

**Supporting Aging in Community in
Naturally Occurring Retirement Communities**

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Abstract

Aging in community emphasizes connections to the social networks and services needed for a person to continue living in their community. This study explores how older adults in naturally occurring retirement communities (NORCs), communities with a majority of residents age 55+, build and maintain social connections and access services and amenities as they age. Through mapping of Census data, this study identifies King County's NORCs. Interviews and a focus group with older adults and observational studies then reveal opportunities for built environment design, services and amenities planning, and meaningful social connections to respond to the needs of older adults and support aging in community in two of King County's urban NORCs.

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Abbreviations

HOA	Homeowners Association
NORC	Naturally Occurring Retirement Community
NORC-SSP	NORC-Supportive Service Program
TOD	Transit-Oriented Development

List of Figures

No.	Title	Data Source	Image Source
1	Theory of Change	N/A	Author
2	Methods	N/A	Author
3	Conceptual Framework	N/A	Bigonnesse & Chaudhury
4	King County NORCs (2020)	U.S. Census Bureau	Author
5	King County Almost-NORCs (2020)	U.S. Census Bureau	Author
6	King County Super-NORCs (2020)	U.S. Census Bureau	Author
7	King County NORCs (2010)	U.S. Census Bureau	Author
8	King County NORCs (2020)	U.S. Census Bureau	Author
9	Seattle NORCs (2010 (left) and 2020 (right))	U.S. Census Bureau	Author

List of Tables

No.	Title	Data Source	Table Source
1	Literature Review Keywords	Author	Author
2	Community Features and Impacts on Older Adults	Choi, Molinsky et al., Ahrentzen, Glass & Lawlor, Yu et al., Masotti et al.	Author
3	Influences on Walking and Health Among Older Adults	Aurand et al., Ahrentzen, Du et al., Morita et al., Sun & Lau	Author
4	Average Percentage of Residents Age 55+ in King County NORCs vs. King County	U.S. Census Bureau	Author
5	NORCs, Almost-NORCs, and Super-NORCs in King County, Washington	U.S. Census Bureau	Author
6	Percentage of Residents Age 55+ Across NORC Block Groups (Seattle)	U.S. Census Bureau	Author
7	NORC Verification Method	Author	Author
8	Percentage of Residents Age 55+ Across NORC Block Groups, Adjusted for Age-Restricted Communities	U.S. Census Bureau, Author	Author

1. Background

1.01 Aging in Community

Aging in community emphasizes the connections to social networks and services that are needed for a person to continue living in a community as they age. Social connections and access to services are just two factors that support aging in community. Others include an accessible built environment, access to amenities, and individual factors like health and mobility (Bigonnesse & Chaudhury, 2021). Designers can impact accessibility, planning and design of services and amenities, and many health factors.

There are a variety of models that support aging in community. These include the Village Model, University-Based Retirement Communities, cohousing, NORCs, and NORC-Supportive Service Programs (SSP) (Hou & Cao, 2021).

1.02 Naturally Occurring Retirement Communities

In this study, NORCs are defined as Census block groups with a majority of residents age 55 or older. It can be useful to consider NORCs because design interventions there have the potential to reach more older adults. NORCs exist across a spectrum of scales, from census block group to an apartment building. They form when younger residents move away or when older adults move to a new location. NORCs do not include age-restricted communities. Research on NORCs is limited, especially on the West Coast, and little is known about the built environment characteristics of these NORCs and how well they meet the needs of older adults.

1.03 Theory of Change

A theory of change was developed to illustrate the expected impact of design interventions on aging in community. It is expected that built environment design interventions combined with program and service design interventions in NORCs, can improve older adults' access to the services and amenities they need and help older adults build and maintain social connections. In the short term, this might mean that more older adults benefit from services and amenities and feel connected to their community. In the long term, this could mean improved quality of life and health outcomes, and aging in community. This research focuses on understanding what those inputs should be.

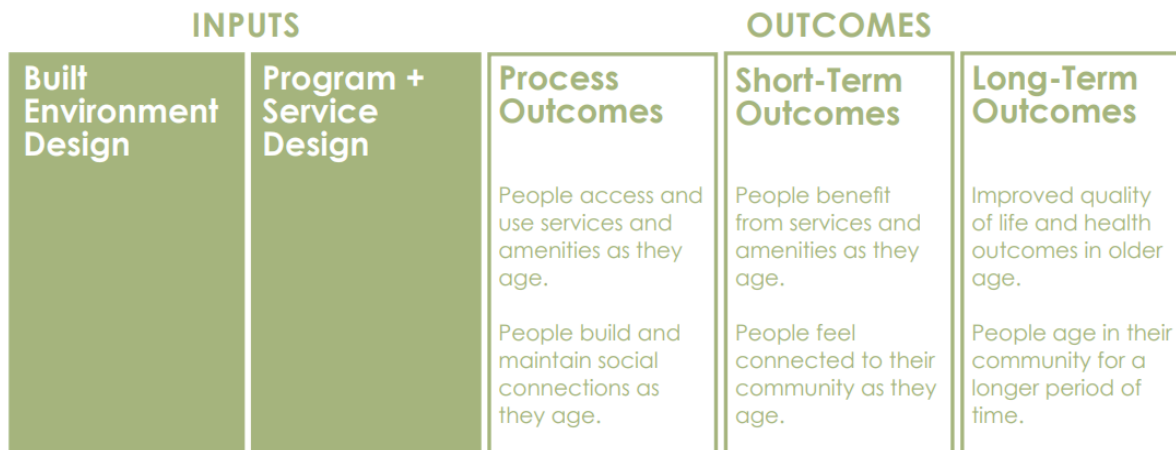


Figure 1: Theory of Change

1.04 Research Objectives and Questions

The research objective is to understand the environmental factors that support accessibility, access to services and amenities, and meaningful social connections for older adults in two Seattle NORCs. These findings will help designers and planners make decisions that support aging in community in NORCs.

The following questions were addressed in this study:

- Where are the NORCs in King County?
- How has the population of older adults and the location of NORCs in King County changed over time?
- What factors support or limit an accessible built environment, access to services and amenities, and meaningful social connections for older adults in NORCs?
- How well do NORCs meet these needs?

2. Methods

A literature review, mapping, interviews, a focus group, and observational studies were conducted to address the research questions. The literature review identified research gaps. Mapping was then used to identify and characterize study sites. Finally, qualitative methods were used to capture the experiences of older adults in the sites. Figure 2 illustrates the sequence of methods.

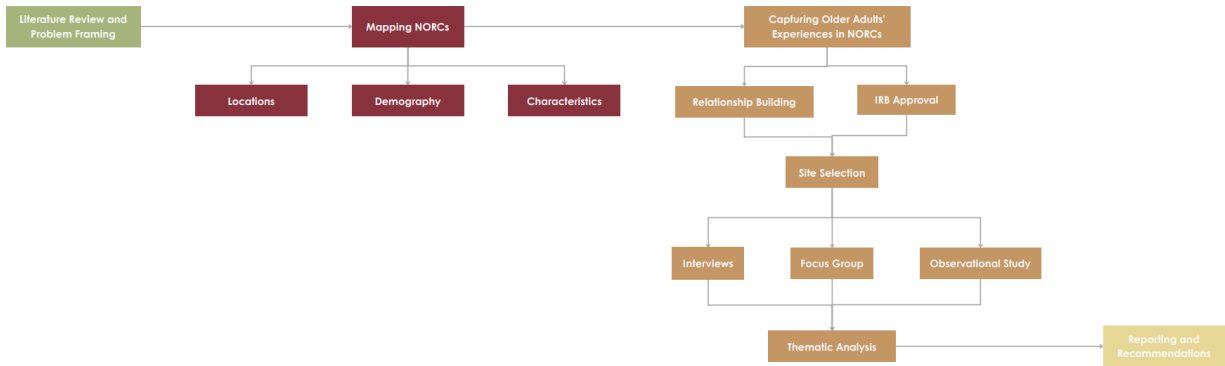


Figure 2: Methods

The University of Washington Human Subjects Division review of the study determined that the study qualified for exempt status.

2.01 Literature Review

The search was conducted using the University of Washington Libraries Search, which connects to 688 academic article and research databases. Both primary and secondary, primarily peer-reviewed sources and qualitative and quantitative methods were considered. The sources were in English and published from 2000 to 2024. An iterative search process was used. The search started with basic search terms and then narrowed as sub-themes were identified. Citations from the articles were also reviewed for additional sources. Urban, suburban, and rural contexts in any country were considered due to the limited literature.

Table 1 includes keywords by category used in the search. NORCs and walkability were defined differently across studies. However, articles with any definition were included given the limited literature. Literature that refers to aging in place in addition to aging in community was included. While aging in place does not always describe aging in community, there is limited literature on aging in community as it relates to the research question.

