that previous thing—there aren't any, like, condos or, you know, small living things that you could buy because it's all single families. It would be really hard to stay in the community and not be in this house. You know what I'm saying?
- I: And then, if you left this home, would you want to stay in your same neighborhood? R: Yeah, but I don't know where, [laughter] you know. Houses over here are either rented or owned and it's all I've got, you know, so I wouldn't have to go anywhere, yeah.

Bad neighbors

• All my neighbors, I don't have any of them that are old like—that they've been to my same neighbors for years and years. Only these people here next door, but they're very selfish. Now that we have to go, you know—when they, when they were making that ramp where they park their cars. She told me to tell them that that ramp was for our house and their house—never to park there, and they're always parked there, and Judy has to go and tell them to get off of it so she can drive the car this way, so I won't have so far to walk because it's getting worse and worse for me to walk.

Where people would go if they moved

Older adult want to live in apartments located in their old neighborhood

"There's a lot of senior homes around there, but I didn't like them. They're right on Seven South. There's been one there, the Riverside place right there by the Chapman Branch. I could have gone to put my application there, but I didn't like the area. I don't like the area, because that was the area where I lived at, first of all. Right around there, no. No. And if it would be further to Glendale, and not necessarily around that area, but it depends the area and if I can tell if it's—I went to apply right there on Glendale, right there by the Glendale Circle too. They have a senior, but they didn't have no balcony, no patio. And they showed me, and no, I didn't-I right away told them I didn't like it. No, I refused two or three. But I don't like—I didn't like them because I knew very well from the beginning I didn't—I wasn't going to be happy. I wasn't. And why do you want to be in a place where you're unhappy? No, it's sad, because you're not—I was sick here for a whole month too. But this gentleman that lives upstairs said that there was illegal activity going on someplace. And we could smell all these things. I don't know what it was. But I got sick. I had an upset stomach. I didn't have an appetite for a whole month, the month of December. And I was sick and I was sick and I didn't feel like eating. I had-nauseated and everything. I could smell—we could smell some. And he told the land—the management there was something. But you never know what's going on. He said that there was people that lived here that were on remedy with their medications. But this guy said, no, he called the Health Department and it shouldn't have to be here with a smell that would get you sick. And that's what I was-and that's why I'm kind of distrustful, you know, about living in places like here. Of course, it could happen any other place too. But [...] The neighborhood has a lot to do with it [...] Hm-hmm. And over here, the brand new, new places, they were bringing in all kinds of people that were coming in to put their application, because it was brand new, you know. And they had to fill it out, fill them up, and up until last month, they were not filled. And there's a lot of different people coming in. So, you can expect that from anyplace, even the motels. They bring drugs, and they do their meth and all their drugs in there too. They've caught them doing that in the motels. You know, what makes us think that these places—like the doctor says, you know, just because it's a new place—because I told my doctor—I went into the urgent care center twice with this upset stomach and didn't—wasn't eating and didn't have an appetite. And I had to take something for the nausea stomach. And, just lately, I just got my appetite not too long ago now, and get the energy of doing things, because I hadn't even taken down my Christmas things, and my grandkids helped me. I still have them here. But I have more energy. And I think—you know, and I'm religious anyway, and I think, no, God gave me the strength to do this, and he'll give me the strength to move to another place, hopefully that I'll be happy."

They may want to move to live with their children or grandchildren

Example 1

R: I would—if I left my home, I probably would go live with one of my grandchildren.

I: Okay. If you were to leave your home, would you continue to live in your neighborhood, in your current neighborhood?

R: No, I would have to live in with one of my children.

I: Okay. And where do your children live?

R: Well, in Salt Lake area. And my daughter-in-law lives in Saratoga Springs.

I: Okay.

R: I have eight living children, so I got places to go.

Example 2

I1: So, the last question on this part says, "If you were to leave your home, would you want to stay in your same neighborhood?"

R: I would—if I left my home, I probably would go live with one of my grandchildren.

[break in interview]

R: Go ahead.

I1: Do they live close?

R: Who?

I1: Your grandchildren?

R: They live in Sandy. That's close but far.

I2: It's pretty far away.

R: Yeah.

Example 3

I: Oh. Okay. What does "aging in place" mean to you? What do you believe that—like, just hearing the words "aging in place," what do you believe that—

R: Aging in place?

I: Yeah.

R: I don't know what you mean by that.

I: To age in—

R: Just to age.

I: Age in place. So, like, to age in your home.

R: Oh. Aging in my home? It's hard. It's a challenge [laughs]. When you're young, you don't ever dream all these things are going to happen to you. So, it's—you know, you just learn as you go.

I: Yeah. So, the idea of aging in place is similar to what we were talking about earlier with trying to keep you in your community. So that's to age in place. So, you're not displaced from your—from what you're used to, right? Where do you want to live while you age?

R: Right here.

I: Right here.

R: I don't want to have to leave. I really don't because I have been here 50 years. I've got a lot of friends. My church is here, you know, and everything.

Example 4

R: If I was to leave my house, I think, I'd want to live with my kids. One of my kids. Well, my daughter, his mom.

I2: Hm-hmm. [affirmative]

R: Not that she's my favorite. Well, she always takes care of me. And like last night she had me over for dinner. I don't know. She's just a good daughter to have.

Example 5

I: So, what does "aging in place" mean to you?

- R: What does aging what?
- I: Aging in place.
- R: Aging place?
- I: Aging in place.
- R: Oh. I guess aging in your home.

Example 6

"Well, in spite of—three of my kids—obviously, they're all adults—live out in Utah County. And they live relatively close to each other. And they keep saying, "You need to move out here, Mom." "I'm not leaving." I've been here 50 years. I'm going to stay until—so at this point, you know, I wouldn't move. I'm not saying it's out of the question. It may happen, like, if something happens to him. But yeah, they think we need to move out to Utah County."

Example 7

I: If you were to leave your home, would you continue to live in your neighborhood, in your current neighborhood?

R: No, I would have to live in with one of my children.

I: Okay. And where do your children live?

R: Well, in Salt Lake area. And my daughter-in-law lives in Saratoga Springs.

I: Okay.

R: I have eight living children, so I got places to go.

Example 8

"But if I had to leave here I'd probably have to go to my son's house in Tooele [...] He has a beach house out there. My grandkids are there, so I hope I don't have to leave, but if I do.

Example 9

"My son says he's building a mother-in-law basement."

Example 10

"If I was to leave my house, I think, I'd want to live with my kids. One of my kids. Well, my daughter, his mom [...] Not that she's my favorite. Well, she always takes care of me. And like last night she had me over for dinner. I don't know. She's just a good daughter to have."

Example 11

I2: So, as you continue to age, would you like to stay in your current home?

R: Absolutely.

I2: Okay. And then if you were to leave your home, would you want to stay in your same neighborhood?

R: No, I probably would not. To be able to, I doubt it very much. In fact—this is kind of interesting—my son Scott that was in the Marine Corps for eight years lives in Kerns [phonetic 00:11:08]. He has a big garage on his property, and he has built an apartment on top of it. Just today—just today, he's begging me to come and live in that apartment at his home. Can you believe that? Begging me to come. So far, I'm not willing to leave. How about that?

Example 12

"Well, we haven't really discussed that too much, so I—we plan to stay here until we can't function anymore. So other than that, I probably wouldn't mind living with one of my children, but a rest home, I don't know that. Not necessarily (want to stay in current neighborhood). Not necessarily at all. Anywhere is fine. We have a lot of family in the Valley, so you know, it wouldn't matter. Anywhere in the Valley."

Example 13

"You know, because I do need help. I'm going to need more help. But she also—because she applied for disability but never kept up with her appointments. And I would be more than happy for her to get her disability, her medical and financial and everything, and housing, so she can live happy. Because she was there for a while homeless and living with friends and living in this home and another one. And I couldn't see that. But then when I was going to sell the house, I wasn't going to live—go to the house—she lived with me up until then, a year before I let the house go, because I thought she needs to go get her own life. But, no, instead she went to live at this lady's house with her ex-boyfriend. And it was not a good idea, not a good place. Because, you know, not everybody has their own good style of living. No, because this home was not a very good home. No, it was not. So that's what I hope. I'm hoping that, even if I go to the Escalante and she applies for her housing and they give her a two-bedroom—I told her social worker that's helping

her now I would want to probably move in together and maybe help her. You know, she can help me and I can help her, financial or with the car or whatever. And she can help me, you know, do those—because she does help me a lot, like grocery shopping or packing or getting things in the car and everything. Okay, that's what I need. I don't want to be—I need—if I could save energy, I always thought that, I could be—I mean, with my kids over here helping me, and I thought it didn't happen when I was over there. And even less here, because they can't even stay over here with me. So, I do. I kind of don't like doing all that, you know. But I have to, because I have to unload my car when I get the groceries. And sometimes it takes two trips to go to the car. Or if the kids come with me, they help. But that's something that's going to happen that we need to do, you know. You have to go to the grocery store and you have to bring your stuff in. You can't leave them out in the car or ... [...] Take care of me, and I can help her too, because she's—she also needs a lot of help. She was on drugs, you know. She was really bad on drugs, because she turned to drugs when she lost her-my grandson. After that, she became bipolar and started using drugs. And that was not a-the best thing that she turned to. No, and it did, it got too bad where she got locked up, got involved with bad company and everything okay. And now she's going to be what? She's 48, 49. She's two years older—or four years older than my youngest daughter [....] So that's why I think—she's going to need help. And if I can help her, like I told her—and she was happy to hear, because she was in jail and she's in a program now. You know, and they're trying to help her. And I told her, "You know what? You're going to need to make big changes and get your disability." Because she applied for disability like in 2010. They don't pay attention to things like that. And you know what? You need to. That's one thing I did all the time—pay attention to my appointments, my dental, my glasses, my doctor's.

Assisted Living

Negative opinion

- "I would not go to assisted living. My son would probably would probably have me move in with him if I move from here [to...] Saratoga. And there's plenty of room there. Oh, I absolutely will not go to assisted living. I would take a heroin cocktail before I would go to assisted living. I've worked in them. Got the answer? No. No. Nope. Someone would take me in. I have no worries about that."
- "Being able to stay in your home and not going to a care facility, any kind of care facility. I know we've got several friends—we have one right now who's in a facility on the west side. And they're—yeah. We do not want to do that. Yeah. I would prefer staying here as long as I can. They're kind of sad places. Anna Jean goes and plays the piano. And the people seem so sad and not occupied. They need to be doing stuff, and they just sit there. And I feel so bad for them."
- "I have worked in homes where people—they have people, you know. A lot of times, they don't, the nurses don't take care of them. They ignore them. Even in the hospitals, they do that, you know? You press on the button on everything—and they're out there just talking to each other. [...] Instead of seeing their—the people they're supposed to see, you know? And it goes the same thing in any—I have—My husband's cousin lives here. Her husband had a stroke, and he's in one of those homes. And she tells me that every time she goes to see him she has to give him a bath because he hasn't [unintelligible 00:21:58]. They're just fooling around. They don't even take care of him, and he can't walk. And so, she says, "I am getting so dirty. I gave him a bath, and I take care of him."

"Well, you're supposed to tell them or report them, because not only they're mistreating him. That also means others too, you know. Because if they're not tending to her husband, well, they're doing the same thing to all of them, not only to him."

- "I hope I never end up in one of those places."
- "I didn't really like it because I didn't know anybody. Because it was everybody was up that way and no people down this way. I think I'm the only one that lives down here, other than that next door. She doesn't want to talk."
- "You know, they wanted to put me in one now that I was in the hospital. The doctor wanted to send me to one on, he said it was on 4500 South and about 2300 East. He wanted me to go there for about a week or two. He said, because you need a lot, a lot of help. I told him I didn't want to. And I said, but, no. And, and they put nursing care to come and take care of me. But, you know what? They never came. They came and did my assessment and that was it. I told him, no, I've got somebody that can take care of me for me. And I, I've never... He's always taken care of me for every, everything. I'm, from baths, toilet...everything."

Positive Opinion: need for help, friends, experience

• "Yeah, if I can (will stay independent). There are good places for assisted living, yeah. Yeah, there was one—I had a friend up there at the Golden Living there. That was a nice place too, and I still have a lot of friends over there. I visit a lot of those places, yeah, I mean, with friends that I have too. And I think they're nice, because you know what? These people need the help. They need the help. And those are good places too, that they never existed before. Years and years ago they never had assisted living for elderly. They used to either be with their kids or their—someone that came to take care of them. You know, get old in their homes. And they wouldn't want to leave their home. They wouldn't want to leave. There's still—I have a lot of friends that don't want to leave their homes, don't want to leave their homes."

• I: Uh-huh. So, if you were going to move away from this home, where would you go? Would you go to stay with one of your sons? Or would you...

R: I wouldn't go live with none of my kids.

I: ...go to a nursing home?

R: Probably a nursing home. I've been in one of them before. I was only there for about a month.

I: Oh, okay.

R: And that's when they were deciding where they wanted to put me. That was before the let me come home, right after I got out of the hospital, and I was there for about a month. I like it because there was, you know, a lot of people my age.

I: Yeah.

R: Well, I wasn't as old as I am now, but people my age anyway that was there. And then they had...

I: So, what did you like about it?

R: What?

I: About the nursing homes. Did you socialize with people?

R: Oh, yeah. The one I was in, they had their game day and people like me would go and they had their movies and different things like that. The movies I didn't go to because I wasn't all that hyped up on them.

I: Okay. And you also felt like people were taking care of you? The nurses? R: Yeah. That's what the doctor's afraid of now. He's afraid I won't be able to count my pills and get the right ones and all that stuff.

Neutral Opinion

- "Well, we haven't really discussed that too much, so I—we plan to stay here until we can't function anymore. So other than that, I probably wouldn't mind living with one of my children,
- but a rest home, I don't know that. Not necessarily (want to stay in current neighborhood)Not necessarily at all. Anywhere is fine. We have a lot of family in the Valley, so you know, it wouldn't matter. Anywhere in the Valley."

Things that people would like or already have as they age to stay in place: ramp, walk-in tub, a well maintained and safe home

- Ramp: "I don't think I'd ever need a ramp because my knees are getting stronger."
- Walk-in tub: "Well, there is one thing, but it's, like, really stupid, like, really not even— I'm going to ask my son to get me this—the walk-in tub. Because, eventually, I'm going to not be able to lower myself and pick myself up."
- High toilets: "Oh, they're all high boys. I changed that out. Yeah. That's a good one. No, they're—I changed those right away when I got in the house."
- Weatherization
 - Doors that do not leak
 - Doors, they, they leak, super leak [...] It, it closes, it's just that—I think maybe the door at one time fit, but you know, wood shrinks and stuff [...] Yeah. So, you, you don't want to stand over there when it's really cold in the winter. You can feel the draft coming through there, so I just put a sheet over it.
- Safe home / Crime-free
 - Doors that lock
 - "You'll see that the door that they put in, the backdoor, for some reason, right now, it won't close. I think it just needs adjustment. I'm having to close it. And there's air coming through. And I have to tighten it with a wire. That backdoor that they installed is just—the change of weather or something got goofy."
 - "I don't know. I need better doors. My doors are very flimsy. I mean, it wouldn't take much just to knock them down. The windows are pretty good. We had them put in when we had the siding put on, which was many, many years ago, probably about 45 years ago. But the doors are the main thing. I feel safer now that I've got the garage. I did have it put in a few years ago. And I just feel safer with it. [...] And took his life about 2011. Seven years [...] He left me with a lot of debt. Don't shine it in anybody's eyes, okay? So, yeah. I'd stay here forever. It was just... And I have a couple of neighbors that watch out for me. Gentlemen, you know. And so, I feel pretty secure here."
 - Windows

- I keep telling my—my son fixed my windows so they don't open. I mean, if I had to, I know how to open them. But he said, and my police officer son said, "Well, if somebody wants to get in, they will." But I think... He said, but the only reason they'd come into your house is if you had drugs, they know you're a drug dealer. And I'm going... I don't think so. He said, or, you know, if somebody's mad at you. You know, people just do weird things. But he said, "Mom, you're pretty safe." Because I told him I wanted my gun. I used to be a security officer for Loomis Fargo, guarding money. And then I had my gun. And he took it away from me because he thought I was going to kill my husband. My husband was a drug addict.
- General maintenance (Repairs, Roof)
 - Everything is used to be—Since the day I bought my house, you know, there are repairs here and there, some repairs. But, like this past summer I reroofed my—I didn't do it, but I had somebody, paid somebody \$1,000 to reroof my garage. And I didn't call insurance on that either, but I paid myself. And, other than that, I don't see anything. Everything seems to be same, you know.

8.3.2.1.2 *Portland*

Barriers in Neighborhood

Built Environment

"Yeah, the speed bumps. I don't think anybody likes them. They're horrible. They don't stop the people that speed. They just fly over it anyway. Other than that, everything is reachable here."

"They just put that new sidewalk. Prior to that we had a dirt walkway out front. I fell. I don't know what happened. I was knocked out colder than a mackerel [sounds like.] I've got a plastic nose. I lost my teeth. That was in the parking lot here. It used to be full of potholes. Serious potholes. It was just let go. Nobody every fixed it. After I fell they decided . . . they just kind of went up the middle as you can see. They paved the whole place. I'm still having a lot of trouble. I never complain. I'm out of the old school. You don't complain about anything. But, I spent two weeks in the hospital. When they took me there I was unconscious. They said I fell. I don't know. I don't have any memory of it. It split my nose wide open. Broke both my dentures. Knocked me out colder than a mackerel. They treated me pretty good for a while, I guess they were afraid I was going to sue them. I don't complain."

ProxyR: "It would have to be there's no sidewalks. There would have to be sidewalks. The traffic is too fast, it would need to be slower.... There're quite a few people out here. Not a great deal, but there's quite a few that I know that are in wheelchairs that traverse. The whole complaint is on Killingsworth there's hardly any sidewalks. The ones that are the people don't cut back their bushes. I went out there myself and had to cut back bushes a block that way and a block down that way because I had problems walking down the street without getting hit in the face sticker bushes from rose bushes or from arborvitae. Because there was no sidewalks and the ones that were kept so poorly, I walked in the street. That's

where the wheelchairs drive at, in the street. When I cleared that off, now some of them ride on the sidewalks. Others still do the street. There are no curb cuts around here, none. Until you get to 42nd.

ProxyR: "It's not that. That's doesn't bother me. It's the grocery store. I have to transfer if I go to Albertsons or Safeway. I have to make a transfer and have to wait. It would be raining and I couldn't take mama...it's like 45 minutes and if you walk there it's 20 minutes away. But it's 45 minutes if you catch the bus."

"Uneven pavement sidewalk, you know. I have fallen on that walking. I'm more alert about it now. When I do my walking around that's what I encounter mostly."

"That would be a good thing, lighted crossing, better sidewalks, and have sidewalks period, cause some areas I walk in there's no sidewalk and I have to get into the street and I try to cross over to where I can get a sidewalk. I'm really, really leery about that. Some areas not developed don't even have a sidewalk."

"Well, up here on 74th there's no sidewalks on one side, or both sides actually. In some spots there isn't [Inaudible.] When we'd walk all the time we'd have to walk on gravel or whatever. So, there was that street there. I think as you go down 174th and Powell it's the same way. Oh yeah, the side streets, some of them don't have sidewalks. Otherwise, everything is pretty good."

"On 82nd, for people that are walking, that are trying to cross 82nd, it would help if they had flashing lights. People don't stop. Once in a while you get somebody kindhearted that says, "Oh, let me stop." Then that stops all the traffic. It could be pouring, freezing, it doesn't matter. You're there with bags and they're just zipping right along."

"One of the this is that unlevel concrete or broken concrete. Portland is pretty. I like the landscape from here when I'm walking. I've fallen and hurt myself because of those kinds of things. I see that they have access for wheelchairs, which is perfectly fine. The two trees out here, both belong to the neighbor next door, but the root is over here where I live, which is broken and whatever it is, because the root has been there longer than me probably. That's a hazard. All day long. There're some roots coming up but I can't afford to fix that. That type of stuff. That's everywhere. Especially when you have these old roots coming up. There's a lot of that."

"When you go over some of these old driveways. Driveways now are at a lot less of an angle. Going over some of these old ones and I feel like I'm [leaning]....It's a real fun thing. I went to Fred Meyers up 82nd Street. There are some places where the edge of this cart is damn near hanging over enough to get into the traffic lane. That's not too cool."

"[I walk] Almost every day. Sometimes I will miss morning and I might go in the evening. Sometimes I would miss the whole day. Several times a week I go...Now, the only obstacle I have is when I'm walking up 162nd. I don't have enough space going under [sounds like] the overpass."

"Oh yeah, the curbs. Getting down off of them. After you fall on this thing, I've fallen about five times. You get a little paranoid. My in-home therapist, every time he comes over he

says, when are you gonna get that [scooter] straightened out? You realize you're leaning to the right side all the time? I said no. Every time it falls over it's to the right."

"I can't drive anymore because I can't trust my hands. So, I wasn't able to go anywhere. I got some issues with my shoulders, which is one reason I can't get very far on this sucker. I need it to keep me from falling down and I end up putting a lot of weight on it which bothers my shoulders, so I can't go very far on it because of that. They wouldn't authorize an electric wheelchair for me unless I could get into my house....Before the modifications I was totally dependent upon other people to get me to doctors and stuff like that. To grocery shop, everything I had to do outside the house I was dependent on other people to take me places. I no longer am."

"Traffic is constant and they have a stoplight just about every block. It really gets congested out there in the morning and at night. You come out here and if don't catch that light you sit there cause that's an extremely long green light right up here. It's real hard to get out on it from here....[pedestrians] get run over by cars all the time. They cross Division against the light or they won't go down to the walk."

Safety

ProxyR: "When I think of distance for safety, we're kind of out of the loop. We're on the fringe. We never had a problem in calling the police or the fire department out here. They've always come real quick. But, it's a way away. It's a long way away."

"Additional modifications? We have a lot of crime in this neighborhood. I would want some security equipment. We do have a lot, we have a lot, a lot of crime....It is just all over. It's just all over. I've seen drug deals go down right here. People going to the bathroom in broad daylight in the park with people there. Right here, like a block over, we've had break ins..."

"It's funny, the neighbors are great. I love my neighbors. People all around are just so nice, really. I'm very satisfied. My dissatisfaction comes from the crime. I'm hoping that that gets resolved. It's kind of hard, because that's not the neighborhood. That's something you hope to get rid of."

"No, because for one thing . . . oh, I know, I used to ride MAX and go downtown. I'd drive to Gateway and then drive down there. That was before I got so bad though. And then MAX just got too dangerous. It's too scary. You feel so vulnerable. I'm not a scaredy-cat, but when you see some of the people . . . you know."

"[Walking is] hard on me. It hurts, my whole body is in pain because I have osteoarthritis and fibromyalgia and I have no cartilage in my knees, I have glaucoma and I had a partial cataract surgery here last September and it didn't quite turn out the way we had hoped it would, because I could see better before the surgery and now it's not as good because there's a ripple in my corneal thing because they have to go in and surgically stitch it down, case it wasn't staying, and it made a ripple in it. So now I kind of see a little double a lot of times, or not as clear....There's no sidewalks up and down 104th so it makes it hard for me to navigate around. I can't navigate the rock and the holes and the mud and all that. People will go along and they'll call you names and everything because they're mad you're a little bit in the street. They still got room to pass you, but I guess they're afraid they're gonna hit you. I understand that. They don't have to do the name calling and that. I mean, how would you like to be me and my walker trying to walk and having a heck of a time walking because I grit my teeth when I'm walking because I'm in pain in my legs trying to walk because I'm walking stiff legged? My knees don't navigate like knees would if you had cartilage in them. So, yeah it makes it rough. Even in the wheelchair. I wheel myself, too. I'm always doing my arms. I have a lot of pain all over because of the arthritis stems in my lower lumbar and radiates out to everything."

"Being gay, I run into barriers all the time. Name calling and stuff like that, occasionally. It's pretty rare. I get along pretty good with the neighbors. Walking Boise Street, a lot of people see me walking with Oriole and it's quaint so they've befriended me. It's just occasional yell, "faggot" or "homo." You just keep on trucking. That's all. But, that's the only real barrier. I fall occasionally now. They think I might have Parkinson's because I stumble and fall a lot, but I can get on my bike and ride for miles, which is...Last time I saw the doctor he said, "we think Parkinson's." But not officially diagnosed. Supposedly that's what happens with other people with Parkinson's. They fall and stumble. I can get on the bike and ride for miles."

"From where I sit, Lents is gentrifying. It's becoming one of the go-to places. I think it's going to get better....Really, the problem is the crime. They've gotten pushed this way. It was bad. It's funny, because it had a bad reputation, but from talking to neighbors that have lived here a long time, there was a period where the crime had really, really, really gone down. It hasn't been until just the last couple years that it has just gotten crazy again."

City Maintenance

"I really wish the city would come out and clean the streets and clean the drainage more often or make sure the property owners do their part in keeping our neighborhood safe. Because when the street cleaner does come, the cars are parked. Some of the neighbors . . . I have a yard man that comes and cuts my grass and clean around my home and keep the drainage open because I can't do it myself. If we could have the home owners get more involved and learn about the city services and even if the city comes out and clones the streets or whatever, they need to keep us a little bit more aware of what they're doing. Some of the neighbors say, "I don't know." I said they post it in the papers and you can call, you know? I used to try to help remind, I used to be block captain and help remind them. I can see the neighborhood going down. If the drainage, like especially right across the street from me, the drainage is not clean. Then the leaves fall, they don't remove the leaves, they have cars parked there that are not movable or drivable so when the street cleaner comes they can't clean the leaves or the debris on the street. What happens, the drainage is clogged up and water is all over everywhere. I wish we could be a little bit more concerned about the care in our neighborhood."

Wishes for the Neighborhood

"...There were concerts last year and the year before at Dalton Park. I don't think they did that this year at all. It's something I would like to go to. More free things to do in the neighborhood. It's just not enough. If there's something to do it normally costs more money to do, but you're on a limited income. It depends on how much income you have for what you can do."

Homeless

"[I want to live] Anywhere but the cities. Sorry to say, I hate Portland....Yeah, I just, all this homeless crap going on. I mean, I gotta admit, when I was in my late teens, I lived in a car for about eight months. But I never piled my garbage up. I never carried anything around. These people, it looks like they go to a dump every day and refill it. I don't think that's as much as they're homeless as they might not be quite on par mentally. It reminds me on the hoarders show. These people ain't got a house but they're still hoarding everything."

"For safety, concrete needs to be level and they need to do, like across the street with all those high bushes, and that's where homeless like to live and catch things on fire."

Lack of Amenities

"Not especially. There's nothing in this neighborhood. There's a movie theater that I can't afford to go to. There's no good Chinese restaurant close enough. I've always lived in Southeast. I think I lived in Northeast and North Portland too. I like Southeast. I'd like to stay in Southeast."

Future Expectations

Financial barriers

"It's the cheapest place, anyhow. If I want to age in place the state would have to pay a lot of it. Medicaid and whatever. And the price they want for things now....Where Bob's at now it's 40 something hundred a month, they got 70 apartments out at Brookdale. They don't use fresh towels and stuff like that. \$4,000 a month over that? Come on. It's not right....I would go probably out in Sandy if I could. My kids have nice acreage out there. That'd be the best spot."

"We plan to live here as long as we can. With the way things are going, you know, it's all up in the air. It's a decision you have to think about. To sell or stay, because with the house issue, the cost of insurance is going, his medication goes higher. If you don't have insurance you're up a creek there. The cost of insurance, then you go to a doctor and then you're trying. You pay them back. We don't want nothing for free. It's like, what do you live without?"

"R: I thought Portland was going to be the answer for decades. Like I said, I'm not 25 anymore. I don't have money. So, it's not going to be here. I've never thought about it not being in this house, but that's become a reality. I'm houseless, I'm not homeless...."

"I: Maybe a big barrier to trying to stay in the neighborhood is cost?

R: Maybe. [Laughing.] I don't play the lottery, I don't expect to win it. I know there's other housing setups, it's just going to be much less space. Much less freedom of movement. There may not be a car involved. I'm still driving, but that car is almost 30 years old. It may not stick together much longer. I can't see putting out thousands of dollars for a car right now." So, I'm not quite sure what I'm going to have to look forward to. Is it going to be a group home? Is it going to be a boarding house?"

"Well, I've been in this house since 2011. One of the things that I thought about when I decided, I needed a house because people were being displaced. I didn't want to move to Gresham or

somewhere else. That was all in my thinking. I had been on a section 8 program when my baby was a baby. It was very helpful for me..."

"Yeah. Where am I gonna go? That was the whole thing. Because everybody was getting put out. Everyday somebody calls me trying to buy this house. That's what they're doing. Where would I go? I'm not going to live as comfortably as I'm living here."

"[I want to live] With my family. Right now, most of them are here. I have two boys living here....The mortgage is too high. But we can't afford to move."

Stay as long as independent

"Aging in Place? Aging the way, I would have a peace of mind and comfort. Aging gracefully without worry. I'm happy a lot of programs are there to help us do that...I prefer to stay here as long as I am able to stay here, you know? By myself. Or, if I get to the point where, excuse me, I don't have long term insurance, I'd love to get it. I can't afford it right now, but I would love to live here even if I have to get a caregiver to come in and assist me with some things. Right now, other than the fall I'm okay. I be careful with the way I walk and everything."

