

Parks for aging: A toolkit for retrofitting parks to support the needs of older adults

by

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A REPORT

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Abstract

The U.S. population is rapidly aging and diversifying (Vespa, Medina, and Armstrong 2020), and many older adults—those aged 65 and older—are choosing to age in their own homes and communities (Lehning, Smith, and Dunkle 2015). The concept of aging in one's own community rather than in an institution is known as "aging in place" (CDC 2017). For aging in place to be possible, community infrastructure—such as parks and green spaces, public transit, or community centers—needs to be designed to be usable by older adults and enable them to age safely in their communities. Parks are an especially important age-friendly community infrastructure that provides many benefits to older adults (Kimic and Polko 2022) and can support their ability to age in place (WHO 2007). Although there are many studies that prove the benefits parks provide to older adults, there are few built parks designed specifically for the needs of older persons. In addition, most aging in place design guidelines focus on private residential modifications rather than adaptations to outdoor spaces within older adults' communities. This study aims to address this gap by creating a Parks for Aging in Place Toolkit that helps facilitate age-friendly park retrofits.

The Parks for Aging in Place Toolkit includes analytical tools and an assessment tool to help identify the needs of older parkgoers and assess the park's current performance. The toolkit also provides design and activity programming recommendations for age-friendly park retrofits. Findings from a document analysis of universal design guidelines and precedent studies of activity programs informed the recommendations within the toolkit. Then, to illustrate its utility, the toolkit was applied to an existing park site: Franklin Park in Boston, MA. This park was selected as the application site due to the City of Boston's eagerness to implement age-friendly public space design and the characteristics of the community surrounding the park.

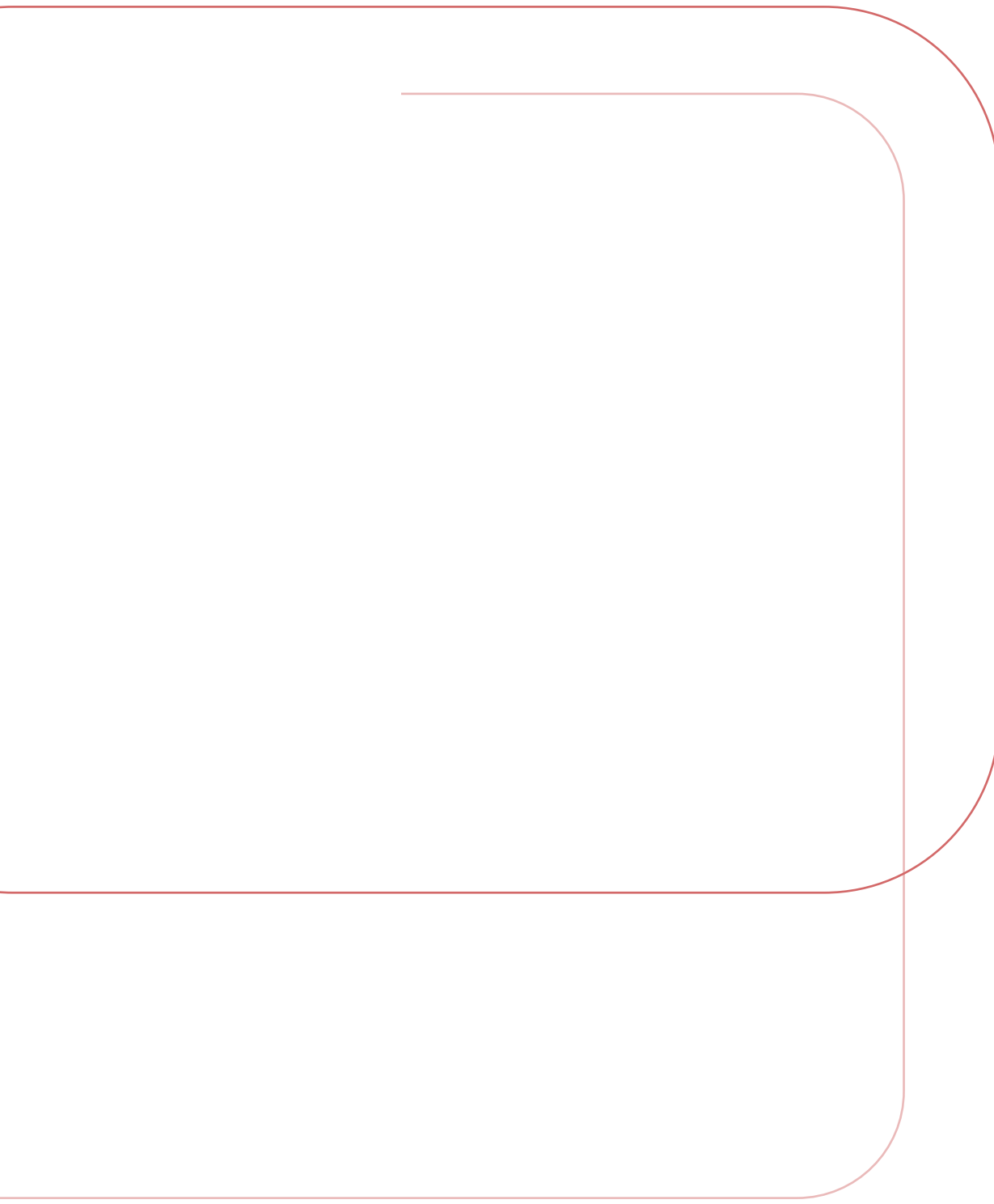
This study advances the research on age-friendly park design and provides landscape architects, parks and recreation professionals, design students, and community members with a tool to aid in initiating retrofits so that existing parks can better serve the needs of older adults. This project demonstrates that even simple design modifications in parks can improve older adults' health and well-being, enabling them to age in place. The recommendations proposed in this project should benefit not only older adults but the greater population as well by increasing

the usability and inclusiveness of park spaces. This project serves as a foundation for future age-friendly research and should inspire future age-friendly park retrofits.

Parks For Aging

A Toolkit for Retrofitting
Parks to Support the
Needs of Older Adults

Anna Rader
2023



Abstract

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Glossary

A

Accessible Design

Design that meets minimum accessibility standards by incorporating special modifications in the built environment to ensure access by people with disabilities (Steinfeld and Maisel 2012).

Access (as in park access)

The physical proximity to and ability to visit parks. The National Recreation Parks Association (NRPA) supports a national initiative for all individuals to live within a ten-minute walk to green spaces (NRPA n.d.a). Barriers to park access can include sidewalk infrastructure, park proximity, and transportation services (Winick and Jaffe 2015; D. Scott and Munson 1994).

Active Aging

A more inclusive term for successful aging which means the “process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age” (Winick and Jaffe 2015; WHO 2007).

Activity Programs

Organized programs—including cultural, social, educational, or physical activities—that engage parkgoers and activate park spaces.

Ageism

The negative perception, discrimination, and stereotypes toward people based on their age. Ageism is typically aimed toward older people and can be seen at the institutional, individual, and societal levels (Bodner 2009).

Age-Friendly City

A city that “adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities” (WHO 2007).

Age-Friendly Environments

Environments “that offer infrastructure and supports that meet the needs of older adults and allow them to remain involved in community life” (Lehning, Smith, and Dunkle 2015, 1).

Aging in Place

“The ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income, or ability level” (CDC 2017). One is considered to be aging in place if they continue to live within their own home or in a noninstitutionalized setting within their community (Farber and Shinkle 2011).

Aging in Place Design

Design that strengthens older adults’ ability to age in their current homes or communities and promotes their independence, dignity, and place in society (Ball 2012; Mohlenkamp et al. 2016).

B

Barriers (to park use)

Barriers exclude use, make use difficult, or are regulative of use by different groups (Steinfeld and Maisel 2012).

C

Cognitive Decline

The condition of worsening memory loss, confusion, and decision-making. Also referred to as cognitive impairment (CDC 2011). The most common form of cognitive decline is Alzheimer’s Disease, and it is estimated that in 2019 5.6 million Americans aged 65+ had Alzheimer’s Disease (Alzheimer’s Association 2019).

Community-Dwelling Older Adults

Individuals aged 65+ who live in non-institutionalized communities (Chi et al. 2019).

D

Design (as in park design)

The physical features, amenities, and facilities that encourage park visitation and use.

I

Inclusive Design

“Design that considers the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference” (Inclusive Design Research Centre n.d.).

Intergenerational Design

Intergenerational design is design that is intended for all ages and encourages meaningful interaction and participation of different age groups in one place (Washington et al. 2019).

O

Older adults

Adults aged 65 years and older. Older adults are a diverse group of people with varying abilities, needs, desires, and backgrounds (Winick and Jaffe 2015)

R

Retrofit (as in park retrofit)

The adaptation and redesign of an existing park rather than the creation of a new park.

U

Universal Design

Design that promotes inclusivity, removes barriers, and aims to meet the needs of as many people as possible. Universal design does not use special modifications, thus destigmatizes disabilities in the built environment (Carr et al. 2013; Steinfeld and Maisel 2012; NC State 1997). Universal design “includes goals beyond basic accessibility, such as health and wellness, social participation, and safety, and a much higher standard of performance than accessible design” (Steinfeld and Maisel 2012).

Usability (as in park usability)

The ability of people to move through park spaces and use the amenities and programming provided (Iwarsson and Ståhl 2003).

V

Visitation (as in park visitation)

The act of visiting a park. Older adults are typically motivated to visit parks for different reasons than most younger people and older adults often have lower park visitation (Veitch et al. 2020).

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(Top left) Fig. 1.01. People lounging on a boardwalk in Malmö, Sweden.
 (Top right) Fig. 1.02. Cyclists and pedestrians in Amagertorv in Copenhagen.
 (Bottom left) Fig. 1.03. A grandfather and his grandchild in a park in Madrid.
 (Bottom right) Fig. 1.04. All ages using Israel Plads in Copenhagen (Cederskjold 2015).

Preface

This project was largely born out of my experiences while studying in Copenhagen, Denmark. There I learned about the European ‘design for all’ concept—an inclusive design process that supports people of all ages, genders, races, and abilities—as well as the idea of ‘lifetime design’—the design of urban environments to accommodate all stages of the aging process. These concepts promote the idea that to be socially sustainable, cities need to be designed for all people and a broader range of diversity.

A trip to Madrid was particularly inspirational for this project. In the city’s largest park, El Retiro Park, I experienced people of all ages enjoying the park’s many activities. I was especially intrigued to observe the numerous ways the older parkgoers utilized the park. From participating in dance classes to exercising on fitness equipment to accompanying their grandchildren at the pond, they enjoyed all of the amenities and were an active part of the park’s social fabric.

Experiences like these led me to question how parks in the U.S. could be better designed so people of all ages can feel included and be active members of the community. I was also interested in learning more about the amenities and activities needed to create vibrant park hubs for older individuals. This research furthers this conversation and provides ways that parks and open spaces can be more inclusive to older persons. The hope of this project is to inspire individuals to design with greater empathy and with a wider range of ages and abilities in mind.

01

Introduction

Project significance and research questions.

Introduction

Project Significance and Dilemma

By 2034, it is projected that the American 65 and older population will outnumber children for the first time in history (Vespa, Medina, and Armstrong 2020). In addition, research has found that most older adults in the U.S. would prefer to age in their own homes and communities rather than in an institutional setting (Binette and Vasold 2018). Aging in one's own community comfortably and independently is referred to as "aging in place" (CDC 2017; Farber and Shinkle 2011). Aging in place empowers older adults and preserves their independence (City of Boston 2017) while reducing health care costs, improving quality of life, and lengthening life expectancy (World Health Organization 2002).

Although many older adults prefer to age in place, most outdoor public spaces are not designed to support an aging population (Lehning, Smith, and Dunkle 2015). Infrastructure that lacks accessibility, safety, or spaces for social interaction, for example, creates barriers for older adults in public spaces and makes aging in place difficult (WHO 2017). Research suggests that adopting age-friendly solutions in outdoor spaces is an effective way to support older adults and their ability to age in place (Choi 2022). Therefore, there is a need to adapt outdoor public spaces to better serve this aging population and enable them to age safely in their communities.

Age-friendly community infrastructure—like parks and green spaces—consists of features that support older adults' needs and encourage them to be an active part of the community (Lehning, Smith, and Dunkle 2015). Parks are an especially important community infrastructure that can enable older adults to live in their communities longer (WHO 2007). Parks provide many important mental, physical, and social benefits to older adults (Kimic and Polko 2022; D. Li et al. 2019; Kweon, Sullivan, and Wiley 1998), however, their park visitation is typically lower than younger individuals (Veitch et al. 2020; Cohen et al. 2019). Unfortunately, since many existing parks were not originally designed with older users in mind, many lack the needed accessibility, amenities, and activity programming to support older adults' use (Loukaitou-Sideris, Levy-Storms, Brozen 2014).

Within the field of landscape architecture, the heightened attention to age-friendly design is fairly new. While this field has recently begun to emphasize the importance of inclusive and universal design, its discussion on age-friendly park design is lacking. Additionally, although literature on age-friendly park design exists, it lacks a thorough discussion on how parks can support aging in place. This existing literature also lacks a comprehensive discussion

on activity programs that can engage older adults in parks. Furthermore, existing design guidelines for aging in place typically focus on private residential modifications rather than outdoor public space modifications.