Table 1: Literature Review Keywords

Category	Keywords
Older adults	Older adults, elderly, seniors
Built environment	Built environment, urban design, urban planning, landscape architecture, outdoor
Aging in community models	Naturally occurring retirement communities, NORCs, transit-oriented development, TOD, Toyama City, aging in community, aging in place, residential encouragement zones
Amenities	Care, care access, public space, green space, open space, amenities, community facilities, park
Transportation	Transportation, transit-oriented development, TOD, bus, pedestrian, walking, walkability, metro, train, car, driving

2.02 NORC Identification

Census block groups containing age information from the 2010 and 2020 Summary File 1, and shapefiles for the block group boundaries were used to identify King County, Washington's NORCs. The percentage of the population age 55+ per block group was calculated.

2.03 Site Criteria

Two sites, both in Seattle, were selected for the study: Pike Place Market and West Seattle. The sites selected met the following criteria:

- NORC or NORC-adjacent
- Presence of senior center
- Presence of senior housing
- Presence of assisted living
- Interest in participating
- Access from the University of Washington via public transportation within approximately one hour

2.04 Interviews

Interview participants met the following criteria:

- Age 55 or older
- Resides in or visits site

Both snowball and convenience sampling were used to select interview participants. 15 semi-structured interviews were conducted at two senior centers – in Pike Place Market and West Seattle – and one low-income senior apartment building in Pike Place Market. A total of 10 interviews were conducted in Pike Place Market and 5 interviews were conducted in West Seattle.

The duration of each interview was approximately one hour. Participants gave verbal consent to be interviewed for the study, and the interviewer took notes.

2.05 Focus Group

Focus group participants met the following criteria:

- Age 55 or older
- Resident of assisted living community where focus group was conducted

Snowball sampling was used to select participants for the focus group. The focus group was conducted at an assisted living community in West Seattle. 11 people participated, and the duration was approximately two hours. Participants gave verbal consent to participate in the focus group, and the facilitator took notes.

2.06 Observational Studies

Sites were visited at different times, days, and locations. Site features and behaviors of older adults were documented.

2.07 Thematic Analysis

Thematic analysis was conducted using Nvivo. Interview, focus group, and observational data were reviewed and analyzed using inductive coding. Next, themes were generated based on the codes, and the themes were reviewed to confirm they reflected the data.

3. Literature Review

The literature review examines the following question: How do the built environment characteristics of Naturally Occurring Retirement Communities and Transit Oriented Developments (TODs) support and/ or challenge aging in community? By understanding the built environment characteristics that support older adults through life transitions, the existing built environment could be modified to extend the period of time older adults can access the social networks and services needed to age in community.

NORCs were reviewed because these communities have a high concentration of older adults and potential for impact. TODs were reviewed because driving cessation and transportation access is a barrier to social network and service access for many older adults (Adorno et al., 2016; Kim & Ulfarsson, 2013). In NORCs, most residents rely on cars for activities of daily living (Glass & Lawlor, 2024). This literature review bridges research on both community types to determine how older adults can be better supported.

3.01 Research Methods

Researchers used a variety of methods to study the topic. Five studies analyzed existing data sets (Aurand et al., 2014; Choi, 2021; Li et al., 2021; Wood et al., 2016; Yu et al., 2022), five conducted interviews (Adorno et al., 2016; Fitzsimmons et al., 2017; Glass & Lawlor, 2024;

Kelsey et al., 2010; Sun & Lau, 2021), four used a survey (Ahrentzen, 2010; Freeman et al., 2006; Kim & Ulfarsson, 2013; Park & Choi, 2021), two used a questionnaire (Du et al., 2022; Kelsey et al., 2010), two conducted focus groups (Adorno et al., 2016; Wang et al., 2022), one conducted a systematic review (Hou & Cao, 2021), and one conducted spatial analysis (Wang et al., 2022). Common data sources included the AARP's Livability Index, the American Community Survey, and the American Housing Survey.

3.02 NORC Neighborhood Typologies

NORC neighborhood typologies vary in scale and are influenced by region. In a study of the built and social environment features of NORCs in Tallahassee, Florida, researchers found that NORC neighborhoods are overrepresented in single-family and rural neighborhoods, which can be challenging for active aging. NORCs were also overrepresented in urban mixed residential neighborhoods, which support active aging. NORCs were underrepresented in multi-family neighborhoods, which include bus stops and small-scale commercial (Aurand et al., 2014).

In contrast, a study of relocation patterns of older adults in the United States found that most movers in the Northeast live in apartments and report good public transportation. To address gaps in transportation where older adults with low functional mobility live, researchers recommend a dense built environment that enables sustainable transportation systems (Li et al., 2021). Another study recommended converting single-family homes to multi-family homes in NORC zones (Masotti et al., 2010).

3.03 Conceptual Framework

One study developed a conceptual framework for Aging in Place (Bigonnesse & Chaudhury, 2021). This conceptual framework identifies processes that influence a person's ability to age in place. The components align with the themes of other studies (3.04-3.06).

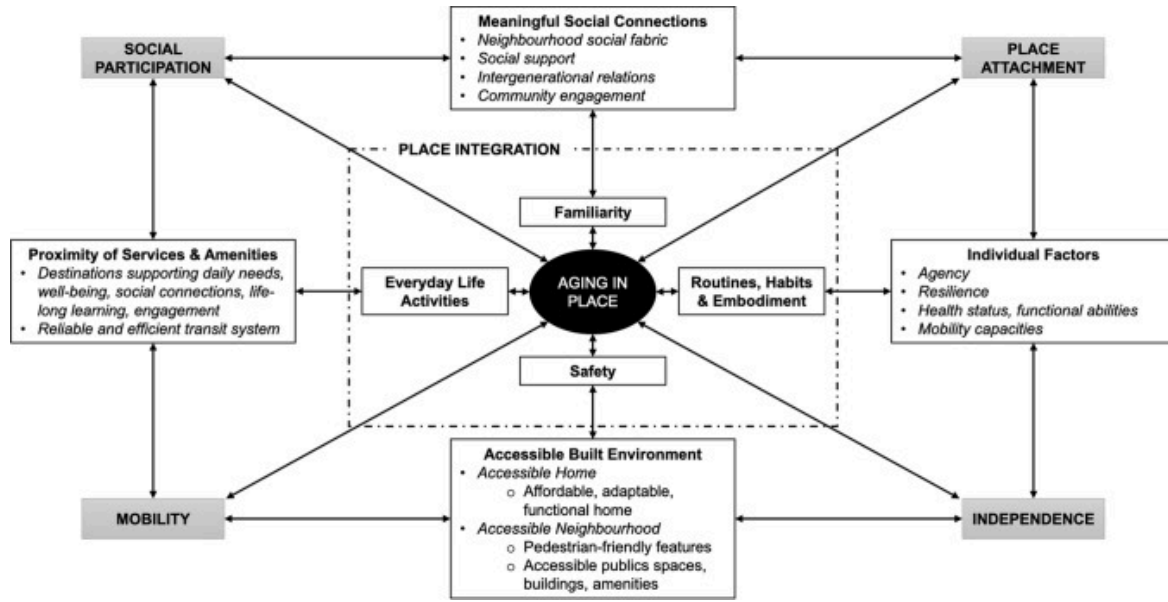


Figure 3: Conceptual Framework (Bigonnesse & Chaudhury, 2021)

3.04 Community Features and Amenities

Many studies described built environment features of NORCs and other communities where older adults live, and their impacts on residents. One study found that Livability Index scores were lower for NORCs due to lack of mixed-use development near parks, libraries, and grocery stores (Molinsky et al., 2020). One researcher suggested further research on the “modifiable community-level characteristics” in NORCs to understand how they impact health, wellbeing, safety, and sense of community among residents (Masotti et al., 2010). Another researcher suggested that many older adults may not know which age-friendly features are available to them when they move, which limits the market for these features. Half of the homes in the study included no-step entries, bathrooms on the main floor, and wide doorways, so as needs change for residents, modifications will be required (Glass & Lawlor, 2024). Table 2 identifies community features and their impact on older adults residents.