"As long as I am able to be mobile in my home I would like to stay here. I'm thinking another 20 years [laughing.] I like my neighborhood. It's familiar. If I had to go somewhere else for whatever reason and it's better for me, I would. I'm trying to be open-minded about what is best for me and having others to help me."

"[I'd like to live at home even if I'm seriously ill] If there's caregivers and care. That's how my mom was. She wanted to stay at home and [Inaudible] was able to accommodate her wishes and keep her home [Inaudible.] So, caregivers, naturally you'll be familiar with the place you've always been and lived in, friends around you, neighbors can [sounds like] all day long around you and all that instead of strangers or being in a hospital or hospice or even a nursing home. Cause you're not familiar with those people. Familiarity brings contentment and peace to you while you're very ill. I'd rather stay at home as long as I can."

"I'm on a picket fence there. If I have a stroke or become disabled type thing, I don't know where I would go or what I would do. I'm good at helping other people but lousy at helping myself. This is my house. This is my Alamo. This is it. I gotta take care of [my dog], keep him accommodated."

"Yeah, well I don't want to [move] if I don't have to. I mean, I know they're upgraded a lot, but I'd like to stay in my own home. I know people that want to stay in their home and I understand why they do. They've worked hard all their lives to have a home, they respect that home, they bond with the home. They feel more comfortable and they can do what they want. They can get up when they want to, they can eat when they want to, they can listen to the TV. They don't have a lot of interruptions and noise and people that they don't really know. It's not that I don't like people, I like people very much. But, I don't like situations where it's super crowded and noisy and just all that stuff going."

Plans

"Here. Here and then I'll go to my daughter's. Hopefully I'll drop dead before [laughing.] It won't be a bother to her or to me....[I'll stay] Just 'til I can't get around. Who knows. I

expect to stay here a long time. Now you can have the groceries delivered. My daughter and my granddaughter and my friends will bring stuff if I need it."

"I have a target, but it's at Gresham Manor in Gresham. I was invited to eat out there a lot. I get my haircut at Tildale's [sounds like] out there. I like that place compared to Gateway. I have to correct myself. Jose is at Marquis Place over at Martin Luther King and Lombard. Right behind the gas station. That's where Jose is. Both those places don't compare to Gresham Manor...It's so much better out there. It's pretty drab at Gateway and Marquis. They're clean places but pretty drab compared to Gresham Manor."

"I'd sorta like to have an accessible bathroom put in. We were thinking about possibly expanding that bathroom to make it wheelchair accessible or shower accessible. Roll in, exactly. The ABLE Account is something we're exploring accessing or starting, I guess. Our case manager. So then maybe we could build up some capital so we could put some money at some point into that. I think about Aging in Place a lot in terms of being able to have him stay here as long as possible."

Health issues

"My sore point is I've got mold coming in through all the windows and I will probably need a ramp on the front porch here one of these days, pretty soon. I'm on a CPAP machine, I've got a bad back, all the frailties of old age, so."

"Aging in Place? It means it's a pain in the butt. The funny thing is, I knew when I was that high that everything was going to be exactly the way it is now. I saw myself walking around half crippled up. Just like the next back operation I've got coming up. The doctor says well, it will probably do you some good but I'm going to give you fifty fifty chance of surviving it. My asthma, for the last six years it's just went nuts. I've got a feeling the furnace helped start it and the rest of it just accumulated. Boy, sometimes if I don't have an inhaler close I'm in bad trouble."

Independence

"I have a car. I wanna do what I wanna do. I want to be independent as I possibly can to do what I wanna do. If I didn't have a car, then yeah I would. I've always had a car. That's why I drove a school bus, cause I drive."

"I would have to go really far out for my bike ride. The last three years I did the Banks Vernonia Trail, which is halfway to the coast on my bike....[I do that] Once a summer."

"I like being able to drive. That's a habit you can't give up. You can change your mind. You can't do that on the bus."

"Yeah, I try to stay upbeat and push the envelope, keep working it. I still ride my bike. I walk [my dog] at least four times a day. Occasionally keeps me up until 3:00 in the morning. Occasionally."

"I do a lot when I'm driving Bob around, he's 90. I've been helping him. I pick him up and take him places and we walk. That's about it, not much walking, not around here....Once in a while, my bike. It's only around here, too. I don't go out on the street with it very much. I guess have to wear a helmet now and all that garbage. I lived when I was a kid without one."

Caregiver Dependence

"Yeah, I mean I don't go very many places because when I get there there's either no parking or if I do find a parking place it's too far. Mostly, my friends will take me to a lot of places in the city. They'll drop me off and then park...Yeah, but I don't take the bus. That would be even worse, trying to climb up on a bus."

"[AIP means] Being able to stay in my house and hopefully without help. I have a cleaning woman come in once a month."

"Age in my home? I don't know. I never thought about it. Right now I can't do my yard work and my cleaning. I had a lady that came in and cleaned but it got to the point where we couldn't do the lawn. She seemed like the more she worked the less she did. Talked to the people about it and they're supposed to contact me so they can get me somebody else. I have a hard time standing up for a long time."

"Well, I like to stay in my own home....I sure do need more things, more help. Like I can't clean the gutters anymore. Some trimming I can't do. I can do some, but I can't do it all...My kids used to be able to do it but they can't anymore. Neither one of them are well."

Barriers in Home

ProxyR: "The stairs are a barrier. She can't go up. It's too confining because of the design of the house, the walls. That's why I moved her down here. That's where she would like to go. There's a lot improvements and additives I've done up there she hasn't seen. I tell her about it all the time."

"I had hell trying to get out of [the tub]. I had rails, but they weren't on the side. This is a side, if I'm getting out, but the rails are against the wall. They have one that's going up this high. If you're sitting, I think it's good if you're taking a shower. That's fine. But I decided to . . . as I got ready to lower myself in I said, oh my god, I can't get out of this thing. I was in the house by myself. I was in there for about an hour and half before I could get the water out and do all the different stuff because I couldn't pull myself up because I had just torn this meniscus thing."

"The old furnace that was in here was oil. For the last six years when you turn it on you can't see it, except when it clings to the walls. It blew a fine, black powder. Which probably didn't help my asthma any."

"Well, the stairs. I can go out this way and walk around, but that's more walking. The stairs, I wish they put that buzzer thing on so that you wouldn't have to walk and let somebody in all the time."

"Yes. Better for me to step, yes. As I get older it's been a challenge for me, steps. Then, I have the foundation on the backside of the home from a leaking gutter. I did get the gutters replaced, but I have the foundation where the gutters had leaked so much until it's kind of wearing away at the house, so I'd like to have that done."

"Door widening for my bedroom. I can't get in my bedroom. I can't get in the bathroom. I'd like some more [grab bars] for my bathroom so I could actually go use my bathroom. I can't use the bathroom. It's very inconvenient."

Opportunities in home

"[AIP] It means the world to me. I feel very blessed and fortunate to have what I have. Incredibly, emphatically blessed. Never complain. I have a house for me and [my dog] and I make it work. It's just a world of difference between being here and people that are developmentally disabled and pushing a cart, collecting garbage. Poor people, I feel for. I feel blessed."

Home Modifications

"It has one. It works great. I utilize it. I like that walk-in shower. I couldn't get in and out of the tub anymore....I found some [grab bars] at a yard sale. I installed them as best I could. I put on the porch out here."

"Comforting. Accessible. It really helped with accessibility and getting out of bed as you can see over here. And the bathroom, too."

ProxyR: "And then there's a video intercom too that I had setup so I could talk to her from upstairs....I call it my "mama monitor.""

"Yeah, and they also put the heater in here. They did that, too. I was really happy. I was really startled that they were going to do my roof and they said how about let's fix that water leak you had for three or four years? I tried to get something done about it. I imagine I spent about 15,000 dollars over the four years."

"Because we needed help with our bathroom because I couldn't take a bath anymore in the tub. I can't get down in the tub anymore and get out of it. They come and put a shower in for me, a showerhead and all that and fixed it up for me like that. It could be that way and a shower chair. Cause, I was before, throwing water over my body, soaping up, from the sink! Throwing water back over my body cause I couldn't bend over that far down before I had the bars and stuff put in. They put the bars in too."

ProxyR: "He can do it himself now. He can use the bars to get up onto the landing and into the house and get out of the house and get in and out of the bathtub as well. More independently than he was...he always needed an arm or kind of a physical assist to get up into the house. He had a grab bar in the bathroom, but having two is actually even more helpful. He just seemed like it was helpful to have more supports in place."

"Less stressed. I dreaded when rainy season came. I was always looking for leaks because I had a few leaks. Like in the garage and places in the house had leaks. That was a lot of stress taken off me with the roof. I was going to say, with that too. Now I've got something I can use."

ProxyR: "Difficult. Way difficult and very arduous before....[Now it's] Comforting. Accessible. It really helped with accessibility and getting out of bed as you can see over here. And the bathroom, too."

ProxyR: "She wasn't able to do that by herself beforehand....Yeah, she likes it. The pole has been an improvement. Had to make an adjustment on the location of the bed to the pole. As you can see."

ProxyR: "I strongly agree. They really helped her. She doesn't fall, and when she does, she's able to hold on to the pole and slide down. So, yeah."

"Well, it was really tough. I had really gotten to the point where taking a shower, I dreaded. The problem, I've got my knees, I've got bone on bone in my knees, I've got stenosis, I've got all kinds of sciatica and stuff. So, to swing my leg up over the tub and then get in there, I'm just shaky the whole time. So, I would try to wait 'til somebody came, but I can't do that, you need to take showers. I hated it, I just hated it and it made me nervous all the time. Now it's totally different. Now I just walk in, take my shower and walk out."

"[One in the] Shower and one on the outside, which I didn't think I needed, but I love it...It's really to get off the toilet. It takes the pressure off my knees when I pull myself up."

"Before the modification I was a lot anxious and stressed, because I knew my roof had been leaking and the insurance was reassessing. I was like, "Oh my god, I'm not going to be insured."...But, after, whoa, peace of mind. I was so appreciative. It was just like, I can live in my home I don't have to worry about not being able to get it repaired, I couldn't afford to do it. They stepped in and everything just came like, I didn't have to worry anymore. They had approved it and it was under control and I didn't worry.

"Well, we had a water heater go out. It flooded. It took the floor out in the bedroom and the bathroom to where you couldn't walk on it. We had that replaced. We had the tile replaced in the bathroom and also in the laundry area, too...[after] A lot safer. Especially for my wife because she had to use a walker."

"Tough and worrisome. I didn't know what I was gonna do. If we had to have the roof repaired I was thinking about taking a loan out on the house. Of course, I didn't want to cause the house is almost paid for and I don't want to take a loan out on it again. But, I thought if I had to save the house, I would. I was really worried about that and I was worried about the leak, and I thought well, I'm sure it's going to cost 6,000 or more to fix all of it. So, anyway, I was really happy when they called me up and said we're gonna put a new roof for you and how about let's fix your water leak too? I said, really? I was shocked. I was really happy they did."

"R: "Oh boy, everything. You did things that were so necessary that I, yeah. You did things that were . . ."

I: "Would have kept you in your house, huh?"

R: "Exactly."

"[Before] Precarious...Things falling apart, what am I gonna do? Desperation...I always let them know how grateful I am, because I am. I am."

Family Connections

ProxyR: "Because we have had like five generations come through this house in our family. So, it's been part of the family, like the meeting place. The center point."

ProxyR: "Aging in Place? That describes mama. That really describes mama. She's getting older and she likes to stay around her home. She doesn't want to travel anymore. She used to travel all the time when she was young. We used to go everywhere even before we had a

family, before she got married she used to travel when she was young. Now she just wants to be here, have the kids come over, the grandkids or great grandkids. She doesn't wanna go anywhere, she's tired....She wants to die here."

"I like home because my kids are here."

Opportunities in neighborhood

Public Transit

"I would say frequently [I ride the bus]. There's places I go and the weather and all the above. I have to use the transit system. I like it. I ride the bus and occasionally the Light Rail."

"Oh, all the time. I ride the bus like almost every day. I'm lucky if it only takes one bus. Sometimes, if I have to go to have medical it takes me an hour and a half to get to where I'm going. Everything takes, a lot of things take quite a lot of time. Some buses don't come as often as others. If I'm going somewhere and it has bus routes that come every 10 or 15, I love it. Sometimes bus routes come almost every half an hour. I'm a familiar face to the bus drivers....Really, I depend on buses and walking. That's one of the reasons I moved to Portland. I left Miami. Miami had a terrible public transit system. Really awful."

Shopping/Retail

"I do shopping therapy. That's mostly my entertainment these days. I go to Safeway and up to Fred Meyers and a Green Box store over on 148th and Stark"

"Yeah, Fairley's drugstore. They're the only one that have a fountain I think left in Portland. I got a vanilla milkshake up there the other day. I can't tell you how long it's been since I had one."

Connections with Neighbors

"Right, because this neighborhood is very interactive with each other, very close. Especially in the summertime when we all have our picnics or barbecues, 4th of July barbecue over here. The neighborhood gets out from around over here. Then there's another celebration down the hill and around the corner where another part of the neighborhood gets together barbecuing out there, lighting the firecrackers, the children do theirs first and then the adults. And then right down the street on Jessup there's another big group of families and we've been doing this for over 25 years. We all started pretty much at the same time. It just catches on. There's been no deaths, no fires, no accidents, because everybody's watching out for the children. The children are here, the adults are around eating and drinking their barbecue and their beer. Then when the children get done at dusk, then the adults come out with their [Inaudible] and light up the whole neighborhood. And that's how it is. Like for thanksgiving, it's hard to park your car. A lot of people will park in front of my house or down the side because there's so many families that have their meetings over here, their family gatherings over here."

ProxyR: "Oh yeah, with assistance, yeah. She'll go around the corner, she'll let me take her around the corner. She likes to see the house and then she'll talk to Annie. She'll talk to Richard across the street who is a doctor downtown and she'll go to this corner over here and

I'll push her around the corner to Tammy's house. Then she'll say hi to Mr. Green. It's just within I would say 200 feet.... Sometimes it will be every day. It depends on how she feels."

"Yes, I love this neighborhood. I love my neighbors. I have good neighbors, I'll put it that way. A lot of people don't have good neighbors."

"My neighbors, even though I'm handicapped, they check in on me, take care of me."

"Everybody's just really nice. [Name] lives over in that green house with the pickup truck there. He's like a son to me. If he's going to go to Safeway or something he gives me a shout [sounds like] and says 'I'm going to Safeway anything I could pick up for you?' He keeps me in the loop. These people up here, Mr. [name] and his family. They have a three-year-old who's just . . . I guess she's four now. Just stole my heart when she was like two. They're very kind and nice people."

"The neighbors are great. I love my neighbors. People all around are just so nice, really. I'm very satisfied."

ProxyR: "He does have a lot of people in the neighborhood and the shops that we go to that know him. If he loses those people that say, "Hey [name]", then I wonder how that would affect him emotionally or socially to lose that kind of connection he has with that map, the yellow. Both neighbors know [name.] Even bus drivers. We know many of the 71 line."

"Being in my neighborhood and at home. I'm in my comfort zone, you know?...As long as I can, I want to live here....I know the area and I like the area. There's not a lot of-, we don't have, say, crime, for instance. We have people maybe once and a while they'll break into somebody's car, but we don't have, at least I don't know of anybody just up and down the neighborhood having their place broken into or people stealing their stuff. I mean, it's been done before. People have done that. But, I'm thinking that the people who were doing it didn't live in the neighborhood. I feel comfortable in this neighborhood."

General Home

"[The house is] in a good location. The bus stop and it's near everything, shopping and stuff. I have no problems with that. And the doctors. They're close."

Transportation

"We would walk out to the road on 67th and then around, I don't know the actual name, maybe Lancaster. Then it hits 66th, take a right and then go 200 yards or less, 150, to Flavel and cross. There's two stops actually, it's really nice. It's just right on 66th and 66th Place....He's on transit every day, er, no. Some days I drive. I would say five to six days a week and if the weather is above 90 or below 40 he's generally not going out in the community."

Issues with Transit

"Yeah. There's just too much walking now, even to go to Gateway to go to MAX. I have to park the car, then I have to walk over the train, then when I get off the train downtown there's walking. It really has isolated me."

"I have a little bit of trouble sometimes putting my bicycle on. I mentioned that to the drivers a couple times. Actually, left a message at TriMet. I don't know why they can't just leave that down. It wouldn't be in the way or anything. Anyway, it's pretty heavy. I have trouble lifting it up and putting it down sometimes."

"A lot of it, where we go, it's a little complex. You have to take a lot of different routes. To go to Adventist there's not a bus that goes there....Yeah, fewer transfers and you still have to walk. For me, it's hard to walk. After the cancer and the treatments and all that [Inaudible.] So, you still have to walk from here all the way down and then take another....cause it's hard to bring the stuff too, when you're done. I don't have the ability very much to carry all the bags on the bus and it will take two or three, you know."

Accessibility

"That's one of the things I kind of like about the MAX. They have the little thing that just kind of shoots out there. If they had something that kind of shot out there, that'd be cool. Sometimes, like yesterday, when I was going to go to Kaiser to get my thing, I got on the 75 over here. I got off at Lombard [sounds like] transit and it's got too many poles and benches and stuff like that that are too close. I actually got stuck under one of their friggin' poles. You know, the round part? I got stuck under that because she didn't stop far enough up that I didn't go straight out into the pole. So, someone had to lift my rear wheels off of the ramp because they those pieces that come up on the side of the ramp, so that she could close the ramp so I could [get around]"

"The [bus] I usually use is 82nd and Duke. If the MAX was any better I'd use it. And that's closer....Well, it's real nice [the bus] designate the front seats for the disabled people. But if I can't get this scooter in there and turn it around right away so I can come off easier, there's no side view mirrors on this. I can't turn around that far to see. It was fun getting off the bus today. Usually I get on down at Johnson Creek or something, it's pretty empty. I can get on and the driver waits a few minutes and I can turn it around and be ready to go off, which is nice....What gets me is you got people that come on there with not only one, some of them three or four or five backpacks. You're getting slapped upside the head or hit someplace by a backpack and they don't notice the difference. They're so used to hitting things with them. They just keep right on going."

"We rely on the bus drivers or the MAX drivers to be cognizant of [name]'s a little slower than most people. He's obviously ambulatory, he's just slower. Getting up onto the MAX or off the MAX, when we pull into the Lloyd Center for instance. It might take a second or two longer than what most people do....The bus drivers generally can see us coming. It's helpful to have [name] be able to sit before the bus is going because he's a little uneven on his feet unless he has me to hold on to him. It's kind of awkward thing. It's helpful for him to be sitting when the bus is moving. Sometimes the number 9 or 72 is so packed that we're just holding on."

"What happens is, I don't mean to be ageist, but generally folks that are younger in either high school or in that age don't really seem to like . . . they look at [name], or they don't even look, they're on their devices. They're not cognizant of, this gentleman might need help, or, yeah. Sometimes to the naked eye he might seem like he's fine. He has trouble with his balance and it doesn't register for them. They're doing the best they can, I understand. But, it's older people and they generally tend to support . . . even when the bus is crowded, yeah."

"If I could squeeze [a monthly pass] it into my budget. It's doable now. It's doable, but, other than that, I don't know how to answer that question."

Safety

"Nowadays, [public transit is] more scarier. I'm sorry to say it. It's scary."

"I'm leery with riding the bus or the light rail. You hear so much about...Yeah, [it's a] safety thing. That's what bothers me mostly. If I can get the Lift or some other way, I would do that."

Automobile

"If I were to-, if I had a lot of different places to go and I was close to a bus line, I probably would. That way I wouldn't take my car."

Paratransit

"Not me, no. It's too difficult to get on that bus, a real bus, with that thing. I always call the Lift."

"Actually, I don't ride the bus. I haven't been riding the bus...I have had the [Lift]...take me to and from some of my appointments. I've had that in the past."

"Before, with Health Share, I would get the [Lift]. Now I don't. So, basically, I take the bus. I take it because the other transportation can come so early. You have to be ready. Then when they pick you up, you could be sitting there a long, long time. I remember when there was one person that I would see waiting. She would be waiting and waiting and waiting. I thought I could get home by bus faster than that."

"Most of the time I call up the Lift service, but they've been kind of pissing me off lately. When they show up you've got to be ready within five minutes or they leave you. They put you on the waiting list. The last time I got on the waiting list and waited I was in Johnson Creek Fred Meyer for two and a half hours and I have a bad bladder. I can't, you know? I get back in the bathroom, they show up, they drive off and leave you. Well, we told somebody to announce it over the-, well, I got news for you, when you announce stuff over the loudspeaker system, it doesn't go back to the bathrooms, so I still don't know you're there. Today, my assistant, she went down to the little store to get something to drink, because they give you a window of time on the Lift of half hour. They aren't never there exactly on time, it's usually after. So, it was quarter to 11:00 and the pickup window started at 11:00 and it's about three blocks away. She went down there and was coming back and the lady-, I didn't even see her. She refused to park in the spot out front. She said, well, people get mad at me. Well, that's what your emergency lights are for. You're a handicap bus, that's what you're for. So, she just took off. Makes you feel good all over. So, I had to take the bus from Glisan all the way home. 82nd Street sucks."

8.3.2.2 Mobility Quotes

8.3.2.2.1 Utah

Mobility at Home & Outside mobility

- Limited mobility of older adults is mainly due to their declining physical and cognitive abilities. Thus, for them, mobility issues are not limited to outside home travel.
 - R: I don't feel very young, some days especially. Mentally, yes. It's hard to realize that number's that big, but it is.
- Mobility inside house was well-addressed by the respondents, and that was directly related to the home modifications they received or anticipated such as railing on stairs or grab bars in bathroom.
 - R: Yeah. When we moved, bought this house, I thought it was wonderful to have those stairs. I used them for exercise. I'd go up and down and up and down. And now it's an effort. It really is hard.
 - R: The only barriers—well, it has that whole basement down there. And I don't really utilize it because it's really hard for both of us to go up and down the stairs.
- Many builders say and there are frequent notions that stairs are good because it makes you climb, but here you can see, it is not good for frail and disabled population. During our home visit for interviews, we could see many older adults just neglect basement or upstairs. Especially, many houses have washer and dryer in the basement. Unless they got moved to the main floor, older adults need to get help on their laundry.
 - R1: And he still lives in the house. And my mother died about two months ago, at 98 and a half. And so, they were able to live in their own house. They don't—they have the bedroom and the bathroom and everything on the main floor but the washer and dryer in the basement. And so, she didn't go down and do laundry because that was too hard on her at her age.
 - R2: I don't go downstairs too much. My granddaughter had the washer and dryer moved up here. Dave paid for that too now that I remember. Take the, the electrician to get the 220 up here and the plumber to bring my washer and dryer up here.
- And home modifications also address their enhanced mobility from home to outside home as well.
 - R: The only thing is I always just come in the backdoor because I had the railing there, you know, that gave me support. So, it's nice to have it out front. And it's nice to have it for other people if they come to visit me because I have a lot of elderly friends that need it also.
- She pointed that these accessibility improvements are also related to social connectedness. It helps her go out and invite her friends to come over.
- The problem can be addressed in different ways as well, when visiting others home or any other places.
 - R: So mainly—and, in fact, that's probably the limitation that I look at. Like, going to a house to see somebody, and they have steps, but there's no railing. And if there's a railing, then I have something to hold on to.

• Here we could see that we cannot really separate mobility at home with outside home mobility. Both need to be considered for older adults.

Mobility Aids

- A walker helps older adults as an aid to support them walking, carrying things with, sitting to, and getting exercised
 - R: Yeah. It's really great, and I have the walker that I walked years ago. It's in the kitchen there, not this one. It's made of iron, and a kid that was watering my lawn for me back then, I had him put a board across the bottom of it. And so, I was able to put groceries, like the milk, the heavy milk, rest, make sure that rested on the, on the board, and then other heavy things, and then, hang groceries from the handlebars.
 - R: And the idea was that they would be—not only could plant things in them, but it also gives me, like, a seat to sit on, that idea. So, no, sometimes in the—especially, say, if it's snowing hard, I really do feel almost trapped in here.
 - R: We go everywhere, but we use a walker. I need a walker. Not because of my legs but because of dizziness. (...) the walker is the best exercise equipment we have because we walk everywhere. And then I can sit down.
 - R: No. I can't get up to walk too much, no. I get out on the normal days I get out in my driveway and use my walker to walk back and forth, back and forth, try to exercise. And I got a bunch of exercises they give me at the VA that I've gotta do.
- Barriers to get around
 - R: The sidewalk's not very even. And it makes it hard to go for a walk because, you know, it's so easy to catch your toe in the raised-up sections. But other than that, that's the only thing I can think of that keeps me from getting out and, of course, the weather now. But that's something you can't control.

Amenities

- Older adults care neighbors to get along with; grocery stores and supermarkets; hospital; post office; park; police station for security and safety concerns; senior/community centers; church
 - R: Mm, boy. I don't know. Pretty much everything I do is right around here.
 - I2: In walking distance?
 - R: Oh, yeah. That's what's great about here. I have Smith's. I have all the— Walmart. Everything is right here. You, you couldn't ask for better.
- Some older people live in the neighborhood with no specific place to go and this relates to them not going outside.
 - R: I don't know. I'll be honest with you. There really isn't anything to do in this neighborhood. Very, very quiet. And you don't see a lot of people out. And so, I just don't go.

I2: So there just aren't any amenities within walking distance.

R: There isn't. There isn't.

I2: Like, no parks or no—

R: No. No.

I2: —shopping areas or—

R: No.

- R: You know, I really haven't thought of it. You know, like I say, I don't travel that much. I don't go anywhere that much. So, I just don't—to me, personally, I don't have no need for it right now.
- Shopping & Walking
 - R: I, I do shopping. I go shopping by myself. As long as I can get a grocery cart, I'm fine. Yeah. I, I can... I'm gone for two-three hours at a time, and sometimes I go just to walk. I've got to walk. So, I do that. And, but sometimes here at home I have to use my walker.

Mobility & Aging in Place

- Mobility matters a lot to enable someone to age in place whether they get assisted or not. It is not restricted to live in one's home, going to other places.
 - R: I think, to me, it means being able to not only live in my home and feel safe, say, taking a shower or something like that, but also to be able to go to the grocery store or something like that and be able to come back. (...) So, I think, mainly, aging in place is whether I can live comfortably and safely in my house but also be able to go to other places or even have, you know, like, somebody come get me and take me or something like that.

Neighborhood boundary when not walking outside

R: Oh. I was going to say, probably because when I go places, I'm taking the car. I've got some wonderful neighbors across the street. And I think she's about 93, 94, and he's maybe in his late eighties. And they go out on walks. But I don't do that. I don't go out on walks and things like that.

I: Yeah. So, what you consider your neighborhood is smaller than maybe your neighbors.

R: Correct.

Changing their transport mode

- Many respondents seem to have gone from driving to not driving or are planning to. When they did not or cannot drive they rely or will rely on family members.
 - "I don't know how soon I'm going to have to stop driving. I'm going to be moving down with my daughter in Solana Beach this summer sometime."
 - "I don't have a car. And my grandson took my car when I was 92. He said, "Grandma, you can't drive anymore." So that's why I don't have a car. But people will shop for me. And, oh, they'll take me to my doctor appointment. And wherever I have to go, I'm taken by—I don't know what company it is."
- A low-income older adult had to take transit because their car broke down and now they were transit dependent
 - "Well, the car was not sounding good. And my son had always taken care of the car for me. And he said, "Mom, I can't do it right now. I've got too many other

things." We have granddaughters and everybody, duh-duh-duh. I said, "That's fine." So, I took it to kind of an adopted son who owns Big O. Here's the manager of Big O. And he said, "Mom, the car, it's got a crankshaft—if it's going to stop, it's going to stop." So, because I wasn't ready to stop the car yet, even though Walt was a nervous wreck when I drive him around—because Walt had to stop driving two years ago because of neuropathy. So, we just kept going with this car. And we finally had to take some stuff to Trader Joe's. I thought, we're driving the car to Trader Joe's I don't care what happens. Then we're going to go to the VA. And we got to the car, and the power steering—nothing. Now, notice, Walt has not driven for two years, right. And he's making me nervous every time I drive. So, we went to Ace Hardware to get [laughs] power steering fluid. But then Walt, because of his dementia, didn't know where the power steering fluid went. So, he put it in the brake fluid thing. And then we found out it was power steering. So, I said, "What should we use? The two, the one two that we have?" He says, "No. I want to drive it. I want to drive it home." And I went, "Oh my God. This can't happen," but in my head. And I said, "No." He has been so wonderful about not driving. And he said he could do it. And from Trader Joe's all the way to here, he drove that car with no power steering. And so that was the last time the car was driven, and it was Walter did it. And he got us home. And it won't go anywhere anymore. That was just three weeks ago-two weeks ago, about the car. But before then, we were taking the bus. And we were happy about the bus. And I was, like, telling you that I really liked having the bus. And I didn't feel agoraphobic anymore. But every once in a while, we wanted to take [Bailey ?] to the park. And we had to be within five miles because the tow is only five miles. So, we would track what was five miles"

Public Transit

General feelings around taking transit

- Indifference
 - "It's not too bad"
- Attachment. When ask if they would move, a transit dependent older adult said:
 - o "Oh, I don't want to-not without my bus."