There is a significant lack of literature that provides designers, park and recreation professionals, students, and community leaders with tools for retrofitting existing parks to support adults aging in place. This study fills this gap by identifying how parks can support the health of older adults through inclusive park design and activity programming. This study utilizes universal design concepts, research on the needs of older park users, and an exploration of activity programs as a foundation for age-friendly park design. This research should benefit not only older park users but all people by increasing the inclusiveness and usability of park spaces for all (WHO 2017).

Project Application Study Site

In tandem with the Kansas State University LAR 705 Master's Project Studio, this project utilized Franklin Park in Boston, Massachusetts as the site for a hypothetical projective design, which included a test application of the design recommendations developed through this research. Students in the LAR 705 studio performed significant background research on the history of the park, its current conditions, and the plans for its future. Students visited the park to perform project-specific site analysis and engage with the design team who authorized the Boston Parks & Recreation Department's Franklin Park Action Plan—a comprehensive report that outlines a vision for the park's future. The outcome of this projective design application can be found in Chapter 6: Projective Design.

Research Question + Goals

Primary Question

How can existing parks be retrofit through design and activity programs to better support the needs of older adults?

- Identify key principles to guide the design and programming of age-friendly parks.
- Inform landscape architects, park and recreation professionals, design students, community members, and other decision-makers on how parks can be retrofit to become more age-friendly.
- Create a design retrofit toolkit that facilitates conducting a park assessment and aids in selecting design and programming recommendations that support the needs of older park users.

Secondary Question

How can an age-friendly park retrofit toolkit inform the redesign of Franklin Park?

- Identify the park areas most in need of age-friendly design retrofit recommendations.
- Suggest age-friendly design recommendations that will best support the needs of the park's older users.
- Propose a redesign that applies age-friendly design and programming recommendations to retrofit the park to better support aging in place processes.

Project Overview

Chapter 2: Background presents the literature review and background research conducted for this project. The first section of this chapter identifies the needs of older adults in parks. The second section identifies and defines principles for age-friendly parks to guide the design and activity programming of park retrofits. The final section of this chapter discusses the background of Franklin Park.

Chapter 3: Methodology presents the project’s research design. A document analysis of universal design guidelines and precedent studies of activity programs were conducted to inform design and activity program recommendations.

Chapter 4: Findings discusses the findings derived from the document analysis of universal design guidelines. Design categories were derived from the documents, which helped inform the development of the design recommendations presented in Chapter 5.

Chapter 5: Parks for Aging in Place Toolkit presents the first outcome of the research: a design and activity programming toolkit for individuals seeking to redesign existing parks to better support older park users.

Chapter 6 presents the second outcome of this project: a projective design of Franklin Park to exhibit an application of the Parks for Aging in Place Toolkit.

Finally, Chapter 7 contains the project’s conclusions, limitations, and potential future research.

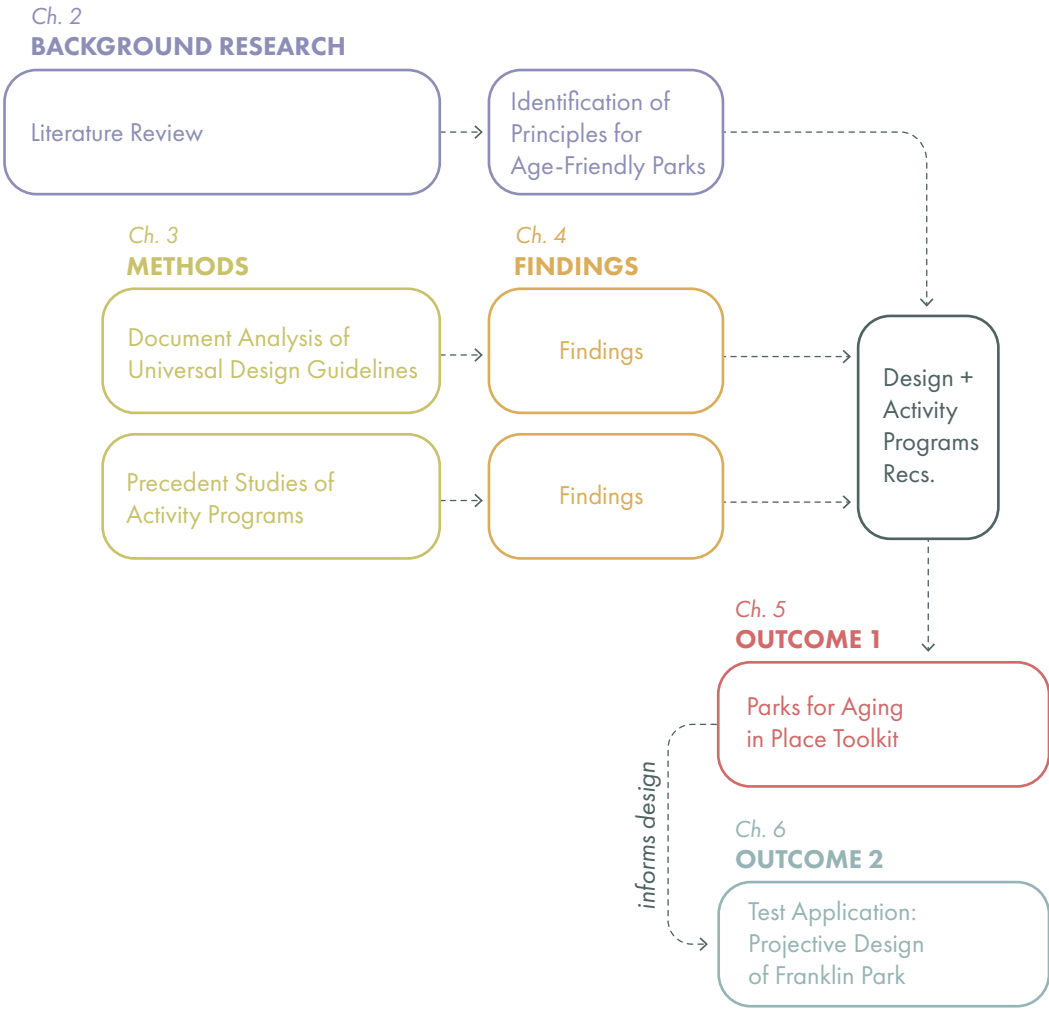


Fig. 1.05. Diagram of the project’s research design process and key milestones.

02

Background

Existing literature and background of the project.

Introduction

A literature review was completed to provide background context for this research and to inform the development of key principles for age-friendly park design and activity programming. Thus, the literature review was structured in three parts. The first provides context and an understanding of the needs of older adults in parks. The second part then identifies and defines five key principles to guide age-friendly park retrofits. These principles—Accessible, Comfortable, Active, Social, and Participatory—help organize the project findings in Chapter 4 and the age-friendly design recommendations in Chapter 5. The third part of this chapter provides an overview of Franklin Park and discusses why it was selected as the site of the projective design.

Part 1: Identification of Older Adults’ Needs in Parks

A review of existing literature on the aging process, aging in place, older adults’ preferred park amenities, park barriers, and preexisting age-friendly park guidelines.

Part 2: Identification of Principles for Age-Friendly Parks

Informed by aging in community qualities and universal design principles and redefined for age-friendly park retrofits.

Part 3: Overview of Projective Design Study Site

Description of Franklin Park’s history, current conditions, and vision for the future.

Background Research

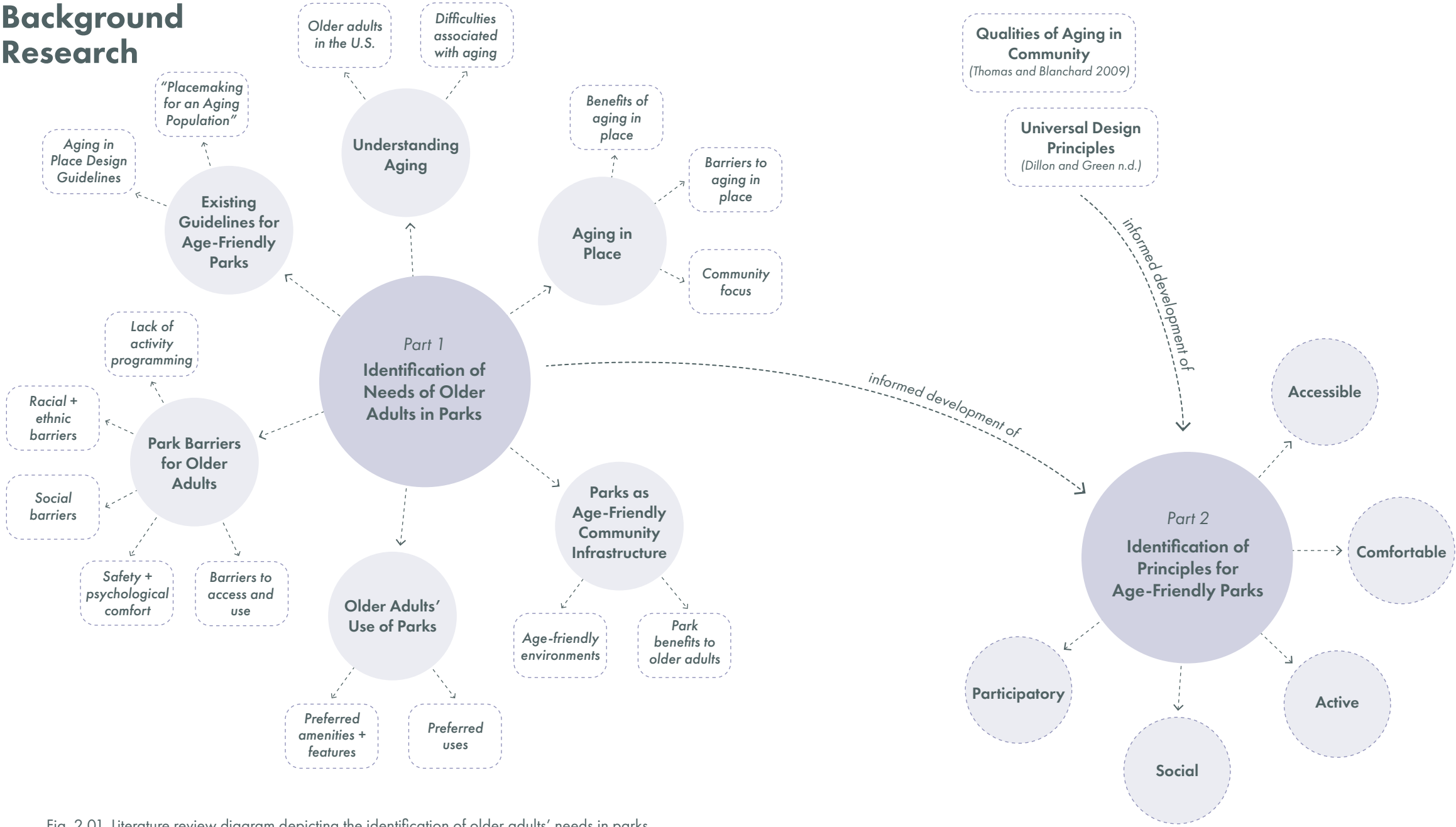


Fig. 2.01. Literature review diagram depicting the identification of older adults' needs in parks and the development of the Principles for Age-Friendly Parks.

Understanding Aging

Who are Older Adults?

Older adults are a diverse group of people with varying abilities, needs, desires, and backgrounds (Winick and Jaffe 2015). Many census datasets group people 65 and older for demographic analysis, thus for this research, older adults will be defined as persons aged 65 and older unless noted otherwise. Current research uses many different terms to describe those aged 65 and older, including 'elderly', 'older adults', 'elderly adults', 'seniors', and 'elders'. This study primarily uses the term 'older adults' to describe persons aged 65+ as it is considered less discriminatory and has fewer negative connotations than other terms (Trucil, Lundebjerg, and Busso 2021).

Older Adults in the United States

Between 2016 to 2060, the 65+ population in the United States is expected to increase from 15% to almost a quarter of the population (Vespa, Medina, and Armstrong 2020). It is important to note that while the current 65+ population in the U.S. is primarily non-Hispanic White, this group is expected to become more diverse in the coming years, according to the U.S. Census Bureau's population projections. In 2016, non-Hispanic Whites were estimated to make up 77% of the total U.S. 65+ population, but by 2050 are expected to decrease to about 60%. Conversely, the U.S.'s 65+ Hispanic population is projected to jump from 8% in 2016 to 19% in 2050. The 65+ Black population is also expected to increase from 9% in 2016 to roughly 12.5% in 2050 ("Race and Hispanic Origin 2018). An increasingly diverse 65+ population creates a need for public places that support the diverse needs of this age group.