Table 2: Community Features and Impacts on Older Adults

Features	Impact on Older Adults
Age-friendly housing, outdoor spaces, buildings, transportation	Positively influence older adults' perceptions of community's age-friendliness and their intention to age in place (Choi, 2021).
Mixed-use development near parks, libraries, grocery stores	Higher Liveability Index score (Molinsky et al., 2020).
Landscape, scenery, parks, paths with views of greenery and scenery	Reason for walking (Ahrentzen, 2010).
Walkability, mixed-use village centers, public transportation	Extend the time people can age in their community (Molinsky et al., 2020).
Newly developing neighborhoods	Easier to make friends (Glass & Lawlor, 2024).
Green space/ trees, activity spaces, trails, facilities for social activities	Attract older adults who are moving to their new community (Glass & Lawlor, 2024).
Bathroom and bedroom on the main floor, a walk-in shower, extra lighting, wider doors, rocker light switches, no-step entry, grab bars	Aging in place (Glass & Lawlor, 2024).
Residential and bus stop density; close proximity to central business district, streetscape greenery	Higher Vibrancy Index (Yu et al., 2022)
Amenities, natural environment	Willing to continue living in their current house or neighborhood (Masotti et al., 2010)

3.05 Accessible Community Facilities

Eight studies explored the interrelationships between transportation access, community facility access, and aging in place. A study of South Korean older adults living in locations with the potential of becoming NORCs found that community facilities were positively correlated with willingness to age in place. These community facilities were hospitals/ oriental medical clinics, a senior center, a senior welfare center, a nursing home, and home-cooking restaurants. Researchers also found that cleaning help, meals, transportation, living costs or housing expenses, nutrition and work therapy, health screening, home care or care services, physical and leisure activities, education programs, walking environment, senior facilities, green areas, rest areas, a health-related neighborhood, a safe neighborhood, housing safety accident prevention diagnosis, and home repair were positively correlated with sustainable residence (Park & Choi, 2021).

A study of transportation mobility experiences of older adults in Arlington, Texas, a low-density city, found that access to affordable, adequate transportation also meant access to health care, goods, and services. Older adults felt “stuck” between the city’s lack of public transportation and inconsistent insurance coverage for paratransit to doctor’s appointments (Adorno et al., 2016). Declining health and loss of independence or autonomy cause residents to leave NORCs (Hou & Cao, 2021). NORC-SSPs fill gaps in Medicaid, Medicare, and the Older Americans Act services. This includes coordinating on-site healthcare and social services such as case management, education, recreation, and assistance (Bedney et al., 2010) but does not include transportation (Hou & Cao, 2021). In a paper that defined opportunities for collaboration between public health agencies and the municipal government, researchers recommended creating “NORC zones,” where NORCs would be supported with programs, services, and by-laws. Researchers also recommended studying activity patterns of NORC residents to better match goods and services to residents’ needs (Masotti et al., 2010).

TODs have a higher density of infrastructure and activities (Wood et al., 2016) and could address the transportation challenge. In Toyama, Japan, the Compact City Strategy and Residential Encouragement Zones were implemented to improve accessibility to activities of daily living, especially for older adults. The city concentrates facilities, including care centers, an indoor public square, art museum, library, bank, and commercial spaces, for older adults in walkable, transit-accessible city center. Care centers include recreational, culinary, and medical services (Arup, 2024). This project aligns with a recommendation to improve walkability to goods and services for older adults living in NORCs (Masotti et al., 2010). Another study, which explored the impact of TOD on older adults’ right to community facilities in Hong Kong, found that lack of public transportation in low-SES neighborhoods limited older residents’ access to community facilities elsewhere. The study found that the TOD exacerbated inequities between TOD neighborhoods and neighborhoods further from the metro stations in the provision of community facilities, especially community centers. (Wang et al., 2022).

3.06 Social Networks, Quality of Life, and Health

Many studies explored the interrelationships between social networks, built environment characteristics, and quality of life. A survey of older adults in South Korea found that nearby family members, friends, and social relationships were reasons older adults were willing to continue living in their current house or neighborhood (Park & Choi, 2021). Another study found that residents are attracted to NORCs because of the sense of community, social connections, and activities (Hou & Cao, 2021). To foster social interactions, one study recommended focusing on “social opportunity spaces,” which contribute to support networks among NORC residents (Fitzsimmons et al., 2017). Another recommended studying how characteristics of NORCs impact stress, perceptions of safety and sense of community and well being (Masotti et al., 2010).

In Arlington, Texas, affordable, adequate transportation gave older adults access to their social networks. Without transportation, older adults experienced isolation and disconnection from their community (Adorno et al., 2016). Another study found that lack of transportation and driving,

especially for male participants, were associated with lower quality of life. This included missing activities due to transportation limitations. An environment that enabled walking to places, especially for participants who did not drive, and access to and knowledge about alternative transportation were associated with higher quality of life (Kim & Ulfarsson, 2013).

One study explored the impact of different modes of transportation on the health of older adults in Hong Kong. Researchers found that using multiple modes of public transportation was associated with better physical health. Users of both metro and bus had the highest physical activity and best physical and mental health (Du et al., 2022).

3.07 Walkability

Many studies explored the built environment characteristics that impact walking among older adults. Table 3 summarizes these findings.

Other studies discussed outdoor falls. One found no association between walkability score categories and falls prevention. Researchers noted that walkability scores include components like distance to amenities and block lengths but not street and sidewalk hazards. The Stakeholders Walkability/ Wheelability in Neighborhood (SWAN) tool addresses this concern (Chippendale, 2020). Another study found that the characteristics of older adults at high risk of falls indoors are different from those of older adults at high risk of falls outdoors. Older adults at high risk of falls outdoors are healthier and more active, and falls are not predictive of future mobility. Outdoor environmental hazards include sidewalks, curbs, and streets (Kelsey et al., 2010).

One study noted that while urban commercial neighborhoods support active aging and are close to amenities, they have lower residential stability (Aurand et al., 2014). Another study recommended using mixed zoning and developing walking distance criteria to improve pedestrian access to goods and services in NORCs (Masotti et al., 2010).

Table 3: Influences on Walking and Health Among Older Adults

Influences	Association with Walking and Health Among Older Adults
Landscape, scenery, parks, paths with views of greenery and scenery	Reasons reported for walking among residents of a NORC in Greendale, Wisconsin (Aurand et al., 2014).
Neighborhood in close proximity to village center	More likely to walk to shops (Aurand et al., 2014).
Crossing high traffic corridors	Less likely to walk to shops (Ahrentzen, 2010).
Weather	Less walking or walking in different locations during winter (Ahrentzen, 2010). Reason reported for not walking (Aurand et al., 2014).
Crowded sidewalks	Negatively associated with physical health (Du et al., 2022).
Sidewalk width satisfaction	Positively associated with mental health (Du et al., 2022).
Railway improvement project	Increased step count among residents aged 75-84 living near the new station, increased step count among residents aged 75-84 living near existing stations, and decreased step count among female residents aged 45-64 living near existing stations (Morita et al., 2021).
Narrow, high pedestrian flow sidewalks, footbridges, undergrounds, long walking distances in metro stations, goods blocking sidewalk, uneven pavement, lack of seating/ rest areas in stations, low traffic signal times for street crossing	Made walking to metro stations more challenging and stressful; prevented metro use (Sun & Lau, 2021).
Escalators and lifts	Made walking to underground stations easier (Sun & Lau, 2021).

3.08 Driving

Three studies highlighted the impact of driving cessation on an older adults' access to healthcare and activities, and aging in their present community. A study of how retirees choose their homes when they move for retirement found that most participants used a car for errands, and less than half used public transportation. Almost none of the participants' new

neighborhoods were walkable (Glass & Lawlor, 2024). Transitions in health impact an older adults' ability to drive. This can result in reduced access to healthcare and services (Adorno et al., 2016), and missed activities, especially for men (Kim & Ulfarsson, 2013). Finally, a survey of older adults found that those who had previously driven or never driven, or who had no drivers in their household had a higher risk of entry into long term care institutions (Freeman et al., 2006).

3.09 Interdisciplinary Partnerships and Collaboration

Three articles highlighted the need for interdisciplinary partnerships and collaboration, including with older adults, in support of NORCs and other older adults who relocate. Interdisciplinary partnerships define NORC-SSPs. One article defined partnerships between housing entities, residents, health care and social service providers, government agencies, and philanthropic organizations as one of five elements that characterize NORC-SSPs. Another element involved meaningfully engaging older adults in the development and operation of NORC-SSPs (Bedney et al., 2010).

After defining the responsibilities of public health agencies and the municipal government, researchers determined opportunities for collaboration to support NORCs. They recommended collaborations between the municipal government and public health agencies regarding changes to street use, sidewalks, and electric and human powered vehicles. Researchers also recommended creating "healthy NORC committees." These committees would represent municipal government, public health agencies, senior associations, and service providers (Masotti et al, 2010). In response to the relocation patterns of older adults in the United States, researchers recommended collaboration between transportation agencies and local government agencies on aging to address the needs of older adults (Li et al., 2021).

3.10 Research Gaps

Overall, research on how the characteristics of NORCs and TODs support and/ or challenge aging in community is limited in scope. There is limited research across scales, geographies, neighborhood typologies, cultures, and landscape features. Further research is needed to identify opportunities to modify the built environment, specifically in landscape architecture, in support of aging in community through life transitions. Many built environment features studied are high level (e.g. "parks"). Less is known about the impact of specific design elements and how they can be used to support aging in community. Future research should also consider how to respond to the needs of older adults at different phases of old age.

The current design of NORCs does not create conditions for high livability and adequate public transportation, limiting access to the services and social networks needed to age in community. Future research is needed to understand why people move to locations that may not support their needs over time and what would attract older adults to communities that do.