Transit dependent older adults close to transit-rich areas might use them all

• "Oh, the Trax. We take them all, the Trax, the Frontrunner. I go down and see my grandkids on the Frontrunner. Well, see, Walt has a paratransit pass. And I'm his attendant because he's suffering from dementia. And so, I've been qualified as his attendant."

Knowing where the bus/train stop is

- Some older adults do not know where the bus stop is: 16_MQ_041318-mp3
 - "I don't know." Most common response.
 - "I don't know because I drive. There is one right up across, right up here on the corner."

- "I don't know. I can't go out at all. It's because of my legs. I can't walk."
- "I've never done it."
- "No, I have never taken that."
- Most older adults seem to recognize where the bus stop is, but most do not use it even if they used it in the past.
 - "The closest is a bus stop—is right over here on 5600 South and the Van Winkle, on the southeast corner"
 - "It's over that way. But when we first moved out here, there were no buses. There was nothing. But there's a Trax stop. You saw the Trax stop. And I don't know. There used to be a bus stop on 40th West. I don't know if the Trax has taken that away or not. I don't do the buses."
 - "Yes. Bus just down Illinois Avenue and [Unintelligible 00:06:39] Street. [Long pause]"
 - "Yeah, right over here. [Inaudible] Road."
 - "It's right by the bank up there. It's about a mile, mile and a half away. It's the one that goes up to Snowbird and everything. And Jean's taken it up to Snowbird. But yeah. So, I know where it is. It goes to the Trax station down the hill. But I've never taken it."
 - "Oh, it's right outside my backdoor. Right there. Yeah. And it goes either north or south. We're very lucky. It's, what, 50 feet, 50 yards. Yeah. It's really, really great"
 - "But I think there's a bus stop all along here, because this is a main road here, 3500 South 33rd. Yeah. I would think that this corner someplace around here, there's a bus stop. Or over there on State Street. So, there's a lot of stores right on State Street there and 33rd South."
 - Bus "Yeah. It's clear down to 47th. Yeah. That's probably—what would you say?—maybe about six blocks, or eight. About eight blocks, I guess."
 - Bus "Up here at the intersection."
 - "Bus down State street, up 4^{h} South, up to the 9^{h} East to the clinic."
 - "Up here on the corner."
 - "They stop right here by Highland. And on 18^{th} and 21^{st} ."
 - "I think it's over there between California Avenue and I don't know what the other street is. It's four or five blocks down the street."
 - "Down on 7th East or 9th East."

Bus

Reason for taking the bus:

- More affordable than a car or a personal scooter, which needs more investment up front. Access to everything if transit dependent.
 - "I had to give up the car because a car's expensive if you're on low income."

- "I got a little scooter there, but I can't use it because I can't stand up on it because of my legs. I've been thinking about getting a motor scooter, but I can't afford it right now."
- "With the bus [I have] everything [I need]"
- "I get everywhere. As long as it's on. No, I don't have a car. It's not in my budget."
- One-car household
 - Would take the bus but "Not 100 percent. Not even 50 percent I would take it. When my wife needed the car. Yeah. I'm fine driving. I would take a car wherever I'm going."
- Car broke down
 - I never have. One time in 60 years that I've been in Salt Lake my pickup broke so I left it there and I had to take the bus.

Reasons for not taking the bus

- Have a car
 - "I'm still driving."
 - "Because I have a car."
 - The car "It's more convenient."
 - "I don't. I don't. I should. Because I don't like to drive downtown Salt Lake. I should ride the bus. But I don't. Because my daughter lives straight down 35th. There's an elementary school, 60th West, I think. And that would take me, you know, but it's just nice to have my car because I have stuff in the trunk and... I don't know. It's just easier. I get there in about seven minutes."
 - "I've never really had to. I think that's, that's the only reason. Yeah. I've never, I've never had to. I've always had a car. Yeah. And I've always been able to drive."
 - Would take the bus but "Not 100 percent. Not even 50 percent I would take it. When my wife needed the car. Yeah. I'm fine driving. I would take a car wherever I'm going."
 - "But, other than that, I have never used the bus. I always had my car, vehicle. I can still drive good, you know. Getting a little hard to raise my legs and get in the car, but, once I'm in there sitting driving, it does not bother me at all. I can drive good. I can, yeah, I can drive. I drive to the VA. I don't go anywhere very much, to the VA for my appointments and the Post Office to get my mail [...] And I try to make all my trips at once. If I go to the VA, on the way back I stop at the store and buy whatever I need. Then I don't have to go out. Sometimes, I don't go out for the whole week, do anything. If I don't have appointments, I just stay home, you know."
 - "Well, I've got a car. And I mean I don't know. I like to drive my car. So I would prefer to keep driving it. But at this age who knows how long I'll be doing that."
- Prefer a bike, car or taxi
 - "For probably three or four years I rode a bike when I didn't have a car. I rode a bike everywhere. I mean, I used to work at the top of a hill, the boulevard up there. I used to ride my bike up there and all the way down every day, snow, sun, and I finally was able to afford a car, so I bought a car."

- When asked if they ever taken a bus the person replied, "No. Well, I took a taxi to the hospital once. It's really weird. They tell you when you're going out to the hospital it's this price, and then when he come back it's \$20 more. And you cross over some—on 114th South is where the line is. But I didn't know that. And it was just lucky I had the money in my purse to pay it. So you've got to learn how to take taxis."
- Someone who would drive them or get what they need
 - "I'm taken—if I go to the doctor"
 - "It's not applicable just because you don't really venture out unless it's with family."
 - "I, I never used a bus. No. But I haven't been able to drive. Sandy does the driving. He takes me to my doctors, my appointments, picks up my prescriptions, pick up groceries when I can't go. Yeah. He's, he's my lifeline, really."
 - "I've been so sick. Like, this last time that I got out of the hospital and stuff, he's the one that takes me to the doctors, to my appointments, goes shopping, picks up my prescriptions. Everything. Yeah."
 - "I have on occasion, but I have not ridden the bus for years and years and years. Because that herd of kids that I've got here, they're always willing to take me places where I need to go. Besides my son Ted—we call him Peg Leg—he's been taking me shopping or whatever. And I have friends that will take me to church on Sundays and so on and so on. That's my form of mobility."
 - "I don't have a car. And my grandson took my car when I was 92. He said, "Grandma, you can't drive anymore." So that's why I don't have a car. But people will shop for me. And, oh, they'll take me to my doctor appointment. And wherever I have to go, I'm taken by—I don't know what company it is."
 - "No, I never have had to. No. But I think there's a bus stop all along here, because 0 this is a main road here, 3500 South 33rd. Yeah. I would think that this corner someplace around here, there's a bus stop. Or over there on State Street. So there's a lot of stores right on State Street there and 33rd South. Yeah, I would take the bus or the TRAX or—yeah, I wouldn't mind it. Actually, the TRAX comes on Second West right down the street. Like this is—is this Main? West Temple and then Second West there's a TRAX down the street. Oh, yeah, that's the first thing that this was advertised with. There's stores all around here and TRAX too, yeah. Yeah. No, if I had to, I probably would. But I don't want to take that chance, even though they're there where I'm at. Huh? No, it isn't [convenient]. And I tell—I have a daughter that's—that drives. And I tell her, you know, if I can, I would like her to drive me around too, because when I sold the house, I bought me a newer car. And I think—I don't want to drive. I've been driving so much, and I think that—you know what? Getting to a point where you get tired of—I go to the store, and then to bring the groceries and get them down and all that, I said you need to think of that and—because she lost her driver license. I said, "You need to go get your driver license and drive me around. And, you know, you can use my car, and we can go." Because she lives alone too. Her kids are grown already too. And she applied for disability also. And we're very close, me and her. She's next to my youngest. Yeah."
- Do not know how:

- "I don't know how. I don't know."
- Walking distance:
 - "If there was a place closer by that I could catch the bus."
 - "Well, because even taking the bus and, say, it would drop me off someplace. And depending on where I wanted to go, that's a block or several blocks or—on my own getting there.
 - "Because, you know, I can't... I couldn't walk from here to the corner. I can't, I can't walk that far. I mean, free walking. I can walk if I have...Probably I could do it with a walker."
- Walking or being alone:
 - "But not, not just walking alone. I, I couldn't do it. Yeah. Yeah. I, I know I couldn't because sometimes I park my car on the side here. And I struggled to get from here to there."
 - "You know, if somebody's with me, maybe I wouldn't be (afraid of taking the bus), but if I'm not—you know, in those electric chairs that you take, and the electric goes out, you don't have—you can't move them."
- Not convenient:
 - "Not very often. It's not convenient."
 - "Well, if it was more convenient. Because they really did used to have a bus stop right over there on Carnation. And if I could just walk over there and take a bus I'd love to do that. It would save me a lot of money."
- Not comfortable
 - "No, I haven't tried UTA or any of those. I don't think I'd feel actually comfortable on any of it, I used to ride track, but I don't want to get on any of that stuff."
- Reliability/Infrequency:
 - "And I was depending on the bus to try to get me to go to work. It had a bad habit of not coming twice a week.
- Would not take them to the places they want to go
 - ^o "Because, at my age, I—my son lives in… He's building a home in Eagle Mountain. So, I can't ride a bus there. Because it's just like, forever. I tell him I have to pack for three breakfasts to get over there. And then another son, my younger son moved to South Jordan. And 90^h South and West. They're out there where those new houses are. He built a house out there. And then my daughter just lives down the street. And my other daughter lives over by Hunter. So, there's really not places that I need to go on the bus. Do you know what I mean? My doctor's just down here on 41 by Bangador [phonetic 00:11:14]. And other than that, I don't have any other (places I go)—maybe I should. Only because like, I'd like to go to the planetarium. I thought that'd be cool. And the Discovery place at Gateway for the kids. I thought that'd be cool. But I'd never drive down there (seems it would be too far to even drive)."
 - "They used to have buses that ran in the neighborhood but they don't do that anymore. I wish they did because I could get rid of my car and go to the grocery store and that kind of stuff."
- Fear of getting lost

- "I'm always getting lost. That's my other thing. If I don't know where I'm going. And so, it, I just feel better in my car."
- Unaffordable:
 - "If I could squeeze it into my budget."
- Safety/ Accessibility: Those using wheelchairs might have never taken public transit and might even be afraid of the bus because they might fall over and becoming injured.
 - "You know, if somebody's with me, maybe I wouldn't be (afraid of taking the bus), but if I'm not—you know, in those electric chairs that you take, and the electric goes out, you don't have—you can't move them."
 - "But for me, I have trouble going up stairs. I can—when I go down—you have the muscular control to, you know, just go down a—and I tend to kind of—like that. It's that muscle control thing. And so, the thought of barely making it up into the van. And I know they have the lowered steps. But some of these, even in the bus, I've seen the steps look like they're about—really tall. So, for the average person, that's great."
- Safety/Crime:
 - "And you don't know who's sitting behind you with what, if they got a gun or knife. We got a lot of gangbangers out this way, big time."
- Crowds/Health:
 - "As you get older, you don't want to be out in crowds and stuff because, you know, you pick up all kinds of germs. So, we try not to go into big crowds of people."
- Social stigma:
 - "You know, I see people waiting for the bus all the time. And I think, how sad. You know? I have my car. You know? And there they are in the snow and in the rain. So, maybe it's just more... Plus, I don't... I really don't like to be around people I don't know. I know that sounds petty. But at my age, who knows?"
- Do not need it because don't need to go out:
 - "Do not work anymore"
 - "I don't go anyplace. I don't need to."
 - Talking about the grandkids, "I don't go anywhere with the kids. Sometimes I'll take them with me somewhere. A drive-thru. Like, sometimes I'll treat them to McDonalds or something. But I don't take them out."
 - "Pretty much everything I do is right around here."
 - "You know, I really haven't thought of it (taking the bus). You know, like I say, I don't travel that much. I don't go anywhere that much. So, I just don't—to me, personally, I don't have no need for it right now. Probably in the future, I wouldn't say I wouldn't ride it; I would in the future. But, right now, I don't have no need for it, you know what I mean?"
 - "Like my son said, the Walmart on 5600, he's a security officer there sometimes. Besides his, him being a Sargent in West Valley Police. And he told me, don't go to that Wal-Mart. There have been women that have had their purses stolen. You know, they cut the strap and take that. Or they assault you in the parking lot and take their purse your groceries. And I went, 'People do

that?' Because, see, I don't get out much. Except, I go to Murray, to my missionary classes."

- "But if I had more places to go, I'd take the bus in a heartbeat. Because I hate parking. Plus, like I said, I don't like to drive on the freeway. My daughter's going, "Just get on the freeway." I'm old fashion. I'll just take the back roads. Don't shine that in anybody's eyes, please [...] I just, I've just seen too many things happen. You know? And I think... Plus, if I'm on the freeway and I see the sign that says Midvale or something, this way, and I go that way, well, you can either go this way or that way. And it's like, I'm too confused. And I've caught myself on my way to Wendover before, going, there was… So, yeah. Yeah. But I take the backroads. Even when my mom lived in Midvale, I always took the backroads. And since she's passed, I don't go that way anymore. Unless I go to the craft store, Hobby Lobby in Draper. But… And that's once every great while. Because my craft room is already full of enough material. I better use up what I have."
- General mobility issues related to deteriorating health such as not being able to walk, not seeing well. It would require a lot effort from their part.
 - "I wouldn't be able to use it at this point, I don't think. It's be very hard. I could because there are people that use it with a cane. But it would be hard."
 - "My legs are very, very weak. And my, my back hurts a lot all the time. Yeah. A lot. A lot. Yeah."
 - "Well, one of the things that—just even, like—when they start talking about the driverless cars. I thought, Whoa. Wouldn't that be nice? Because they have these vans and things that pick up different people. But for me, I have trouble going up stairs. I can—when I go down—you have the muscular control to, you know, just go down a—and I tend to kind of—like that. It's that muscle control thing. And so the thought of barely making it up into the van. And I know they have the lowered steps. But some of these, even in the bus, I've seen the steps look like they're about—really tall. So, for the average person, that's great."
 - "He doesn't—no, he won't even walk to the mailbox, you know. He used to, but that was part of his—he used to smoke and drink a lot too, but he's given up, I think, because he doesn't want to go to the store. He doesn't want to go anyplace. But, you know, that's sad for him to do that, because he's not that old. He's 78, I think. He's not even 80 yet. But, you know, you have to keep active to be able to do a lot of things that you need to do."
 - when ask what would need to change to take transit the person responded, "I don't think really anything would be helpful. It's just my way of thinking with it, that what I got, and not being able to get out and do anything. I'm a fisherman from hell but I can't do that. I have no—I can't use my right hand to hold a pole, or... So, I just kind of"
 - I: The bus. [Long pause] And then I would assume that the reason why you don't use public transportation anymore is because of your eyesight?
 R: Hm-hmm [affirmative].
 I: And your back issues?
 R: Hm-hmm [affirmative]. It's more my eyesight.

I: When, when would you say was the last time you probably used public transportation?R: [Overtalk] The last time I what?I: That you used public transportation.R: Oh, gosh. I will give it 10 years ago.

What would make them take the bus

• "Well, if they would run their buses out here in the Holladay area, ride them until about two o'clock in the morning, if that'd be the last stop coming out here, if they would do that, then I probably wouldn't have needed the car to go to work"

Where to people take the bus:

- Stores
- Health-related trips
- Visit family and friends

Trax - Light rail

Most people seem to knowing where it is

• "The TRAX comes on Second West right down the street. Like this is—is this Main? West Temple and then Second West there's a TRAX down the street. Oh, yeah, that's the first thing that this was advertised with. There's stores all around here and TRAX too, yeah."

Reason for not taking the train

- Not accessible
 - "I, it had the ramp that I could walk up and then the new ones, the newer ones. But, the one, the blue train that goes uptown is the old one with the high thing, and you can walk up the ramp and they even open the door and help you in and out, you know."
- Too far to walk to/use wheelchair
 - "Well, see, therein lies the problem. You saw it. You know where the Trax is. There's not a prayer Ed could walk from here to the Trax. Even with a walker, he couldn't do that. I think we've been on the Trax once in our whole life. This was a while ago. Years ago, yeah, he could walk there. But he couldn't now. So, we don't do that."
 - "And they haven't had it here for a few years. We had to walk 13th South. And 9th West before we could catch a bus. And if we didn't end up there, we had to go over here on 21st South and walk over there to catch a bus.
 - R: "Why I don't use it? Because it's really not accessible. You'd have to walk from here over to there.

I: So, what would make you use transit more often?

R: If the Trax stop was closer. Yeah [laughs].

Reasons for taking the train

- Access to downtown, access to the Mormon temple and the history library, expose grandchildren to experiences, has park and ride options for seniors, feel safe because driving in the freeway or city streets, convenience, avoid traffic, not having to find parking one at Temple square or downtown.
 - "Well, maybe if I have a particular thing to go into town for, I'll drive over to the bus stop and then get on light rail and take that into town and back out."
 - "Well, the only reason that I would use—we have used public transportation—but we have driven down the hill to the Trax station—is to go downtown to Temple Square. Jean likes to go to Temple Square. So, we have gone down the Trax down there. Mostly, I would do it to expose Anna Jean—because I'm kind of like her nanny—expose Anna Jean to things that she's never done before."
 - "I like to—my, my daughter and I usually go park at West Valley. And then we take TRAX downtown. We took the kids to a circus. We've taken them to Disney on Ice. We take TRAX. It's just so much easier. You don't have to find a place to park."
 - "...and park there, and they have senior parking. And then, you ride to the family 0 history library, and, and what is the reason to take TRAX, specifically, to go there? I take it because I feel quite safe. I don't have to drive on the freeway, you know, or on the city street. That's, you know, to me, I, I do feel quite safe in taking the TRAX. I just, it's just more convenient to take the TRAX. My husband just insisted that I drive the car uptown, and I wouldn't do it. It's just more convenient. You don't have to fight all that traffic, you know. You don't have to fight the traffic. It's cheaper than driving your car up there and paying to park it. A good 10 years ago I started riding the TRAX. And, I used to go every week, you know, and then, my husband got sick and I couldn't go. And, I haven't really gotten started back because I've got too much to do. Oh, I learned to lie to my husband for my children. I used to tell him that. He'd say, "Where did you park?" And, I'd say, "There's a steak center up there that's a good place to park." Because people who came out of town, and the reason why I knew about it, because people came out of town and told me about it. They would come from all, someplace where they couldn't take the TRAX. I lied to him. I learned to lie for my kids. I said I learned that from my teenagers, you know. "I didn't know. Mom, this..." Anyway—I just wasn't going to—He would insist on driving me up there, and of course, you know, by that time, I, I didn't even feel safe for, for him to come and get me at the TRAX. He said, "I'll come and get you." And, I, I said, "No, no." So, that's why I started riding there, because I didn't want him taking me there and coming and get me and then, then having to come and get me during real heavy traffic, you know. I just-That was ridiculous, so. He felt like he had to take care of me a little bit."
 - "We take Tracks downtown once in a while. Buses were kind of awkward. But if there are events going on downtown it's easier to take the tracks than try to drive downtown and park, walk around wherever. Yeah. Parking is an issue. But I would say we might take Tracks a couple times a year and that's about it."

Frontrunner - Train long distance

Reasons for taking the train

- Learn how and found it entertaining: 15_DB_032218
- Convenience: Most likely to take the train if it implies convenience such as avoiding an accident, avoiding driving and not finding parking downtown: 23_LC_050118, 15_DB_032218

Where people take the train:

• "I go down and see my grandkids on the Frontrunner."

Paratransit

- "I've known other people that have, but I never have. And my brother used to live up on 9th East. He was in assisted living. And he used to take the bus to come out to visit me. And so, I learned how to—I learned a little bit about it from him. But I've never even ridden the bus."
- "Well, see, Walt has a paratransit pass. And I'm his attendant because he's suffering from dementia. And so, I've been qualified as his attendant."
- "I was using the Aging Senior Wellness Transportation at Salt Lake County, but I haven't used that since I got the van and my chair and everything, so. Oh, they'd come pick us up for doctor appointments. And my wife still does use them occasionally for her doctor appointments. My doctor appointments, I'll call a week—Get a ride from them, so I don't have to ask people for a ride. I don't drive because I have glaucoma, and so you find out who really says they're your friend or whatever the case may be, when you call and say, "Hey, I need a ride here." It's hard there to get where we need to go. We've got so many to drive the van, thank God for little favors, but they have their lives and they have their jobs and stuff, so..."
- "I've seen one on TV the other night that was advertised that they could come in the house to get you, take you wherever you're going. They're not telling anybody they're going to charge us but they do all the time. Everything they do, they charge us. Yeah. It's not exactly \$5.00. A few dollars per ride. And I can put gas in my son's car and he can take me where I have to go."

8.3.2.2.2 *Portland*

Past Modifications

"[My mobility] hasn't changed an awful lot because I'm pretty mobile. [The grab bar] is was preventative. When I needed it kind of stuff as I get older. I'm 68 years old. My husband is two years older me than. Just like with the knee kind of thing. You bounce back, but you gotta know [sounds like] kind of stuff. That was for prevention. They also wanted to get rid of my tub and get one of those shower things where you stand up, but I didn't want that I want to be able to take a bath if I want to take a bath. That was something that was offered."

ProxyR: With the ramp and the garage door the respondent could now get in and out of her home with her electric scooter whereas before she had to leave it outside and enter the front door "[With the ramp] I can come and go more easily...[get the scooter out easier]...easier to get in the tub [with the tub cut-out].

"It has [a handheld shower head]. It works great. I utilize it. I like that walk-in shower. I couldn't get in and out of the tub anymore....Yeah, the [grab bars] were laying around. I found some at a yard sale. I installed them as best I could. I put on the porch out here. That's where it landed."

Proxy R: "Comforting. Accessible. [The modifications] really helped with accessibility and getting out of bed as you can see over here. And the bathroom, too."

"Well, it was really tough. I had really gotten to the point where taking a shower, I dreaded. The problem, I've got my knees, I've got bone-on-bone in my knees, I've got stenosis, I've got all kinds of sciatica and stuff. So, to swing my leg up over the tub and then get in there, I'm just shaky the whole time. So, I would try to wait 'til somebody came, but I can't do that, you need to take showers. I hated it, I just hated it and it made me nervous all the time. Now it's totally different. Now I just walk in, take my shower and walk out....It's really to get off the toilet. [The grab bar] takes the pressure off my knees when I pull myself up."

Future modifications

I: "If you could make any modifications...what would it be?; **R:** "My front and rear steps, because I've fallen. I'd love to get those redone where they could be...better for me to step. (...) As I get older it's been a challenge for me, steps. (...) I did get the gutters replaced, but I have the foundation where the gutters had leaked so much until it's kind of wearing away at the house, so I'd like to have that done."

In home mobility

"The stairs are a barrier. She can't go up. It's too confining because of the design of the house, the walls. That's why I moved her down here. That's where she would like to go. There's a lot of improvements and additives I've done up there she hasn't seen. I tell her about it all the time."

"Let's face it, I'm not going to be going up [stairs] to play the piano."

ProxyR: "The stairs are a barrier. [My mother] can't go up. It's too confining because of the design of the house, the walls. That's why I moved her down here [to the split-level basement]. That's where she would like to go. There's a lot of improvements [upstairs] she hasn't seen. I tell her about it all the time.

"My daughter said, why don't you get in a hot bath? I had hell trying to get out of that. I had rails, but they weren't on the side. This is a side, if I'm getting out, but the rails are against the wall....But I decided to . . . as I got ready to lower myself in I said, oh my god, I can't get out of this thing. I was in the house by myself. I was in there for about an hour and half before I could get the water out and do all the different stuff because I couldn't pull myself up because I had just torn this meniscus thing."

"Right now, other than the fall I'm okay. I be careful with the way I walk and everything....I fell several times, but once it was very scary. I ended up going to the doctor to make sure I was okay.

That really made me feel like I'm getting older now and I have to be more careful. I can't turn and move. I have to pace myself....As long as I am able to be mobile in my home I would like to stay here. I'm thinking another 20 years [laughing.]"

Assistance

R: "But I can't go anywhere by myself. I need an electric wheelchair. I can't get out the door by myself. I can't do anything by myself.

ProxyR: "Oh yeah, with assistance [my mother] will let me take her around the corner. She likes to see the house and then she'll talk to Annie [and] Richard across the street who is a doctor downtown and she'll go to this corner over here and I'll push her around the corner to Tammy's house. Then she'll say hi to Mr. Green. It's just within, I would say, 200 feet... [We go] once a week....Sometimes it will be every day. It depends on how she feels."

ProxyR: "We would need the door widened and it's recommended that she have an electric wheelchair for outside by herself and her insurance won't pay, but I would like to buy her a used one just for in here. Because she could do the loop in here with one and not get in too much trouble. So, that's our goal so she's more mobile while she's in the house. Anything outside the house I can help her with.

I: "What does 'Aging in Place' mean to you?" **R**: "Being able to stay in my house and hopefully without help. I have a cleaning woman come in once a month."

"I would love to live here even if I have to get a caregiver to come in and assist me with some things... I'm trying to be open-minded about what is best for me and having others to help me."

"Aging in Place? I have no idea what that means. It means, I don't know, maybe like, I've often told people I don't ever want to have to move again. This place is kind of hard for me to afford, for us to afford. Because we don't have Section 8 or anything like that. But the rental here is fairly reasonable for the size of the house it's \$1175 a month, so it's really reasonable for this size of house and whatnot. I've been living here for 17 years. 15, 16 years. I love my neighborhood, I love my neighbors....Everybody's just really nice. [Name] lives over in that green house with the pickup truck there. He's like a son to me. If he's going to go to Safeway or something he gives me a shout and says 'I'm going to Safeway anything I could pick up for you?' He keeps me in the loop."

Proxy R: "Oh yeah, with assistance, yeah. She'll go around the corner, she'll let me take her around the corner. She likes to see the house and then she'll talk to Annie. She'll talk to Richard across the street who is a doctor downtown and she'll go to this corner over here and I'll push her around the corner to Tammy's house. Then she'll say hi to Mr. Green. It's just within I would say 200 feet."

Outside mobility

"No. I [ride the bus] once in a while if I've got business. My son was getting a name change downtown and needed my signature, so I braved the bus. I used to do the buses a lot before I had

a car. When I left the first time. I didn't drive or anything. But, downtown has all changed and my eyesight is not good so I couldn't do landmarks. I used to know downtown like the back of my hand. 30 years in between changes things. Plus, the trees were about 30 feet. It's like a forest in the middle of the city."

"Two or three times a week [I get out walking]. Traffic [is an issue]. You've got that flashing light down there and they ignore that."

"Yeah, the speed bumps. I don't think anybody likes them. They're horrible. They don't stop the people that speed. They just fly over it anyway. Other than that, everything is reachable here."

"**ProxyR**: It would have to be there's no sidewalks. There would have to be sidewalks. The traffic is too fast, it would need to be slower. Traffic and sidewalks. There's quite a few people out here. Not a great deal, but there's quite a few that I know that are in wheelchairs that traverse. The whole complaint is on Killingsworth there's hardly any sidewalks. The ones that are the people don't cut back their bushes. I went out there myself and had to cut back bushes a block that way and a block down that way because I had problems walking down the street without getting hit in the face sticker bushes from rose bushes or from arborvitae. Because there was no sidewalks and the ones that were kept so poorly, I walked in the street. That's where the wheelchairs drive at, in the street. When I cleared that off, now some of them ride on the sidewalks. Others still do the street. There are no curb cuts around here, none. Until you get to 42nd."

"That would be a good thing, lighted crossing, better sidewalks, and have sidewalks period, cause some areas I walk in there's no sidewalk and I have to get into the street and I try to cross over to where I can get a sidewalk. I'm really, really leery about that. Some areas not developed don't even have a sidewalk."

"I came with the idea that I need public transportation, I really can't go anywhere without good public transportation. So, I picked here. So, basically, it's to be able to stay in my house. I like to have a yard, I've always had my own place since I was 23 years old."

"One [issue] is that unlevel concrete or broken concrete. Portland is pretty. I like the landscape from here when I'm walking. I've fallen and hurt myself because of those kinds of things. I see that they have access for wheelchairs, which is perfectly fine. The two trees out here, both belong to the neighbor next door, but the root is over here where I live, which is broken and whatever it is, because the root has been there longer than me probably. That's a hazard. All day long. There're some roots coming up but I can't afford to fix that. That type of stuff. That's everywhere. Especially when you have these old roots coming up. There's a lot of that."

"Yeah. I had to give up the car because a car's expensive if you're on low income. I got a little scooter there, but I can't use it because I can't stand up on it because of my legs. I've been thinking about getting a motor scooter, but I can't afford it right now. [I ride the bus] about every other day or probably every day. Quite a bit. I use a bus pass."

"Yeah, I walk [my dog] four times a day up to the park and I ride my bike down to Safeway, sometimes three or four times a day."

"I'm in the pool three days a week. Then I was doing Tai Chi and that was at the Hollywood Center. I haven't done that because on the next level, you have to stand on one foot and my balance is not good enough with that particular thing and I didn't want to injure myself. That's what brought me to the pool. When the weather is nice it's nice to walk. Because of the injury I kind of baby myself. I also go to 42nd [Inaudible.] I just did that maybe a month ago. It was a year ago and I was scared to do it and I was fine. I don't want to over kind of baby myself with the torn meniscus thing."