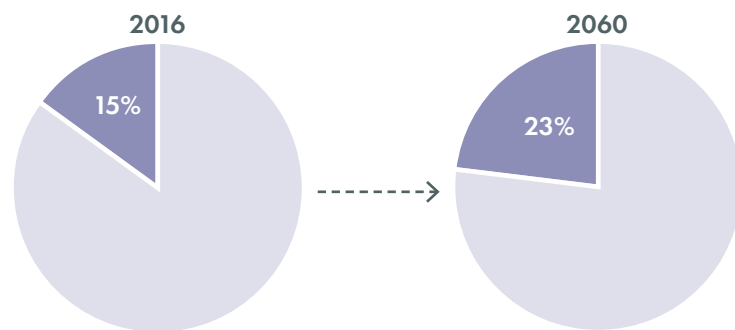


Fig. 2.02. The percent of those aged 65+ in the U.S. in 2016 and the predicted percent in 2060 (Data from Vespa, Medina, and Armstrong 2020).

Difficulties Associated with Aging

Disability and Physical Functioning

With age, people often develop physical and mental disabilities that affect their engagement in life activities. A disability can be visual, hearing, ambulatory, cognitive, or difficulty with taking care of oneself or living independently (Erickson, Lee, and von Schrader 2022). In 2019, around 33.5% of non-institutionalized 65+ Americans reported a disability. A higher percentage of African Americans and Native Americans reported a disability than White Americans, while Asian Americans reported fewer disabilities than White Americans (Erickson, Lee, and von Schrader 2022).

The most common disabilities older adults report are mobility issues (U.S. Census Bureau 2014). These mobility issues can mildly or severely affect daily function and are one of the biggest reasons older adults are unable to age in their own homes. Physical environments that are designed without considering the needs of older adults inhibit their mobility both in their homes and in their communities (Ball 2012). Falling is one of the biggest concerns associated with decreased mobility and can lead to serious consequences like bone fractures (Cunningham et al. 2020). Older adults with mobility limitations may have difficulty using or accessing parks. Outdoor environments that are not designed to be barrier-free discourage or make it impossible for older adults with mobility limitations to use outdoor spaces (WHO 2017).

Older adults can also face difficulties with performing basic daily activities and independent living skills, which are referred to as "activities of daily living" (ADLs) and "instrumental activities of daily living" (IADLs), respectively. Some ADLs may include using the bathroom, bathing, eating, or other self-care activities ("Projections and Implications for Housing" 2016). IADLs refer to the daily tasks related to taking care of responsibilities inside and outside of the home, including shopping, transportation, or cleaning ("Projections and Implications for Housing" 2016; Guo and Sapra 2021). Difficulties with both ADLs and IADLs reduce the ability of older persons to live within their communities independently and negatively affect their quality of life (Guo and Sapra 2021).

Chronic Disease

Older adults are at a high risk of having or developing chronic diseases. Chronic diseases can have a significant impact on their ability to complete daily functions and their overall quality of life. Of adults aged 65 and older, it is reported that over 86% have at least one

chronic disease (CDC 2020a). The most common chronic disease among older adults 65 and older is arthritis, followed by diabetes and cancer (“2020 Profile of Older Americans” 2021). Cardiovascular disease is another chronic disease prevalent in older adults. The instance of cardiovascular disease increases from 40% in persons aged 40 to 59 to 70-75% in persons aged 60 to 79 years old. Cardiovascular disease can contribute to functional decline and frailty in older adults, which significantly decreases their independence (Yazdanyar and Newman 2009).

However, parks can contribute to chronic disease prevention and management in older adults (NRPA n.d.b). Parks provide opportunities for physical activity, which can reduce the risk of cardiovascular disease and other chronic illnesses (Kaczynski et al. 2014).

Cognitive Decline

As adults age, many see a decline in their cognitive health. Cognitive decline is the worsening conditions of memory loss, confusion, and decline in decision-making skills (CDC 2011). In 2019, among those aged 65+ in the U.S., it was reported that around 5.6 million live with Alzheimer’s disease, a form of dementia (Alzheimer’s Association 2019). Inequalities exist within the cognitive health of older adults based on race and ethnicity. African American and Hispanic populations are more likely to be diagnosed with Alzheimer’s disease than White Americans (Alzheimer’s Association 2019; Matthews et al. 2019; Steenland et al. 2016), and it is predicted that they will have the largest increases in dementia and Alzheimer’s disease out of all other races and ethnicities (Matthews et al. 2019).

Healthy cognitive functioning is a key factor of healthy aging (Annele, Satu, and Timo 2019), thus cognitive decline can be a detriment to aging in place (Mayo et al. 2021). Cognitive decline is one of the primary reasons older adults must leave their homes to move to long-term care facilities (Mayo et al. 2021). In one study, older adults reported that social isolation, a decline in memory functioning, poor self-esteem, difficulty with mobility, and difficulties with ADLs and IADLs are all challenges associated with aging in place while experiencing cognitive decline (Mayo et al. 2021). Ill-designed community infrastructure such as parks can cause difficulties for those experiencing cognitive decline. Outdoor spaces should be legible with clear wayfinding and landmarks to be more usable and accessible to those with cognitive decline (WHO 2017).

Social Isolation, Loneliness, and Depression

Age increases the potential for loneliness in older adults (Shankar et al. 2011). It is reported that an estimated 25% of older adults are considered to be socially isolated (CDC 2021). They are more prone to social exclusion due to age discrimination, the loss of a spouse, and negative perceptions toward them (Chung et al. 2021). Other older adults have reported that the loss of former friend groups and difficulty with forming new social connections due to living alone causes them feelings of social isolation (Mayo et al. 2021). Older adults who have chosen to age in place are also susceptible to social isolation as a result of living alone (Mayo et al. 2021).

Loneliness and social isolation of older adults can have many negative health effects including increased risks for premature death, dementia, and depression (CDC 2021; Steptoe et al. 2013). A lack of social relationships has been associated with a higher risk of stroke and heart disease, as well as a greater risk of dementia (CDC 2021). Loneliness is closely linked to depression (CDC 2021), and in 2019, the rate of depression among adults aged 65 and older was 18.4% (CDC 2020b). Opportunities to reduce the social isolation of older adults would therefore greatly benefit the physical and mental health of those individuals.

Although aging in place provides many benefits for older adults (Wiles et al. 2012; Mayo et al. 2021), aging in place can lead to social isolation when older adults’ community environments are not designed to be age-friendly (Scharlach and Lehning 2013). Therefore, there is a need to design outdoor environments that encourage social interactions between older adults.

Aging in Place

As adults age, most have expressed that they prefer to do so in their own homes or communities, rather than in long-term care facilities (Binette and Vasold 2018; Lehning, Smith, and Dunkle 2015). This concept is called aging in place: the CDC defines aging in place as “the ability to live in one’s own home and community safely, independently, and comfortably, regardless of age, income, or ability level” (CDC 2017).

77%
of Americans aged
50+ would prefer to
stay in their community
as long as possible
(Binette and Vasold 2018)

Benefits of Aging in Place

Research has found many benefits to aging in place. The following are the main benefits of aging in place for older adults:

- Maintains independence of older adults
- Honors older adults’ attachment to their communities
- Maintains older adults’ feelings of security and familiarity with their surroundings
- Maintains older adults’ relationships with family and friends in their community
- Improves older adults’ quality of life and wellbeing
- Reduces health care costs

Sources: (Wiles et al. 2012; HUD User 2013; Mayo et al. 2021)

One of the greatest benefits aging in place provides is that it maintains older adults’ independence and choice. Research has also shown that place attachments to their homes, neighborhoods, and communities influence older adults to age in place (Wiles et al. 2012). The neighborhood plays a significant role in older adults’ desire to age in place because they are where individuals derive their identity and form social connections (Gardner 2011).

Relationships with friends and family within their community are another driver for aging in place. (Wiles et al. 2012; Gardner 2011). This familiarity of people and place is a significant benefit to aging in place for many older adults as it promotes feelings of social connectedness (Mayo et al. 2021; Wiles et al. 2012).

As for health care costs, aging in one’s own home is significantly less expensive than aging in an institutional setting (HUD User 2013; Wiles et al. 2012). Aging in place is also less expensive for governments and the families of older adults (Lehning, Smith, and Dunkle 2015).

Barriers to Aging in Place

Although aging in place presents many benefits to older adults, some barriers may make it unfeasible. The primary barriers to aging in place are:

- Mobility within one’s home and community
- Declining physical health and cognitive decline
- Insufficient home care
- Access to community services
- Transportation
- Social isolation

Sources: (Brim, Fromhold, and Blaney 2021; Farber and Shinkle 2011; Martin, Long, and Kessler 2019; Mayo et al. 2021)

Older adults in one study reported that a decline in their health was a barrier to aging in place. Falls, mobility issues, hearing issues, cognitive changes, mental health needs, and access to proper nutrition were all some of their biggest concerns (Brim, Fromhold, and Blaney 2021; Mayo et al. 2021). The same study also reported the lack of access to community services—such as physical exercise programs, transportation, physical therapy, and adult day programs—as a barrier to their ability to age in place (Brim, Fromhold, and Blaney 2021). Access to community services is made even more difficult when there is inadequate transportation for older adults. Some older persons who are unable to drive or do not have a car can find it difficult to access necessary services if they are in an isolated location, have few public transportation options, or live in neighborhoods with poor walking infrastructure (Farber and Shinkle 2011). Being socially isolated from community services and social activities is another cause of older adults relocating away from their communities. This is especially a barrier for those with cognitive or physical impairments (Martin, Long, and Kessler 2019).

Although most older adults have expressed that they would prefer to age in their own homes, for some aging in place is less of a choice and more that it is their only option. Low-income, Latino, and African American communities are more likely to be “stuck in place” in this way (Lehning, Smith, and Dunkle 2015, 10). Thus, it is important to retrofit community environments to support disadvantaged elders whose only options are to age in their own homes.

A Community Focus

In recent years, there has been a growing emphasis on the importance of communities and neighborhoods on older adults' ability to age in place (Wiles et al. 2012). For older adults to age in place, public places near their homes must accommodate their growing needs (Fong et al. 2021). Wiles et al. (2012) note that considerations need to be given to "transportation, recreational opportunities, and amenities that facilitate physical activity, social interaction, cultural engagement, and ongoing education" to facilitate aging in place (358).

Some research has termed this idea of focusing on older adults' community environments as 'aging in community'. Thomas and Blanchard (2009) describe 'aging in community' as a living situation for older adults that is community-focused and aims to enhance the quality of life for older persons. The American Planning Association describes 'aging in community' as an approach to aging-supportive community planning that is community-centric rather than dwelling-centric (Winick and Jaffe 2015).

By emphasizing age-friendly interventions for communities, older adults will have a greater ability to age in place (Choi 2022) because communities and neighborhoods are "practical resources for aging in place" (Wiles et al. 2012, 365). Choi (2022) suggests that adopting age-friendly solutions in outdoor spaces, buildings, housing, and transportation "may be the most effective and efficient way to promote the age-friendliness of community and support [aging in place]" (54). This study also found that a greater number of age-friendly features encouraged more older adults to age in place (Choi 2022). Thus, creating more inclusive, safe, and accessible communities enables older adults to age in place.

Parks as Age-Friendly Community Infrastructure

Age-Friendly Environments

Lehning, Smith, and Dunkle (2015) define 'age-friendly environments' as places that "offer infrastructure and supports that meet the needs of older adults and allow them to remain involved in community life" (1). Age-friendly environments are critical to facilitating aging in place because they promote the socialization, health, and well-being of older adults and ensure physical environments are accessible and safe (Lehning, Smith, and Dunkle 2015). Community infrastructure—such as parks, streets, public transportation, or other outdoor spaces—can promote aging in place by having features that support the ability of older adults to continue living in their communities (WHO 2007). Some of these features include walkability, community services, safe environments, and accessible facilities (Choi 2022; WHO 2007).

Park Benefits to Older Adults

Green spaces are one of the most important age-friendly outdoor infrastructure features for older adults (WHO 2007). Parks have many benefits for older adults including encouraging physical activity, increasing their social interactions, and providing opportunities to increase contact with nature (Kinic and Polko 2022).

Physical Health

Staying physically active is important to older adults' health and their ability to age well. Parks are important spaces for physical activity because of their widespread locations in cities, are generally free to access, and are usually open to the public (Kaczynski et al. 2011). Parks provide places for people of all ages to walk, jog, play sports, or perform other vigorous activities (Cohen et al. 2007). Parks encourage older adults to move and exercise, thus helping to prevent mobility issues some older individuals encounter as they age (CDC 2013; Cunningham et al. 2020).

The CDC recommends persons aged 65+ get at least 150 minutes per week of moderate-intensity activity, 2 days a week of muscle-strengthening activities, and 3 days a week of balance-improving activities. Brisk walking is a great moderate-intensity activity for older adults in parks (CDC 2022).

Mental Health

Parks provide important places for respite. They also provide opportunities for older adults to be within nature, which is proven to be beneficial to their health. One study found that nature-based programs reduced older adults’ anxiety, improved their cognitive functioning, enhanced their sleep, and improved their physical health (Sia et al. 2020). Green spaces also lower stress levels and reduce the depression levels of older adults. The benefits of green space are shown to be beneficial to both older individuals who are active in parks and those who passively watch nature (D. Li et al. 2019).

Connection to Community

Parks not only provide places for physical activity but also set the stage for social connections and sedentary activities for all ages (Cohen et al. 2007). Parks facilitate important social connections for older adults, greatly improving their well-being. Green spaces can also create social ties amongst older neighborhood residents and enhance their sense of community (Kweon, Sullivan, and Wiley 1998).