Additional research is also needed to understand how to best identify NORCs, including in the West Coast and in higher density cities in the United States. Only New York State was found to have a government office that identifies, supports, and funds NORCs, and current research is

primarily located in low-density American cities and in Asia. Conclusions from one region of the United States may not be applied to another region, and given the cultural differences in views on aging across Hong Kong, South Korea, and the United States, conclusions from one context cannot necessarily be applied to another.

Many researchers used existing data sets and concluded that interdisciplinary collaboration is needed. There may be opportunities to analyze existing data sets across disciplines to ask new questions. The role of public policy, gender, geography, and socioeconomic status should also be explored further. Landscape, architectural, and urban designers were not included in collaborator lists recommended by researchers, so the role of designers in these collaborations should also be explored.

Transportation is an unsolved problem in NORCs, and the relationship between older adults and TODs is understudied. Further research is needed to better understand the impact of TODs on older adults, how transportation options can be better communicated for older adults, and how transportation needs can be met in NORCs. Research on the influences of walking to activities of daily living is also needed to identify interventions that support aging in community.

4. NORC Identification and Demography

4.01 NORCs, Almost-NORCs, and Super-NORCs

This project defines NORCs as census block groups with at least 50 percent of residents age 55 or older. Almost-NORCs are defined as census block groups with 33 to 50 percent of residents age 55 or older. Super-NORCs are defined as census block groups with 70 to 100 percent of residents age 55 or older.

15 NORCs were identified in King County, Washington, as shown in Figure 4. These block groups represent 0.97% percent of the total block groups in King County.

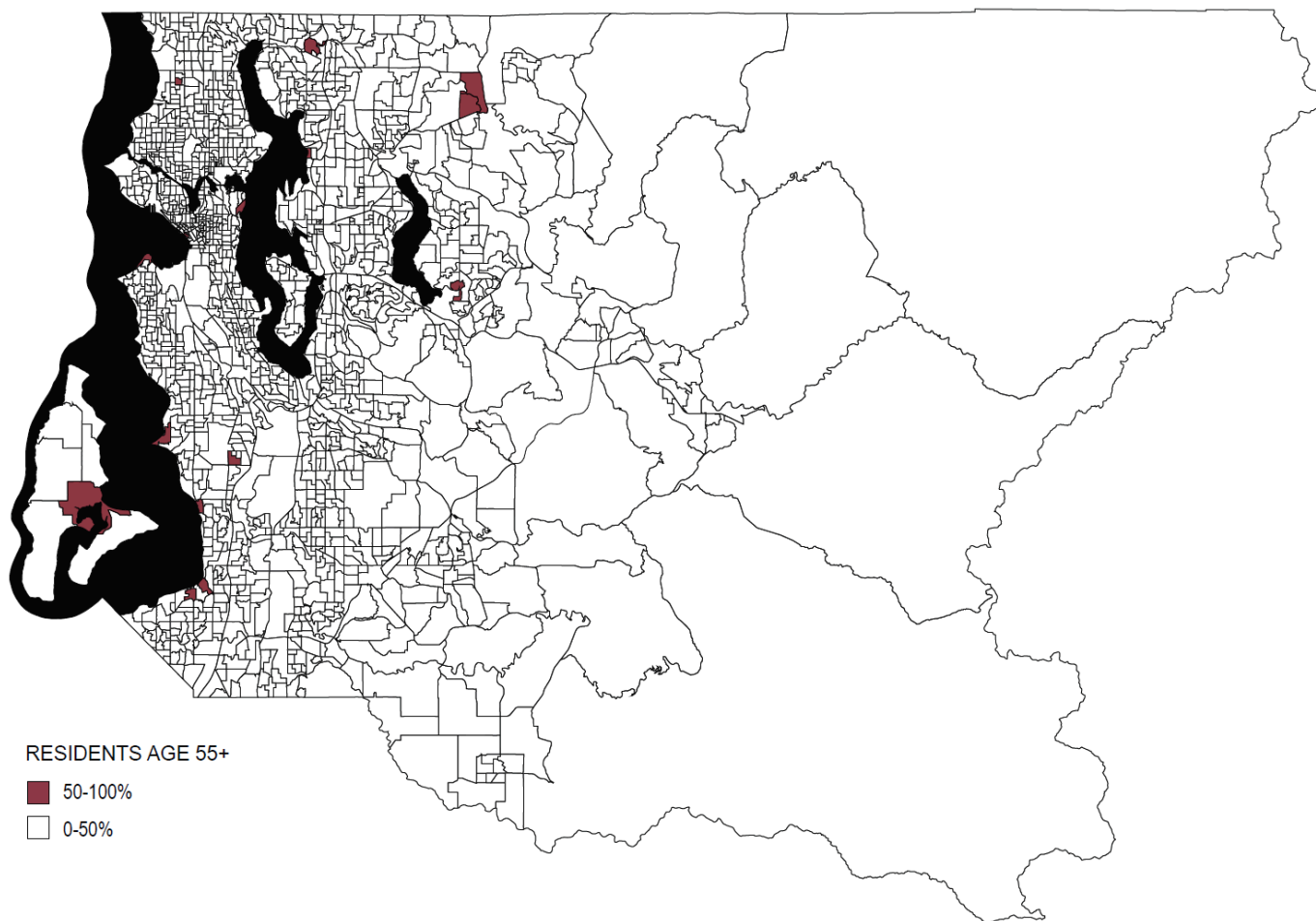


Figure 4: King County NORCs (2020)

The average percentage of older adults residing in King County NORCs is significantly higher than in other King County block groups. Table 5 illustrates the difference.

Table 4: Average Percentage of Residents Age 55+ in King County NORCs vs. King County

	King County NORCs	King County
Average % residents age 55+	52.59	25.27
Average % residents age 75+	20.52	5.39
Average % residents age 85+	6.13	1.59

278 Almost-NORCs were identified in King County, Washington, as shown in Figure 5. These block groups represent 17.99 percent of the total block groups in King County.

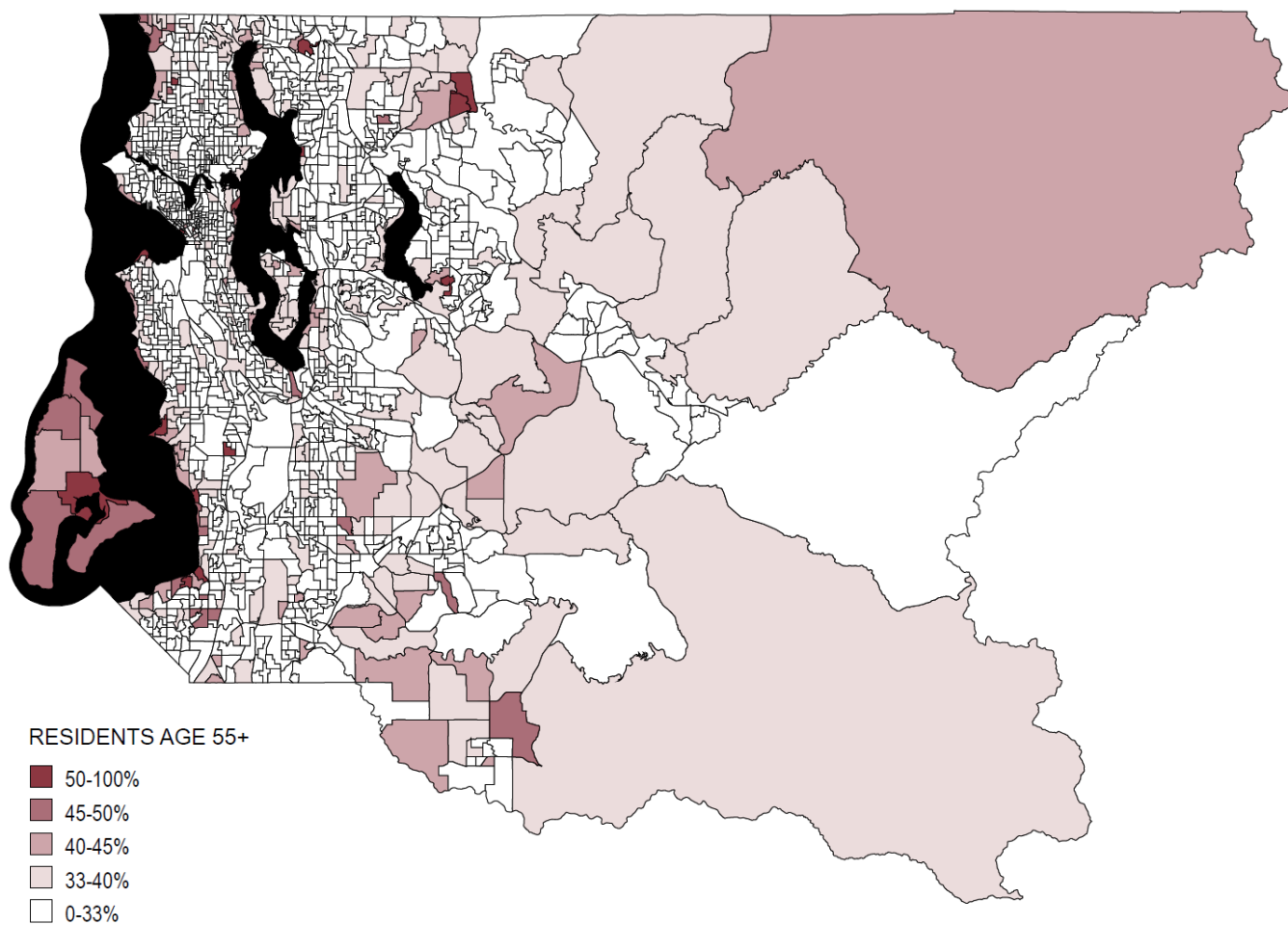


Figure 5: King County Almost-NORCs (2020)

2 Super-NORCs were identified in King County, Washington, as shown in Figure 6. These block groups represent 0.13 percent of the total block groups in King County.