"Really, the climate and weather [is a barrier], I just have no choice. And you can't change it so I don't know what to tell you on that. It doesn't stop me. If I have to go to the grocery store I have to go. If I have no food I have no food. So, it doesn't stop me. I can't say that. Maybe somebody that didn't drive, but in my case. I don't even think about that."

"I would say [I go to the grocery store] at least three or more times a week. I have to carry everything. I can usually only carry about two days' worth of groceries, even with a cart. If not, then a cart is too heavy if you put too much. Getting off and on buses. I can only carry enough groceries for a couple days. I go about three times a week."

"Well, up here on 74th there's no sidewalks on one side, or both sides actually. In some spots there isn't paved roads. When we'd walk all the time we'd have to walk on gravel or whatever. So, there was that street there. I think as you go down 174th and Powell it's the same way. Oh yeah, the side streets, some of them don't have sidewalks. Otherwise, everything is pretty good."

"Yeah, benches. When I walk I like to sit down and rest. I wish they'd have it along the path by the water. That would be really nice because you can sit there and look at the water. I'd sit over there".

"[Crosswalks are] really the problem. I mean, really. It's funny, they do have a really good crosswalk in front of the Eastport Plaza with flashing lights and everything. We really need some over here. People actually stop. Here they don't. It's funny, you would think this little area here that not that many would be crossing, but a lot of people use that crosswalk." "Uneven pavement sidewalk, you know. I have fallen on that walking. I'm more alert about it now. When I do my walking around that's what I encounter mostly."

"They just put that new sidewalk. Prior to that we had a dirt walkway out front. I fell. I don't know what happened. I was knocked out colder than a mackerel. I've got a plastic nose. I lost my teeth. That was in the parking lot here. It used to be full of potholes. Serious potholes. It was just let go. Nobody every fixed it. After I fell they decided . . . they just kind of went up the middle as you can see. They paved the whole place. I'm still having a lot of trouble. I never complain. I'm out of the old school. You don't complain about anything. But, I spent two weeks in the hospital. When they took me there I was unconscious. They said I fell. I don't know. I don't have any memory of it. It split my nose wide open. Broke both my dentures. Knocked me out colder than a

mackerel. They treated me pretty good for a while, I guess they were afraid I was going to sue them. I don't complain."

"That would be a good thing, lighted crossing, better sidewalks, and have sidewalks period, cause some areas I walk in there's no sidewalk and I have to get into the street and I try to cross over to where I can get a sidewalk. I'm really, really leery about that. Some areas not developed don't even have a sidewalk."

"It's hard on me. It hurts, my whole body is in pain because I have osteoarthritis and fibromyalgia and I have no cartilage in my knees, I have glaucoma and I had a partial cataract surgery here last September and it didn't quite turn out the way we had hoped it would, because I could see better before the surgery and now it's not as good because there's a ripple in my corneal thing because they have to go in and surgically stitch it down, case it wasn't staying, and it made a ripple in it. So now I kind of see a little double a lot of times, or not as clear."

"Oh, well yeah. There're no sidewalks up and down 104th so it makes it hard for me to navigate around. I can't navigate the rock and the holes and the mud and all that. People will go along and they'll call you names and everything because they're mad you're a little bit in the street. They still got room to pass you, but I guess they're afraid they're gonna hit you. I understand that. They don't have to do the name calling and that. I mean, how would you like to be me and my walker trying to walk and having a heck of a time walking because I grit my teeth when I'm walking because I'm in pain in my legs trying to walk because I'm walking stiff legged? My knees don't navigate like knees would if you had cartilage in them. So, yeah it makes it rough. Even in the wheelchair. I wheel myself, too. I'm always doing my arms. I have a lot of pain all over because of the arthritis stems in my lower lumbar and radiates out to everything."

"Traffic [on Division St.] is constant and they have a stoplight just about every block. It really gets congested out there in the morning and at night. You come out here and if don't catch that light you sit there cause that's an extremely long green light right up here. It's real hard to get out on it from here....[pedestrians] get run over by cars all the time. They cross Division against the light or they won't go down to the walk."

"Oh yeah, the curbs. Getting down off of them. After you fall on this [motor scooter], I've fallen about five times. You get a little paranoid. My in-home therapist, every time he comes over he says, when are you gonna get that thing straightened out? You realize you're leaning to the right side all the time? I said no. Every time it falls over it's to the right."

"When you go over some of these old driveways. Driveways now are at a lot less of an angle. Going over some of these old ones and I feel like I'm [leaning]. . . .I went to Fred Meyers up 82nd Street. There are some places where the edge of this cart is damn near hanging over enough to get into the traffic lane. That's not too cool."

Proxy R: "Speaking on his behalf, if I was putting myself in his shoes, I would say that I rely on my staff to watch out for obstacles in my way, my path. Uneven sidewalks, limbs or branches in my pathway, curbs. I, [name], can walk down declines, a driveway, that kind of angle, but if it's

severe, then I can have problems falling or yeah. . . . the curbs aren't quite made suitable for [name] to keep walking. I have to stand there, stand in front of him and help him up the curb."

"Almost every day. Sometimes I will miss morning and I might go in the evening. Sometimes I would miss the whole day. Several times a week I go....Now, the only obstacle I have is when I'm walking up 162nd. I don't have enough space going under [sounds like] the overpass. If they could push that back a little bit that'd be good."

"So far, I'm halfway amenable to go over to the neighbors, making things work, I pay my bills. I ride my bike to stay active a little bit. I walk [my dog] and get fresh air. I just keep pushing the envelope. Someday I'll fall. We all fall. I don't know who to call or where to go or what to do. It's out of my hands."

Changing needs for shopping (online options)

Proxy R: "We've been getting groceries delivered. I found a way to do it where it's not expensive. It's free, actually at Safeway... All these stores are going to start having it, it's the future, everyone's doing everything online. We haven't had to go as much as we used to. That's affected us a lot...In the last 20 trips we've made or in the last...we've almost never found what we're looking for, because it's so limited in terms of merchandise and what they have in there. Once we can shop online, the malls are closing because of that."

Automobiles

"Yeah, I mean I don't go very many places because when I get there there's either no parking or if I do find a parking place it's too far. Mostly, my friends will take me to a lot of places in the city. They'll drop me off, and then park."

"No. I don't like [public transportation]...I like being able to drive. That's a habit you can't give up. You can change your mind. You can't do that on the bus."

"[I would ride the bus more] if I were to-, if I had a lot of different places to go and I was close to a bus line, I probably would. That way I wouldn't take my car."

"I have a car. I wanna do what I wanna do. I want to be independent as I possibly can to do what I wanna do. If I didn't have a car, then yeah I would. I've always had a car. That's why I drove a school bus, 'cause I drive."

"**Proxy R**: "....He's on transit every day, er, no. Some days I drive. I would say five to six days a week and if the weather is above 90 or below 40 he's generally not going out in the community. Driving is more for, well, I'm his facilitator, so I'm kind of the house manager. I take the car and we go out to Bob's Red Mill for instance, or to get big rolls of toilet paper or laundry soap that I could take on TriMet LIFT, but if I want to do multiple stops in a shorter amount of time, I take my car. Generally, we bus it and just do like, Winco, which is on 82nd and Bell. Then we might go to Woodstock to Safeway there. Bi-Mart is in that neighborhood as well. It's only when the weather's really hot that we say, staff, don't take him out. In terms of heat stroke, any heat kind

of issues or cold. He's not going to be able to tell us. He actually likes to take off his clothing. He's not all that safe."

"I do a lot when I'm driving Bob around, he's 90. I've been helping him. I pick him up and take him places and we walk. That's about it, not much walking, not around here."

"No, but I know I'll have to because I don't drive anymore. I have a couple of nice friends that have been [driving] me but I know that's not going be forever either. She's also in her 90's. Both of them are, come to think of it."

Public Transportation—Negative experiences/barriers

"We don't ever go anywhere anymore. We probably won't ride [TriMet] ever again."

R: "I used to ride the bus. I hate TriMet. I'll never vote for anything for TriMet for the rest of my life. You can't get ahold of them when you call them up, ever. Ever. It took me two weeks to find out how much it cost me to ride the bus. I couldn't get ahold of anybody to find out what it cost and I still don't know if my caregiver gets rides for free, if I use a senior coupon, a dollar coupon, can he ride free if he's helping me? Or how does that work?"

Bike

"I have a little bit of trouble sometimes putting my bicycle on [the rack on the bus]. I mentioned that to the drivers a couple times [and] left a message at TriMet. I don't know why they can't just leave that [rack] down. It wouldn't be in the way or anything. Anyway, it's pretty heavy. I have trouble lifting it up and putting it down sometimes."

"I: Do you ever ride a bike?; R: In the summer time I will. Yes...I will probably ride it very often. So, I would say a couple times a week. Not every day."

"Right. Once in a while, my bike. It's only around here, too. I don't go out on the street with it very much. I guess have to wear a helmet now and all that garbage. I lived when I was a kid without one"

Barriers to bus

"I don't take the bus. That would be even worse [than driving and parking], trying to climb up on a bus...I never used it. I've driven since I was 16."

"Yeah, fewer transfers and you still have to walk. For me, it's hard to walk. After the cancer and the treatments and all that. So, you still have to walk from here all the way down and then takes another. But, we ride the bike around here. To go shopping or somewhere like that is....cause it's hard to bring the stuff too, when you're done. I don't have the ability very much to carry all the bags on the bus and it will take two or three, you know. We used to drive all the time."

"That's one of the things I kind of like about the MAX. They have the little [ramp] that just kind of shoots out there. If [the bus] had something that kind of shot out there, that'd be cool.

Sometimes, like yesterday, when I was going to go to Kaiser to get my thing, I got on the 75 over here. I got off at Lombard transit and it's got too many poles and benches and stuff like that that are too close. I actually got stuck under one of their friggin' poles. You know, the round part? I got stuck under that because [the driver] didn't stop far enough up that I didn't go straight out into the pole. So, someone had to lift my rear wheels off of the ramp because they those pieces that come up on the side of the ramp, so that she could close the ramp so I could [get free].

"**R**: Never did. Never started [riding public transit].; **I**: Is there anything that would make you ride the bus or the MAX more often?; **R**: No, I can't hardly walk. I have trouble walking. I'm in a lot of pain, so."

"This [bus line] runs pretty good. I used to go to church up at Holy Redeemer instead of Holy Cross. The reason I go to Holy Cross is because I get a ride, but I'd rather go to Holy Redeemer. The 6 goes straight up there and then you get off, but I have to walk five blocks or six blocks, and I'd rather go there."

"Lately, it hasn't been very much. I used to go to the doctor over town. I hated that. Every place I go on the bus, I have to take three buses. The 6, the 75, just to go to Fred Meyers I have to take the 6, 75... If I get off at the MAX station it takes me right up. Sometimes I do that, get off at the MAX station. It never used to stop there. But, I thought, why can't it stop there? Then I could get straight off and I wouldn't have to transfer to the 75....If I have to go to the doctor, that's the one I take three buses. If I drove it would be 15 minutes and I'd be there. I don't have a car."

"**R**: In the car.; **I**: Do you use the bus at all?; **R**: No...I can't do that by myself. I can't think to do it."

"Oh, yes. This bus stop over here, there's just no place for [a bench]. Wherever they could put one, that'd be great. There are places you could tell that they could put one, but there's just a lot of places it just wouldn't fit. You couldn't do anything about it....And those [leaning benches] are so uncomfortable. They had one right there close to where I was before. On Gladstone and 39th. Nobody uses them. It was a total waste of money."

"I can't read the bus schedules. [Inaudible] I tell my kids, they read the schedule, they're fine."

"Getting on and off the MAX or the bus. We rely on the bus drivers or the MAX drivers to be cognizant of [name]'s a little slower than most people. He's obviously ambulatory, he's just slower. Getting up onto the MAX or off the MAX, when we pull into the Lloyd Center for instance It might take a second or two longer than what most people do....The bus drivers generally can see us coming. It's helpful to have [name] be able to sit before the bus is going because he's a little uneven on his feet unless he has me to hold on to him. It's kind of awkward thing. It's helpful for him to be sitting when the bus is moving. Sometimes the number 9 or 72 is so packed that we're just holding on."

"What happens is, I don't mean to be ageist, but generally folks that are younger in either high school or in that age don't really seem to like . . . they look at [name], or they don't even look, they're on their devices. They're not cognizant of, this gentleman might need help, or, yeah.

Sometimes to the naked eye he might seem like he's fine. He has trouble with his balance and it doesn't register for them. They're doing the best they can, I understand. But, it's older people and they generally tend to support . . . even when the bus is crowded, yeah."

"**ProxyR:** It's the grocery store. I have to transfer if I go to Albertsons or Safeway. I have to make a transfer and have to wait. It would be raining and I couldn't take mama.... it's like 45 minutes and if you walk there it's 20 minutes away. But it's 45 minutes if you catch the bus."

Bus—Positive

"[The bus stop] is right out by the first driveway where you guys came in. There's a bus stop. I would say [I ride] frequently. There's places I go and the weather and all the above. I have to use the transit system. I like it. I ride the bus and occasionally the [MAX]"

Paratransit

ProxyR: "I have to get the LIFT for her. But, if she needed [the bus] it was only two blocks away. She used to do it before she was in the wheelchair [after her second stroke]."

I: "Do you know where the closest transit stop is to your home?" R: "Yeah, two blocks. (...) It's too difficult to get on that bus, a real bus, with that [scooter]. I always call the LIFT."

"I have [used] medical transportation...takes me to and from some of my appointments... If I can get the LIFT or some other way, I would do that."

"I usually take the LIFT service everywhere....I find that very convenient. I don't know what I'd do really without it. It's really a godsend for us."

"[I would take LIFT] before, with Health Share, I would get the transportation for medical. Now I don't. So, basically, I take the bus. I take it because the other transportation can come so early. You have to be ready. Then when they pick you up, you could be sitting there a long, long time. I remember when there was one person that I would see waiting. She would be waiting and waiting and waiting. I thought I could get home by bus faster than that."

"Most of the time I call up the LIFT service, but they've been kind of pissing me off lately. When they show up you've got to be ready within five minutes or they leave you. They put you on the waiting list. The last time I got on the waiting list and waited I was in Johnson Creek Fred Meyer for two and a half hours and I have a bad bladder. I can't, you know? I get back in the bathroom, they show up, they drive off and leave you. Well, we told somebody to announce it over the-, well, I got news for you, when you announce stuff over the loudspeaker system, it don't go back to the bathrooms, so I still don't know you're there. Today, my assistant, she went down to the little store to get something to drink, because they give you a window of time on the LIFT of half hour. They aren't never there exactly on time, it's usually after. So, it was quarter to 11:00 and the pickup window started at 11:00 and it's about three blocks away. She went down there and was coming back and the lady-, I didn't even see her. She refused to park in the spot out front. She said, well, people get mad at me. Well, that's what your emergency lights are. You're a handicap bus, that's what you're for. So, she just took off. Makes you feel good all over. So I had to take the bus from Glisan all the way home. 82nd Street sucks."

Proxy R: "We've been really broke for the last six months...We're waiting for that to pick up now, again...As far as LIFT, there's no other alternatives, so we haven't had to use it. She qualifies for cab rides, essentially. We use those a lot to go to medical appointments."

R: "You have to set [paratransit] in advance. You gotta know what time you want to be picked up to come home and we don't always know that. They don't really encourage you to have two or three stops on the way."

Proxy R: "There's a rigmarole, you have to sign up [for LIFT]. We just haven't got around to it. Mainly because it's like a domino effect. We still haven't gone and gotten her current ID since she stopped driving. That's the first step. That will allow us to do several other things that we just haven't followed through with. That's been because of transportation or money issues and that just goes on and on. Things could change in the future, but at this point, we don't need it because we have other rides, plus our vehicle works again.

Barriers to park and ride

"There's just too much walking [to park and ride at] Gateway. I have to park the car, then I have to walk over the train, then when I get off the train downtown, there's walking. It really has isolated me."

Safety

"I used to ride MAX and go downtown. I'd drive to Gateway and then [ride downtown]. That was before it got so bad...the MAX just got too dangerous. It's too scary. You feel so vulnerable. I'm not a scaredy-cat, but when you see some of the people ... you know."

"I don't ride the bus. I haven't been riding the bus.... You hear so much about [the] safety thing. That's what bothers me mostly. I'm sorry to say it. It's scary."

"I hate the bus. I did it when I was kid and I hated it then and I hate it now....The people on it. There's a lot of rowdy... the bus drivers get beat up all the time. [Bad people] beat on people. If I ever got on it I'm afraid I'd kill somebody because I don't think people are good anymore. They're not. They weren't raised I guess when I was."

"No, it's not on the bus that I don't feel safe. It's getting on the neighborhood in the nighttime. Everything about the service is really good. The only thing is a place where there's so sitting....I don't do anything at night."

Expense/cost

I: What would make you ride public transportation more often?; **R:** "If I could squeeze it into my budget. It's doable now. It's doable, but, other than that, I don't know how to answer that question.

"We all want [the bus] to be cheaper if you're on a fixed income."

"I don't ride [the bus] enough to make a monthly pass worthwhile by any stretch of the imagination. At the most, two or three times a week."

R: "I don't think I could afford [TriMet LIFT]. I don't know what it costs, I don't know anything about it. Nobody will tell me and I can't get through to TriMet. They're useless, they're no good. They're rotten, horrible."

Proxy R: "You have to have the badge, the [Hop card for TriMet]...We gave up on it...I don't have current ID. That's about 50 bucks to get current ID. I don't have that much money."

MAX/Streetcar

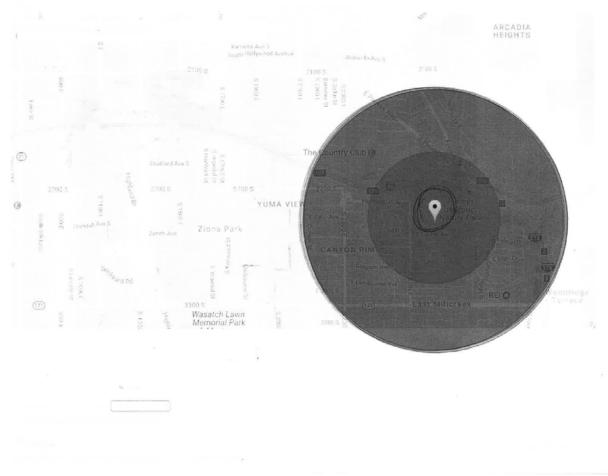
"Well, it's real nice they designate the front seats for the disabled people. But if I can't get this scooter in there and turn it around right away so I can come off easier, there's no side view mirrors on this. I can't turn around that far to see. It was fun getting off the bus today. Usually I get on down at Johnson Creek or something, it's pretty empty. I can get on and the driver waits a few minutes and I can turn it around and be ready to go off, which is nice....What gets me is you got people that come on there with not only one, some of them three or four or five backpacks. You're getting slapped upside the head or hit someplace by a backpack and they don't notice the difference. They're so used to hitting things with them. They just keep right on going."

8.3.2.3 Defining and Understanding Neighborhood

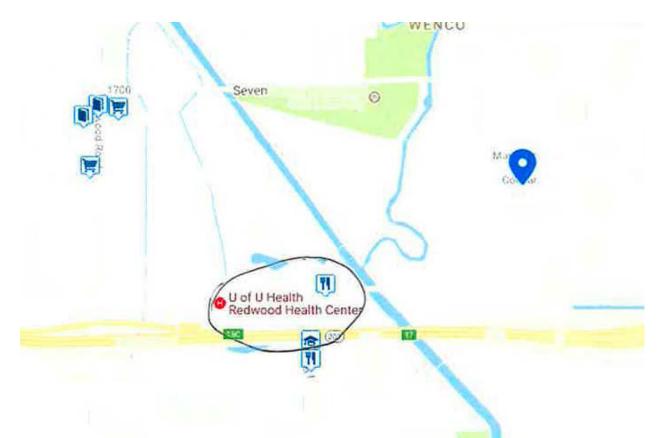
8.3.2.3.1 Utah

Maps

1. Home as the center - Some people draw a circle around their home. The circle could be big or small.

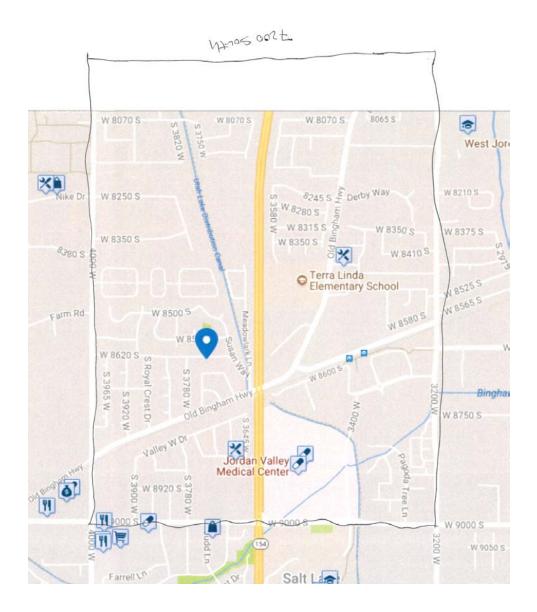


48679296. Places to go as neighborhood centers, not the home.

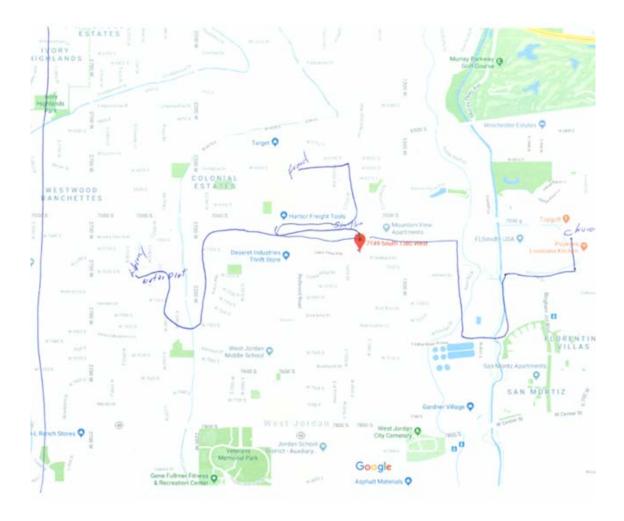


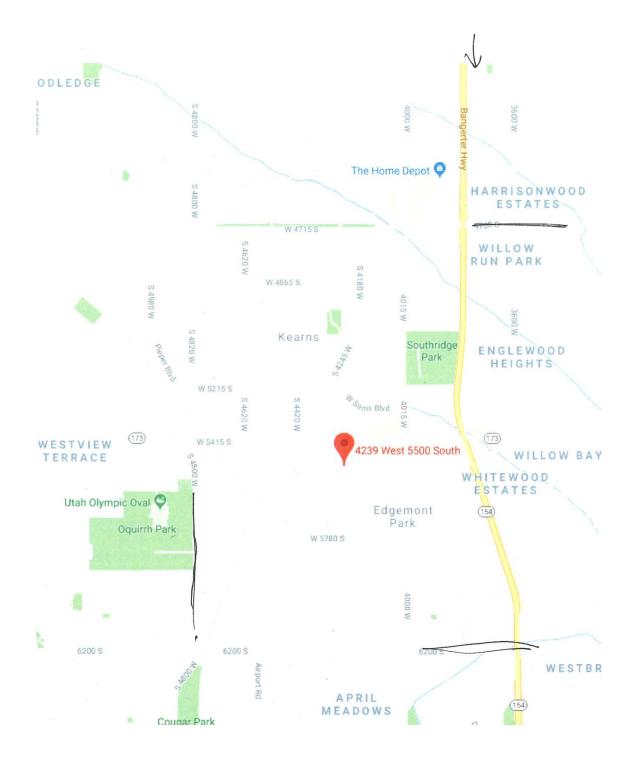
40286464. Neighborhood as define by main streets - People draw around the streets were they mostly drove in or they took public transit as well as circles. They made lines and circles. Some neighborhoods were literally squared or double square. Some people only drew transportation lines or sets of commercial corridors and their homes were just an abstraction.









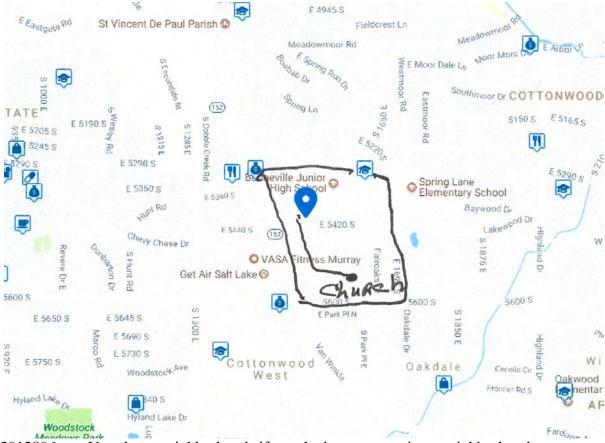


78037056. Neighborhood as defined from the everyday life - People drew their home in relation to the places that they frequented like the grocery store or the park

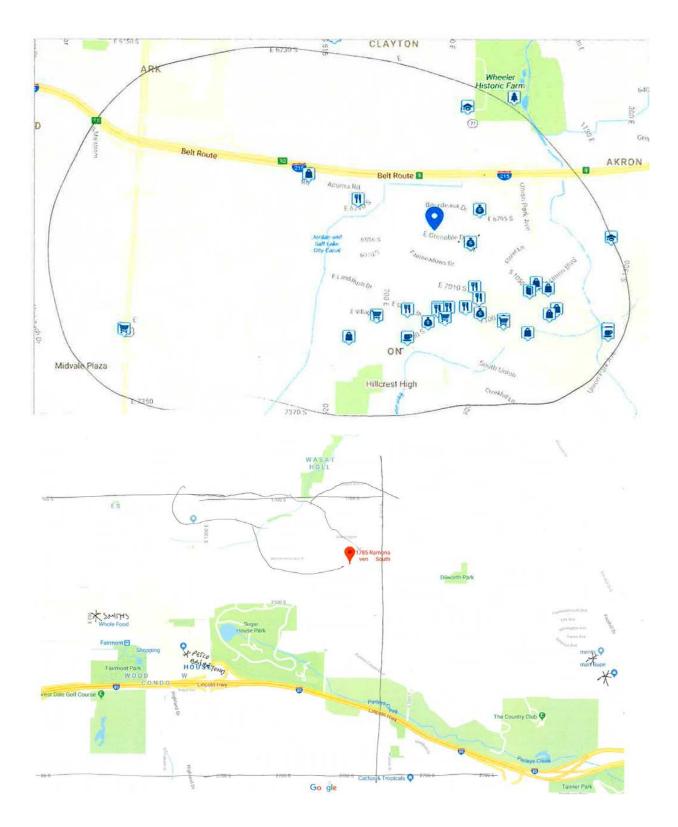


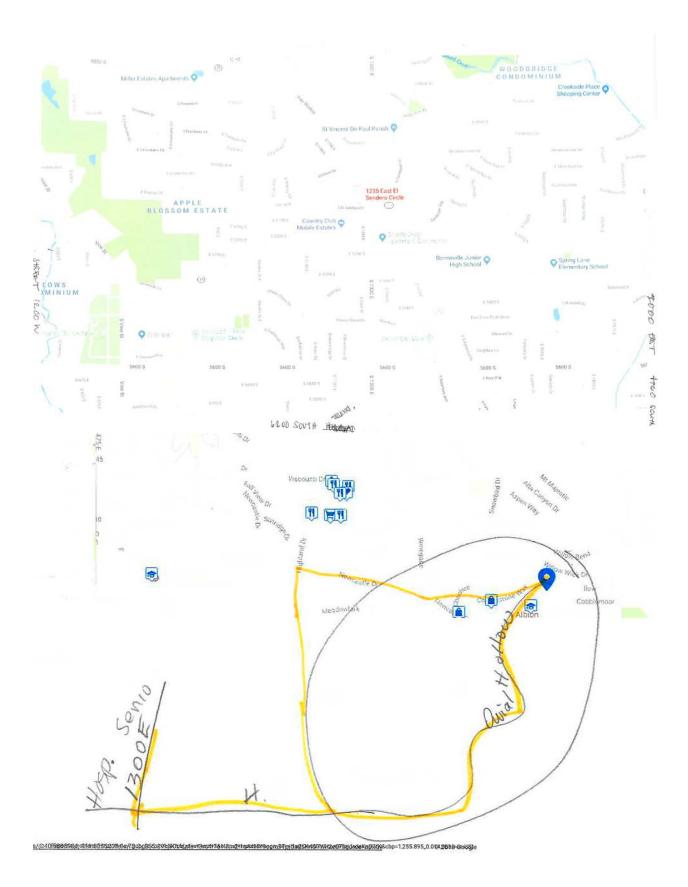
52945152. Neighborhood as defined from the everyday life in the past - People talked about the elementary school they use to take their kids, the park that they used to go...these were elements of their neighborhood.

48727744. Social neighborhoods - they included the church, the senior center, parks or school where they pick up their grandkids, neighbors, and family members.