Intergenerational Connections

Parks offer places for both active and sedentary activities for people of all ages. Intergenerational connections can be either informal through general proximity to other age groups while in parks, or formal through organized activities (Washington et al. 2019). Parks are important settings for intergenerational connections because they encourage the comingling of all generations in one space. Not only do intergenerational parks create connections between generations, but they increase feelings of social inclusion and connectivity (Azevedo 2020).

Older Adults’ Use of Parks

Although parks provide substantial benefits for older adults, their park visitation is typically much lower than younger people and they typically have shorter park visits than younger individuals (Veitch et al. 2020; Cohen et al. 2019). One potential reason is that parks are often designed with younger users in mind. Most programmed activities in parks are suitable for kids but not suitable for older adults (Cohen et al. 2016). Older adults typically use parks differently than younger users and have different wants and needs for amenities within parks (Sundevall and Jansson 2020; Onose et al. 2020). Often, specific features and amenities tailored toward older adults’ needs encourage greater park use by older adults. Understanding the needs of older adults in parks and the park features they prefer is critical to encourage greater park visitation and use by their age group (Veitch et al. 2020).

Preferred Uses

The preferred park uses of older adults refer to the activities they most enjoy when visiting parks. The most common park activities by older adults include:

- Walking
- Relaxing
- Meeting new people
- Exercising
- People watching
- Picnicking
- Dog walking
- Having solitary time
- Playing games (sports, lawn games, and board games)
- Experiencing nature and gardens

Sources: (Onose et al. 2020; Veitch et al. 2020; Sundevall and Jansson 2020; Perry et al. 2021; Cohen et al. 2016; Raymore and Scott 1998)

Walking

Among several studies that observed park use behavior by older adults, the most frequent activity observed was walking (Veitch et al. 2020; Cohen et al. 2016; Raymore and Scott 1998; Besenyi et al. 2013). Walking is linked to many health benefits including a reduction

in cardiovascular disease, decreased risks of falling, and improvements in mental well-being (Curl and Mason 2019). One study recommends older adults walk one mile six to nine days a week to meet the physical activity requirements for their age group (Gault and Willems 2017).

Relaxation

Several studies also found that relaxation was a preferred activity of older adults in parks (Raymore and Scott 1998; Veitch et al. 2020; Perry et al. 2021). Studies have found that older adults are usually sedentary during their park visits (Kaczynski et al. 2011; Cohen et al. 2019), which could be linked to their preference for relaxing in parks. Relaxation in parks is an important activity because even sedentary activities during visits improve older adults’ mood and mental well-being (Perry et al. 2021).

Socialization

Seeing and interacting with people is an important way older adults use parks, as it is beneficial to their social well-being and quality of life (Perry et al. 2021). One study found that older adults reported using urban parks to connect with others, both those that they knew and strangers they would meet there (Perry et al. 2021). Many studies have reported the tendencies of older adults to people watch during park visits as it brings them enjoyment and feelings of connectedness to other people (Sundevall and Jansson 2020; Veitch et al. 2020; Perry et al. 2021). These social connections are vital to older adults’ social and mental health because they can reduce loneliness and feelings of exclusion often reported by older adults (Shankar et al. 2011).

Additional Uses

Other preferred uses of parks by older adults include picnicking, participating in various games, dog walking, spending time alone, and using play and fitness areas (Veitch et al. 2020; Sundevall and Jansson 2020; Onose et al. 2020). Older adults also appreciate nature and trees in parks and cite it as one of the main reasons they visit parks (Veitch et al. 2020).

Preferred Features and Amenities

There are several park features and amenities that older adults enjoy in parks. Parks features and amenities are the physical infrastructure elements in parks. Commonly preferred features include:

- Seating
- Restrooms
- Shelter from the elements
- Walking loops
- Nature
- Fountains/water features
- Fitness areas
- Playgrounds
- Chess tables
- Restaurants and cafés

Sources: (Perry et al. 2021; Raymore and Scott 1998; Onose et al. 2020; Veitch et al. 2020)

Seating and Restrooms

Several of the amenities listed above appertain to older adults’ comfortability in parks. In one study, the park amenities most important to older adults were restrooms, seating, and shelters (Perry et al. 2021). Restrooms are crucial features of public parks that make visitation viable for older adults. The location of bathrooms in parks is especially important; restrooms should be located near essential or popular amenities for easy access by older adults (Perry et al. 2021). Older park users also note a need for adequate places to sit and rest while they visit parks (Veitch et al. 2020; Perry et al. 2021). Placing benches along walking trails, in front of attractions, or in private areas allows older persons to have areas of rest when they tire in parks. Seating also encourages relaxation and social interaction with others, as older adults have mentioned these are important activities for them in parks (Veitch et al. 2020; Raymore and Scott 1998). Seating under sheltered areas that protect from the sun and other elements also helps promote the comfort of older adults in park areas (Perry et al. 2021).

Amenities to Increase Enjoyment

Additional park features appreciated by older adults relate more to their enjoyment and the infrastructure needed for specific activities. Walking loops are an important feature in parks since walking is the most preferred activity by older persons in parks (Cohen et al. 2016). A study found that parks that had longer walking trails, included more natural areas, and were larger in size caused older adults to walk more (Zhai et al. 2020). Nature and water are also important features in parks for many older adults (Veitch et al. 2020; Raymore and Scott 1998; Onose et al. 2020). Trees, gardens, and other vegetation improve older adults’ mood and create a nice park ambiance (Veitch et al. 2020).

Exercise and Play Facilities

Older adults also enjoy using exercise and play facilities during their park visits (Veitch et al. 2020; Perry et al. 2021; Onose et al. 2020). Outdoor fitness stations have become an increasingly popular park amenity for older adults. They improve older adults’ functional movement, serve as equipment for physical rehabilitation, and allow them to be more playful in parks (Lee and Ho 2022). Park play can be an important part of an older person’s park experience because it reminds them of being a kid again. Unfortunately, many older adults feel too self-conscious or that they are not allowed to use play equipment because it is typically designated for children (Perry et al. 2021).

Understanding the programs, amenities, and typical uses preferred by older adults in urban parks is imperative to designing equitable and inclusive parks that encourage their visitation (Veitch et al. 2020; Perry et al. 2021). Recognizing that a one-size-fits-all approach may not be sufficient for older adults because of their diverse abilities, races, ethnicities, and preferences is essential for park retrofits.

Park Barriers for Older Adults

This section describes how parks fail to support older adults and how they might discourage older persons’ use. Park barriers often make park use and visitation difficult for older adults. These barriers may be caused by physical infrastructure or by psychological factors. Understanding the barriers older adults face in parks can encourage more empathy in design and provide a greater understanding of the needs of older park users.

Barriers to Access and Use

Many factors create barriers to older adults’ use of parks. Older adults may feel unwelcome or excluded from using a park if they perceive the park to be unsafe, inaccessible, or not designed with their needs in mind. This makes them less likely to visit or spend long periods of time in parks (Perry et al. 2021).

Access to Parks

The term ‘access’ here refers to the spatial distributions of park spaces (Guo et al. 2019) and the ability to get to a park. Older adults who experience inequity in park access face more difficulties accessing outdoor public spaces (Guo et al. 2019). The ability to physically get to parks is often a barrier to older adults (S. C. Gibson 2018). Transportation can be a barrier to park use by older persons as well. When parks are difficult to get to, it can cause older adults to fear for their safety or feel as if they must depend on others, reducing their feelings of independence (Perry et al. 2021). Thus, community infrastructure design that targets the needs of older adults is needed to ensure better park access for older adults (Guo et al. 2019).

Poor access to parks also contributes to low visitation. One study found that low-income older adults had less park access than high-income older adults (Guo et al. 2019). In another study of people of all ages, residents from a low-income area of Cleveland stated that if parks were closer to their homes and public transportation was easily available, then they would be more likely to visit parks in their area (D. Scott and Munson 1994).

Usability

The physical condition of parks and the lack of features and amenities within them create barriers to older adults' use of parks. Some potential usability barriers in parks that would discourage use include, but are not limited to:

- Poor path conditions
- Steep grades
- Lack of ramps/the presence of stairs
- Curbs
- Insufficient lighting
- Obstructions related to poor maintenance

Sources: (Kimic and Polko 2022; Sundevall and Jansson 2020; Perry et al. 2021)

When older adults are presented with usability issues in parks, they are more likely to feel unsafe or that the park is not designed for them or their mobility limitations. This then deters older persons from visiting or using parks (Perry et al. 2021).

Safety and Psychological Comfort

Older adults state their perceptions of safety in parks are an important determinant of their use of parks (Veitch et al. 2020; Kimic and Polko 2022). Older adults' security needs differ from younger park users (Kimic and Polko 2022), thus it is critical to respond to the needs of older park users when retrofitting parks to be more age-friendly. Parks with unsafe features, like lack of lighting, poor road safety, or poor visibility due to overgrown vegetation, create barriers for older adults and make them less likely to use parks (WHO 2017; Kimic and Polko 2022).

Older adults' feelings of safety also relate to their perceived risks of danger or crime (WHO 2017). Outdoor environments that show degradation and lack of maintenance are perceived by older adults to be less safe. Litter, vandalism, and perceived risk of danger or crime are significant factors that cause older adults to feel unsafe in outdoor spaces (WHO 2017).

Social Barriers

There are also social factors—such as ageism and income—that are predictors of park use by certain groups. Low-income older adults and older persons who face ageism in the built environment are overall less likely to visit and use parks (Cohen et al. 2016).

Ageism

Ageism is the negative perception of and biases toward people based solely on their age (Bodner 2009). The World Health Organization (WHO), in their Global Age-Friendly Cities report, found that the biases typically reported by older individuals were that they are “useless, less intelligent, stingy and a burden” (2007, 46). Unfortunately, older adults who suffer from disabilities and poor health are often treated with more disrespect and intolerance than those who are healthy (WHO 2007). Parks should seek to reduce this by being accessible and usable by all no matter their ability. Ageism is also more likely to occur when older and younger populations do not engage with each other in social settings (Hagestad and Uhlenberg 2005). Therefore, creating spaces for generational overlap and interaction in parks is incredibly important to reducing negative biases towards the older population.

Income

Income is a significant factor that correlates to park use by older adults. Older adults with higher incomes are more likely to take part in physical activities, engage in health promotion programs, and report better health (Zhai et al. 2020, 10). Amongst all ages, parks are utilized less in low-income areas and are typically smaller in size than in high-income areas (Cohen et al. 2016). Factors that contribute to low park visitation in low-income areas include fears of crime and safety, types of park programming, and the condition of parks (Cohen et al. 2019).

Racial and Ethnic Barriers

Multiple studies have observed differences in park use by different racial and ethnic groups. These studies looked at all ages and found that White park users place much more emphasis on the aesthetic qualities of parks, while African American, Latino, and Asian users appreciated parks more for their social and recreational aspects (Loukaitou-Sideris 1995;

Derosé et al. 2015). Studies found that Hispanic park users often visited parks in groups and participated in social gatherings while there. One study noticed how Hispanic park visitors often adapted the park's layout to meet their needs for these gatherings (Loukaitou-Sideris 1995). Not considering the specific needs and preferences of different racial and ethnic groups can contribute to a lack of park visitation and use by those groups (S. Gibson, Loukaitou-Sideris, and Mukhija 2019).

Lack of Activity Programming

A lack of park activity programs for older adults is one factor that may discourage their use of parks. In a study of physical activity programs in 51 parks, 83% of the participants in the programs were children or teens. This demonstrates the scarcity of organized activities for older park users (Cohen et al. 2010). In another study, it is suggested that older adults need specific activity programs tailored to their needs to encourage their use of park facilities (Cohen et al. 2007). In addition, most activity programs for older adults are held in indoor facilities like senior centers or community centers rather than in outdoor spaces like parks (Loukaitou-Sideris, Levy-Storms, and Brozen 2014).

Existing Park Design Guidelines for Age-Friendly Parks

"Placemaking for an Aging Population: Guidelines for Senior-Friendly Parks"

Loukaitou-Sideris, Levy-Storms, and Brozen (2014)'s document "Placemaking for an Aging Population: Guidelines for Senior-Friendly Parks" is the most thorough document identified in this research on parks for older adults. The document provides research on older adults' needs for physical activity and open space, as well as findings from interviews with agencies on aging and focus groups with older adults. The authors identified through their focus groups four aspects of elders' 'ideal park': natural features and wildlife; design amenities and features that make parks more comfortable for them and encourage their physical activity; safe and quiet environments; and spaces that encourage social interactions. Safety was discussed by older adults, caregivers, staff, and aging agencies, thus emphasizing

the need for environments that are not perceived as threats to older adults' physical or psychological well-being.

Loukaitou-Sideris, Levy-Storms, and Brozen also propose ten aspects that "senior-friendly open spaces should strive to satisfy": control; choice; safety and security; accessibility; social support; physical activity; privacy; contact with nature; comfort; and aesthetic and sensory delight (2014, 105). For each of these ten aspects, guidelines are provided to aid in the design of 'senior-friendly open spaces'.