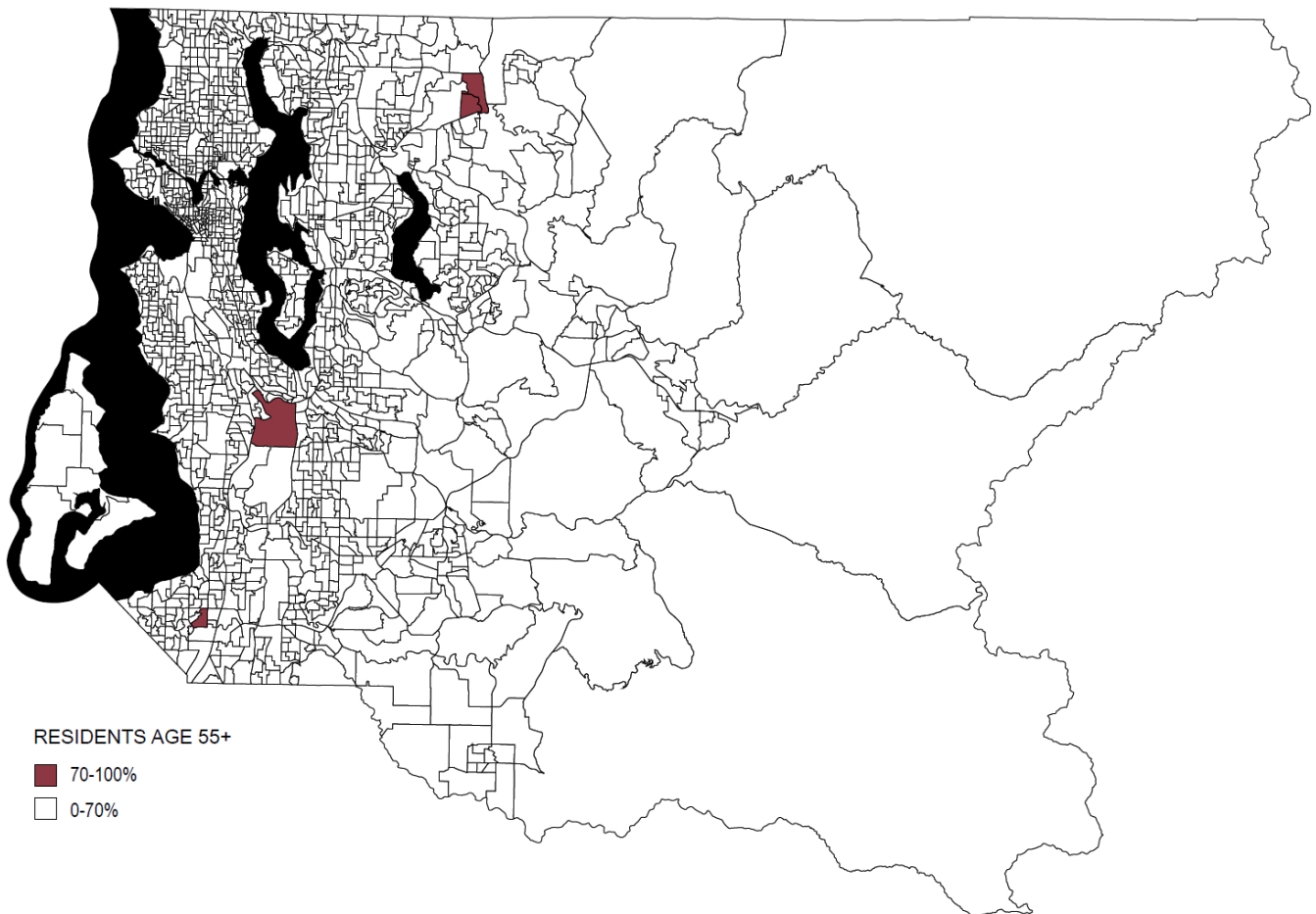


Figure 6: King County Super-NORCs (2020)

Table 5 shows the number of NORCs, Almost-NORCs, and Super-NORCs by block group in King County, Washington, in 2020. It also shows the percentage of block groups in King County that the NORCs, Almost-NORCs, and Super-NORCs represent.

Table 5: NORCs, Almost-NORCs, and Super-NORCs in King County, Washington

	2020	% of King County Block Groups
NORCs	15	0.97
Almost-NORCs	278	17.99
Super-NORCs	4	0.26

4.02 Increasing NORCs

11 NORCs were identified in 2010, and 15 NORCs were identified in 2020, as shown in Figure 7 and Figure 8.

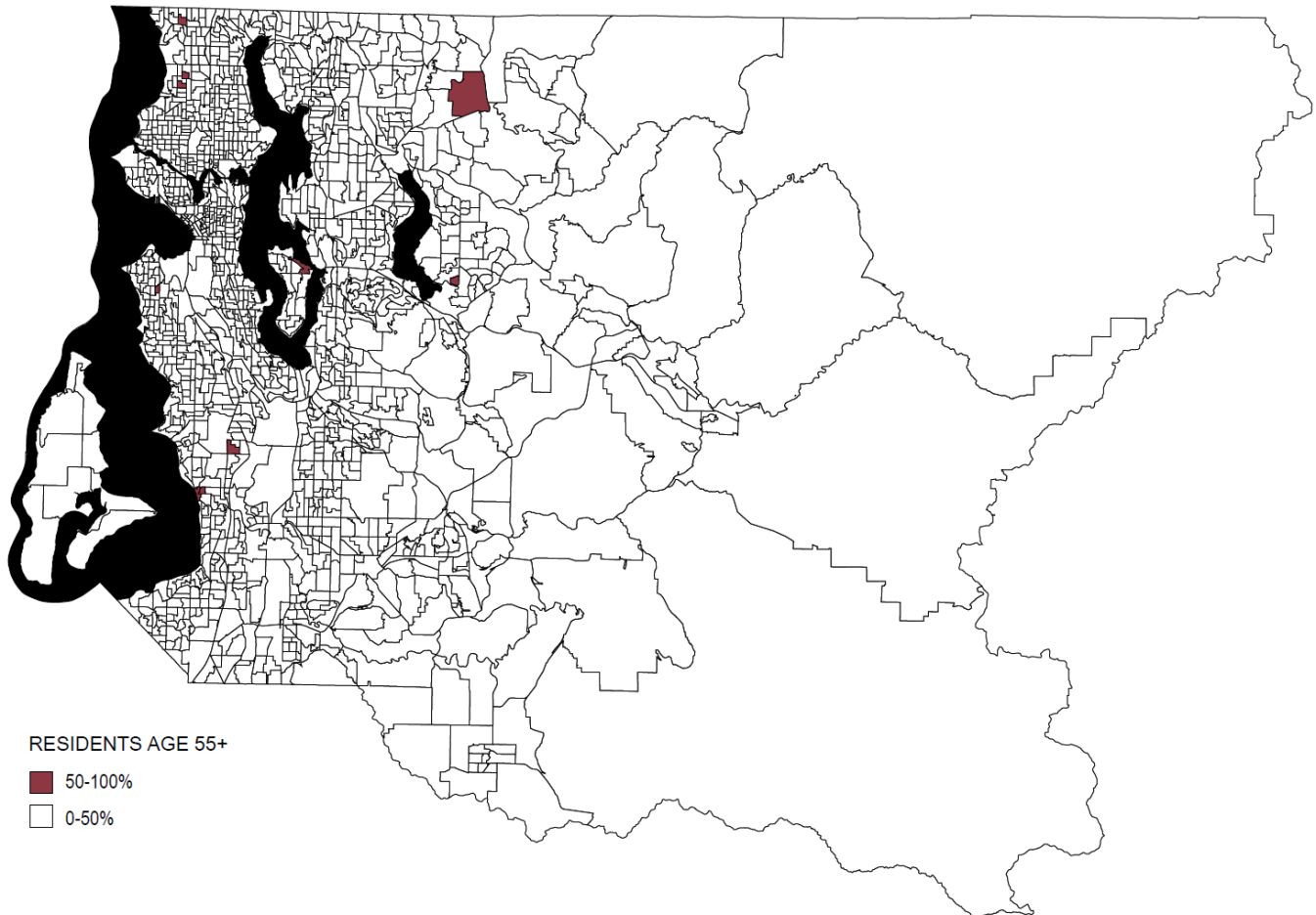


Figure 7: King County NORCs (2010)