73912896. Very large neighborhoods if people drove - sometimes neighborhoods were very large to include at the Target they sometimes drove too, in occasions the sense of place could be completely loss (e.g., between where the person lives and the Target there is a highway, train tracks, if you wanted to walk there you really would not be able to. Some people would include other things like the hospital or a supermarket.

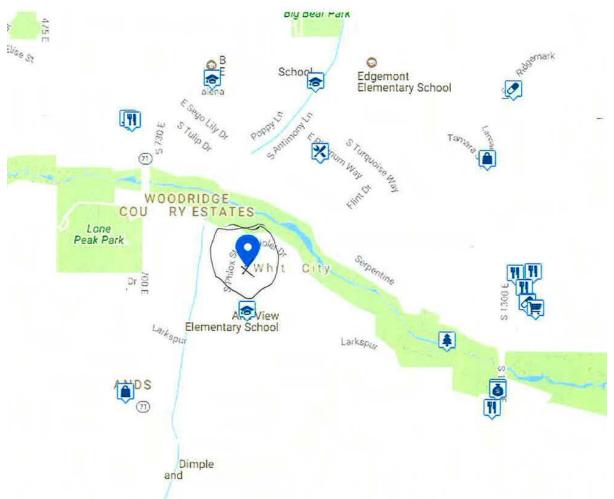




8. Those who take the bus would have generally speaking smaller neighborhoods that those that drove, but their neighborhoods would be a lot larger than those who might have a car, but did not go out as often.



9. People that did not go out would have very small neighborhoods.



10. People could have different definition of neighborhood. A walkable neighborhood and a drivable neighborhood.



Defining neighborhood

Some thought their absence of walking around their neighborhood might have affected their conceptualization of the neighborhood smaller than those who walk more in the neighborhood

I: [...] first, I would like to know, what do you consider your neighborhood?
 R: So if this is my house, for me, I would probably put it more like this.
 I: Close.

R: Yes. Just the area right here.

I: Okay. Yeah.

R: If that makes sense.

I: Yeah. That's good.

R: Because—all right. Go ahead.

I: No. Yeah. But you can tell me why. Yes.

R: Oh. I was going to say, probably because when I go places, I'm taking the car. I've got some wonderful neighbors across the street. And I think she's about 93, 94, and he's maybe in his late eighties. And they go out on walks. But I don't do that. I don't go out

on walks and things like that.

I: Yeah. So what you consider your neighborhood is smaller than maybe your neighbors. R: Correct.

Some defined neighborhood as road boundaries/ arterials near their home where they would drive the most

"I think, generally, in this area—because, as I say, that's 33rd over there, 33rd South."

Others define neighborhood very large because they had cars, some made their neighborhood based on where a place they go to frequently is like the target. This info is based on a non-recorded conversation when asking people to define neighborhood on the map.

Others felt they either spend time at home or somewhere, but not their neighborhood because they did not walk.

"Truthfully, I don't wander around my neighborhood because there just isn't—I just normally just stay home if I'm going to stay home. Otherwise, if I go someplace, I get in the car and go."

An older adult who move to an independent facility still defines as her neighborhood where her home is (now her son living in this house).

"Oh, I just get in my car and go. If I have to go to the store, I go downtown or go to 21^a South Smith's or go to the Smith's over there by my house, because I was used to it. I still shop over there or stop at my son's to get my—visit him for a while and pick up my mail, because I still get mail over there. They're still sending it. I haven't changed—like I changed to a P.O. box. When I moved to my daughter's house, I changed to the main office, that P.O. box. And then I was still getting mail over there at my old address, because I was there so long that I had all these businesses. And they send me literature from the Catholic Church, from the Catholics, you know, from St. Jude's Hospital and everything. And so I get a lot of that over there."

Many older adults are homebound. Thus, some really did not defined their neighborhood and others defined neighborhood based on their memories and experiences in the past, which could be many different factors

- "No. I never visit or go shopping. I stay home."
- "No. I don't. The only time I go out of the house is when I have doctor appointments."
- "You know, I don't really get out very much. [Clears throat] Like I said a minute ago, my children come and take me somewhere."
- "I don't go around this neighborhood. I don't know anybody on that street anymore. I don't know anybody, only one person, on that street anymore. I don't go around it. If it gets when the sun goes down, I don't even go out of my yard. Not very much the last three or four months, I haven't. I haven't even been outside."
- "I'm only here all the time."
- "I really don't get out from here."
- "Well, I don't walk a whole lot around the neighborhood. If I go anywhere more than a block I will take a car. Or, you know, going anywhere else I always use a car [...] Yeah. No problem driving. Yeah. Even to go a couple houses down the street I probably would take the car and not walk."

- "No. I can't get up to walk too much, no. I get out on the normal days I get out in my driveway and use my walker to walk back and forth, back and forth, try to exercise. And I got a bunch of exercises they give me at the VA that I've gotta do."
- "Well, I don't go anywhere because I'm afraid to leave. And I never did—I used to have best friends that lived in this house and that house and then up the street, and we used to do that when we had kids. But that's over with now. And I talk to the lady on the corner every once in a while, I have a good friend that lives up there somewhere. But I don't really—I would like to start getting out of my house, you know?"

Challenges to get out in the neighborhood

- Several people cited not having a ramp
 - I: So, what, what changes do you think would need to be made, like in the home or in your neighborhood, to help you, like, get out and be around?
 - R: Well, the biggest change that I need right now is that ramp
- Nowhere to go
 - "No place I'd want to go."
- Can't walk
 - "I can go out."
 - "I can't go out at all"
 - "I don't do too much, I'll be honest with you, because I do not get much exercise and that's my fault—as a result, my muscles are deteriorated—is that the word?—and so I can't walk for a long distance. I've had arthritis in my right knee for over 40 years and never done anything about it. Unlike my wife, who also had arthritis in her right knee, she had constant pain in her right knee, I don't have that; I'm sitting here, there's absolutely no pain. If I'm laying down, there's no pain. If I overdo the knee by trying to walk too far or do too much lifting then I get pain, but as long as I don't do it too bad—as long as I sit down and relax—within just a few minutes the pain is gone. I have no pain right now, none."

Attachment to neighborhood

- No attachment
 - *Family more important that neighborhood*
 - "Not necessarily. Not necessarily at all. Anywhere is fine. We have a lot of family in the Valley, so you know, it wouldn't matter. Anywhere in the Valley. "
 - Bad neighbors and neighborhood
 - I just, you know, and I'm, I would favorable of moving away from the evil around here. I've got criminals. I'm surrounded by criminals. I've had so many things stolen. It's just ridiculous, and I've actually caught the neighbors that were across the street, that little house there, in my shed and back here behind here. I was looking out that window. I can't remember why I was looking out that window, but I was on that side of the house adjusting those curtains. That's what I was doing, putting a suitcase down on the other side of that bath, and here's those two. They're not supposed to be in this part. Nobody's supposed to be walking in other people's yards around here. And, that's just a mild example. I've had people stealing out

of my mailbox, and one woman gave me a note about it one day. She, she waited for me to come out to my mailbox, and she said that she had seen this person take mail out of my mailbox and, and then go around the corner. And, she followed her home. So, she gave me her name and phone number, and she said, "If you want to go to court, I'll, I'll testify for you." So, and that same person I had seen taking mail out of my garbage can after I'd thrown it away. So, I called the, the post office and told them about that, and she said, "Well, if she wanted to testify, you know, this, this is a felony, you know." And, I said, "Well, actually, I haven't seen her taking it out of my mailbox, only out of the garbage can." And she said, "That doesn't matter. It's still a felony." I, I was really surprised. And, I prayed about it and decided no, just tell the bishop, and I, I let it go at that. But, that same person was later reported by the bank. Actually, the bank manager called the bishop because she was crowded right behind me right at my window at, at the bank, and she wouldn't stand back. And, it was, it was really a weird experience. So, but so, and, and she was really close. So, I, I smelled a really bad odor. I, I was told that's methadone because one of the other neighbors brought me some food one day. Her, her daughter has a food thing that she's been trying to sell it to me. "No, no, no, no." I said and she said, "You can smell that smell?" And, I said, "Yeah. That's worse than sewage." And she said that's meth. Oh, I get that every so often, and then, there will be sometimes there will be a really sweet smell, you know. So, this person, and I don't know if it's right next door or across the street that way because I know he's been in trouble with, for drugs. And, things like that, you know, I'd really like to be free of. Some of the other neighbors I know about are-Well, I'll tell you. The other neighbor, one neighbor across the street, and this one now, plays seductive music [music sound], you know, extremely loud for hours about, all night long. I reported this one across the street finally to the bishop, and he managed to stop her. Except, they're doing it again, and I can see why. It's because that person's back, and the one that actually lives there must be away because this person is, is a grandson actually, I think, or a granddaughter or something. And, I've had to be suffering again the last little while, and it keeps me away. And, I'm hard of hearing, but it, they've got it—I don't know why the other neighbors don't complaint. But, you know, people are afraid for, you know, you just—It's, it's a problem. So, yeah, I would like to get away from that. If I didn't have these problems, I'd be happy here, but they're major problems [...] I would want to move out of this ward. And, I can't tell you the reasons for that, but they're definitely very good reasons, extremely good reasons.

- Person who walks a lot
 - I: Do you feel the same kind of attachment to this neighborhood?
 - R: No. Just my house.
- *Attachment* go to section 2 "Aging in Place" under "Older adults want to stay in their neighborhood because of..."

It's with neighbors

- "Yeah. And I do have a lot of neighbors that I'm friendly with. There's a lady that lives down the street and she's in a wheelchair, so I go down there, well, a couple of a times a month, and just take her cookies. She's so housebound. It's so sad. And she's a hoarder."
- "I know all my neighbors. Yeah, they're real friendly. So that was good because—if you've ever bought a house you always wonder what are the neighbors going to be like, am I going to fight with them? But I get along great with them, you know. [...] it's kind of like a fair for neighborhood, everybody in the neighborhood gets to know each other. So that works out real good."
- "And not visit with neighbors too much. No, I was too much to myself. And I still am. You know, my neighbors, I'll say hi to them or on my way out and everything now. You have to be friends, you know, become friends and everything. But, to go visit, I know a lady that lives upstairs. I don't have time to go visit with him, because I'm doing things. And most of the time I just like to do things here too. And I haven't done a whole lot, because I figure I'm going to be moving, so I'm going to be packing."
- "I've got some wonderful neighbors across the street. And I think she's about 93, 94, and he's maybe in his late eighties. And they go out on walks. But I don't do that. I don't go out on walks and things like that." Because she doesn't go out in walks but she mostly drives, she would consider her neighborhood around her house smaller than her neighbors. She also said that she only talks to neighbors once in a long while.

A neighborly hand

- "And now it's nice because I know there's a railing there. And, in fact, when I—I shovel the snow. But I only—I shovel my little back porch and then out, kind of a path to the garage. But I have something I'm holding on with the left hand, shoveling with the right. So it's just enough to give me a path. And I have a couple of neighbors on both sides, and they're very good and helpful at shoveling. But it gives me a sense that—a little more confidence that—maybe that's a better."
- "He was 90. He reached 90 age, and he got a [unintelligible] [00:02:01]. You know, he had, he had broken his ankle when he was a young man, and that's what caused him to have problems. So, you know, it took me a long time, and then, we had the walker and he'd used that inside the house. But, he wouldn't use it outside the house, but he would use the cane. And then, it got it to the point where he would use the walker outside the house, but not very much. By that time, he was getting to the point where it was difficult for him to get around. And, the rails in the bathroom, I bought him and my neighbor put them up for me [...] But, my neighbor helped me put those up in the bathroom. I just over and bought them, and he helped me put them up."

Concerns on newcomers in the neighborhood

- I1: Yeah, that makes sense, yeah. Because our area has changed a lot, right? R: Yeah. Yeah.
 - I1: Now it has more families. It has more like Hispanic, probably like 50%.

R: Yeah, now a lot of people have come in and out. And then there was apartments next door and even for a long time—

I1: Yeah. And you've been there for a long, long time. 47 years? So you saw many changes in that neighborhood.

R: Yeah, I did. I did, because Yeah, I did. I did, because there was older people—you know, like older, older old people that passed away and left their homes to their sons or daughters that were grown already, maybe older than me. And it was safe, like I'm saying. You know, little by little, I started noticing the difference and then start—their people start coming next door to me to live in that one home, renting or buying. And there were different people coming in. So, yeah, that's a big change that I noticed that wasn't—that I wasn't happy with, having the neighbor with different people or different lifestyles, whether it was Hispanic or American or whatever. They had—it was people that came to rent that one house on my right side. [...] But it was still different. See, they come—different people come different with different lifestyles and different ways. [...] Well, it's not going to be the same, just like the people that—the gentleman, the older man that lived on my left, he built that home there, plus he built the one over there by the school in his years, and he was already up in age when he passed away. So, yeah, there was a lot of differences.

- "it's not places that I was familiar with, and over there, that was more of an area where I was familiar with, on the north side, yeah. Even around the neighborhood where I was at, I was not a person that visited my neighbors all the time. But I liked the area. But it was kind of getting—another thing too, that it was getting kind of a lot of homeless, even here, everywhere you go anymore. [...] It started getting to where, even in the summertime, I was not—didn't feel safe, because I didn't have a fence. My son put a fence now. You know, he did—he protected it. But if I would have had that, maybe I would have stayed there too. Maybe if I would have asked or something. But I didn't think that was something that they would do because it was something that I would want. I thought maybe they would think that it was something that was out of the question to fence it in, because it did have fence on both sides, but not in the front."
- "I don't go around this neighborhood. I don't know anybody on that street anymore. I don't know anybody, only one person, on that street anymore. I don't go around it. If it gets when the sun goes down, I don't even go out of my yard. Too many cars come up here and parks on the side of the road. I don't trust everybody."

Places that older adults go and things they do in the neighborhood

Visiting neighbors

• "Yeah. And I do have a lot of neighbors that I'm friendly with. There's a lady that lives down the street and she's in a wheelchair, so I go down there, well, a couple of a times a month, and just take her cookies. She's so housebound. It's so sad. And she's a hoarder." *iting family and going around*

Visiting family and going around

- "I like this neighborhood. And there isn't really much around as a place—in fact, it would be great if they developed something like that. But I think, generally, in this area—because, as I say, that's 33rd over there, 33rd South. And my son, right now, is living with his family on 45th South. And so it's—I like kind of that area. And my dad, he turned 99 in August [...] He's about three miles away."
- If I would have my great-grandkids, I would take them to the park to go have lunch, or I would go visit my ex-husband. Or sometimes I would have to go get his medication or take him—on the 1st I would go to the bank and get his money orders and everything, now towards for the last two years. But around that time when I was there too, I was always

gone or probably go out to the second-hand store down to the DI, because it's on mid-South.

Restaurant

• My total thing is I'm on oxygen 24 hours a day, so I have tanks. They're the small ones that I can carry. I don't carry enough oxygen, so I have to take backups. But, I'm able if—Right now, I'm having a hard time getting to the car. Once, once I get in the car, I have total control, and I can go on the other oxygen. And then, I get up to the restaurant that I go to every day for lunch, and I have to carry two tanks in to have enough oxygen while I eat. And, they're very, very nice. They have a place for me to sit and that works out.

Shopping: Stores, Grocery, Pharmacy, Bank, Dry Cleaning, Hardware store, Post Office,

- "Once a week or once or twice a week, depending on what I need to do (mostly groceries).
- "We go everywhere, but we use a walker. I need a walker. Not because of my legs but because of dizziness. And I have diabetes, and it might be low blood sugar. But I should have two need operations, and I'm not going to do it. Bu the walker is the best exercise equipment we have because we walk everywhere. And then I can sit down. And that's—two miles. Pretty much. In and out and walking around and going through stores and walking across parking lots to Jo-Ann's."
- "Most days, it's going to the mailbox, which, in the wintertime, is a real challenge because it's slick. But going to the mailbox on the street there. And then, I don't walk anywhere. I drive about a mile and a half to Smith's most days, get medicine and groceries. And normally, I use the power cart, the electric cart that's there. So I don't walk at all. Then I'll drive to the post office, which is on Highland. And actually, his granddaughter will go in and check the mailbox for me. She does the walking. She goes in and checks the mailbox. Just in the—when I know I have a longer—or if I have to, I'll hold on to a regular cart and go. But yeah. I go to the dry cleaner. Ashley's becoming, now—his 18-year-old granddaughter—is driving me a lot of places. And she'll do the walking for me. A lot of things are drive-up, like the-go to the dry cleaners on 1386, and that's just drive-through. Home Depot, which is two miles. They have power carts. So I do power carts there. [...] Mostly she does the driving [...]Yeah. Because she's in school, you know. So I'll go there. I would—and there's a Shopko in the same strip there with Smith's. So I find that I'm doing more of the-other than grocery shopping, you know, Shopko, like socks or whatever you need. I hate to pay the high prices, but it being close to the house, I end up buying stuff there that I wouldn't have done in the past."
- "I do grocery shopping."
- "I, I do shopping. I go shopping by myself. As long as I can get a grocery cart, I'm fine. Yeah. I, I can... I'm gone for two-three hours at a time, and sometimes I go just to walk. I've got to walk. So, I do that. And, but sometimes here at home I have to use my walker. Yeah. And like I said, before that I have to use the wheelchair which he helped with that stuff."
- "I walk to the Dollar Store almost everyday just to get something. There's a beer store down there. Once in a while I get a beer. And I walk over to Walmart sometimes to shop and then just take Lyft home."
- "And then once I go out I have several places to go. Because that neighborhood market, there's a new Walmart Neighborhood Market. They carry completely different things

than Smith's does. And so, I like to go there first, get those items. And then I just drive down a little bit and then there's Smith's. And every once in a while, I'll go to Reems. Because I like their donuts."

- "I was going to the grocery store for myself. I wasn't getting any help, but the last couple of years, I've, others are getting the groceries for me. So, once in a while, back then even, someone would take me to the store you know, but it got to the point where I was in too much pain with my back to go, so."
- R: Mm, boy. I don't know. Pretty much everything I do is right around here. I2: In walking distance? R: Oh, yeah. That's what's great about here. I have Smith's. I have all the—Walmart.

Everything is right here. You, you couldn't ask for better. But in the old days it never was that way. In fact, 24 South is where the city ended. There was-that was all swamps and stuff out there. The only thing out there was Roper Yard train station."

"Or sometimes I would have to go get his medication or take him—on the 1st I would go to the bank and get his money orders and everything, now towards for the last two years. But around that time when I was there too, I was always gone or probably go out to the second-hand store down to the DI, because it's on mid-South."

Parks for a walk

- "I walk up to Liberty Park. Not around it. And then I just come around back down."
- "If I would have my great-grandkids, I would take them to the park to go have lunch."

• "I could walk from here to the park with my walker, you know, just to get out."

- *Senior center and being active*
 - "Oh, and also I go to the Senior's Center. Liberty Senior Center and workout there, do their little aerobics. They call it Jazzercise, but most of them are under water so it'swell, I'm free standing [...] So I go over there a couple times a week and it is good. And you know, I get around people my age and I feel young. I don't know what it is, but I guess because [...] I think maybe because I am real healthy [...] I'm always doing something."

Take a walk and play outside with grandchildren

• "Well, I usually take the kids outside if it's nice. Tomorrow it's going to snow. So, we're in for the day. But him and I like to go for a walk. And we walk clear down to the mailbox and get my mail. And-then there's some rocks. And we look for dinosaur bones in the rocks. And then we go over to this other area where there's rocks and we have a campfire because there's like, a grate. And then we go over to this other area where there's rocks and we have a campfire because there's like, a grate. So, we had a pretend campfire. And sometimes we'll walk all the way around, except when the wind's like that. I get an earache real easy. So, did I put cotton in, then I can't hear him. So, it's... There's no wind there. But... So, we walk around because I count my steps. But it's, it's okay on the sidewalk. But we have to be real careful with him running in the road. "

Church

- "Yeah, I haven't walked anywhere else. But my church is just a couple of streets down, maybe, too. And I've walked to church before and back."
- "I don't want to drive. I don't drive at night too, because it's far from here and I go to viewings down-you know, the neighborhood mortuary downtown. And the church. I have my church that I go to, St. Patrick's over there, Catholic church. Yeah."

Doctor/ Hospital (outside neighborhood)

- "I don't go to church. I go to the hospital a lot. It was last in—Since September, I've been in three different hospitals."
- "I've always had a car. Yeah. And I've always been able to drive. It's... Like I said, but I've been so sick. Like, this last time that I got out of the hospital and stuff, he's the one that takes me to the doctors, to my appointments, goes shopping, picks up my prescriptions. Everything. Yeah."

Everywhere

• "Yeah. My aide—I have two aides that can take me, and then I have a friend, her name is Judy. She's from church, and she volunteers to take me everywhere. She takes me to the doctors. Wherever I have to go."

Eyes on the street

- "I have a couple of neighbors that watch out for me. Gentlemen, you know. And so, I feel pretty secure here."
- "Well, there's—we see people walking up and down the street, kids on bicycles and people, like, walking their pets, and individuals driving up and down the street in their vehicles. [...] I really don't get out that much. I pretty much stay here and keep an eye on things."
- A older woman that lives in an industrial place said, "I don't feel safe and there's not enough people around (at night). Because there's nobody here, only people that work. Okay? Guys that work. And I don't associate with the guys. If they wave hi, okay, yeah, I'll say hi to them, but I don't talk to them."

8.3.2.3.2 *Portland*

Public Transportation

Bus Location

"[The bus stop] is right out by the first driveway where you guys came in. There's a bus stop....I would say [I ride transit] frequently. There's places I go and the weather and all the above. I have to use the transit system. I like it. I ride the bus and occasionally the Light Rail."

Proxy R: [Nearest bus stop is] two blocks....I have to get the Lift for [my mom]. But, if she needed it was only two blocks away. She used to do it before she was in the wheelchair.

"Yeah, Saratoga and Dekum. Which is 24th. Saratoga on this side of the street, 24th on that side of the street....I rode it yesterday because I had to go and get an iron infusion. I gotta go get one tomorrow....I don't ride it enough to make a monthly pass worthwhile by any stretch of the imagination. At the most, two or three times a week."

"We would walk out to the road on 67th and then around, I don't know the actual name, maybe Lancaster. Then it hits 66th, take a right and then go 200 yards or less, 150, to Flavel and cross. There's two [bus] stops actually, it's really nice. It's just right on 66th and 66th Place."

Mobility devices

"...I had to give up the car because a car's expensive if you're on low income....I got a little scooter there, but I can't use it because I can't stand up on it because of my legs. I've been thinking about getting a motor scooter, but I can't afford it right now.... [I'm on the bus] about every other day or probably everyday. Quite a bit. I use a bus pass."

Paratransit

"I have had the [LIFT]....Yeah, take me to and from some of my appointments. I've had that in the past. I'm leery with riding the bus or the light rail....Yeah, [it's a] safety thing. That's what bothers me mostly. If I can get the LIFT or some other way, I would do that."

Automobiles

"Yeah, I mean I don't go very many places because when I get there there's either no parking or if I do find a parking place it's too far. Mostly, my friends will take me to a lot of places in the city. They'll drop me off and then park."

Built environment—negative experiences

"Yeah, the speed bumps. I don't think anybody likes them. They're horrible. They don't stop the people that speed. They just fly over it anyway. Other than that, everything is reachable here."

Sidewalks

Proxy R: "It would have to be there's no sidewalks. There would have to be sidewalks. The traffic is too fast, it would need to be slower....Traffic and sidewalks. There's quite a few people out here. Not a great deal, but there's quite a few that I know that are in wheelchairs that traverse. The whole complaint is on Killingsworth there's hardly any sidewalks. The ones that are the people don't cut back their bushes. I went out there myself and had to cut back bushes a block that way and a block down that way because I had problems walking down the street without getting hit in the face sticker bushes from rose bushes or from arborvitae. Because there was no sidewalks and the ones that were kept so poorly, I walked in the street. That's where the wheelchairs drive at, in the street. When I cleared that off, now some of them ride on the sidewalks. Others still do the street. There are no curb cuts around here, none. Until you get to 42nd."

"[Some improvements] would be a good thing, lighted crossing, better sidewalks, and have sidewalks period, cause some areas I walk in there's no sidewalk and I have to get into the street and I try to cross over to where I can get a sidewalk. I'm really, really leery about that. Some areas not developed don't even have a sidewalk."

City Maintenance

"I really wish the city would come out and clean the streets and clean the drainage more often or make sure the property owners do their part in keeping our neighborhood safe. Because when the street cleaner does come, the cars are parked. Some of the neighbors . . . I have a yard man that comes and cuts my grass and clean around my home and keep the drainage open because I can't do it myself. If we could have the home owners get more involved and learn about the city services and even if the city comes out and clones the streets or whatever, they need to keep us a little bit more aware of what they're doing. Some of the neighbors say, "I don't know." I said they post it in the papers and you can call, you know? I used to try to help remind, I used to be block captain and help remind them. I can see the neighborhood going down. If the drainage, like especially right across the street from me, the drainage is not clean. Then the leaves fall, they don't remove the leaves, they have cars parked there that are not movable or drivable so when the street cleaner comes they can't clean the leaves or the debris on the street. What happens, the drainage is clogged up and water is all over everywhere. I wish we could be a little bit more concerned about the care in our neighborhood."

Traffic

"On 82nd, for people that are walking, that are trying to cross 82nd, it would help if they had flashing lights. People don't stop. Once in a while you get somebody kindhearted that says, "Oh, let me stop." Then that stops all the traffic. It could be pouring, freezing, it doesn't matter. You're there with bags and they're just zipping right along."

Neighbors/community-positive

"When I visit over here, I visit people in their yards mostly, because some of them don't have access into the house. I visit [name] and there's some people who moved in over here and there's some kids who live up the block that come over and visit me so I go over and visit them when they're outside sometimes. Or visit with them when I'm on my way somewhere or on my way back from somewhere. So, the street knows me."

"Right, because this neighborhood is very interactive with each other, very close. Especially in the summertime when we all have our picnics or barbecues, 4th of July barbecue over here. The neighborhood gets out from around over here. Then there's another celebration down the hill and around the corner where another part of the neighborhood gets together barbecuing out there, lighting the firecrackers, the children do theirs first and then the adults. And then right down the street on Jessup there's another big group of families and we've been doing this for over 25 years. We all started pretty much at the same time. It just catches on. There's been no deaths, no fires, no accidents, because everybody's watching out for the children. The children are here, the adults are around eating and drinking their barbecue and their beer. Then when the children get done at dusk, then the adults come out with their [Inaudible] and light up the whole neighborhood. And that's how it is. Like for thanksgiving, it's hard to park your car. A lot of people will park in front of my house or down the side because there's so many families that have their meetings over here, their family gatherings over here."

Proxy R: "Oh yeah, [my mom will go out] with assistance, yeah. She'll go around the corner, she'll let me take her around the corner. She likes to see the house and then she'll talk to Annie. She'll talk to Richard across the street who is a doctor downtown and she'll go to this corner over here and I'll push her around the corner to Tammy's house. Then she'll say hi to Mr. Green. It's just within I would say 200 feet.

"Everybody's just really nice. [Name] lives over in that green house with the pickup truck there. He's like a son to me. If he's going to go to Safeway or something he gives me a shout and says 'I'm going to Safeway anything I could pick up for you?' He keeps me in the loop. These people up here, Mr. [name] and his family. They have a three year old who's just...I guess she's four now. Just stole my heart when she was like two. They're very kind and nice people."

"I'm good with it. Everything is so close by. I like the convenience. I would say I strongly agree. I have so many different ways to go. A lot of neighborhoods only have one way. They have one main area. Now we have 92nd that's really opening up. I have Woodstock. It only takes me one bus. I have all the shops. I have two Goodwills, A Salvation Army, altogether I have five thrift stores including the Goodwill. Just right here. It's great. Clackamas, the movies there. Eastport has movies. I have tons of places to go to."

"It's funny, the neighbors are great. I love my neighbors. People all around are just so nice, really. I'm very satisfied. My dissatisfaction comes from the crime... You know, everything. I just basically, it's a great location. That's another reason why I picked it. The bus was number one and then I have everything here close by. I don't have anything else that I need."

"I know the area and I like the area. There's not a lot of-, we don't have, say, crime, for instance. We have people maybe once and a while they'll break into somebody's car, but we don't have, at least I don't know of anybody just up and down the neighborhood having their place broken into or people stealing their stuff. I mean, it's been done before. People have done that. But, I'm thinking that the people who were doing it didn't live in the neighborhood. I feel comfortable in this neighborhood."

Neighbors/community-negative

"Well, [the City] messed up their maintenance schedule so the streets are pretty bad in some places. Last week I noticed people going in and out of the old Gordon's Fireplace parking lot that's been fenced off for a year or so. The cyclone fence, they just pulled it open and moved their bicycles in and pulled it shut. So, I called the police about it and it took me a long time to get a number. I couldn't find anybody to talk to. It took me about 15 minutes to leave a message. The property there is not secure. Anybody can go in and out as they wish to. Course, they've got trails down below by the train tracks where all the homeless go. We've had them come up on our porch and pick through stuff thinking we had cans and stuff in storage. I'm sorry guy, some of us have guns. We're homeowners, just saying."