While this document furthers the discussion on park design for older adults, it lacks a significant discussion on parks as age-friendly community infrastructure to support aging in place. The document discusses some of the types of activity programs offered for older adults in parks but does not thoroughly discuss the park infrastructure needed to support these programs. Thus, there is a need for more research on how parks can support aging in place and how they can provide infrastructure for a multitude of activity programs for older adults to encourage their park use and engagement with their community.

Aging in Place Design Guidelines

Most identified design guidelines to support aging in place focused on home or institutional living design rather than modifications to outdoor environments. A handful of documents were identified that provided design recommendations for exterior or community design, with one recognizing that "unsupportive community design, unaffordable and inaccessible housing, and a lack of access to needed services" significantly impact older adults' ability to age in place (Farber and Shinkle 2011, vii). Some aging in place guidelines recognized improvements to walkways, streets, lighting, landscapes, and transportation as necessary to improve outdoor environments for older adults (Mohlenkamp et al. 2016; Winick and Jaffe 2015; Farber and Shinkle 2011). Another identifies the five key components of aging in place as choice, flexibility, entrepreneurship, mixed generations, and smart growth (Ball 2012). No aging in place design guidelines specifically for parks were identified in this research. Though these documents provide a foundational understanding of aging in place design guidelines, they prove the need for greater research on park design that supports aging in place.

Park Design and Activity Programming

This project seeks to provide age-friendly recommendations for improving the design and activity programming of existing parks. The five principles for age-friendly parks, as defined in this section, later informed the development of the Design Recommendations presented in Chapter 5: Parks for Aging in Place Toolkit. Before discussing the five age-friendly principles, the terms ‘park design’ and ‘activity programs’ are defined here.

Park Design

The design of a park, including its features, amenities, and facilities, can provide many benefits to older adults. Veitch et al. (2020) found that specific park features—like walking paths, trees, and seating—were particularly important to older adults’ visitation and active and social use of parks. As previously mentioned, when park features are tailored toward older adults’ needs and wants, there will be increased use by this age group (Veitch et al. 2020).

Activity Programs

Activity programs are organized activities that engage park users and activate park spaces, such as fitness classes, cultural festivals, or board game matches. Activity programs are essential in parks to encourage park use and make park visits more engaging and enjoyable for all people (Harnik and Welle 2011). Multiple studies have found that organized activities within parks increase use (Cohen et al. 2007; 2010). Physical activity programs—including sports, fitness classes, tai chi, or bicycling—are some of the most popular activity programs among all ages in parks. Activity programming in parks is especially important for older adults’ use and enjoyment of parks (Loukaitou-Sideris, Levy-Storms, and Brozen 2014).

Principles for Age-Friendly Park Design and Activity Programming

Precedent Principles

Based on research about aging in place and universal design principles, a new set of principles for the design of age-friendly parks were developed. These principles were created to guide the process of retrofitting existing parks. These principles were derived primarily from two sources: Thomas and Blanchard’s (2009) qualities of aging in community and Dillon and Green’s (n.d.) universal design principles.

Thomas and Blanchard (2009), in their article “Moving Beyond Place: Aging in Community,” define six qualities of aging in community. The authors define ‘aging in community’ as a sort of middle ground between aging in an institution and aging in one’s own home. ‘Aging in community’ is a concept that promotes aging within a community that is supportive of people of all ages and abilities. Such communities have extensive resources to support older adults as they age and encourage them to remain active members of society. The six qualities defined by Thomas and Blanchard (2009) are:

Inclusive

“People of all ages, races/ethnicities, and abilities, especially elders, are welcome” (14).

Sustainable

The community’s lifestyles are socially, environmentally, and socially sustainable and encourage human interaction.

Healthy

Mental, physical, and spiritual health is supported and those with disabilities or other diseases are supported by the systems in place.

Accessible

Homes and public spaces are accessible and incorporate universal design features.

Interdependent

The community promotes cooperation and support among neighbors, friends, and generations.

Engaged

The community “promotes opportunities for community participation, social engagement, education, and creative expression” (14).

Although aging in community differs slightly from aging in place because aging in community typically refers to senior cohousing or “urban villages” (14), the community focus offers a unique perspective on inclusive aging infrastructure. Since there is little research on how outdoor public spaces like parks contribute to aging in place, it is necessary to draw on other similar concepts like aging in community. Since aging in community has a strong focus on community infrastructure, inclusivity, and sociability, its qualities serve as a useful foundation for age-friendly park design principles.

Dillon and Green’s (n.d.) universal design principles were developed with the American Society of Landscape Architects (ASLA) as a guide for designers seeking to design more inclusive outdoor public spaces. The principles listed in this resource are:

Accessible
All public spaces should be physically accessible to all people regardless of ability.

Comfortable
Spaces should feel safe and promote a sense of belonging.

Participatory
Designers should co-design with people of varying abilities.

Ecological
Provide exposure to nature for all ages and support ecological resilience.

Legible
Public space design should be clear and understandable.

Multi-Sensory
Multi-sensory elements should enhance wayfinding.

Predictable
Public spaces should be predictable and maintain the same visual cues to increase comfort and safety.

Walkable/Traversable
Enable pedestrians and cyclists of all abilities to move through public spaces.

These ASLA universal design principles are an important foundation for age-friendly park principles because they consider the design features needed to make outdoor spaces inclusive to all people, regardless of age, ability, race, or gender. They also provide an approach to universal design from a landscape architecture perspective; this was especially applicable since the age-friendly principles are intended for parks.

Project Principles

While these two sources provide a foundation for age-friendly park design principles, they do not fully encompass the concept of age-friendly design. Thus, this research builds off and expands these existing principles and defines a new set, the five Principles for Age-Friendly Parks.

These are:

- Accessible
- Comfortable
- Active
- Social
- Participatory

By applying these principles to public spaces, they can improve the overall health and well-being of older adults. Parks that are accessible and comfortable promote the psychological and physical health of older adults by making them feel safe and capable of using park spaces. Parks that are active and social encourage the physical activity and sociability of older adults. Parks that are participatory of older adults and their needs improve their feelings of belonging and inclusion. Thus, each of these five principles aims to improve the health and well-being of older adults through park design and activity programming.

These five principles can be used in multiple ways, but they are primarily intended to inspire and inform park retrofits that can make parks more accessible, comfortable, active, social, and participatory to best support older adults and their ability to age in place. They can also serve as a framework for assessing how existing parks are currently supporting the needs of older adults. Although this research is focused on retrofitting existing parks, these principles could also be applied when designing new parks that support older adults. It is also



Fig. 2.03. The five Principles for Age-Friendly Parks developed in this research.

important to note that these five principles are not mutually exclusive. The following sections define these principles and their importance to this research.

Accessible

The principle ‘Accessible’ refers to the usability of park spaces and amenities. For park users to be able to reap the benefits parks offer, they must be able to physically use them. As previously discussed, barriers for older adults in parks relate to the physical usability of spaces. Issues such as poor wayfinding, inaccessible walkways, and uncomfortable street crossings, among others, deter older persons from using outdoor spaces (WHO 2017). One way to create more accessible and usable—and thus age-friendly—parks is to utilize universal design principles.

Universal Design

Since universal design principles strive for greater inclusivity and usability, universal design is an excellent foundation for age-friendly design. Universal design can be defined as a process that benefits all people by removing barriers and promoting inclusivity. Universal design differs from accessible design because universal design is intended to be usable by all people without special modifications, thereby removing stigmas around disabilities (Carr et al. 2013; NC State University 1997). Universal design supports aging in place because it “removes [the] segregation of the older population” (Carr et al. 2013).

While many universal design documents now exist, the first universal design principles were developed by NC State University in 1997. These guidelines were the first of their kind and serve as a precedent for universal design today. The authors created seven principles that define universal design:

- Equitable use
- Flexibility in use
- Simple and intuitive use
- Perceptible information
- Tolerance for error
- Low physical effort
- Size and space for approach and use (NC State University 1997).

Challenges of Implementing Universal Design

One limitation to the widespread use of universal design principles is a lack of knowledge on how to apply the principles. Since universal design is a relatively new concept within landscape architecture, many professionals may not have formally learned about it during their educational training. It can also be difficult for designers to anticipate the challenges and needs of older adults when they themselves are able-bodied. Since universal design is not typically the norm in practice, it can also be difficult to convince clients to pay for it (Carr et al. 2013).

Although universal design provides important and necessary principles for inclusion and usability in the built environment, its principles do not fully address the diverse needs of older adults in parks. To ensure parks are fully usable and utilized, a more thorough design process is needed.

Park Access and Use

Park access also refers to the physical proximity to and the ability to access parks. Park access is important because individuals who live closer to parks are more likely to use them (Harnik and Welle 2011). Another study found that among all ages park proximity is directly associated with park use (Cohen et al. 2007). Cohen et al. (2007) recommend designing communities so that all people are within 1 mile of a park for ideal park accessibility.

Older adults find it much harder than able-bodied young people to access parks. For older adults who walk to parks, barriers such as poor sidewalk conditions, insufficient lighting, and inadequate street crossings are likely to prevent them from safely accessing public spaces (Loukaitou-Sideris, Levy-Storms, and Brozen 2014).

Although parks may be physically usable by older adults, usability does not guarantee actual use. As Cohen et al. (2016) state, "The mere presence of a park does not guarantee its use, even when many facilities are usable" (6). Similarly, activating park spaces with programs and amenities can help encourage use by older park users, but will not guarantee actual park use.

Comfortable

The 'Comfortable' principle refers to both the physical and psychological comfort of older adults in parks. Certain essential park amenities like restrooms, seating, drinking fountains, and parking can improve the physical comfort of older adults (S. C. Gibson 2018).

Safety

Psychological comfort refers to the feelings of safety and security in a park. It is essential for older adults to feel safe in park spaces to encourage their use of and visitation to parks. Clear visibility across park spaces, sufficient lighting, and the presence of other people make parks feel safer for older adults (Veitch et al. 2020).

Active

The principle 'Active' promotes the physical and mental health of older adults and supports them in being active in parks. Active parks should include features and amenities that encourage physical activity and movement because physically active older adults have lower morbidity and mortality rates and a higher quality of life (Cunningham et al. 2020). It has also been proven that older adults who are physically active are at a decreased risk for falls, fractures, cognitive decline, depression, activities of daily living disabilities, cardiovascular mortality, and breast and prostate cancer (Cunningham et al. 2020). Age-friendly parks should also support the cognitive and mental health of older adults by providing opportunities to interact with nature and engage in other park activities.

Social

The 'Social' principle refers to the opportunities for social engagement in parks for older adults. Older individuals greatly benefit from community connections, as they bring them a greater sense of community and feelings of inclusion (Kweon, Sullivan, and Wiley 1998). Features and amenities within parks that encourage social interactions can foster greater engagement of older persons and improve their quality of life (Veitch et al. 2020).

Intergenerational Connections

The opportunity to build intergenerational connections is an aspect of creating social-engaging parks. Providing intergenerational contact zones within parks allows different generations to engage with one another and create social connections (Washington et al. 2019). Studies have shown that intergenerational connections improve older adults' well-being, reduce their loneliness, increase collective empowerment, and promote positive attitudes around aging (Corbin 1998; Nelischer and Loukaitou-Sideris 2022). It is also proven that intergenerational connections benefit both older adults and young people alike (Corbin 1998; Nelischer and Loukaitou-Sideris 2022). Parks can utilize paths to encourage these intergenerational interactions (Washington et al. 2019), implement play areas for all ages, or provide places of respite for older adults to observe other generations at play (Loukaitou-Sideris, Levy-Storms, and Brozen 2014).

Participatory

'Participatory' refers to the inclusion of older adults in decision-making processes and engaging them in the retrofits of existing parks. Inclusive design should consider "the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference" (Inclusive Design Research Centre n.d.). It is imperative for parks to be inclusive to all people no matter their race, ethnicity, age, income, or abilities. It is important to consider the differences in park preferences when designing and programming parks. Kaczynski et al. (2014) note that parks can be planned and designed to target specific groups that are either most at-risk, live in the closest proximity to the park, or would most benefit from specific interventions in parks. Parks should have a certain sensitivity to the cultural context around them to make them inclusive and site-specific.

It is crucial to engage older adults in the planning and decision-making processes when designing age-friendly environments. Older adults can provide insight into their experiences and the barriers they face in the built environment. Thus, older adults should play an active role in the design of spaces that are created with them in mind (Rémillard-Boilard, Buffel, and Phillipson 2017).

Although inclusive engagement with older adults is critical to design processes, some barriers may make community engagement difficult. It may be more difficult to promote aging in place in disinvested communities because they often lack the resources to alter the physical environment to make it more age-friendly (Rémillard-Boilard, Buffel, and Phillipson 2017).

Projective Design Study Site

This project utilizes Boston’s Franklin Park to illustrate the application of age-friendly design recommendations developed in this research. This site was selected as part of the LAR 705 Master’s Project Studio.