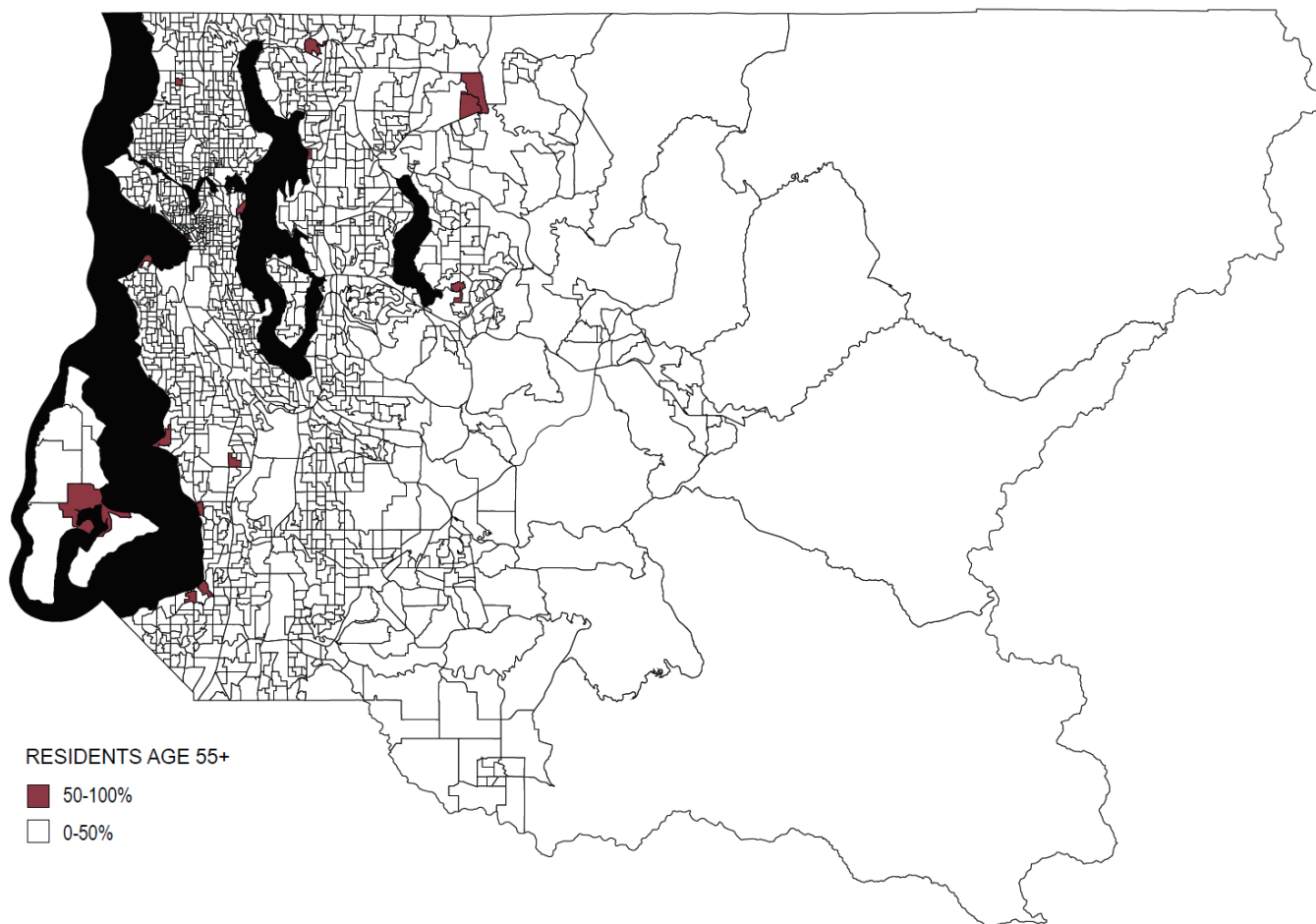


Figure 8: King County NORCs (2020)

4.03 Shifting NORCs

NORC block groups shifted over time. For example, three of the four Seattle NORCs in 2010 were no longer NORCs in 2020. By 2020, three different block groups were NORCs, as shown in Figure 9. Only one block group was a NORC in 2010 and 2020 (Bitter Lake).



Figure 9: Seattle NORCs (2010 (left) and 2020 (right))

4.04 Increasing Older Adults

The percentage of older adults in many block groups increased from 2010 to 2020. Some block groups exceeded the NORC population threshold between 2010 and 2020, as shown in Table 6. No data is available where significant block group boundary changes occurred between 2010 and 2020.

Table 6: Percentage of Residents Age 55+ Across NORC Block Groups (Seattle)

NORC	2010: % of residents age 55+	2020: % of residents age 55+
Bitter Lake	57.30	54.57
South of Bitter Lake	56.75	–
Freeway Park	65.87	45.02
Camp Long	57.97	–
Madison Park	48.44	51.21
Pike Place Market	–	52.58
Duwamish Head	47.51	51.33

5. Defining Community

Participants were asked what community meant to them and to share a little bit about their own community or communities. Older adults thought about community in three ways: as a place, a service, and/or people.

5.01 Community as a Place

For some older adults, community was thought of as a place. Community as a place was considered at two scales: neighborhood and apartment building.

Neighborhood Scale

Particularly among older adults in West Seattle, their neighborhood or West Seattle as a whole was their community.

Apartment Building Scale

For others, community was tied to their apartment building. Residents of an assisted living community in West Seattle agreed that their social life grew and feelings of loneliness improved after moving in. They described new friendships, running into familiar people in the hallway, and feelings of acceptance. An 85-year-old man shared, “It [assisted living community] gives me a social life I probably wouldn’t have on my own.”

Residents of a low-income senior apartment building shared this desire to find community within their apartment building, but struggled to build a meaningful community there. They noted that language differences, reduced activities, and lack of participation in activities as barriers to building community within the apartment building.

Two participants live in intergenerational apartment buildings in West Seattle, where they have found community. Both knew and spent time with their neighbors – at the farmers market and on

the rooftop. A 78-year-old man in West Seattle shared that his younger neighbors greet him, “Hi Uncle [name redacted]!”

5.02 Community as a Service

For some older adults, community was tied to a service or a network of services.

Pike Place Market

Pike Place Market is a network of services and a place where older adults live. The sense of community older adults feel there is tied to the people and supportive services, including the Market Commons, clinic, food bank, and senior center. Older adults and senior center staff described the market itself as a close community of people looking out for each other.

Senior Centers

For many older adults, their senior center is their community. A 78-year-old man in West Seattle described the senior center as “a home away from home.” The sense of community at senior centers was primarily tied to the social activities, relationships, and services.

5.03 Community as People

For many older adults, community was people. Many older adults explained that community is familiar people, friendship, a sense of belonging and acceptance, and helping others.

Familiar People

For many older adults, knowing others well contributed to their community. A 67-year-old woman who moved to West Seattle less than a year prior knew her neighbors – including a cashier at QFC and apartment neighbors – by name. She explained that they help her, and “That’s, to me, what community is.”

The same was true in Pike Place Market, where older adults, senior center staff, and business owners called each other by name and knew each other well. On a walk with a Pike Market Senior Center staff member, he found a dog wandering in the market. He knew who the dog belonged to, knew where the pet-owner might be, and returned the dog to them.

Helping Others

A 76-year-old man who lives in a single-family home in West Seattle shared that responding to other peoples’ needs through service is what connected him to his community. He knows his neighbors well and noted that there is mutuality. He has given people rides, volunteered with the Time Bank to help people with tasks like hanging pictures, and started a storytelling group to help people build relationships. He also received support from others such as rides from the airport or doctor’s appointments. His community is “a source of joy and connection.” “My little community is such a nice group of people,” he said.

Shifting Community Connections

The need for a continuity of people to maintain a sense of community varied for older adults. For many older adults, the loss of loved ones, especially friends and neighbors, limited their sense of community. For others, maintaining ties to their previous community wasn't critical. One 85-year-old woman in Pike Place Market considering a move to an assisted living community in another neighborhood hoped to find community in the new neighborhood and didn't plan to return to Pike Market Senior Center after the move. A similar sentiment was expressed by some residents of an assisted living community in West Seattle. For both the woman in Pike Place Market and the residents of the assisted living community, connection to family was maintained through other community transitions.