"It is just all over. It's just all over. I've seen drug deals go down right here. People going to the bathroom in broad daylight in the park with people there. Right here, like a block over, we've had break ins. Just this last week some people broke into this guys, no, it was funny, they were in there and he didn't realize it. They had snuck in there in the evening and he went and he locked it. So, he locked them in there. But then they broke their way out the side door. And they left a mess in there. Everybody gets on Nextdoor and warns everybody. Packages are constantly getting stolen, so I'm glad I have Slurpee and he barks. But, sometimes he doesn't. If sometimes he's asleep at night I hear it before he does [laughing.]"

"**Proxy R**: He does have a lot of people in the neighborhood and the shops that we go to that know him. If he loses those people that say, "Hey [name]", then I wonder how that would effect him emotionally or socially to lose that kind of connection he has with that map, the yellow. Both neighbors know [name.] Even bus drivers. We know many of the 71 line."

Mobility experiences—positive

"Yeah, I walk [my dog] four times a day up to the park and I ride my bike down to Safeway, sometimes three or four times a day."

"I: Is there any reason you would define this as the kind of neighborhood . . .

R: Basically, because this is what I walk. This is what I walk and what I think of as my homing area"

"I: Getting around in your neighborhood, you had mentioned walking to Safeway and Annie's Donuts?

R: Yeah, [and] Fairley's drugstore. They're the only one that have a fountain I think left in Portland. I got a vanilla milkshake up there the other day. I can't tell you how long it's been since I had one."

Neighborhood features

"We've got the bike trail not too far down the road here, just past the red light camera....When I'm walking [my dog] out front that blinking light catches my attention. I see it all the time, so it works. I don't drive anymore."

"Normally, I'd get in, like today. I'd get on my scooter, I had to take care of some business and I went to Fred Meyers. Sometimes I'll go to Cascade Station down there by the airport....Or Safeway, I go to Safeway sometimes."

Neighborhood barriers

"Not especially. There's nothing in this neighborhood. There's a movie theater that I can't afford to go to. There's no good Chinese restaurant close enough. I've always lived in Southeast. I think I lived in Northeast and North Portland too. I like Southeast. I'd like to stay in Southeast."

"I thought Portland was going to be the answer for decades. Like I said, I'm not 25 anymore. I don't have money. So, it's not going to be here. I've never thought about it not being in this house, but that's become a reality. I'm houseless, I'm not homeless. [I'll stay] until my kids are ready to renovate. We're trying to empty the house out. It's really hard with me having to pace myself for work for having to do anything with the house, sorting through or donating, garbage. I have one small trash can and now all the recycling has to go into it, ridiculous. But, that's the situation we're living with.

I: Maybe a big barrier to trying to stay in the neighborhood is cost?

R: Maybe. [Laughing.] I don't play the lottery, I don't expect to win it. I know there's other housing setups, it's just going to be much less space. Much less freedom of movement. There may not be a car involved. I'm still driving, but that car is almost 30 years old. It may

not stick together much longer. I can't see putting out thousands of dollars for a car right now. So, I'm not quite sure what I'm going to have to look forward to. Is it going to be a group home? Is it going to be a boarding house?"

"I'm concerned right now because my neighbors right here, they were here before me, right next door. They are getting ready to move. They put their house up really high. The house is not as nice as this. They added on. This is a very quality house. The bones of the house. It's a very well-constructed house. Anybody who has ever been in this house to do anything always, you know, man, what was done in the house and the things I've done since to maintain it or make it better. I put another bedroom downstairs like I said. If my mother came and whatever I could go downstairs and she could stay up here. If I left here I'd have to win the lottery or go somewhere where . . . I can't see myself moving anywhere else. The people right here are getting ready to sell this. They've got 500,000 offer for that house. I don't think they paid 50 for it. They're going to move and I'm so afraid that they're going to make a high rise like they have down at Fred Meyers."

"Well, I used to [ride the bus] when my car wasn't very good. I used to ride the bus more then. Or, if I'm going someplace I might park my car and take the bus rather than drive. Now, the only obstacle I have is when I'm walking up 162nd. I don't have enough space going under the overpass. If they could push that back a little bit that'd be good."

8.3.2.4 Interview Functional Ability

8.3.2.4.1 Utah

Balance, back, knees, falls

- "Balance. That's what I was trying to think of a while ago. My balance has really gotten bad. But I've had eight back surgeries. And both knees have been replaced. And so I've had one shoulder replaced and rotator cuff surgeries on both of them. And so I can't raise my arms up. So it makes it really hard to do things in my kitchen. I need to have something that I can climb up on that I would feel safe. But I don't know what it'd be."
- "Usually, all around the house now I use a cane. It helps me. I, I have—I have a bad back [clears throat] and also my knee."
- I1: So, is that what kind of keeps you from going out and walking around, or has it been the weather lately?
 R: More, more my back. I've, I've got a really bad back, but they can't do anything about it, not without drastic surgery I was told back in, because it was, I don't know, quite a number of years ago.
- "Yes. So that means that as I walk out the door, I'm holding on to the door as I'm opening it, but then I can—if I need to, I can hold on to the railing while turning around making it. So as I said before, the balance and stability. So that's been very helpful."

- "Okay. Well, both of us—he's 76 and I'm 72—both of us had problems getting up the front steps, especially if it was wet or snow. So we just didn't go that way. We would come around and go in through the garage. And there was a lot of wobbly knees a lot of times. I was always concerned when he was in the restroom, bathroom by himself, before the bars were installed, because I would always listen to be sure he didn't fall or something. So it was nerve-racking before the bars, I guess would be what I would say."
- "We don't have to walk as far. But we—I was always hesitant to do that without the grab bar there. I was always afraid I was going to fall. [...] He[her husband]'s fallen several times, all around the house. He's fallen down the basement stairs three times. And he's fallen in the bathroom once. I fell in the garage once. Oh my goodness. That's terrible. And so mostly, it just kind of limited our access to the house because we would try to come in—because we could hold on out there. Even though there was no bar, you know, we could hold on easier there than we—yeah."
- "Yeah, I was okay. But it wasn't—no, because my back was bad too, and it's still bad. My back started bothering me, and this leg, because I have a pinched nerve on this. And I hated to go downstairs, because it was so big, and I had my pantry down there or storage thing that I had down there, my blankets and dishes that I had stored down there or things that I needed for Christmas or for Halloween or something. [...] I probably fell like the second—you know, mis-stepped. Yeah, I did a couple of times. But that wasn't major. I didn't fall back to hit my—because I kind of stumble and just fell like a step or two away from the last one. But it was nothing."
- "I have a pinched nerve on this leg too. And sometimes my knee, like it bothers me. And I get a little numbness here since a long time. That's why, when I was over there too, I started noticing that more—you know, as I went down the steps too, that it goes numb and everything. And I have a pinched nerve. And I don't want to get—the doctor says, "I wouldn't recommend surgery on that, because that's pretty painful." So I do exercising too. Actually I got in a car accident. Some car hit me from behind when I lived over there last—this was in May last year. And there was a three-car pileup that the car behind the other car hit the middle car. And the middle car hit me. So I was going to physical therapy up until November. Yeah, that was September, something like that. Yeah.

October was the last time that I had to go to the physical therapy because of my—it messed up my back. And that's when I started noticing my pinched nerve more on this leg. But, no, I can—if I'm careful—I kind of walk carefully, you know. And that's what we have to do, be careful. And they've told us about rugs too. But I like rugs too. [Laughter.] I'm careful too. I kind of tripped on it too, but I don't have too many like that one there. I like them in the kitchen. Usually, because you splash things in the stove or the kitchen or the fridge, especially when the kids come. But I'm careful. You know, I manage to be a little more careful, yeah. You have to. You know, you have to do that. But not everybody thinks that way, not all elderly people."

- "Yeah, but I slip and fall too much."
- "I just barely had to tell that nurse that comes in that I had to have somebody help me. I can't wash my back. I can't get my arm back there."

- "My mother never had any knee surgery or knee replacements or hip replacements or anything. She fell a couple times. Well, she didn't fall. She tripped and broke her pelvic a couple of times. She did that a couple of times about six years apart because she tripped. She didn't fall."
- "I walk around the neighborhood, but I'm not real regular with it. The only exercises I've been really doing is my knee exercises. I use the pepper stuff and the Italian stuff on my knees, and it's—I usually use it for about a week, and they wouldn't bug me maybe for six or nine months. But now, that's not really working, and I'm thinking about it. But, I'll get this taken care of first. I'm going to go see the doctor about it. I might them cleaned out, you know. They scope them and clean them out, but the pepper spray is not, the pepper stuff is not cleaning them out."
- "I've had arthritis in my right knee for over 40 years and never done anything about it. Unlike my wife, who also had arthritis in her right knee, she had constant pain in her right knee, I don't have that; I'm sitting here, there's absolutely no pain. If I'm laying down, there's no pain. If I overdo the knee by trying to walk too far or do too much lifting then I get pain, but as long as I don't do it too bad—as long as I sit down and relax—within just a few minutes the pain is gone. I have no pain right now, none. It's only when I overwork it, the knee, that I get any pain is what I'm saying."
- "Well, I had both my knees replaced and they're recovering okay, but my ankle is getting worse. Okay? So walking—if I walk too much, my ankle gets really bad and then I just have to use the crutches, so I depend upon a lot. Depends on how my ankle feels. So my ankle needs surgery, but I'm just not ready for it."

Eyesight

"I am on your side. I want to stay here until I die, to be honest with you, that's what I want to do. I have several children that want me to come and live with them. So far, if I were to live here alone for the rest of my life, as long as my health is what it is now I'd get along just fine. I honestly say that. I get along just fine, because there's always family and friends that are willing to give me a ride to the store or whatever—take me to church, whatever-and so I do have that type of mobility. But I don't need to get out and do very much. I very seldom go shopping; if I go shopping I spend money. So that, that is—I'm going to—for want of a better term, that's the worst thing about having this macular degeneration, losing my eyesight to a point. I don't know what you know about macular degeneration, but I was told that people who get it like I have it-and I've had it for about 12 years now----people who have this, their eyesight diminishes to a certain point, then it levels off. People like myself almost never go totally blind. Now, I've been going to an eye doctor, the eye doctor I was going to is money-hungry; he was always having me-he had eye tests and eye tests that Medicare would pay for. Here's how I test my eyesight: I've got a wristwatch here that talks [...] Okay. If I hold that right up to my eye, and if the light in the room is bright enough, I can tell you within one or two minutes what time it is. That's how my eyesight is; that's how it's been for the last three or four years. So I don't expect to go totally blind. I get around my house fantastically well. I memorize where things are, I can do my own cooking-besides all of the food my kids bring to me, they're afraid I'm starving to death. I get along; with my eyesight what it is I get along, I think, perfectly well."

- "And my eyesight's limited now. So if I go anywhere, one of my children come take me."
- I: The bus. [Long pause] And then I would assume that the reason why you don't use public transportation anymore is because of your eyesight?
 R: Hm-hmm [affirmative].
 I: And your back issues?
 R: Hm-hmm [affirmative]. It's more my eyesight.
- "And Sandy's had two strokes. And he's completely blind on one eye from glaucoma. And almost blind in the other. So, he can't do a heck of a lot. I mean, he can't get up to look up to do any because he'll fall backward."

Hearing issues

I: Do you know where is the closest transit stop, like, bus stops?
R: Do I what? I'm sorry.
I: Closest bus stop in your neighborhood or transit stop, transit station?
R: I don't know.
I: Bus stop. You don't know?
R: I'm having a really hard time hearing you because I can't hear out of this ear at all.
I: Do you know where is the closest bus stop in your neighborhood, from your house?
[slowly & loudly]
R: Where the bus stop is?
I: Yeah.

Delicate health and compound issues

"But, you know? Thank God I've been, I've been very lucky. I, I've been sick. I had pneumonia, I think, three years ago. I was so sick. He'd go in there and check on me because I didn't know I had pneumonia. And he'd go in there and check on me. He says, 'I'm afraid you're going to die on me.' Finally, he talked me into going to the doctor. By then I had had it for over a week. So, they gave me medication. And I stayed here at home. Then I had a, a gout attack, which I didn't know I had. And I had it on my knee. And he had to call the ambulance at 3:00 in the morning because I couldn't move. And that's what it was. And, again, I was on a wheelchair and stuff and he took care of me then too. So... And then now he took me to the doctor, I think it was on the 21st of March. And they sent me to the hospital because I had, they said I had a real bad virus in my stomach. I had a urinary tract infection, and I had double pneumonia. So, they kept me in the hospital for 10... Yeah"

Get tired easily, fatigue

• But it's not going to be for very, very, very long, because, like I say, you get tired. Like I go in the store and everything. And for me to—I've been doing that so long, even over at the other house. And I thought, you know, that's—even to go to my daughter's, I have to

load some things. I get a lot of stuff that I need to take her. And I think—ah, to me, it's like a big job, like very hard. And if I had somebody—like told my daughter, "If you get your disability and they get you a home or something, maybe they can give you a two-bedroom place, and we can both move in together and help each other.

• It's mostly, I guess what you call fatigue. I don't have the strength to walk like—I used to walk two miles a day. And for some reason I just don't have the strength. They're analyzing my back and everything, imaging my back. But they haven't really got a definitive answer. But mostly I'm just not strong enough anymore to walk very far.

Dizziness

• "We go everywhere, but we use a walker. I need a walker. Not because of my legs but because of dizziness. And I have diabetes, and it might be low blood sugar. But I should have two need operations, and I'm not going to do it. But the walker is the best exercise equipment we have because we walk everywhere. And then I can sit down. And that's—two miles. Pretty much. In and out and walking around and going through stores and walking across parking lots to Jo-Ann's."

Need oxygen tank

• My total thing is I'm on oxygen 24 hours a day, so I have tanks. They're the small ones that I can carry. I don't carry enough oxygen, so I have to take backups. But, I'm able if—Right now, I'm having a hard time getting to the car. Once, once I get in the car, I have total control, and I can go on the other oxygen. And then, I get up to the restaurant that I go to every day for lunch, and I have to carry two tanks in to have enough oxygen while I eat. And, they're very, very nice. They have a place for me to sit and that works out.

8.3.2.4.2 Portland

Walking

"Yeah, I walk [my dog] four times a day up to the park and I ride my bike down to Safeway, sometimes three or four times a day."

"Yeah, I try to stay upbeat and push the envelope, keep working it. I still ride my bike. I walk [my dog] at least four times a day. Occasionally keeps me up until 3:00 in the morning. Occasionally."

"I mean, how would you like to be me and my walker trying to walk and having a heck of a time walking because I grit my teeth when I'm walking because I'm in pain in my legs trying to walk because I'm walking stiff legged? My knees don't navigate like knees would if you had cartilage in them. So, yeah it makes it rough. Even in the wheelchair. I wheel myself, too. I'm always doing my arms. I have a lot of pain all over because of the arthritis stems in my lower lumbar and radiates out to everything."

"This one runs pretty good. I used to go to church up at Holy Redeemer instead of Holy Cross. The reason I go to Holy Cross is because I get a ride, but I'd rather go to Holy Redeemer. The 6 goes straight up there and then you get off, but I have to walk five blocks or six blocks, and I'd rather go there, but . . ." "It's easy to walk it. I don't have major streets. On 82nd, for people that are walking, that are trying to cross 82nd, it would help if they had flashing lights. People don't stop. Once in a while you get somebody kindhearted that says, "Oh, let me stop." Then that stops all the traffic. It could be pouring, freezing, it doesn't matter. You're there with bags and they're just zipping right along."

Bicycle Riding

"I would have to go really far out for my bike ride. The last three years I did the Banks Vernonia Trail, which is halfway to the coast on my bike...[I do that] Once a summer."

Mobility Device

"Normally, I'd get in, like today. I'd get on my scooter. I had to take care of some business and I went to Fred Meyers. Sometimes I'll go to Cascade Station down there by the airport."

"When I visit over here, I visit people in their yards mostly, because some of them don't have [wheelchair] access into the house. I visit [name] and there's some people who moved in over here and there's some kids who live up the block that come over and visit me so I go over and visit them when they're outside sometimes. Or visit with them when I'm on my way somewhere or on my way back from somewhere. So, the street knows me."

"I got a little scooter there, but I can't use it because I can't stand up on it because of my legs. I've been thinking about getting a motor scooter, but I can't afford it right now."

"Oh, I did for a while. I'd go up and down the roads. I don't go anywhere and stop in and talk to anybody. Just get out and get in the neighborhood."

"But I can't go anywhere by myself. I need an electric wheelchair. I can't get out the door by myself. I can't do anything by myself."

Declining Health/Ability

"My sore point is I've got mold coming in through all the windows and I will probably need a ramp on the front porch here one of these days, pretty soon. I'm on a CPAP machine, I've got a bad back, all the frailties of old age, so."

"It has [a handheld shower head]. It works great. I utilize it. I like that walk-in shower. I couldn't get in and out of the tub anymore."

"They think I might have Parkinson's because I stumble and fall a lot, but I can get on my bike and ride for miles...Not officially, maybe. Last time I saw the doctor he said, "we think Parkinson's." But not officially diagnosed. Supposedly that's what happens with other people with Parkinson's. They fall and stumble. I can get on the bike and ride for miles."

"Well, it was really tough. I had really gotten to the point where taking a shower, I dreaded. The problem, I've got my knees, I've got bone on bone in my knees, I've got stenosis, I've got all kinds of sciatica and stuff. So, to swing my leg up over the tub and then get in there, I'm just shaky the whole time. So, I would try to wait 'til somebody came, but I can't do that, you need to take showers. I hated it, I just hated it and it made me nervous all the time. Now it's totally different. Now I just walk in, take my shower and walk out." "As I get older it's been a challenge for me, steps."

"I fell several times, but once it was very scary. I ended up going to the doctor to make sure I was okay. That really made me feel like I'm getting older now and I have to be more careful. I can't turn and move. I have to pace myself."

"It's hard on me. It hurts, my whole body is in pain because I have osteoarthritis and fibromyalgia and I have no cartilage in my knees, I have glaucoma and I had a partial cataract surgery here last September and it didn't quite turn out the way we had hoped it would, because I could see better before the surgery and now it's not as good because there's a ripple in my corneal thing because they have to go in and surgically stitch it down, case it wasn't staying, and it made a ripple in it. So now I kind of see a little double a lot of times, or not as clear."

"But, downtown has all changed and my eyesight is not good so I couldn't do landmarks. I used to know downtown like the back of my hand. 30 years in between changes things. Plus, the trees were about 30 feet. It's like a forest in the middle of the city."

"I wish that I'd have somebody that could come out and do my yard work for me. I think once they go through and do it then I can keep it up."

"I have to carry everything. I can usually only carry about two days worth of groceries, even with a cart. If not, then a cart is too heavy if you put too much. Getting off and on buses. I can only carry enough groceries for a couple days. I go about three times a week."

"I sure do need more things, more help. Like I can't clean the gutters anymore. Some trimming I can't do. I can do some, but I can't do it all."

"My asthma, for the last six years it's just went nuts. I've got a feeling the furnace helped start it and the rest of it just accumulated. Boy, sometimes if I don't have an inhaler close I'm in bad trouble."

"I get exercise. The kind that isn't stressful. When I was painting this thing I had to do it while my stomach was killing me. Those days are gone. I'm not so bad, but I'm 80 years old so I'm taking it easy."

Public Transit Ridership - Positive

"I would say [I ride the bus] frequently. There's places I go and the weather and all the above. I have to use the transit system. I like it. I ride the bus and occasionally the Light Rail."

"Oh, all the time. I ride the bus like almost everyday. I'm lucky if it only takes one bus. Sometimes, if I have to go to have medical it takes me an hour and a half to get to where I'm going. Everything takes, a lot of things take quite a lot of time. Some buses don't come as often as others. If I'm going somewhere and it has bus routes that come every 10 or 15, I love it. Sometimes bus routes come almost every half an hour. I'm a familiar face to the bus drivers."

Public Transit Ridership - Negative

"Not me, no. It's too difficult to get on that bus, a real bus, with that [scooter]. I always call the Lift."

"No, because for one thing . . . oh, I know, I used to ride MAX and go downtown. I'd drive to Gateway and then drive down there. That was before I got so bad though. And then MAX just got too dangerous. It's too scary. You feel so vulnerable. I'm not a scaredy-cat, but when you see some of the people . . . you know."

"Yeah. There's just too much walking now, even to go to Gateway to go to MAX. I have to park the car, then I have to walk over the train, then when I get off the train downtown there's walking. It really has isolated me."

"Do the ramp and stuff like that. That's one of the things I kind of like about the MAX. They have the little thing that just kind of shoots out there. If they had something that kind of shot out there, that'd be cool. Sometimes, like yesterday, when I was going to go to Kaiser to get my thing, I got on the 75 over here. I got off at Lombard transit and it's got too many poles and benches and stuff like that that are too close. I actually got stuck under one of their friggin' poles. You know, the round part? I got stuck under that because she didn't stop far enough up that I didn't go straight out into the pole. So, someone had to lift my rear wheels off of the ramp because they those pieces that come up on the side of the ramp, so that she could close the ramp so I could [get around it]."

"Lately, it hasn't been very much. I used to go to the doctor over town. I hated that. Every place I go on the bus, I have to take three buses. The 6, the 75, just to go to Fred Meyers I have to take the 6, 75, well that's only two. How come I counted three? If I get off at the MAX station it takes me right up. Sometimes I do that, get off at the MAX station. It never used to stop there. But, I thought, why can't it stop there? Then I could get straight off and I wouldn't have to transfer to the 75."

"I can't [ride the bus] by myself. I can't think to do it"

"I can't read the bus schedules."

Car Dependency

"Yeah, I mean I don't go very many places because when I get there there's either no parking or if I do find a parking place it's too far. Mostly, my friends will take me to a lot of places in the city. They'll drop me off and then park."

"Oh, I haven't done that for a while. I do a lot when I'm driving Bob around, he's 90. I've been helping him. I pick him up and take him places and we walk. That's about it, not much walking, not around here."

"I have a car. I wanna do what I wanna do. I want to be independent as I possibly can to do what I wanna do. If I didn't have a car, then yeah I would. I've always had a car. That's why I drove a school bus, cause I drive."

"I like being able to drive. That's a habit you can't give up. You can change your mind. You can't do that on the bus."

Self-done Home Modifications

"Yeah, [the grab bars] were laying around. I found some at a yard sale. I installed them as best I could. I put on the porch out here. That's where it landed."

"Anyway, I bought a five gallon bucket of tar. Did the whole area [of the roof]. So far it's held up."

Traveling Distances

"I'm good with it. Everything is so close by. I like the convenience. I would say I strongly agree. I have so many different ways to go. A lot of neighborhoods only have one way. They have one main area. Now we have 92nd that's really opening up. I have Woodstock. It only takes me one bus. I have all the shops. I have two Goodwills, A Salvation Army, altogether I have five thrift stores including the Goodwill. Just right here. It's great. Clackamas, the movies there. Eastport has movies. I have tons of places to go to."

ProxyR: "I'm the one, I know I'm not speaking on his behalf, but I feel like I can support him enough to get where we want to go. My weekend staff as well. She and I creatively kind of think about all sorts of things that we would like to do, so then we think, [name] could do this too. We spread our wings. He's going to Seattle in a couple weeks. We're going to take the drive up there. I have a bunch of maps and books. We're gonna just explore the Ferris wheel or the Space Needle."

In Home Mobility

"Yes, the grab bars, the handle bars, the banisters, yes. They really have. Because, like the stairs to the basement, really scary. I almost fell several times. I would say that I strongly agree. To carry laundry to go downstairs was really hard."

"Respondent 2: "Yeah, she has trouble getting up. Sometimes she starts to fall and she can't catch herself....From the bed and we have to get one more for the bathtub. She has one to get in but not one to hold onto."

Respondent: "I've fallen between the toilet and the bathtub before."

8.3.2.5 *Home Modifications*

8.3.2.5.1 Utah

How to learn about ASSIST for home modifications

- Salt Lake County Aging Services
- A Friend/Family who had received the service
 - "Well, I got the name from a friend. She lives right down the street here. And she had used them, and so she told me about it."
 - o "My neighbor had some work done, and she was telling me about it."
 - R: A friend told me and I live on a fixed income, so I just needed some help.
 I1: Okay. Yeah. So a friend told you because she got the services before?
 R: Right.
 - "My sister told me that my other sister had used it, and she said, "Give them a call and see if they can help you at all." "
 - "Through a friend of mine. She passed away already, but she's a wonder. She had ASSIST come over and do something for her other house, her condo. And she's

the one that told me to call and see if I could get some help when I was hurt. So, I called and they came over and they, yeah, they told me I qualify, so, cause I'm just on Social Security, you know."

- Senior Center / Recreation Center
 - "I'm trying to think. I think that, one time, we went to a senior citizen thing, you know. And they talked about it."
 - "It was at the park over by the recreation center that was just built, the Salt Lake County Recreation, the pool. They had a meet and greet. [..] And there was Dave Woodman sitting over with ASSIST. [...] And my partner went over, Walt, who I just talked to. He said, "You ought to go and ask. You need a lot of stuff done. And I bet you'll qualify." Because I don't make so much. So I was reticent. Finally, I went over, and I met. And I got on the list."
- Community Action
 - "My daughter knew someone at the Community Action and she referred to ASSIST. And she called. And they came down."
 - "I can't remember who it was through. It was, oh, Community Action, I believe it was."
- Information book for seniors
 - "I was the caretaker for my mom. And she's the one that said you need to find some rails. So, I looked—I have a book that I get at Smith's. I was getting them. And it was called Information for Seniors. And in there, that's where I found the number. It said for railing or help with, you know, things to get in the tub. And I thought, oh. Because my mom couldn't stand up long enough for a shower."
 - "Through that book, "55 and Older.""
- Hospital
 - "I think when I was in the hospital somebody probably told me. I'm not absolutely sure."

Types of home modifications received

- Railing
 - "Well, it had to do with mostly railings in the hallway, the entryway, and then, the wheelchair ramp."
 - "The railing to my front door. My husband had already put one in at the back. But this was after he had died. And so I really needed one at the front too. So they put one in there for me and grab bars in the bathroom too."
 - "And they put a railing down the basement stairs, so that he'd have something to hold on to."
 - "And they put a railing going down to my basement."
 - "I have, in my bathroom, this is, has a shower. So, in my bathroom where my mom stayed in the main bedroom there's a rail right here. And then there's another one on the other side of the wall. So, she could get in here or get in backwards that way. Or frontwards, however it was. But she had a, a long handle to hold onto, nice and sturdy."
 - "[...] so I have some railings that were put in when I first moved in, to help from the house to the garage, something to hold on to, especially—this is an area where there are very high winds early in the morning often, and with the snow coming.

So what ASSIST did, then, was put in some railings by my house. So I have the door here on the porch, and they put a railing here and a railing here, and here are some steps. So that meant that when walking to or from the garage I had something to hold on to."

- "The thing that's been so helpful are grab bars. They installed grab bars on our front porch to get up the two stairs. They installed a grab bar on our garage steps to get into the kitchen. They installed grab bars in the big bathroom, one, two, three grab bars, which are amazing. They've helped—they've saved a lot of falls."
- "In the front porch, yeah, so I could go down, because, as you open the door, it was right here by where I open the door, and it was kind of dangerous. So he figured, "Would you like a handrail there?" "Yeah," I said, "I would." So he did. He put the handrail on that side as you open the door. And, you know, you could hold onto the door."
- Ramp
 - "They redid the whole front porch and, and the ramp one time, and then, they came back later and just done it, did the ramp, which needs it again, as you can see."
 - "Get my ramp fixed. Like I said, I've tripped on it a couple of times. It's in really bad shape."
- Grab bars in the bathroom
 - "They fixed my bathtub. They put in like, handles for the bathtub."
 - "Yes. I have grab bars in the bathroom and, because I've fallen, fallen before. I'm very weak. My legs hurt real bad. I have neuropathy in my leg, and so, getting around is very hard. I guess I have not been able to get any help. I can't do much of anything."
 - "Yes. And there are some—they put in two grab bars in my bathroom shower. And I can show those to you."
 - "So inside, the two railings in the shower. And so there was—when I had the shower put in, before I moved in, it was a bathtub. And I had that taken out and put a shower in. And the fella put in one railing. And I guess it's—anyway, it's not one that I use that much for holding on to. But I was showering one day, and I realized—showerhead behind me—how nice it would be to have, say, a railing about here that I could hold on to and shampoo and everything. And so where they put it in—and I'll show you. So one is here where I can hold on. The other is here, a vertical one. So horizontal and vertical. And those have been just the best. They really are. Because, as I say—and it's probably back of my mind, this fear, "What if I fall in the shower or something, and there's nothing to grab on to?" So these are just really good."
 - "And also in the big bathroom, they installed an ADA toilet, the higher toilet. And that's been a real blessing, real blessing. And then, in the small bathroom, they put in one grab bar."
 - "Oh, yeah. Oh, absolutely. Yeah. I couldn't even stand in the shower. And so they put that bar in. So that was nice. Because I had a bar in this other one that was here when I bought the trailer."