Franklin Park

Franklin Park is a 527-acre park designed by the notable landscape architect Frederick Law Olmsted. It was built in 1885 as part of Olmsted’s vision for a “crown jewel” of the Emerald Necklace—a string of interconnected parks that provide over 1,000 acres of green space to Bostonians (The Cultural Landscape Foundation n.d.; The President and Fellows of Harvard College n.d.). Olmsted originally designed the park to be a place of respite from city life where people from all backgrounds could enjoy nature and leisure activities (E. Carr 2022; Hoffman 1988). Throughout the years, the park devolved from Olmsted’s original vision of a picturesque country park and new functions, such as a zoo, golf course, and sports stadium, were added (Hoffman 1988).



(Left) Fig. 2.04. Pathway along the William J. Devine Golf Course and Circuit Drive.



(Right) Fig. 2.05. The Schoolmaster Hill ruins.

The park is located in a historically underserved area of Boston, which includes the Roxbury, Dorchester, Jamaica Plain, and Mattapan neighborhoods (The Cultural Landscape Foundation n.d.). These surrounding neighborhoods are racially and ethnically diverse communities home to many African American and Hispanic residents. In addition, the Roxbury, Dorchester, and Mattapan neighborhoods to the north, east, and south of the park, respectively, have lower-than-average household income levels (Boston in Context: Neighborhoods 2022). Around 6,000 adults aged 65+ live in census tracts directly adjacent to the park. A high number of these 65+ adults live alone, with about 2,000 living alone in non-family households (U.S. Census Bureau 2020d; 2020c).

Due to decades of disinvestment, many areas of the park were neglected and in need of improvements (E. Carr 2022). In response to this, the city of Boston assembled a team of designers to develop an action plan for the future of Franklin Park. The action plan was developed by an interdisciplinary team consisting of landscape architects, planners, and ecologists. Led by Reed Hilderbrand, Agency Landscape + Planning, and MASS Design Group, the team conducted a rigorous community engagement and site analysis process for three years to evaluate how the park is currently functioning, assess its opportunities and constraints, and determine the needs of park users. The Franklin Park Action Plan was released for public comment in December 2022. It provides thorough recommendations for the redesign of park edges, circulation, and gathering spaces as well as suggestions for the restoration of native ecology and historic structures (Boston Parks & Recreation Department 2022).

Reason for Selection as the Application Site

Franklin Park was selected as the study area to test this research for three main reasons:

The potential to study age-friendly retrofit design on an existing large park.

- Franklin Park is the largest urban park in the Boston area. It serves several nearby neighborhoods and has the potential to serve many older adults throughout the city of Boston. Studying age-friendly interventions at this scale exhibited the application of age-friendly design recommendations at a large scale.

Boston's eagerness to introduce age-friendly changes to its public spaces.

- The city of Boston developed an age-friendly city action plan in 2017 in hopes of improving the quality of life of many of its older residents (City of Boston 2017). The development of this city-wide plan exemplifies Boston's willingness to enact age-friendly plans.

The characteristics of the park's adjacent demographics.

- Many of the census tracts directly adjacent to Franklin Park have aging populations and high percentages of older adults who live alone at home (U.S. Census Bureau 2020d; 2020c). Age-friendly modifications to Franklin Park can support older adults nearby who have chosen to age in place.

These factors made Franklin Park a suitable site to test the Parks for Aging in Place Toolkit that was developed through this research.

Boston, MA

In 2010, there were 80,000 Bostonians aged 60+ living within the city. This number is expected to increase to 125,000 by 2030 (City of Boston 2017). These unprecedented population numbers will cause a significant demand for public resources and infrastructure that support the needs of aging Bostonians. Boston has begun to take steps to mitigate this situation and develop age-friendly solutions for its communities (City of Boston 2017).

City of Boston Age-Friendly Action Plan 2017

Cities offer a wide range of benefits for aging adults. Some of these include cultural diversity, opportunities for engagement within the community, access to resources, and a wide range of activities for all interests (Rémillard-Boilard, Buffel, and Phillipson 2017). Unfortunately, many cities are not accessible to older adults and therefore do not promote aging in place. To help address this issue, in 2007 the World Health Organization developed a guide aimed at assisting cities around the world to become more age-friendly. The guide was created in response to the global aging and urbanization trends that saw a growing 65+ population and rapidly urbanizing cities (WHO 2007). The World Health Organization (2007) defines age-friendly cities as cities that support active aging and improve their citizens' quality of life through supportive services and environments. Age-friendly cities can

minimize older adults' social exclusion and increase their participation in life (Chung et al. 2021). Because the guidelines generally recommend ways to make cities more accessible and inviting, age-friendly cities benefit not only older adults but also the entire population (WHO 2007).

In 2014, the City of Boston became part of the WHO's network of age-friendly cities. In response, they developed the "Age-Friendly Boston Action Plan 2017" for local businesses, public agencies, community organizations, and other institutions to identify how they can contribute to a more age-friendly city. The action plan completed a community assessment and engaged with residents in the Boston area before creating a plan for the city. The report is divided into several age-friendly domains that represent different areas of urban life. While the report lists eight domains, the most applicable ones to this research are outdoor environments and transportation. Through engagement with older Bostonians the city found that some of the biggest issues older adults face in Boston's outdoor spaces are feeling unsafe in parks, the lack of public restrooms, and inaccessibility to many of these spaces. In response to these concerns, the city proposed new initiatives to improve city parks and sidewalk accessibility and ensure older adults are engaged in the planning process (City of Boston 2017). This action plan shows the City of Boston's willingness to modify existing parks and public spaces to better accommodate older adults' needs.

03

Methodology

Research methods and procedures.

Introduction

The project's methodology was designed to answer the primary research question: How can existing parks be retrofit through design and activity programs to better support the needs of older adults? Two methods were used to address this question: 1) document analysis of universal design guidelines, and 2) precedent studies of activity programs tailored for older adults. The document analysis served primarily to understand how parks can be designed to be more usable and inclusive to older adults, and the outcomes of this analysis helped inform the development of design recommendations within the Parks for Aging in Place Toolkit. The findings from the precedent studies helped to inform recommendations for activating parks through activity programs for older adults also found within the Parks for Aging in Place Toolkit.

The literature review and findings from the methods were then used to inform the development of the first project outcome: the Parks for Aging in Place Toolkit. The toolkit includes both design and activity programming recommendations for retrofitting parks to be more usable and inclusive to older adults. Additionally, to demonstrate an application of the Parks for Aging in Place Toolkit, a projective design was completed for Franklin Park as the second project outcome. The purpose of this outcome was to exhibit how the toolkit could be applied to an existing park and to demonstrate how these age-friendly recommendations would improve the experience of older park users.

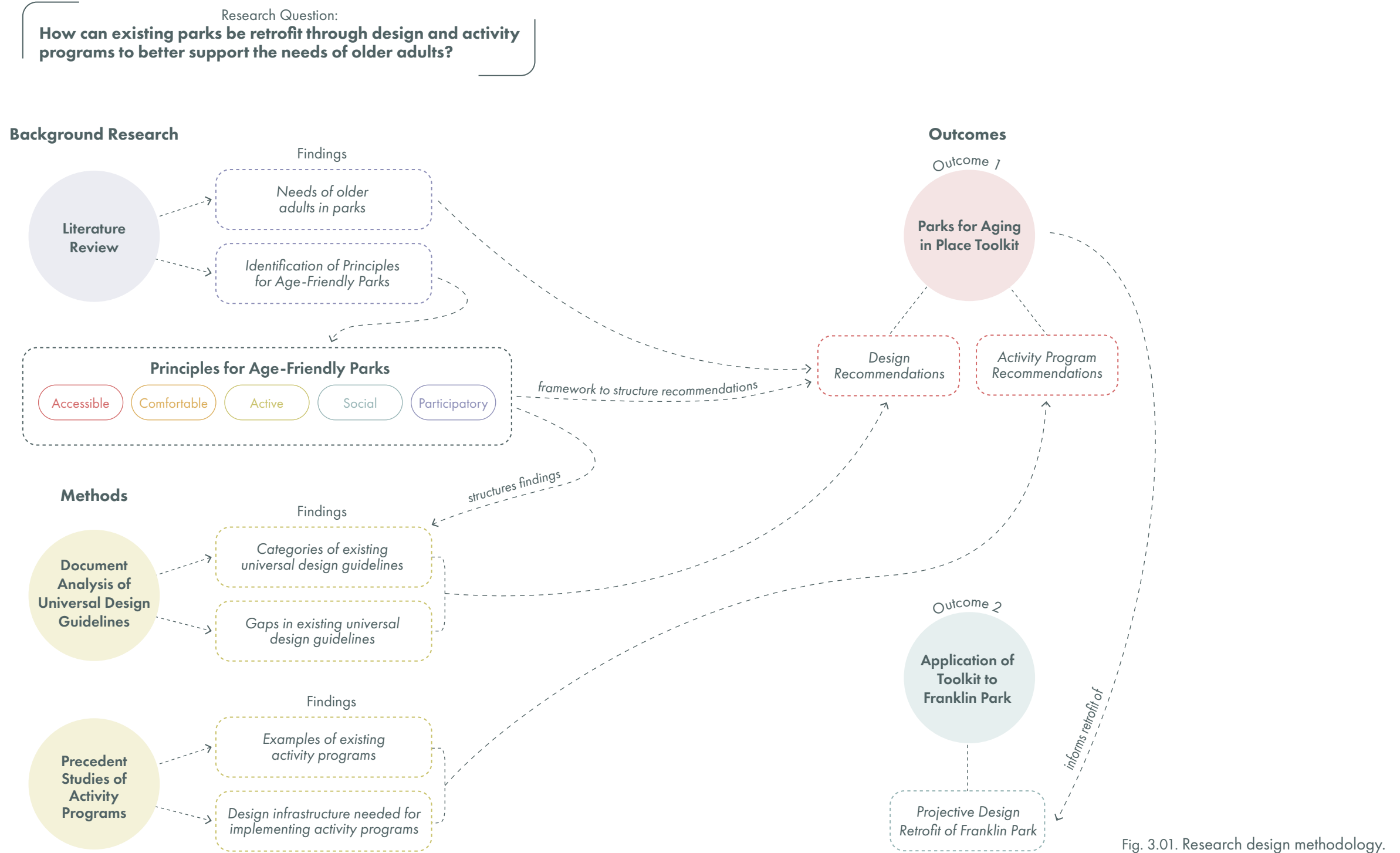


Fig. 3.01. Research design methodology.

Document Analysis of Universal Design Guidelines

Purpose

Documents of universal design guidelines were analyzed to understand how existing parks can be retrofitted to be more inclusive and usable by all. Analyzing these documents helped identify common universal design recommendations in existing literature and also revealed gaps in existing guidelines when applying them through an age-friendly lens. Universal design guidelines are intended to make public spaces more inclusive to all people, but they alone are not comprehensive enough to meet the diverse needs of older adults in urban parks. Nevertheless, it is important to discern the key guidelines that can be applied to age-friendly design and acknowledge the gaps in existing universal design guidelines when applying them to parks for older adults.

Procedure

Each document was analyzed to understand common themes, gaps, and how they can be applied to parks to support aging in place. Each document was analyzed for the following criteria:

- Audience
- Purpose of the document
- Definition of universal design
- Universal design guidelines for outdoor spaces or parks
- Specific mention of design guidelines for elderly needs, if any

Selection Criteria

Universal design documents were found through systematic searches using the keywords ‘universal design’, ‘universal design guidelines’, and ‘universal design landscape architecture’. Documents were selected to be analyzed if they met these criteria:

- Discussed universal design in the built environment
- Provided a set of guidelines or recommendations for universal design in outdoor environments or parks
- Were authored and published by a reputable organization

Documents Analyzed

After reviewing several universal design documents, three were selected for analysis:

- “Design for Social Participation” and “Public Accommodations” in *Universal Design: Creating Inclusive Environments* (Steinfeld and Maisel 2012)
- “Universal Design” (Dillon and Green n.d.)
- “External Environment and Approach” in *Building for Everyone: A Universal Design Approach* (National Disability Authority 2017)

Precedent Studies of Activity Programs for Older Adults

Purpose

To understand how parks can be activated for older adults’ use, a range of activity programs tailored toward older adults were studied. Some of these activity programs are park programs, while others take place in other community settings but have the potential to be implemented in parks. Studying these programs demonstrated existing popular activities to engage older park users. This method also determined the design features needed to successfully implement these activity programs in parks.

Procedure

The first step of this analysis was to determine the most common park uses by older adults and their preferred activities in parks. This list was developed from the literature review and is more fully explained in Chapter 2: Background. These common park uses and activities for older adults are:

- Walking
- Movement and fitness
- Sports
- Games
- Socializing or meeting others
- Observation
- Picnicking
- Connecting with nature

Sources: (Onose et al. 2020; Veitch et al. 2020; Sundevall and Jansson 2020; Perry et al. 2021; Cohen et al. 2016; Raymore and Scott 1998)

Next, precedent activity programs that corresponded to each of the eight common park activities for older adults were studied. Activity programs were identified through health and aging organizations including the National Council on Aging (NCOA), the National Recreation and Park Association (NRPA), the Centers for Disease Control and Prevention (CDC), the Arthritis Foundation, the Administration for Community Living (ACL), and other groups that focus on the well-being of older adults. Many of the programs selected are

considered evidence-based programs (EBPs): programs that have proven benefits for older adults. Evidence-based programs essential precedents because they have been rigorously studied, are proven to be beneficial to older adults, and are more likely to be successful than non-evidence-based programs (NCOA 2022a).