6. Factors that Support or Limit an Accessible Built Environment

Three factors impacted accessibility for older adults: uneven surfaces, outdoor access, home or yard maintenance.

6.01 Uneven Surfaces

Sidewalk Conditions

Overall, a smooth surface was more important than a flat surface for many older adults. Cracks in sidewalks and cobblestones, especially leading to the entrance of Pike Market Senior Center, were frequently mentioned as fall hazards.

Hills and Stairs

Hills and stairs were concerns for many residents of an assisted living community, and falls contributed to some residents' decision to move to assisted living. One 71-year-old woman who lived in a single-family home in West Seattle, explained that her balance has declined, and stairs and her driveway, which is on a hill, are challenging to navigate and have caused falls. She walks less now due to her fear of another fall.

6.02 Outdoor Access

An accessible built environment included outdoor access for many older adults. Older adults most frequently accessed the outdoors by visiting parks and the waterfront, enjoying views of the mountains and water, taking walks, riding the ferry, and going on hikes or excursions.

Views of Nature

Across sites and housing types, many older adults described views of the water and mountains from their homes. A 72-year-old woman who lives in a low-income senior apartment building in Pike Place Market described views of ferries and the mountains and reflected, "I feel lucky to live on the water here." Many older adults also accessed meaningful views from parks and the waterfront. Many older adults in Pike Place Market visit the pier and Olympic Sculpture Park.

Places to Wander and Dwell

Places to walk and sit outdoors were important to many older adults. The ability to wander through and dwell in outdoor spaces was meaningful. Ferries were significant to many older adults in Pike Place Market. For most older adults, riding the ferry was a leisure activity rather than a mode of transportation. Without social connections, older adults didn't always visit outdoor spaces – in Seattle and outside of the city. Some older adults requested groups for walking, hiking, or sitting in parks.

Experiencing Nature

Experiencing nature was distinct from being outdoors. One woman experienced wildlife on her commute by ferry to Pike Market Senior Center a few days a week. She shared, "every day, I count the herons" from the ferry.

Another woman at Pike Place Market shared that moving to the market and no longer having a car meant compromising. She previously hiked three days per week with a hiking group, and she shared, "Sometimes I feel like being in the Hoh Rainforest." She also described memories of lupine as far as the eye can see. "I miss that," she said. Being in the middle of nature was something she no longer had access to.

6.03 Home or Yard Maintenance

Many older adults lived in buildings maintained by a Homeowners Association (HOA) or property management, so they were not responsible for home or yard maintenance. Home and yard maintenance prompted moves for some older adults. For example, one 98-year-old woman in West Seattle sold her 5-bedroom single-family home and moved to a condo 25 years ago because her previous home required too much upkeep. Similarly, one reason an 81-year-old man in West Seattle moved to an assisted living community was because he couldn't maintain his single-family home anymore.

7. Factors that Support or Limit Access to Services and Amenities

Four factors impacted access to services and amenities for older adults: transportation, proximity, safety, and crowded spaces.

7.01 Meaningful Services and Amenities

Four categories of services and amenities were most meaningful to older adults: food, basic and care needs (non-food), outdoor, art, and exercise. The most meaningful services and amenities met basic needs such as food and healthcare and facilitated social connections.

Grocery and dining options were important to older adults in both sites. However, older adults in Pike Place Market tended to feel unsatisfied with the grocery store options, whereas older adults in West Seattle were satisfied.

7.02 Transportation

The most common modes of transportation for accessing services and amenities were driving, rides from family and friends, taking the bus, and walking. Some older adults also take the ferry, ride the Hyde Shuttle, or ride their motorcycle. More older adults drove in West Seattle than in Pike Place Market. Many older adults walked to amenities like the grocery store or the library but relied on rides or the bus for doctors appointments, which were often further away.

Offering or accepting rides from others built community in West Seattle. For example, a 76-year-old man in West Seattle shared that he sometimes drives another member of the senior center home when she has bags of groceries from the food bank. It was important to him to notice and respond to the needs of others. These small acts of service – both given and received – connect him to his community.

7.03 Proximity

Older adults didn't typically move to their place of residence to be in close proximity to services and amenities, but many recognized the value of it after experiencing the convenience. Older adults more often moved to be in close proximity to family or when they needed more support caring for themselves or their home. A 67-year-old woman who moved to West Seattle less than a year prior was pleasantly surprised that she could walk to all her basic needs and didn't need a car. She had moved to be closer to her son, and called the convenience of living in The Junction a "pleasant change." She explained that her needs and wants were right there and described West Seattle as having a "small town feel in a big city."

A 78-year-old man in West Seattle initially moved to Tukwila to be closer to family. After he found community at the Center for Active Living in West Seattle, he moved to an apartment less than a one minute walk from the center.

Even in close proximity, amenities were not always used by older adults without meaningful programming, social connections, and invitations. An 80-year-old woman described the day, eighteen years earlier, that she moved into a low-income senior apartment building. "I walked off the elevator...and Father [name redacted] said 'Why don't you go and sit [in the garden]...and you'll refresh yourself,'" she recalled. She explained that the staff "accepted that we all had pride, and if you didn't have it, they gave it to you." That year, she planted wisteria seeds, and it grows in the garden today.

7.04 Safety

Some older adults in Pike Place Market expressed concerns regarding safety at the senior center, their apartment building, and the bus. They recalled instances of behavioral issues at the senior center and on the bus, trespassers and drug use in their apartment building, and being attacked on the street. Safety concerns had deterred some older adults from using the bus and going out at night. Older adults in Pike Place Market expressed more safety concerns than people in West Seattle, and women expressed more safety concerns than men.

7.05 Crowded Spaces

Crowded spaces, especially in the summer and on weekends in Pike Place Market, deterred some older adults from going out or visiting the senior center.

8. Factors that Support or Limit Meaningful Social Connections

Five factors impacted social connections for older adults: social activities and programs, proximity to family, loss of loved ones, and moving to assisted living.

8.01 Meaningful Social Programs and Spaces

Five categories of social programs and spaces were most meaningful to older adults: senior center, food, outdoor, art, and exercise. Many older adults relied on senior centers for social programs and spaces. The most common activities and programs attended were meals, exercise classes, talks, and games (e.g. cards, bingo). For some women at Pike Market Senior Center, the people who sat at their table became their community.

Food

For many older adults, food-related spaces were important for building and maintaining social connections. Lunches at senior centers, potlucks in apartment buildings, dinners and happy hours with friends, food banks, farmers markets, and buying produce in Pike Place Market were programs and spaces that supported social connections.

Art

For many older adults, the performing arts were an important aspect of their social life. A 66-year-old man in Pike Place Market shared that “Music keeps me motivated...and young.” He feels the happiest when going to concerts, and regularly attends shows at the Neptune with his friends.

Exercise

The most common forms of exercise among older adults were walking outdoors and weightlifting. Many older adults did these activities alone, and some shared that they wished they had another person or group to walk or weightlift with.

8.02 Social Activities and Programs

Programming of social spaces gave meaning to them for many older adults. Aesthetics and design weren't critical. Instead, open, versatile spaces that left room for people to fill them and use them the way they desired worked well. This type of space was found at senior centers.

Many older adults relied on senior centers or their assisted living community to facilitate social activities and programs and build friendships. At Pike Market Senior Center, activities and programs were primarily attended by women, and the activities were run by volunteers. Many older men spent afternoons in the lunch room, where movies were often played. They were less

engaged in social activities. In contrast, at Center for Active Living in West Seattle, both men and women participated in activities and programs, and members of the center often facilitated them. For example, a 78-year-old man in West Seattle teaches art classes at the center.

A 74-year-old woman at an assisted living community in West Seattle appreciated “the feeling of personal choice” to join activities. Because of the activity options, which compare to what is offered at the Center for Active Living, an 86-year-old resident hasn’t gone back to the center since moving to the assisted living community.

8.03 Proximity to Family

Many older adults relocated to be closer to family. Some older adults moved into the same apartment building as a family member, but most relocated to the same state or city. A 78-year-old man who relocated to West Seattle from out-of-state to be closer to his brother and niece noted that family and relationships had become more important as he aged.

A 74-year-old woman at an assisted living community in West Seattle reflected that “it helps my sense of wellbeing” to have her daughter six blocks away. Family filled a gap in social connection for some older adults, but being in close proximity to family didn’t always mean they saw them often or were their primary source of social connection.

An 80-year-old woman residing in a low-income senior apartment building in Pike Place Market wanted to move to different low-income housing, where her daughter lived. She wanted her daughter to be her caregiver and was lonely in her current apartment building. Despite her low income, the move was not possible because unhoused applicants were given priority.