- "When I broke my foot, he put up bars in my bathroom. I had already put one up when I was 70 just because I love to take a bath, and I was 70. So, I had him put up that bar, and then, when I broke my foot, he put another bar for me."
- Move the washer/dryer from the basement to the first floor
 - "See, that's another thing. When you're young and you're remodeling everything, you don't think about, these days are coming that you need those kind of things, just like with the stairs. Of course, I hardly ever go up and down the stairs anymore. My son does everything for me that has to be done downstairs. And so I did have my washroom moved up, which I did myself because I was just so scared of going up and down carrying laundry. And we just built a little room there right off the kitchen, and it's been so wonderful."

Life before and after the home modifications

- R: Well, we had a little problem trying to get her up and down the stairs. And then, since the modifications have been made, it's been a lot easier for her to get around. Although we need—still have to kind of hold on to her so she doesn't fall.
 I1: Okay. So she's still having mobility issues.
 R: Yes. But not as bad as it was.
- "The only thing is I always just come in the backdoor because I had the railing there, you know, that gave me support. So it's nice to have it out front. And it's nice to have it for other people if they come to visit me because I have a lot of elderly friends that need it also."
- "The railing has made, especially with my legs, a lot easier."
- "And I am so much better. Well, especially my rails and my stuff. You know, that's, well, 100 percent better because I need them. Yeah."
- "Well, they put rails down the stairs, and then I got more handicapped, so I'm afraid to go down because I might not get back up. And so my kids moved my washer and dryer up here so I don't have to go down there. But if I can get rid of this problem with the neighbors I would like to start going to an exercise class."
- "Before I was falling a lot. When I got the bars put in, it was very great because I could hold onto them while I'm showering, and the ramp gave me the ability to get up and down, you know, to my car. And, they're just, you know, without them, I can't do anything."
- "Probably, in terms of, oh, say, like, "certainly" is not a good word. But the idea that, especially, say, like, when I was walking around here and carrying something on the outside and didn't have, maybe, my balance, I didn't feel that day was very good. And it's like, "Am I going to be able to make it?"

And now it's nice because I know there's a railing there. And, in fact, when I—I shovel the snow. But I only—I shovel my little back porch and then out, kind of a path to the garage. But I have something I'm holding on with the left hand, shoveling with the right. So it's just enough to give me a path. And I have a couple of neighbors on both sides, and they're very good and helpful at shoveling.

But it gives me a sense that—a little more confidence that—maybe that's a better word—that I can hold on and do things. So probably confidence is a good word."

• "Well, both of us—he's 76 and I'm 72—both of us had problems getting up the front steps, especially if it was wet or snow. So we just didn't go that way. We would come

around and go in through the garage. And there was a lot of wobbly knees a lot of times. I was always concerned when he was in the restroom, bathroom by himself, before the bars were installed, because I would always listen to be sure he didn't fall or something. So it was nerve-racking before the bars, I guess would be what I would say. [...] Kind of all of that. Just getting out the front, a lot of times, is closer. We don't have to walk as far. But we—I was always hesitant to do that without the grab bar there. I was always afraid I was going to fall."

- "We are really, really satisfied with the grab bars. They're been a real blessing. But the thing that's a concern right now, and I've been meaning to call ASSIST about, is the basement stairs is open at the top there. And Audie has no balance in one of his ears, his right ear. So every time he walks by there, I'm always afraid he's going to fall down. He gets up off the loveseat over there, stands up, and he's all dizzy. I'm afraid he's going to fall down the stairs. So I would love to get something at the top of the stairs there to make it safer for him."
- "Well, of course, much better. Yeah. The steps—I couldn't hardly walk down the back steps. And the door, you know, it was open to the elements. Of course, the plumbing [laughs]. I have water. And I have a secure feeling that I can call again."
- "I just needed it because my husband was starting to, you know, need help. He, he— Well, he wouldn't use a cane for the longest time. Then, he would use it in the house, but he wouldn't use it out of the house. And, he was hanging onto me, and he just, we just needed it, you know, to help to steady him. Actually, he got to the place where he couldn't get into the house even with the rail. The last few weeks, I had to call the paramedics a few times to help me get him back inside the house."
- "Well, I'm going to be very honest with you. I've done an awful lot of work in this home here by myself, and some of it did not meet building codes, like hand rails. And the ASSIST program was so wonderful to put the hand rails on all my stairways except for the one that goes up to an attic room, and it's not living quarters, legal living quarters, so they did not put a handrail up there but everywhere else. The front porch is all new. They put me a grab bar here, because I've got two steps to go down to my kitchen. On my back porch I've got six steps going down to the basement, I've got six steps coming up, and right behind me there's a stairway, a full stairway, that goes down to the basement; they put handrails on all of these for me. Wonderful, wonderful, wonderful. I've really appreciated it."
- "Well it's hard to explain. But before I had a hard time getting up and down the stairs. But since then things have gotten a little bit worse so I've been using crutches and I hardly use the rail at all now, because I'm using crutches."
- "Well, it was bad, because, as I say, I got hurt. Until they put them on it really helped me, you know? But before, well I didn't have all that convenience. It was an inconvenience. Now it is good, you know. Like getting in and out of my house real good by hanging onto that railing. Bathroom is good."

Additional needs for home modifications

• Mostly, the respondents answered that they are quite satisfied with what they got and they are helpful. Although many of them haven't felt the needs of any further modifications, they are acknowledged that things are getting limited for them.

- "And so I can't raise my arms up. So it makes it really hard to do things in my kitchen. I need to have something that I can climb up on that I would feel safe. But I don't know what it'd be."
- "The one that I wish I'd thought about—and I don't know that it's worth having them do it—but the—on the—so this is the house. So as I come out the backdoor, there's the railing here and a railing—a shorter one here where there's some steps, which is great. But going around the corner, say, to turn on the house or something, the railing—and I'm the one who told them where to put it—is, like, here and then the air conditioner and the hose bit. And in thinking about it, I kind of wish that I had said, "Let's make it a little closer to the corner, make that a little longer." But as I say, right at this point, that's the only one I can think about. And I don't know that it's—I don't know that it's worth saying, "Come back. Take that and let's put a longer one in.""
- R: the small bathroom has a regular toilet. And it's real short. And that's becoming more of an issue because we're not able to use it in there because it's so short. It's really hard for him to get up off the toilet. You don't realize how much difference there is until you use a short one and you use the taller one. It makes a big difference.
 - I: So maybe adding, like, another bar grab closer.
 - R: Or even a taller toilet.
 - I: Or a taller toilet.

R: The ADA, American Disability—the toilets—would be helpful.

- "The cupboards, because the cupboards were pretty high. They were old-fashioned and they were going to be remodeled. These people that sold me the house were going to remodel it. The cupboards were pretty high. They didn't replace those, because they only did the sink and they put shelves—the cupboard, the shelves on the bottom, but not the cupboards on top. I would have wanted those probably lowered."
- "Well, all the modifications that's been done up to today is great. It's helped me in every way possible. But the one we're waiting on, the complete renovation of the home to be opened up where I can get around in my chair, is very important, and that's what we're really hurting and waiting for."
- "I wish I'd have had one of those bathtubs you could walk into when I had the, when we had the shower put in because I have to have somebody help me now get in and out of the shower."
- "Well, at this point, getting in and out of the bathtub is pretty hard. And you know, to get a couple grab bars would really help. So that's about it. I go up and down the stairs probably—okay. You're not going to get it any softer. I go up and down the stairs like once. I come down in the morning, go back up at night, so I don't use the stairs that much. And it's not that hard using the stairs. So that would be the main thing."

8.3.2.5.2 *Portland*

Walking

"Yeah, I walk [my dog] four times a day up to the park and I ride my bike down to Safeway, sometimes three or four times a day."

"Yeah, I try to stay upbeat and push the envelope, keep working it. I still ride my bike. I walk [my dog] at least four times a day. Occasionally keeps me up until 3:00 in the morning. Occasionally."

"I mean, how would you like to be me and my walker trying to walk and having a heck of a time walking because I grit my teeth when I'm walking because I'm in pain in my legs trying to walk because I'm walking stiff legged? My knees don't navigate like knees would if you had cartilage in them. So, yeah it makes it rough. Even in the wheelchair. I wheel myself, too. I'm always doing my arms. I have a lot of pain all over because of the arthritis stems in my lower lumbar and radiates out to everything."

"This one runs pretty good. I used to go to church up at Holy Redeemer instead of Holy Cross. The reason I go to Holy Cross is because I get a ride, but I'd rather go to Holy Redeemer. The 6 goes straight up there and then you get off, but I have to walk five blocks or six blocks, and I'd rather go there, but . . ."

"It's easy to walk it. I don't have major streets. On 82nd, for people that are walking, that are trying to cross 82nd, it would help if they had flashing lights. People don't stop. Once in a while you get somebody kindhearted that says, "Oh, let me stop." Then that stops all the traffic. It could be pouring, freezing, it doesn't matter. You're there with bags and they're just zipping right along."

Bicycle Riding

"I would have to go really far out for my bike ride. The last three years I did the Banks Vernonia Trail, which is halfway to the coast on my bike...[I do that] Once a summer."

Mobility Device

"Normally, I'd get in, like today. I'd get on my scooter. I had to take care of some business and I went to Fred Meyers. Sometimes I'll go to Cascade Station down there by the airport."

"When I visit over here, I visit people in their yards mostly, because some of them don't have [wheelchair] access into the house. I visit [name] and there's some people who moved in over here and there's some kids who live up the block that come over and visit me so I go over and visit them when they're outside sometimes. Or visit with them when I'm on my way somewhere or on my way back from somewhere. So, the street knows me."

"I got a little scooter there, but I can't use it because I can't stand up on it because of my legs. I've been thinking about getting a motor scooter, but I can't afford it right now."

"Oh, I did for a while. I'd go up and down the roads. I don't go anywhere and stop in and talk to anybody. Just get out and get in the neighborhood."

"But I can't go anywhere by myself. I need an electric wheelchair. I can't get out the door by myself. I can't do anything by myself."

Declining Health/Ability

"My sore point is I've got mold coming in through all the windows and I will probably need a ramp on the front porch here one of these days, pretty soon. I'm on a CPAP machine, I've got a bad back, all the frailties of old age, so." "It has [a handheld shower head]. It works great. I utilize it. I like that walk-in shower. I couldn't get in and out of the tub anymore."

"They think I might have Parkinson's because I stumble and fall a lot, but I can get on my bike and ride for miles...Not officially, maybe. Last time I saw the doctor he said, "we think Parkinson's." But not officially diagnosed. Supposedly that's what happens with other people with Parkinson's. They fall and stumble. I can get on the bike and ride for miles."

"Well, it was really tough. I had really gotten to the point where taking a shower, I dreaded. The problem, I've got my knees, I've got bone on bone in my knees, I've got stenosis, I've got all kinds of sciatica and stuff. So, to swing my leg up over the tub and then get in there, I'm just shaky the whole time. So, I would try to wait 'til somebody came, but I can't do that, you need to take showers. I hated it, I just hated it and it made me nervous all the time. Now it's totally different. Now I just walk in, take my shower and walk out."

"As I get older it's been a challenge for me, steps."

"I fell several times, but once it was very scary. I ended up going to the doctor to make sure I was okay. That really made me feel like I'm getting older now and I have to be more careful. I can't turn and move. I have to pace myself."

"It's hard on me. It hurts, my whole body is in pain because I have osteoarthritis and fibromyalgia and I have no cartilage in my knees, I have glaucoma and I had a partial cataract surgery here last September and it didn't quite turn out the way we had hoped it would, because I could see better before the surgery and now it's not as good because there's a ripple in my corneal thing because they have to go in and surgically stitch it down, case it wasn't staying, and it made a ripple in it. So now I kind of see a little double a lot of times, or not as clear."

"But, downtown has all changed and my eyesight is not good so I couldn't do landmarks. I used to know downtown like the back of my hand. 30 years in between changes things. Plus, the trees were about 30 feet. It's like a forest in the middle of the city."

"I wish that I'd have somebody that could come out and do my yard work for me. I think once they go through and do it then I can keep it up."

"I have to carry everything. I can usually only carry about two days worth of groceries, even with a cart. If not, then a cart is too heavy if you put too much. Getting off and on buses. I can only carry enough groceries for a couple days. I go about three times a week."

"I sure do need more things, more help. Like I can't clean the gutters anymore. Some trimming I can't do. I can do some, but I can't do it all."

"My asthma, for the last six years it's just went nuts. I've got a feeling the furnace helped start it and the rest of it just accumulated. Boy, sometimes if I don't have an inhaler close I'm in bad trouble."

"I get exercise. The kind that isn't stressful. When I was painting this thing I had to do it while my stomach was killing me. Those days are gone. I'm not so bad, but I'm 80 years old so I'm taking it easy."

Public Transit Ridership - Positive

"I would say [I ride the bus] frequently. There's places I go and the weather and all the above. I have to use the transit system. I like it. I ride the bus and occasionally the Light Rail."

"Oh, all the time. I ride the bus like almost everyday. I'm lucky if it only takes one bus. Sometimes, if I have to go to have medical it takes me an hour and a half to get to where I'm going. Everything takes, a lot of things take quite a lot of time. Some buses don't come as often as others. If I'm going somewhere and it has bus routes that come every 10 or 15, I love it. Sometimes bus routes come almost every half an hour. I'm a familiar face to the bus drivers."

Public Transit Ridership - Negative

"Not me, no. It's too difficult to get on that bus, a real bus, with that [scooter]. I always call the Lift."

"No, because for one thing . . . oh, I know, I used to ride MAX and go downtown. I'd drive to Gateway and then drive down there. That was before I got so bad though. And then MAX just got too dangerous. It's too scary. You feel so vulnerable. I'm not a scaredy-cat, but when you see some of the people . . . you know."

"Yeah. There's just too much walking now, even to go to Gateway to go to MAX. I have to park the car, then I have to walk over the train, then when I get off the train downtown there's walking. It really has isolated me."

"Do the ramp and stuff like that. That's one of the things I kind of like about the MAX. They have the little thing that just kind of shoots out there. If they had something that kind of shot out there, that'd be cool. Sometimes, like yesterday, when I was going to go to Kaiser to get my thing, I got on the 75 over here. I got off at Lombard transit and it's got too many poles and benches and stuff like that that are too close. I actually got stuck under one of their friggin' poles. You know, the round part? I got stuck under that because she didn't stop far enough up that I didn't go straight out into the pole. So, someone had to lift my rear wheels off of the ramp because they those pieces that come up on the side of the ramp, so that she could close the ramp so I could [get around it]."

"Lately, it hasn't been very much. I used to go to the doctor over town. I hated that. Every place I go on the bus, I have to take three buses. The 6, the 75, just to go to Fred Meyers I have to take the 6, 75, well that's only two. How come I counted three? If I get off at the MAX station it takes me right up. Sometimes I do that, get off at the MAX station. It never used to stop there. But, I thought, why can't it stop there? Then I could get straight off and I wouldn't have to transfer to the 75."

"I can't [ride the bus] by myself. I can't think to do it"

"I can't read the bus schedules."

Car Dependency

"Yeah, I mean I don't go very many places because when I get there there's either no parking or if I do find a parking place it's too far. Mostly, my friends will take me to a lot of places in the city. They'll drop me off and then park."

"Oh, I haven't done that for a while. I do a lot when I'm driving Bob around, he's 90. I've been helping him. I pick him up and take him places and we walk. That's about it, not much walking, not around here."

"I have a car. I wanna do what I wanna do. I want to be independent as I possibly can to do what I wanna do. If I didn't have a car, then yeah I would. I've always had a car. That's why I drove a school bus, cause I drive."

"I like being able to drive. That's a habit you can't give up. You can change your mind. You can't do that on the bus."

Self-done Home Modifications

"Yeah, [the grab bars] were laying around. I found some at a yard sale. I installed them as best I could. I put on the porch out here. That's where it landed."

"Anyway, I bought a five gallon bucket of tar. Did the whole area [of the roof]. So far it's held up."

Traveling Distances

"I'm good with it. Everything is so close by. I like the convenience. I would say I strongly agree. I have so many different ways to go. A lot of neighborhoods only have one way. They have one main area. Now we have 92nd that's really opening up. I have Woodstock. It only takes me one bus. I have all the shops. I have two Goodwills, A Salvation Army, altogether I have five thrift stores including the Goodwill. Just right here. It's great. Clackamas, the movies there. Eastport has movies. I have tons of places to go to."

ProxyR: "I'm the one, I know I'm not speaking on his behalf, but I feel like I can support him enough to get where we want to go. My weekend staff as well. She and I creatively kind of think about all sorts of things that we would like to do, so then we think, [name] could do this too. We spread our wings. He's going to Seattle in a couple weeks. We're going to take the drive up there. I have a bunch of maps and books. We're gonna just explore the Ferris wheel or the Space Needle."

In Home Mobility

"Yes, the grab bars, the handle bars, the banisters, yes. They really have. Because, like the stairs to the basement, really scary. I almost fell several times. I would say that I strongly agree. To carry laundry to go downstairs was really hard."

"Respondent 2: "Yeah, she has trouble getting up. Sometimes she starts to fall and she can't catch herself....From the bed and we have to get one more for the bathtub. She has one to get in but not one to hold onto."

Respondent: "I've fallen between the toilet and the bathtub before."

8.3.2.6 Future Expectations

8.3.2.6.1 Utah

Expectations related to aging in place

- "Oh, there may be challenges. If it isn't too much of a hassle, I'll try to get by with what we have here. And if there's anything more, we'll sing out, you know, to somebody that they know what to do."
- "For my age, I'm taking care of myself. [...] Just don't take me to a retirement."
- I1: So the last question on this part says, "If you were to leave your home, would you want to stay in your same neighborhood?"
 - R: I would—if I left my home, I probably would go live with one of my grandchildren.
- "I'm going to stay until—so at this point, you know, I wouldn't move. I'm not saying it's out of the question. It may happen, like, if something happens to him. [...] I would like to live here until I die. I don't know. Like I say, especially if something happens to my husband, I don't think my kids will leave me alone."
- "Yeah, because it's true. You know, I'm the one that's going to be living here, not them. It's not only because they call me and because it's going to be less money. I didn't care, because I want to be comfortable and happy, because I do—I spend time in the kitchen when I'm not in over here. As soon as I can think of going, I can go do things and everything, and I'm glad. Or I go to my daughter's in the daytime, you know, when the kids are there, when they're not in school."
- "I am on your side. I want to stay here until I die, to be honest with you, that's what I want to do. I have several children that want me to come and live with them. So far, if I were to live here alone for the rest of my life, as long as my health is what it is now I'd get along just fine. I honestly say that. I get along just fine, because there's always family and friends that are willing to give me a ride to the store or whatever—take me to church, whatever—and so I do have that type of mobility. But I don't need to get out and do very much. I very seldom go shopping; if I go shopping I spend money."
- "Well, we haven't really discussed that too much, so I—we plan to stay here until we can't function anymore. So other than that, I probably wouldn't mind living with one of my children, but a rest home, I don't know that—I don't know if that would ever work, but maybe."

Expectations related to assisted living

• "A balcony and cheaper. [...] Yeah, I have friends, and I know a lot of people around there, yeah. And all the neighborhood there, the businesses and everything, the stores and— And it would be easier for me, because I don't want to drive. I don't drive at night too, because it's far from here and I go to viewings down—you know, the neighborhood mortuary downtown. And the church. I have my church that I go to, St. Patrick's over there, Catholic church. Yeah."

Expectations on their children as caregivers for the future

- "Like I say, especially if something happens to my husband, I don't think my kids will leave me alone."
- I: If you were to leave your home, would you continue to live in your neighborhood, in your current neighborhood?

R: No, I would have to live in with one of my children. [...] I have eight living children, so I got places to go.

- "Just my house so much. [...] But if I had to leave here I'd probably have to go to my son's house in Tooele. He has a beach house out there. My grandkids are there, so I hope I don't have to leave, but if I do."
- "If I was to leave my house, I think, I'd want to live with my kids. One of my kids. Well, my daughter, his mom. Not that she's my favorite. Well, she always takes care of me. And like last night she had me over for dinner. I don't know. She's just a good daughter to have."
- "I would not go to assisted living. My son would probably would probably have me move in with him if I move from here."
- "The cupboards, because the cupboards were pretty high. They were old-fashioned and they were going to be remodeled. These people that sold me the house were going to remodel it. The cupboards were pretty high. They didn't replace those, because they only did the sink and they put shelves—the cupboard, the shelves on the bottom, but not the cupboards on top. I would have wanted those probably lowered."
- "We have a lot of family in the Valley, so you know, it wouldn't matter. Anywhere in the Valley."

Expectations related to home modifications

• I: So if you do not use public transportation often, can you explain why you don't use it often?

R: Why I don't use it? Because it's really not accessible. You'd have to walk from here over to there. And he couldn't do that.

I: So what would make you use transit more often?

R: If the Trax stop was closer. Yeah [laughs].

- "Well, there is one thing, but it's, like, really stupid, like, really not even—I'm going to ask my son to get me this—the walk-in tub. Because, eventually, I'm going to not be able to lower myself and pick myself up."
- "Well, some—my house really isn't convenient because in order for me to go to the laundry room, I have to go down to sets of stairs. And so my plan is, when I get the—when I get the Publishers Clearing House, I'm going to redo a bedroom downstairs and a bathroom with a walk-in shower, which will make it easier because almost everything you do comes from the bedroom into the laundry, you know, sheets, towels, whatever. And that's what I, you know, eventually, would like to do."
- "Well, at this point, getting in and out of the bathtub is pretty hard. And you know, to get a couple grab bars would really help. So that's about it. I go up and down the stairs probably—okay. You're not going to get it any softer. I go up and down the stairs like once. I come down in the morning, go back up at night, so I don't use the stairs that much. And it's not that hard using the stairs. So that would be the main thing."

Expectations related to home modifications

• "My balance has really gotten bad. But I've had eight back surgeries. And both knees have been replaced. And so I've had one shoulder replaced and rotator cuff surgeries on both of them. And so I can't raise my arms up. So it makes it really hard to do things in my kitchen. I need to have something that I can climb up on that I would feel safe. But I don't know what it'd be."

I1: Good. And, if you could make any other changes in your home, what changes would you make?
R: Get my ramp fixed. Like I said, I've tripped on it a couple of times. It's in really bad shape.

Expectations related to miscellaneous things

- "I can't—I don't know. I haven't thought about it. So I really don't know, right at this point, what would help. I've tried to do things on my own, like getting rid of all the extra rugs and things. I do have one over there now because of the salt that's out there. I did want, you know, something to kind of brush the feet on."
- "I don't know. I need better doors. My doors are very flimsy. I mean, it wouldn't take much just to knock them down. The windows are pretty good. We had them put in when we had the siding put on, which was many, many years ago, probably about 45 years ago. But the doors are the main thing. I feel safer now that I've got the garage. I did have it put in a few years ago. And I just feel safer with it."
- "You know, if I did, I need my light—my outlets fixed. Especially in the living room. And my light switch in the front room, my chandelier, I think the switch is gone because it doesn't work. So, I, I don't have the money to call an electrician to do that stuff and that. So... And I want to change this light because it's too hard for me to clean. Yeah. And the chandelier in the living room... I'm, I'm willing to pay somebody to come in and clean it for me. Because when you, to take out the little lightbulbs, the little tubes, you have to squeeze the, the tip and Sandy can't do it. And I, I can't. I can't even open a bottle sometimes."
- "They can get my wheelchair working. It just needs batteries, you know, where I can—I can't go to church. I can't go anywhere because my legs won't carry me."
- "I would repair my roof. As you see, there's some of the ceiling tile off there. It's a strange situation. When we built this part of the house on, the roof here is one of those low, flatter ones and it goes underneath the edge of the real steep roof on the other part of the house, and it has always leaked there and on the back porch. Both things are the same. That is something that needs to be repaired, but I've never gotten it done."

Worries and fears

- Health
 - "The only challenge I can think is if I get Alzheimer's, that's a scary thing. I think that most everything I can deal with. Excuse me. I don't want to become bedridden, because I'll kill myself. Really."
 - "Just what I'm doing I guess. You can't prevent getting old. Even though my spirit doesn't feel older, my body is unhealthy. That's the worst part. It's, it's not just age. It's all the other, all the health problems that result, come upon me. That's, that's the big problem. It's not getting older and wiser. It's getting unhealthy."
 - "And Audie has no balance in one of his ears, his right ear. So every time he walks by there, I'm always afraid he's going to fall down. He gets up off the loveseat over there, stands up, and he's all dizzy. I'm afraid he's going to fall down the stairs. So I would love to get something at the top of the stairs there to make it safer for him."

- "And I will not let stairways scare me. I've seen too many people that are scared to death of stairs. I will not let stairs scare me, I just take my time and I'm very careful going up and down stairs. I keep a cane right there by my front door, as you see. That's to remind me to forget it, because I have tried walking with a cane, I cannot see how a cane helps me. I own four canes, and I never use any of them. That's me."
- Aging
 - "I've been thinking a lot about aging lately. I've had three good friends die and although they were 15 years older than myself, it makes you think about it. And it's inevitable."
- Safety
 - "I would favorable of moving away from the evil around here. I've got criminals. I'm surrounded by criminals. I've had so many things stolen. It's just ridiculous, and I've actually caught the neighbors that were across the street, that little house there, in my shed and back here behind here."
- Financial issues
 - "Well, challenges down the road could be financial, you know, because if one of us were to pass, financially it would be difficult for us to maintain."
- Housekeeping
 - "And if we were completely alone, if we didn't have Anna Jean, it would be—it's going to be a challenge to maintain the home, you know. Just cleaning every day, that could be a challenge."

Expectations on the use of space in the house to help people who need accommodations

• "But the opportunities, I think, will be that there will be a place here. If somebody needs a room or something, needs to stay, we've got room that we could help somebody else that need it. He's got a couple friends that, you know, have—he's down in Highland. And he would come up to the hospital up here. And so he would stay here with us for a couple days while he was doing his appointments. So it's nice to have the space to help other people out. That's been a blessing."

8.3.2.6.2 *Portland*

Declining Health

"I'm on a picket fence there. If I have a stroke or become disabled type thing, I don't know where I would go or what I would do. I'm good at helping other people but lousy at helping myself. This is my house. This is my Alamo. This is it. I gotta take care of [my dog], keep him accommodated."

"I'm always on a picket fence when I entertain that question. So far, I'm halfway amenable to go over to the neighbors, making things work, I pay my bills. I ride my bike to stay active a little bit. I walk [my dog] and get the fresh air. I just keep pushing the envelope. Someday I'll fall. We all fall. I don't know who to call or where to go or what to do. It's out of my hands."

"I fall occasionally now. They think I might have Parkinson's because I stumble and fall a lot, but I can get on my bike and ride for miles... Last time I saw the doctor he said, "we

think Parkinson's." But not officially diagnosed. Supposedly that's what happens with other people with Parkinson's. They fall and stumble. I can get on the bike and ride for miles."

"Aging in Place? That describes mama. That really describes mama. She's getting older and she likes to stay around her home. She doesn't want to travel anymore. She used to travel all the time when she was young. We used to go everywhere even before we had a family, before she got married she used to travel when she was young. Now she just wants to be here, have the kids come over, the grandkids or great grandkids. She doesn't wanna go anywhere, she's tired."

"As long as I am able to be mobile in my home I would like to stay here. I'm thinking another 20 years [laughing.] I like my neighborhood. It's familiar. If I had to go somewhere else for whatever reason and it's better for me, I would. I'm trying to be open-minded about what is best for me and having others to help me."

"My son was getting a name change downtown and needed my signature, so I braved the bus. I used to do the buses a lot before I had a car. When I left the first time. I didn't drive or anything. But, downtown has all changed and my eyesight is not good so I couldn't do landmarks. I used to know downtown like the back of my hand. 30 years in between changes things. Plus, the trees were about 30 feet. It's like a forest in the middle of the city."

Future Financial Instability

"We plan to live here as long as we can. With the way things are going, you know, it's all up in the air. It's a decision you have to think about. To sell or stay, because with the house issue, the cost of insurance is going, his medication goes higher. If you don't have insurance you're up a creek there. The cost of insurance, then you go to a doctor and then you're trying. You pay them back. We don't want nothing for free. It's like, what do you live without?"

"I: Do you foresee any barriers in staying in your home or staying in the community?

R: Just money."

"Unless it gets to expensive. If I can't live here, I'm looking into subsidized housing. I should qualify for that in about another six months."

"It's the cheapest place, anyhow. If I want to age in place the state would have to pay a lot of it. Medicaid and whatever. And the price they want for things now. You know?....Retirement. You really scrape."

"No, I can't afford [assisted living]. My insurance doesn't cover it and I can't afford it. And I don't qualify for most assisted livings. They are very expensive. There's nursing homes, but I wouldn't want to live in one of those."

"I thought Portland was going to be the answer for decades. Like I said, I'm not 25 anymore. I don't have money. So, it's not going to be here. I've never thought about it not being in this house, but that's become a reality. I'm houseless, I'm not homeless."

"I: Are there any barriers or challenges to staying in this home or neighborhood that you can think of?

R: The mortgage is too high. But we can't afford to move."

Future Caregiver/Family Dependence

"I have a target, but it's at Gresham Manor in Gresham. I was invited to eat out there a lot. I get my haircut at Tildale's [sounds like] out there. I like that place compared to Gateway. I have to correct myself. Jose is at Marquis Place over at Martin Luther King and Lombard. Right behind the gas station. That's where Jose is. Both those places don't compare to Gresham Manor...I think so. It's so much better out there. It's pretty drab at Gateway and Marquis. They're clean places but pretty drab compared to Gresham Manor."