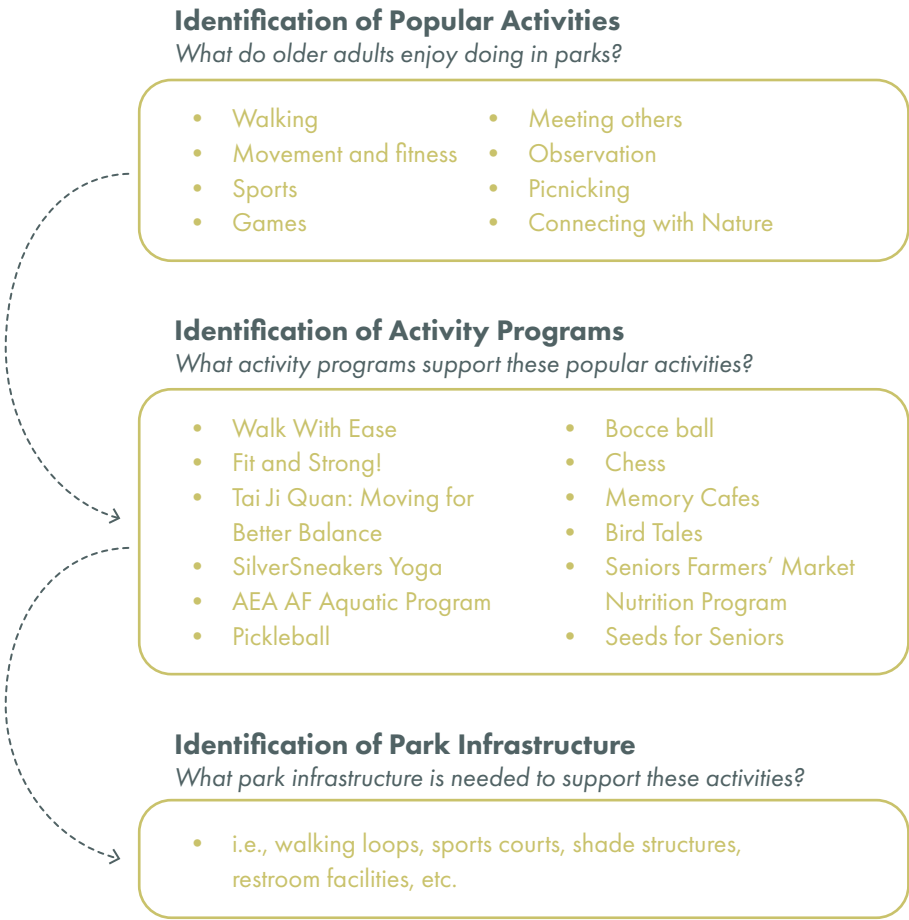


Fig. 3.02. Process and procedures involved in precedent studies.

Selection Criteria

Precedents were selected for analysis if they met the following criteria:

- Benefits the health, encourages participation, or boosts the quality of life of older adults
- Are evidence-based, have research proving their success, or are best-practice programs
- Are currently implemented in parks or have the potential to be implemented in a park

Analysis Organization

Each program was studied to understand its benefits to older adults and its potential application in parks. The programs were analyzed for the following factors:

- Developer/sponsor of the program
- Purpose and overview of the program
- Benefits for older adults
- Setting of the program
- Design infrastructure needed to implement the activity program in parks

Precedents Studied

- Walk With Ease
- Fit and Strong!
- Tai Ji Quan: Moving for Better Balance
- SilverSneakers Yoga
- AEA Arthritis Foundation Aquatic Program
- Pickleball
- Bocce ball
- Chess
- Memory Cafes
- Bird Tales
- Seniors Farmers’ Market Nutrition Program
- Seeds for Seniors

04

Findings

Project findings and analysis.

Introduction

This chapter discusses the findings from the document analysis of universal design guidelines. These findings informed the development of the ‘Design Recommendations’ in the Parks for Aging in Place Toolkit which can be found in Chapter 5. The findings from the precedent studies of activity programs helped to inform the recommendations for activity programs and are included directly within the toolkit in the ‘Activity Programs Recommendations’ section.

Findings: Document Analysis of Universal Design Guidelines

Development of the Design Categories

As part of the document analysis of universal design guidelines, each document’s design guidelines for outdoor spaces were studied and organized into a list. Then, from the comprehensive list of the documents, eighteen design categories were identified. The eighteen design categories were then further categorized into the Principles for Age-Friendly Parks: Accessible, Comfortable, Active, Social, and Participatory. This framework of the age-friendly park principles and design categories is reflected in the ‘Design Recommendations’ section of the Parks for Aging in Place Toolkit in Chapter 5 and helped to organize the design recommendations for age-friendly park retrofits. See Figures 4.02, 4.03, and 4.04 to understand how each document’s guidelines were categorized.

Note: Any guidelines within the documents that did not relate to outdoor environments were disregarded.



Figure 4.01. The process of categorizing each document’s universal design guidelines.

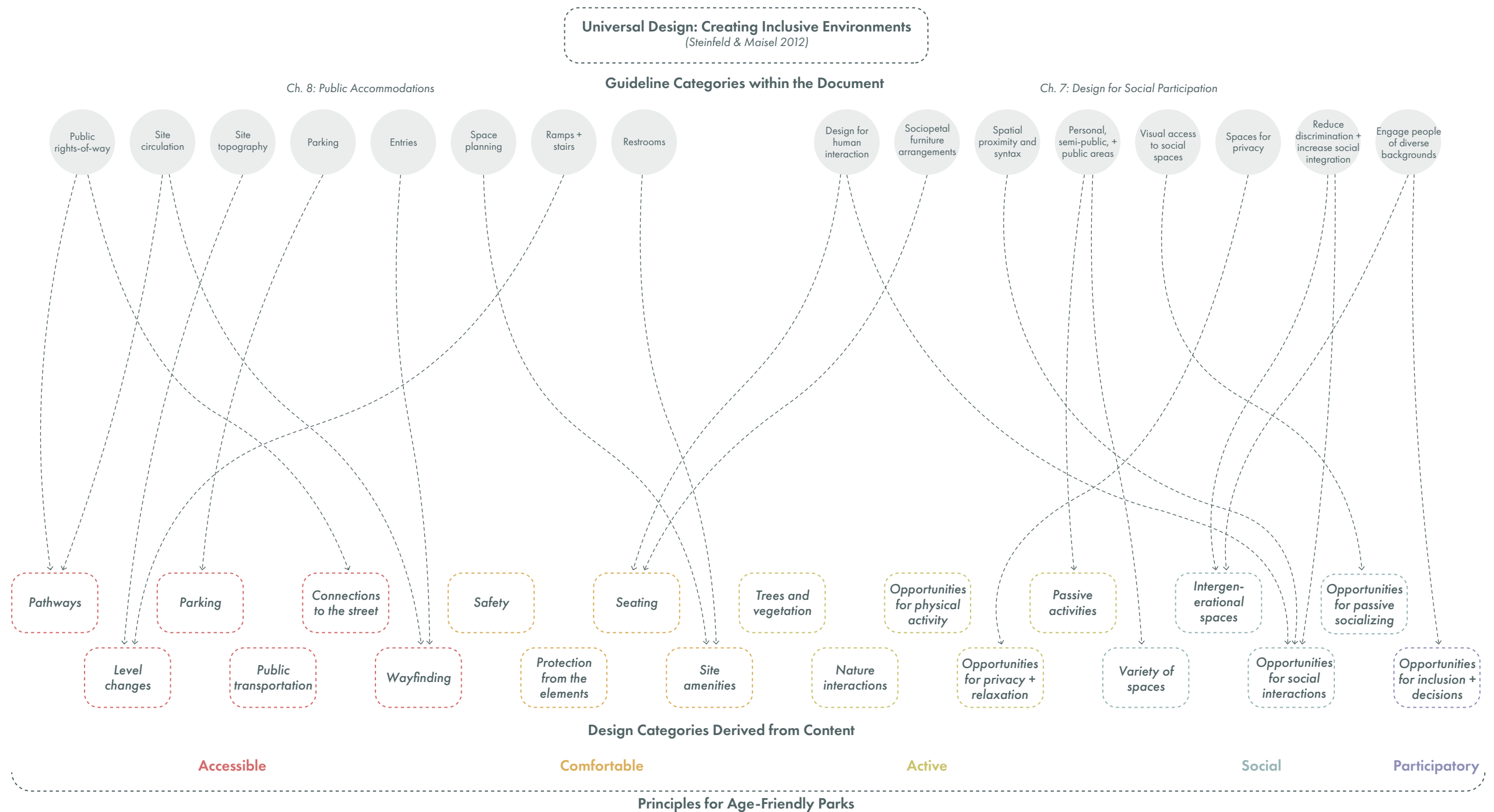


Figure 4.02. Steinfeld and Maisel's (2012) guidelines organized into the five Principles for Age-Friendly Parks.

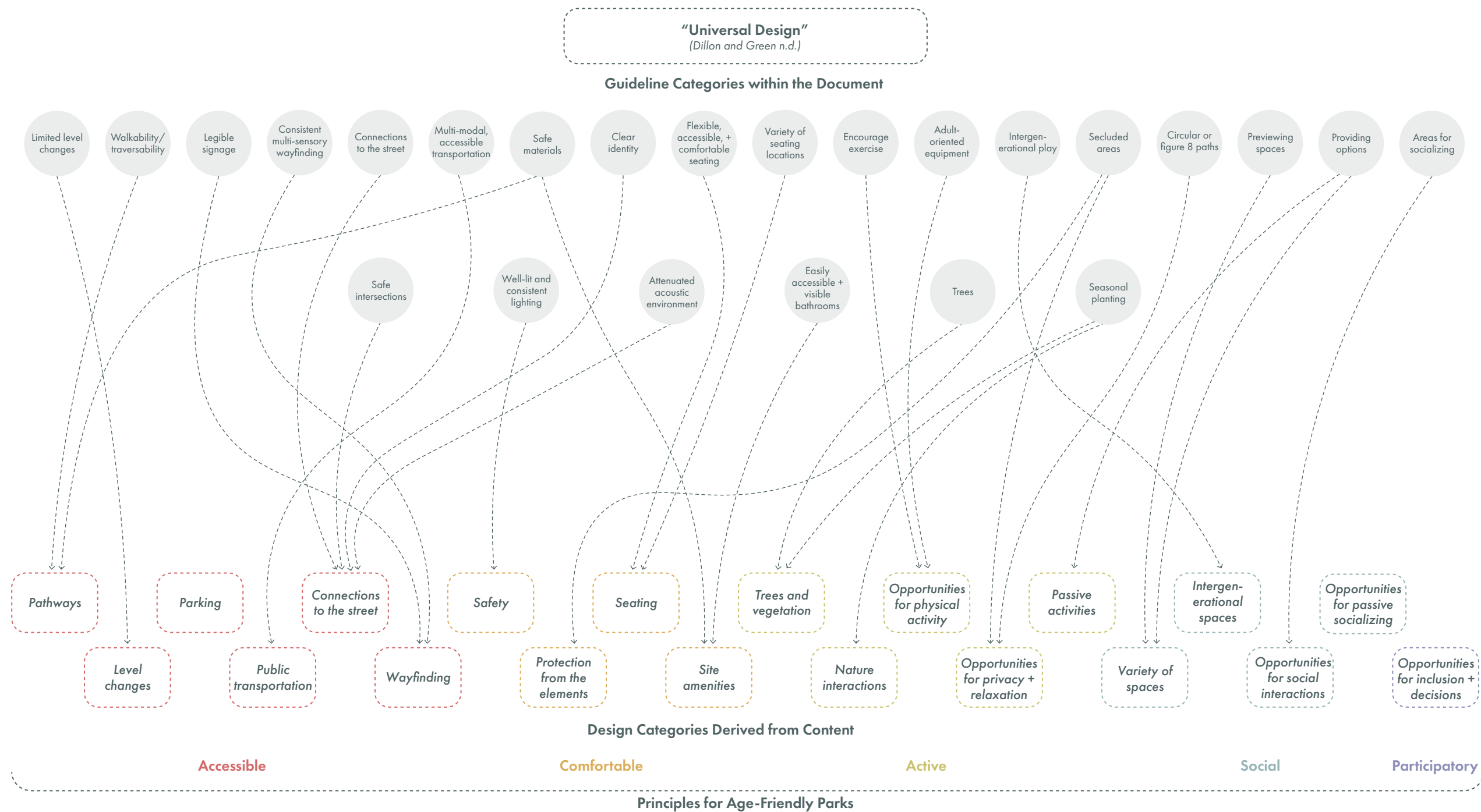


Figure 4.03. Dillon and Green’s (n.d.) guidelines organized into the five Principles for Age-Friendly Parks.