8.04 Loss of Loved Ones

Loss of Community

Loss and loneliness were significant factors limiting social connections for older adults. The loss of friends and neighbors contributed to isolation and loneliness among many older adults. One woman in Pike Place Market estimated that in the past 18 years, between 150 and 175 neighbors had died in her apartment building. She said, “At 80, I find myself community-void.” She explained, “Every time I get a really good friend, they die,” and advised that “old people should not be put together. We should be where there are still children.”

An 83-year-old man in Pike Place Market had also experienced significant loss. Six close friends had died, and he didn’t see his family often, so he no longer had a social life outside of his apartment building. He now gets takeout because he doesn’t want to eat alone in restaurants. “I’m comfortable, but I’m lonely,” he explained. Residents of low-income senior housing outside of Pike Place Market and those who were not regularly involved in a senior center most often described feelings of loneliness and isolation.

Supporting Each Other

At the Center for Active Living in West Seattle, a sense of responsibility to look out for others,

recognize their needs, and support each other was prevalent among members. A 78-year-old man there noticed the loneliness of some people at the center. He explained that he chose “to sit with others and lift their spirits.” During the interview, a woman entered the room to tour the center. The man immediately greeted her and shared his experience with the center’s activities and programs. He talked to her about her interests and suggested a few activities she might be interested in participating in. He wanted her to feel connected and welcome.

Resilience through Loss

Some older adults shared what helped their resilience through loss. For some older adults, communities built around art were important. An 80-year-old woman in Pike Place Market regularly took art and dance classes with Path with Art, a trauma-informed arts engagement organization. She had also accessed the opera and symphony through Path with Art. She shared, “When I sit in the opera...my mind will float back...to being part of that.” She recalled that when she previously worked in performing arts, “It was a very special time for me. I had a huge community.” She shared that “When I go to the symphony, I’m completely in the symphony.” That feeling lasts two to three days. She also attends art shows at Pike Place Market each month, where she talks about art and her experience with depression.

Other older adults emphasized the importance of intergenerational communities and senior centers for helping maintain a sense of community through the loss of loved ones.

8.05 Moving to Assisted Living

Residents of an assisted living community in West Seattle agreed that their social lives grew after moving to the assisted living community. An 85-year-old man shared that “It [assisted living community] gives me a social life I probably wouldn’t have on my own.” An abundance of social activities and participation have made it easy to make friends for many residents.

9. Limitations

9.01 Census Data

Scale and Geography of Available Data

Block groups are the smallest scale of publicly available age data from the Census. Because NORCs can also be found at many scales, including the apartment building scale, the use of block group data may not identify some of the NORCs that may exist in King County, Washington. Additionally, block groups do not necessarily represent actual community boundaries, so it is possible that the use of this data misses NORCs that would be identified within other boundaries (e.g. neighborhood).

2020 Undercount of Young Children

The 2020 Census undercounted Washington children ages 0-4 by 4.17 percent and overcounted adults age 50-99 by 1.69 percent, which may impact the validity of the data used (Elliott et al., 2021).

Changing Block Group Boundaries

Census block group boundaries changed between 2010 and 2020, so it was not possible to understand changes in block groups over time without manipulating the data further. In future studies, it would be useful to harmonize the spatial data in order to make more meaningful comparisons and forecast future NORCs.

Inclusion of Age-Restricted Communities

Because block group population data includes all residents, including those living in age-restricted communities, the NORCs identified may overcount the number of older adults that “naturally” reside in the block group. NORCs, by definition, do not include residents of age-restricted communities.

To understand the magnitude of this limitation, site visits were conducted at the seven Seattle block groups identified as NORCs through mapping. The block groups were selected based on proximity to the University of Washington and access via public transportation within 1.5 hours. A selection of streets were walked in each of the seven block groups to identify age-restricted communities. Age-restricted communities were also searched for on mapping platforms. Figure 9 shows the walking routes taken at each site.

While the walking routes of the NORC site visits included the majority of streets, it is possible that age-restricted communities were missed on streets that were not walked. It is also possible that buildings not clearly identified by signs were missed. This may impact the validity of the data that was adjusted for age-restricted communities.

Many age-restricted communities were categorized in various mapping platforms as non-profits, apartment buildings, and condominiums. These categories were considered when mapping the age-restricted communities used to adjust the Census data. It is possible that some age-restricted communities were categorized differently and missed. This may impact the validity of the data that was adjusted for age-restricted communities.

Identified age-restricted communities were then called, visited, or researched online to determine the number of residents. Age-restricted communities were also identified or confirmed by searching for nursing homes and senior living communities on Google maps. For the Camp Long NORC, a site visit was not conducted, but age-restricted communities were verified with this search method. The Census data was then adjusted for the age-restricted communities to verify NORC status. Table 7 describes the population verification method used for each age-restricted community identified.

Table 7: NORC Verification Method

NORC	Age-Restricted Community	Verification Method
Bitter Lake	Bitter Lake Manor	Site visit, desk research
Bitter Lake	Four Freedoms	Site visit, reception
Camp Long	Providence Mount St. Vincent	Google Maps, phone call
Camp Long	Brookdale West Seattle	Google Maps, phone call
Freeway Park	Horizon House	Site visit, desk research
Madison Park	Parkshore	Site visit, reception
Pike Market	Providence Vincent House	Site visit, phone call
Pike Market	Pike Place Market	Desk research
South of Bitter Lake	Ida Culver House Broadview	Google Maps, phone call

Through the site visit process, six of seven NORCs were disqualified. Table 8 shows the percentage of residents age 55+ in the NORC block groups when adjusted for age-restricted communities. It also identifies which NORCs were disqualified when adjusted for age-restricted communities. No data is available where significant block group boundary changes occurred between 2010 and 2020.

Table 8: Percentage of Residents Age 55+ Across NORC Block Groups, Adjusted for Age-Restricted Communities

NORC	2010: % of residents age 55+	2020: % of residents age 55+	NORC? (2020)
Madison Park	37.51	45.46	No
Pike Place Market	–	40.18	No
Duwamish Head	47.51	51.33	Yes
Bitter Lake	39.08	39.64	No
South of Bitter Lake	46.42	–	–
Freeway Park	16.71	10.94	No
Camp Long	42.38	–	–

These findings were not considered when selecting sites for the study. For example, Pike Place Market is still considered a NORC for the purpose of this study.

9.02 Sampling

Convenience and Snowball Sampling

The use of convenience and snowball sampling may limit the reach. For example, many interviews were conducted at senior centers, so older adults who do not go to senior centers may not have been sampled. Additionally, people at activities or who just visit the senior center for lunch may not have been sampled.

Sample Size

The sample was too small to reach data saturation, so the data may be incomplete.

Representative Population

More women participated than men, and few participants used mobility aids. Additionally, only English speakers were sampled. The population sampled may not reflect the actual population.

Audio Quality

Interview locations and audio quality limited data collection and analysis. Detailed notes of each interview and the focus group were coded, rather than the full transcribed interview or focus group. As a result, some data may have been lost.

10. Recommendations

Findings reveal opportunities for designers, planners, policymakers, and researchers to support aging in community in NORCs.

Accessible Built Environment

- Ensure smooth pathways to key services, amenities, social spaces, and residences. Explore solutions that maintain historical landscapes (e.g. cobblestones) as well as accessibility of important routes.
- Utilize trauma-informed design in housing and amenities for older adults. Incorporate art and music programming.
- Design accessible urban parks that give visitors the experience of being immersed in nature. Include seating and spaces to dwell.
- Expand programs and transportation that connect older adults to national parks and other natural areas outside of the city.
- Design walking routes for wandering.
- Maximize views of water and mountains from residential and public spaces.

Access to Services and Amenities

- Plan senior housing, including assisted living, in close proximity to services and amenities.
- Encourage older adults to choose housing in close proximity to services, amenities, and social connections.

Meaningful Social Connections

- Explore intergenerational housing typologies for older adults, specifically for older adults without strong family ties.
- Designate open spaces for gathering with minimal design interventions. Design multi-purpose spaces that can accommodate a variety of programs.
- Explore opportunities (e.g. design, programming) to foster intergenerational community among neighbors in apartment buildings.
- Prioritize the following social activities and programs: meals, exercise classes, talks, art, and games. Encourage older adults to lead activities.
- Establish pathways for older adults residing in low-income housing to relocate to other low-income housing to access family caregivers.

Future Research

- Explore the reasons many older adults do not consider proximity to services and amenities and other future needs when choosing housing for retirement. Explore marketing strategies to encourage older adults to prioritize these factors.
- Explore the program and spatial needs of men at Pike Market Senior Center.
- Determine the impact on aging in community of home and yard maintenance gaps for older adults.
- Compare findings to non-urban NORCs in King County, specifically Vashon Island.
- Develop methods of identifying NORCs, including at smaller scales than block group.
- Prioritize focus groups for qualitative research with older adults. Participants expressed that this was a meaningful experience for them and allowed them to connect with and learn about their neighbors' interests.

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