"Here and then I'll go to my daughter's. Hopefully I'll drop dead before [laughing.] It won't be a bother to her or to me....Just 'til I can't get around. Who knows. I expect to stay here a long time. Now you can have the groceries delivered. My daughter and my granddaughter and my friends will bring stuff if I need it."

"As long as I am able to be mobile in my home I would like to stay here. I'm thinking another 20 years [laughing.] I like my neighborhood. It's familiar. If I had to go somewhere else for whatever reason and it's better for me, I would. I'm trying to be open-minded about what is best for me and having others to help me."

"I would go probably out in Sandy if I could. My kids have nice acreage out there. That'd be the best spot. When you get out in the woods, I mean jeez. A little 17 acre Christmas tree farm. It's got a lot of big timber on it and a lot of Christmas trees. They love it. They used to live in Boring. They love that out there. And I do too."

"Yeah, well I don't want to [move] if I don't have to. I mean, I know [assisted care facilities] upgraded a lot, but I'd like to stay in my own home. I know people that want to stay in their home and I understand why they do. They've worked hard all their lives to have a home, they respect that home, they bond with the home. They feel more comfortable and they can do what they want. They can get up when they want to, they can eat when they want to, they can listen to the TV. They don't have a lot of interruptions and noise and people that they don't really know. It's not that I don't like people, I like people very much. But, I don't like situations where it's super crowded and noisy and just all that stuff going."

"[I'll live here] Until I can't. I told my youngest son, I'm gonna come out and live with you, you said you'd take me! He said, I'll build ya a shed in the backyard. He was teasing. But those sheds are nice!"

"Age in my home? I don't know. I never thought about it. Right now I can't do my yard work and my cleaning. I had a lady that came in and cleaned but it got to the point where we couldn't do the lawn....I have a hard time standing up for a long time."

"I sure do need more things, more help. Like I can't clean the gutters anymore. Some trimming I can't do. I can do some, but I can't do it all."

"[AIP] If there's caregivers and care. That's how my mom was. She wanted to stay at home and [Inaudible] was able to accommodate her wishes and keep her home [Inaudible.] So, caregivers, naturally you'll be familiar with the place you've always been and lived in, friends around you, neighbors can [sounds like] all day long around you and all that instead of strangers or being in a hospital or hospice or even a nursing home. Cause you're not familiar with those people. Familiarity brings contentment and peace to you while you're very ill. I'd rather stay at home as long as I can."

Future Necessary Home Modifications

"Nothing is hard to get in and out of here now. It's simplified for me....Maybe some railing on [the outside], to go down...In the garage, too."

"Then, I have the foundation on the backside of the home from a leaking gutter. I did get the gutters replaced, but I have the foundation where the gutters had leaked so much until it's kind of wearing away at the house, so I'd like to have that done."

"Well, if I owned the place I would have the bathroom changed. I can't even get my walker into it. I have a person who comes once a week. The main thing they have to do is help me into and out of the shower. Because I got to step over the side of a tub. I'd go for one of those walk-in tubs or walk-in showers or something like that, you know what I mean? So I could take a shower whenever I felt like taking a f***ing shower!"

"I would to have a basement and an upstairs for when I have people that like to stay overnight with me or help me, that sort of thing. And maybe a little more room for, there's not much storage room in this house. There's no room to put your towels and that, so I put them in the laundry room in a bag. I try to put all the bedding in a cupboard space in the bedroom, that gets full, so there's no space for other utility things to be. So, it makes it hard around here. It's really hard in that respect. I would have the driveway repaved because all the cracks out there all messed up. I think the biggest thing I'd love to have done is the bathroom redone in there so it's a bigger tub in there because my son is a bigger guy and he likes a sunken down tub so the water can't splash up all over the place. But that would be nice. If money wasn't an option I would redo this house a lot. It's in a good location. The bus stop and it's near everything, shopping and stuff. I have no problems with that. And the doctors. They're close."

ProxyR: "Yeah, we would need the door widened and it's recommended that she have an electric wheelchair for outside by herself and her insurance won't pay, but I would like to buy her a used one just for in here. Because she could do the loop in here with one and not get in too much trouble. So, that's our goal so she's more mobile while she's in the house. Anything outside the house I can help her with."

"Door widening for my bedroom. I can't get in my bedroom. I can't get in the bathroom. I'd like some more [grab bars]...For my bathroom so I could actually go use my bathroom. I can't use the bathroom. It's very inconvenient."

"I: A transfer bench in the bathroom? For getting into and out of the bathtub?

R: You know, that would help.

I: A tub cut? A bath that you could step into, rather than over?

R: That would be good. That would be better than sitting.

I: What about lever handles rather than doorknobs?

R: You know, that would really help. My hands are getting so weak. Ridiculously weak."

ProxyR: "We actually have been thinking about this. I, [name.] There's a ramp in his backyard, but some grab rails or bars that would help him so he can walk down the ramp himself rather than stuff walking in front of him or behind him as he walked down or up that ramp."

ProxyR: "This issue has been coming up. I'd sorta like to have an accessible bathroom put in. We were thinking about possibly expanding that bathroom to make it wheelchair accessible or shower accessible. Roll in, exactly. The ABLE Account is something we're exploring accessing or starting, I guess. Our case manager. So then maybe we could build up some capital so we could put some money at some point into that. I think about Aging in Place a lot in terms of being able to have him stay here as long as possible."

Positive Expectations

I: Do you have any ideas on how long you expect to live in this current home?

R: I'm hoping to see 100.

8.3.2.7 Supports and Services

8.3.2.7.1 Utah

• Some older adults get out for groceries:

- I2: So how often do you go out typically?
- R: Well, maybe once a week or once or twice a week, depending on what I need to do.
- I1: For groceries.
- R: Yeah. My sister goes out and gets the groceries for my mom. And I stay here and kind of keep an eye on her. And then, when I have to go, she's stays here and keeps an eye on her. So there's always somebody here in case she has a problem. We can get it solved.
- Assist and other organization like Community Action offer great support for older adults
 - "I think, another thing I think that the ASSIST did, either ASSIST or community action, they sprayed underneath the house. They sprayed for insulation. It took them all day long. I mean, they, they paid other guys to do it. Like, experts came and they sprayed under the whole house, so yeah. And then, they were on my roof too. They put a new roof on."
- Some communities lack sidewalks and older adults might not know how to contact the appropriate organization to raise their concerns
 - I1: What are the barriers you encounter with respect to mobility in your neighborhood on a typical day? Do you believe the lack of sidewalks may cause an issue?

- R: Yes. If they would get sidewalks out here, that would help. But if I understand right—isn't the property owner liable for the sidewalk if the county puts it in or whomever?
- I1: I believe it's a shared responsibility.
- R: Okay. That's what I thought.
- I1: But your community has to petition for that to be placed. So, you have to get a few of your neighborhood kind of neighborhood to kind of congregate and talk to the City and say, "Hey, it's an issue that we don't have sidewalks because it's not safe for us to just walk on the street, because most roadways are geared to vehicles, auto vehicles."

• Handrails and general home accessible home designs are understood as a way of supporting or not supporting older adults to be able to perform everyday tasks:

[This home is] designed for older people, because I'll show you the bathroom after a while. It does have handrails on the side. But they don't have very many plugs in there. You know, like maybe there's only one plug-in, where I have like one, two, three, four, five, six up here in the kitchen. That should have been designed also with three or four plugs, plug-ins. And the tissue—where you sit at to use the bathroom is very far away from where you have to put the—they put the toilet paper holder. No. Whoever did that—and that's the first thing that I told my daughter—she says, "Gal, you should have been an architect or a designer." I says, "Well, being an older adult," I says, "That's the first thing you look for."

• Older adults want to live in places they are familiar with, do not have to drive much and have social networks

• Yeah, I have friends, and I know a lot of people around there, yeah. And all the neighborhood there, the businesses and everything, the stores and—And it would be easier for me, because I don't want to drive. I don't drive at night too, because it's far from here and I go to viewings down—you know, the neighborhood mortuary downtown. And the church. I have my church that I go to, St. Patrick's over there, Catholic church.

• To be able to stay at home older adults might hire help for showering and other tasks.

- I hired somebody to come in, and for right now when it's cold she comes once a week. When the weather changes it will be twice a week.
- I just barely had to tell that nurse that comes in that I had to have somebody help me. I can't wash my back. I can't get my arm back there. Two times a week is about all I do. There isn't anybody that would come that often. I had a heck of a time even getting one to come once a week. So I don't know what the deal was.
- Some older adults had to stay in a car facility temporarily to receive assistance and they like the support that they received.
 - About the nursing homes. Did you socialize with people?

- R: Oh, yeah. The one I was in, they had their game day and people like me would go and they had their movies and different things like that. The movies I didn't go to because I wasn't all that happed up on them.
- I: Okay. And you also felt like people were taking care of you? The nurses?
- R: Yeah. That's what the doctor's afraid of now. He's afraid I won't be able to count my pills and get the right ones and all that stuff.

• They also give and receive support from family or friends' members.

- My sister goes out and gets the groceries for my mom. And I stay here and kind of keep an eye on her. And then, when I have to go, she's stays here and keeps an eye on her. So there's always somebody here in case she has a problem. We can get it solved.
- My son does it all the time. He has my insulin out on the table and my syringe. He has my pills in the little pill thing and he makes sure I take them before he leaves.
- My son takes me or I write the list and he goes.
- I have my son get them. He's my go-between. If I need somebody or something, he'll do it. And then I do have a couple of ladies from the church that comes over and they'll want to know is there anything we can do for you?

8.3.2.7.2 *Portland*

How they learned about Unlimited Choices

"Actually, [Unlimited Choices] were building a porch for somebody down here and I stopped and talked to the workers. They gave me the business card. I called and they came out and built that back porch for me. I had a really rickety, almost a wooden box that Russell, boy, they were just really frugal. But, anyway, [they] did a nice job on the porch. I have no complaints."

"From a lady at my church her name is Mary Lou. Her grandson used to be a contractor for Unlimited [Choices]. In fact I think he still is. In fact, he's the one that put all the stuff in there. Him and his group put all the stuff in the bathroom for mama."

'My daughter, I had said I needed to get rid of the tub. I know what it was. It was Nextdoor. I put a thing on Nextdoor and said, "Does anybody know anybody that does that?" Then, my daughter called the guy and he came out and gave me an estimate. It was just too expensive, I just said I can't do that. He said, "Well, I don't know what your income is." I said, "Uh, zero, practically. It's just social security." He said, "I'll bet you'll qualify for [Unlimited Choices]." I sent it in. It was wonderful to find out. I think he said \$3,500 or something like that."

"I learned about them through PCRI and also the Portland Housing Bureau."

"Well, I knew about it because I used to work in a social service program. I used to work at [Inaudible] and I did a lot of social, you know, and discharge planning. Then my daughter

works at Wells Fargo so she got the application and because we had a bad leak, we had a [Inaudible] that was leaking to the ceiling and all that. She got an application to the bank."

"Through, I think it was Urban League told me about them. That gave me the number. I was casting it out for somebody to do this [ramp] for me, because I couldn't go anywhere"

"Basically, through home remodeling places. I've also used Rebuilding Together, too."

"[UC] sent us a card in the mail. I called them and then I called a different place that had done work on our house earlier. She recommended them, too. Beverly something? I don't know what her last name was."

'We had called through another organization."

"I think someone gave me a brochure from [UC]. Maybe Human Solutions, too, had told me about them."

"I heard about it, I got a flyer [in the mail]"

"[I learned about UC] Through Multnomah County. I got my windows through Multnomah County."

"Well, actually, something came in the mail for REACH. It was a card for a tenant that had been here years ago. I got curious and I called it. I almost threw it out. I thought, "This looks kind of interesting, let me call." And, they said, "Yes, you know, that's great. You're the type of person. You fit the requirements.""

"State social services."

"Through my nurse"

"I can't remember. Somebody gave me the name when I was having . . . a lady friend of mine lives over on North 10th and Jessup and she's got a house that's on the National Historic List and she can't afford to get a lot of things done to it so she went to somebody like Rebuilding Together. They do stuff and they won't . . . when you're on the historic list it's got to be certain things. She gave me a card that had Unlimited Choices' name on it. I feel like getting a life insurance policy and signing it over to them for all the work they've done."

"A lot of phone calls and asking around. I finally got a ahold of somebody who says there's this, there's this, and there's this. There's different groups I called. That was just one of them. I had different ones helping me. They may have helped me more than once, too, this Unlimited Choices"

"R: I called and somebody connected to me to them. I don't know if it was a friend or something, I don't know.

I: A referral of some sort?

R: A referral."

Modifications done by many orgs

"Basically, through home remodeling places. I've also used Rebuilding Together, too."

"I had some work done on the house before then. Rebuilding Together did some work a couple years before...[they did the ramp] and they also put in a back deck on the back door. That was from Rebuilding Together."

"So, I looked around for programs here by the county or the state or the city, and I found it. PCRI was one. They helped us with one, REACH helped with another, Unlimited Choices helped with that. Somebody was with Mend a Home."

"Yeah, we had that for years and we thought it was a roof leak cause the shingles were old. So, we got a grant from REACH to do the north half of house."

"I returned from San Diego when dad went into the hospice the third time, so I had knowledge of how they do a lot to help people keep their houses, the older folks and stuff. So, I looked around for programs here by the county or the state or the city, and I found it. PCRI was one. They helped us with one, REACH helped with another, Unlimited Choices helped with that. Somebody was with Mend a Home. I've got a folder with all this in it. It was just me searching out and finding resources that I didn't have."

"When I reached out, actually, I had another program to come out to do some things in my home and they mentioned the Portland Housing Bureau and that's how I ended up with PCRI and Unlimited Choices."

"No. They didn't do anything, but I had another program that did some things. That was the main thing, that [UC] did the roof."

"R: I had the electrical and that was kind of crazy....The fireplace was done. I don't know who did that, actually. It was one of you guys. The electrical, that was like the biggest. That's the one that kept me from moving. The modifications for safety (grab bars) were done by REACH....They also, the toilets were changed and the furnace. The water heater was way, way, way bigger than it needed to be. The size was more in line with the house. That was done. There was insulation. I'm not sure who did the insulation. That has made such a difference.

I: Did you have weatherization come in?

R: Yes....The concrete, and you patched up the basement."

Safety

ProxyR: "When I think of distance for safety, we're kind of out of the loop. We're on the fringe. We never had a problem in calling the police or the fire department out here. They've always come real quick. But, it's a way away. It's a long way away....Yeah. Sometimes I worry about that. They seemed to have showed up fairly quickly."

Support from family/friends/community

"Before the modifications I was totally dependent upon other people to get me to doctors and stuff like that. To grocery shop, everything I had to do outside the house I was dependent on other people to take me places. I no longer am."

"Yes, I love this neighborhood. I love my neighbors. I have good neighbors, I'll put it that way. A lot of people don't have good neighbors."

"I like my neighborhood. It's familiar....I'm trying to be open-minded about what is best for me and having others to help me."

"I will be here, my son is here and my daughter is here. My daughter was the one that got me here and my son followed us here. So, as long as I have family here I'll be here."

"My daughter will be getting a car finally...No, right now we do not. I'm so excited I can hardly stand it. When we first came, she started working waving signs by the side of the road. And then she kept changing from that job to a better job. Now she's an insurance agent for Allstate. We're on the home stretch, I'm excited."

"Oh, that is so wonderful. Because we need so many services. You know, elderly people compared to younger people who are mobile and immobile also. All the disabled needs all they can get and more because they are extra-, you know, in their lifetime they are not fully mobile. So they need that. I really applaud that. It's so much that I see. Immobile people and wheelchair people. It really makes me kind of sad to see how the community is trying to cope even though they don't have the total facility."

Grocery Delivery

"Now you can have the groceries delivered. My daughter and my granddaughter and my friends will bring stuff if I need it."

ProxyR: "Also, shopping online. We've been getting groceries delivered. I found a way to do it where it's not expensive. It's free, actually. Safeway....It has a pretty expansive delivery system. It goes everywhere. It's been good. All these stores are going to start having it, it's the future, everyone's doing everything online. We haven't had to go as much as we used to."

Paratransit/Ride Connection

"Yeah, [I have LIFT] take me to and from some of my appointments. I've had that in the past. I'm leery with riding the bus or the light rail. You hear so much about . . . Yeah, safety thing. That's what bothers me mostly. If I can get the Lift or some other way, I would do that."

"I don't think I could afford [LIFT]. I don't know what it costs, I don't know anything about it. Nobody will tell me and I can't get through to TriMet. They're useless, they're no good. They're rotten, horrible."

"Before, with Health Share, I would get the [LIFT]. Now I don't. So, basically I take the bus. I take it because the other transportation can come so early. You have to be ready. Then when they pick you up, you could be sitting there a long, long time. I remember when there was one person that I would see waiting. She would be waiting and waiting and waiting. I thought I could get home by bus faster than that."

8.3.2.8 *Equity*

8.3.2.8.1 Utah

Affordability

- Older adults might struggle to pay for housing if they leave their home. In the case of this woman she sold her home to her son and now she rents in older adult homes, but she keeps moving from apartment to apartment because is unaffordable. This means that aging in place could also be a strategy of not having to pay rent if one owe free and clear. Many older adults might not be able to afford the rental market today.
 - And you'll see it's going to go according to my income. I will not be paying \$500 or \$600. I was paying \$800 over here where I moved to here. So, I will be paying over there like \$300 and no utilities. And these utilities are really high here, because I've got central air, and it takes a long time to warm up the place.
- Mobile home parks charge quite lot for renting the land, resulting in older adults being severely overburden.

Access

- Older adults might perceive equity as the personal access they have or not to transit services (e.g. a bus stop nearby).
 - Used to have it stop right out in front of our house, but they took away.

Low-income neighborhood and services

- Living in a low-income neighborhood might mean reduce city services including lights on the street and policing.
 - I1: Another thing that I noticed when we drove up is that there's a lack of lighting. Is that an issue as well?
 - R: Yeah. That is. We did have the yard light working, but some of the neighbors around here thought it was cute to use it, use that light as target practice, this yard light out here.
 - I1: So, they shot at your light?
 - R: Yeah. And if you say anything to the law enforcement, they won't even do a—they won't even come out and investigate.
 - I1: Has that happened multiple times?
 - R: It happened quite a bit for maybe—like, 10, 15 years ago. But I don't know how it is now.
 - I1: That doesn't seem very safe.
 - R: It's not. And then, too, I was living in town for a while, just after I was married. My work was only about a block west of where I was living. And I wanted to walk to work rather than use the car. But my wife told me, "You use the car due to the fact that areas not safe."
 - I1: Where did you live prior to here? R: Down around 1st Avenue and—around 1st Avenue and A Street.
 - I1: That's a pretty safe area. At least now. Maybe not so much 20 years ago.
 - R: Yeah.

8.3.2.8.2 *Portland*

LGBTQ+ Concerns

"Being gay, I run into barriers all the time. Name calling and stuff like that, occasionally. It's pretty rare. I get along pretty good with the neighbors. Walking Boise Street a lot of people see me walking with [my dog] and it's quaint so they've befriended me. It's just occasional yell, "faggot" or "homo." You just keep on trucking. That's all. But, that's the only real barrier."

Safety concerns

Proxy Respondent

When I think of distance for safety, we're kind of out of the loop. We're on the fringe. We never had a problem in calling the police or the fire department out here. They've always come real quick. But, it's a way away. It's a long way away...sometimes I worry about that. They seemed to have showed up fairly quickly.

Social Stigma

Respondent

Well, my son doesn't really like the regular bus because he's really a big guy and doesn't like people staring at him and making remarks because he gets angry.

Interviewer

So, he'd be kind of confined?

Respondent

Yeah. This one lady, when I got on the bus, she was a big woman, really big. Bigger than me, even. She said, well your son is really big and I said, well so are you. I'm a big woman myself. Nothing wrong with that is there? She kind of gave me a dirty look, you know? I thought, never mind, lady. It makes him angry and then he gets anxiety going and upset because he doesn't like people attacking him. That's what it is. People kind of realize when they're saying stuff to somebody. If they think about it first they won't be saying half the stuff they would if they'd really think about it.

Trouble with neighbors

Not necessarily. In fact, this neighborhood, living here, the only thing that's made it pleasant for me is having my friends across the street in that yellow house who try to look in on me and give me good advice and have been with me since before my kids were born. They've done a lot to help me and make me feel comfortable, but other neighbors, some of are better. Some of them are like this one next door, just give me a hard time all the time and would do things that were nasty to us and park in our driveway. My son used to live with us and he had a seizure problem. He parked his cars, or had neighbors park their cars in front of my driveway. Finally, the ambulance guy said, move your car, whose car that is, move it or we'll have somebody tow it out of here. He said, this kid needs to go to the hospital right now. He's always doing stuff to irritate us.... His daughter passed away, too. She had cancer of the bone I think it was. They tried to save her at OHSU. In all the things, I miss her the most. I never had anything against her, she was a sweet little girl all the time. In fact, my kids when they were younger used to play together. Anyway, when she passed away I got some silk flowers and I got a card and I told him how I felt. Sorry for your loss, I miss her, I always will. I hope things will get better for you. I put it on the front seat of his car and I never heard a word. He didn't thank me. It didn't matter. But yeah, I just felt so sad. I cried about it for a long time. It really hurt. As much crap as he gave me, I didn't like him but I liked the little girl. She was okay.

Future uncertainty/being priced out

"No, I can't afford it. My insurance doesn't cover it and I can't afford it. And I don't qualify for most assisted livings. They are very expensive. There's nursing homes, but I wouldn't want to live in one of those....Last time I had contractors here, this [mobile home] is fifty years old, I said, how long do these trailers last? He goes, 'I don't think anybody thought it would last this long.""

"I thought Portland was going to be the answer for decades. Like I said, I'm not 25 anymore. I don't have money. So, it's not going to be here. I've never thought about it not being in this house, but that's become a reality. I'm houseless, I'm not homeless....I know there's other housing setups, it's just going to be much less space. Much less freedom of movement. There may not be a car involved. I'm still driving, but that car is almost 30 years old. It may not stick together much longer. I can't see putting out thousands of dollars for a car right now. So, I'm not quite sure what I'm going to have to look forward to. Is it going to be a group home? Is it going to be a boarding house?"

"Yeah. Where am I gonna go? That was the whole thing. Because everybody was getting put out. Everyday somebody calls me trying to buy this house. That's what they're doing. Where would I go? I'm not going to live as comfortably as I'm living here....No, if I don't live here, I have no idea. I'd probably go out of state....I can't see myself moving anywhere else. The people right here are getting ready to sell this. They've got 500,000 offer for that house. I don't think they paid 50 for it. They're going to move and I'm so afraid that they're going to make a high rise like they have down at Fred Meyers."

"I don't know how long I got...The mortgage is too high. But we can't afford to move."

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Ivis Garcia is an assistant professor in city and metropolitan planning (CMP) and a planning commissioner in Salt Lake City. Her philosophy, methodology and ethos revolve around conducting research and plans in partnership with stakeholders, being from the grassroots or from institutionalized forms of government. She has spent time as a professional planner in Albuquerque, NM, San Francisco, Springfield, MO, Washington, D.C., and most recently in with the Nathalie P. Voorhees Center for Community Improvement, a research center within the University of Illinois at Chicago.

Originally from Puerto Rico, Ivis earned her Ph.D. in urban planning and policy from the University of Illinois at Chicago. She holds dual master's degrees from the University of New Mexico in community and regional planning and Latin American studies and a bachelor's in environmental sciences from Inter-American University in Puerto Rico.

Alan DeLaTorre, Ph.D.

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Alan DeLaTorre is an environmental gerontologist focused on the translation of research into policy and practice. As a research associate at Portland State University's (PSU) Institute on Aging, he is involved with projects focused on housing and environments for older adults, including efforts to improve local communities' age friendliness. Alan serves as the coordinator of PSU's Senior Adult Learning Center, co-coordinator of the Age-Friendly Portland and Multnomah County initiative, as an appointed volunteer for AARP Oregon's livable communities' efforts, and as the chair of the Age-friendly Design Committee for the Academy for Gerontology in Higher Education.

Alan earned his doctorate in urban studies from Portland State University with field areas in urban planning and gerontology. He has been involved in the World Health Organization Agefriendly Cities efforts since the initial global research project in 2006.

Ja Young Kim

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Ja Young Kim is a doctoral student in the Department of City and Metropolitan Planning at the University of Utah. Ja Young holds a bachelor's degree in architecture from Hanyang University, Seoul, Korea, and a master's in city planning from the University of California, Berkeley. Ja Young is interested in the issue of aging, place, and environmental equity set in the frame of the built environment and urban form. Building upon her previous research on the potential of urban design to improve walkability in relation to the needs of an aging urban population in Oakland Chinatown, her research aims to better understand the impact of the built environment on the well-being of older populations and assess diverse public needs on the issues to develop feasible planning interventions. Before pursuing her doctoral degree, she worked as an architect in Korea, urban designer and planner in Berkeley and San Francisco, and as a researcher for the Seoul Institute, developing policies in Seoul, Korea.

Keith Diaz Moore, Ph.D., AIA

Dean, College of Architecture and Planning Professor, School of Architecture, University of Utah Phone: 801-585-1766; Fax: 801-581-8217 Email: diazmoore@utah.edu



Keith Diaz Moore is a professor and dean of the College of Architecture and Planning at the University of Utah. Keith is a passionate advocate and an international expert in the connection between culture, health and place, particularly in the area of design for people experiencing dementia. His current research explores the impact neighborhood design has upon the incidence and trajectory of cognitive impairment in older adults, and he is considered the leading architectural voice on aging in place. His leadership has been recognized as past chair of the Environmental Design Research Association and as past president of the Architectural Research Centers Consortium. Whether in his academic, professional or community roles, he is an ardent proponent for the power of good design to promote well-being.

Julianne Reno

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Julianne Reno is a graduate student pursuing dual master's degrees in urban and regional planning (College of Urban and Public Affairs, Portland State University) and public health (School of Public Health, Oregon Health & Science University/Portland State University). Julianne also holds a bachelor of design studies: sustainable design from the Boston Architectural College in Boston, MA, and is interested in the intersection of public health, urban environments, aging and disability equity. Before pursuing her master's degrees, she worked as a construction site supervisor in Vancouver, WA, designing and building homes for families with varying abilities.

Jordan Mckay Pieper

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From Taylorsville, UT, Jordan grew up in a close community and was able to serve and participate in many social and religious activities. He decided from a young age that he wanted to study architecture because of his love of community development with which he had grown up. He has an interest in design and a passion for understanding how we, as architects and planners, can protect and encourage sustainable living. He graduated from the College of Architecture at the University of Utah with a bachelor's in architecture. Jordan worked with ASSIST through the Undergraduate Research Opportunities Program.

Jason Wheeler

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Jason Wheeler is executive director of ASSIST Inc Community Design Center in Salt Lake City. Founded in 1969, ASSIST provides design and emergency home repair services for low-income, disabled, and elderly families and individuals. ASSIST also plays a critical role in community engagement in Utah, shaping shared transportation routes and protecting housing along the Wasatch Front. Prior to joining ASSIST, Jason worked as an architect at Alley Poyner Macchietto Architecture in Omaha, NE, focusing on housing for seniors, historic preservation, and custom home design. From 2010 to 2013, Jason was an Enterprise Rose Architectural Fellow at Color Country Community Housing in St. George, UT, improving the energy efficiency of affordable housing in the desert southwest, and at Enterprise Community Partners, Inc. in New York City, where he directed the FAR ROC Design Competition and helped create the Sandy Design Help Desk centers as part of Enterprise's Superstorm Sandy task force. Jason holds an M.Arch. degree from the University of Illinois at Urbana Champaign, and a B.S. degree in construction management from Brigham Young University.

Nicole Zinnanti

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Nicole Zinnanti is a design associate at Assist Inc Community Design Center in Salt Lake City. She has traveled across Europe, Russia and South America to observe transit systems and their interaction with everyday life. Her professional interests trend towards human-scale planning and understanding human behavior in order to develop equitable outcomes. Nicole strongly believes in public engagement by providing communities the opportunity to have their voices heard and their opinions valued in the decision-making process at the local and state levels. She holds a bachelor's degree in urban ecology from the University of Utah.

Brenda Jose

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Unlimited Choices is a private, non-profit corporation offering housing rehabilitation:

- To remove barriers and make affordable housing accessible for low- to moderate-income people with physical disabilities.
- To provide critical home repairs to low- to moderate-income homeowners.
- To offer EPA certification for lead safe work practices by providing the RRP training to individuals in the housing industry.

Before joining Unlimited Choices, Brenda worked as an independent, living-skill supervisor with Access Oregon, training skills trainers/advocates and care providers for people with disabilities, providing employment training for job seekers and counseling adults with developmental disabilities. From 1986 to 1991, she served as a program supervisor at Morrison Center for Youth & Family Services for incarcerated, convicted and addicted youth; developed an on-site alternative school; and worked as a group facilitator, behavioral and crisis management specialist, and parent effectiveness trainer. Brenda was also a teacher, counselor, administrator, educator, and statistician in her earlier career.