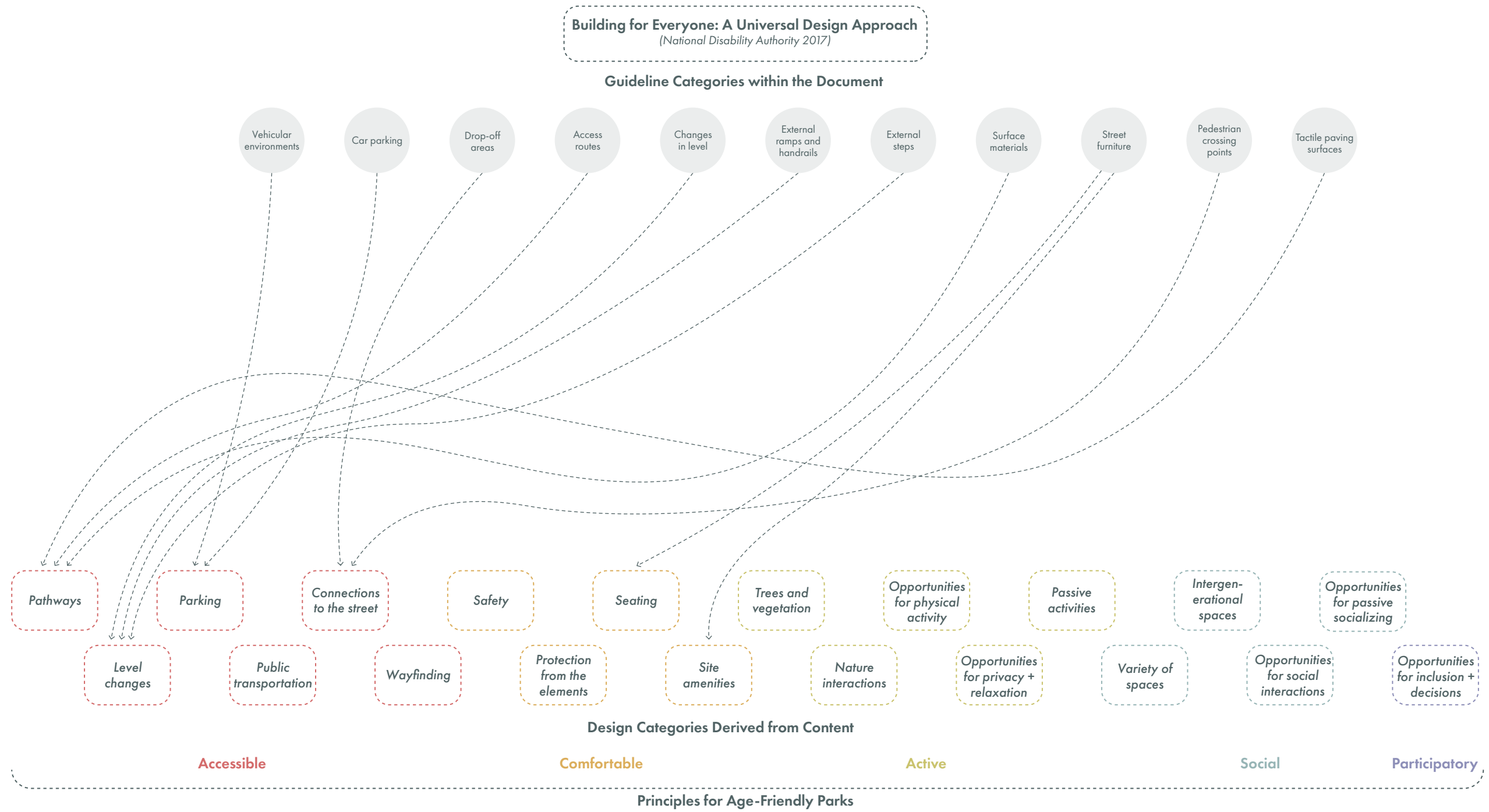


Figure 4.04. The National Disability Authority’s (2017) guidelines organized into the five Principles for Age-Friendly Parks.

Analysis of Each Text

“Universal Design” by Dillon and Green (n.d.)

“Universal Design” (Dillon and Green n.d.) is a design guide published by the American Society of Landscape Architects (ASLA). The document aims to provide landscape architects and students with a simple guide to universal design practices in five types of outdoor public spaces: neighborhoods, streets, playgrounds, public gardens, and parks and plazas. The document recognized those aged 65+, those with limited mobility, and those with a disability as the primary audience that its guidelines are written for (Dillon and Green n.d.).

“Universal Design” included recommendations within four of the Principles for Age-Friendly Parks but did not have any guidelines related to the Participatory principle. As this guide was written by landscape architects, there was a much stronger focus on nature and vegetation than in the other documents. It was the only one out of the three to include universal design recommendations for trees and vegetation.

Audience: Landscape architects, planners, designers, and students

Definition of Universal Design: Does not give a definition.

Universal Design: Creating Inclusive Environments by Steinfeld and Maisel (2012)

Chapters “Design for Public Participation” and “Public Accommodations”

Steinfeld and Maisel’s (2012) Universal Design: Creating Inclusive Environments provides a thorough examination of the history of universal design and strategies to achieve universal accessibility. The authors recognize that universal design serves those with disabilities, mental illnesses, mobility or functional limitations, low-income groups, minority ethnic groups, as well as the general public (Steinfeld and Maisel 2012).

These two chapters were selected because of the outdoor space recommendations in the “Public Accommodations” chapter and the social participation recommendations in the “Design for Public Participation” chapter. “Public Accommodations” listed recommendations that primarily discussed guidelines for accessibility and comfort. “Design for Public Participation” mainly provided strategies for encouraging social interactions.

Audience: All designers and design students

Definition of Universal Design: “Universal design is a process that enables and empowers

a diverse population by improving human performance, health and wellness, and social participation” (Steinfeld and Maisel 2012, 29).

Building for Everyone: A Universal Design Approach by the National Disability Authority (2017)

Chapter “External Environments and Approach”

Building for Everyone: A Universal Design Approach (National Disability Authority 2017) is a document published by the Irish National Disability Authority’s Centre for Excellence in Universal Design. This document acknowledges that universal design can serve those aged 65+, as they often experience struggles with their physical strength, mobility, memory, sight, hearing, stamina, or dexterity (National Disability Authority 2017, 94).

This document focused primarily on physical accessibility—like access routes, level changes, and parking—as well as physical comfort. This document mainly presented recommendations relating to design infrastructure rather than amenities or activities. It did not discuss activity programming to increase opportunities for physical activity or social interactions.

Audience: Developers, designers, architects, planners, engineers, builders, and building managers

Definition of Universal Design: The document provided a synopsis of the 2005 Disability Act: “Universal design refers to the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people, regardless of their age, size, ability or disability” (National Disability Authority 2017, 90).

Gaps in Universal Design Guidelines

After analyzing each document, several gaps in were identified. Gaps are considered to be missing or insufficient design guidelines on park infrastructure needed to support older adults’ physical, social, and psychological needs. These gaps are identified through findings derived from the background research in Chapter 2 about the needs of older park users and the barriers older adults face in parks.

The first gap identified is that the documents primarily focused on design for accessibility, comfort, and socialization, but few guidelines addressed universal design strategies for the infrastructure of activity programs in parks. For example, there was a lack of information on design for group gathering spaces, games, sports, walking loops, and areas for public events or shows. Dillon and Green (n.d.) did provide recommendations for play and exercise but had a primary focus on those activities for kids. Activity programs are an essential predicting factor of older adults’ visitation and use of parks (Cohen et al. 2007), thus the infrastructure for these programs needs to be universally designed. The second research method of this project—precedent studies of activity programs—seeks to fill this gap by understanding the infrastructure needed to support popular activity programs tailored to older adults. These findings can be found in the ‘Activity Programs Recommendations’ in Chapter 5: Parks for Aging in Place Toolkit.

Within all the documents, there was minimal discussion on psychological safety and comfort; most recommendations in this area focused on lighting and ensuring clear sightlines. Crime reduction, more security personnel, and a focus on programming spaces to increase eyes on the park (Cohen et al. 2016) are additional topics not highlighted in these documents that would greatly improve the safety perceptions of older adults in parks.

		Design Categories Derived from Universal Design Documents	Universal Design: Creating Inclusive Environments Steinfeld & Maisel 2012	"Universal Design" Dillon & Green n.d.	Building for Everyone: A Universal Design Approach NDA 2017
Principles for Age-Friendly Parks	Accessible	Pathways	●	●	●
		Level Changes	●	●	●
		Parking	●		●
		Public Transportation		●	
		Connections to Street	●	●	●
		Wayfinding	●	●	
	Comfortable	Safety		●	
		Protection from the Elements		●	
		Seating	●	●	●
		Site Amenities	●	●	●
	Active	Trees and Vegetation		●	
		Nature Interactions		●	
		Opportunities for Physical Activity		●	
		Opportunities for Privacy + Relaxation	●	●	
		Passive Activities	●	●	
	Social	Variety of Spaces	●	●	
		Intergenerational Spaces	●	●	
		Opportunities for Social Interaction	●	●	
		Opportunities for Passive Socializing	●		
	Participatory	Opportunities for Inclusion + Decision-Making	●		

Table 4.01. Summary of the design categories derived from the content analysis and the age-friendly park principles they are categorized into.

Conclusion

While these universal design guidelines include many important recommendations for making outdoor spaces inclusive to and usable by older adults, there are further considerations that need to be made to ensure parks are age-friendly. A greater focus on activity programming for older adults and improving perceptions of safety are other essential considerations, in addition to the guidelines discussed in these three documents, for parks that support aging in place.

These documents emphasized universal design as designing for all people. Although universal design should enable outdoor spaces to be usable by as many people as possible, including older adults, it is important to not disregard the primary user groups of each park and the park's surrounding context. This will help designers not only consider the needs of older adults but also the needs of the surrounding community during the park retrofitting process.

05

Parks for Aging in Place Toolkit

Strategies to achieve an age-friendly park.

Parks for Aging in Place Toolkit

All Parks Should Support Older Adults to Age Gracefully

The Parks for Aging in Place Toolkit serves as a guide for retrofitting existing parks to be more age-friendly for older park users. Parks are fundamental infrastructure that support aging in place by providing opportunities for socializing, physical activity, relaxation, and connection to nature. As the population continues to age, adaptations to existing parks are necessary to ensure outdoor spaces are inclusive to older adults and support their needs. Creating parks that are more accessible, healthy, and vibrant not only benefits older individuals, but benefits *all* people.

Purpose of the Toolkit

The goal of the toolkit is to provide a resource outlining ways to retrofit existing parks to be more supportive of older park users and their ability to age in place.

Where the Toolkit Can be Used

The toolkit is intended to be used to retrofit *existing* parks. This toolkit can be used at many different scales, but it is important to note that some recommendations may not be as applicable to smaller parks.

Where the Research Came From

The content within the toolkit was informed by universal design guidelines, literature on parks and older adults, literature on aging in place, and precedent studies of activity programs for older adults.



Fig. 5.01. The five Principles for Age-Friendly Parks.

What Defines an Age-Friendly Park?

Principles for Age-Friendly Parks

Age-friendly parks provide benefits to older adults, support their well-being, and enable them to age in place. The five Principles for Age-Friendly Parks were developed from universal design and aging in community principles. These age-friendly principles are: Accessible, Comfortable, Active, Social, and Participatory. Age-friendly parks should be accessible and comfortable for older adults, providing opportunities for physical activity, social interactions, and engagement with the community. Age-friendly parks should also involve older adults in the park design and programming process and should take into account the specific needs and preferences of older adults. It is important to understand that these principles are not mutually exclusive. For example, focusing on the ‘Comfortable’ principle is not the only way to improve older adults’ comfort in parks. Aspects of the other four principles should also enhance their comfort and satisfaction.

Accessible
Encourages accessibility and usability by all ages and abilities.

Comfortable
Provides both physical and psychological comfort.

Active
Supports a variety of activities and promotes physical and cognitive health.

Social
Fosters social interactions and promotes feelings of belonging.

Participatory
Promotes the inclusive participation of older adults of all races, genders, ethnicities, and incomes in decision-making processes.

How to Use the Toolkit

Steps to Achieve an Age-Friendly Park

The Parks for Aging in Place Toolkit includes three phases: 1) Community Assessment, 2) Age-Friendly Park Assessment, and 3) Recommendations for Age-Friendly Park Retrofits. These phases were designed to better understand the users and community context of the existing park, assess the park’s limitations and opportunities, and to inform the selection of design solutions and activity programs that best fit older adults’ needs.

It is important to note that the recommendations provided in this toolkit are intended to be inspirational and a starting point for change. The recommendations do not go into depth on ADA-accessible standards, which are a standalone document that should always be referenced first when making any design modifications. The recommendations within this toolkit intend to move beyond these ADA-minimum standards to facilitate universally inclusive parks that benefit not only older adults but the greater population as well.

- Phase 1: Community Assessment, pg. 76**
Understand the park’s context, potential users, and needs of the community.
- Phase 2: Age-Friendly Park Assessment, pg. 84**
Assess existing park conditions and identify opportunities and constraints.
- Phase 3: Recommendations for Age Friendly Park Retrofits, pg. 98**
Select applicable age-friendly design and activity programming solutions.



Fig. 5.02. Structure and organization of the Parks for Aging in Place Toolkit.

Who Can Use the Toolkit?

Applications by a Variety of Users

The toolkit was primarily designed to generate outcomes that could be starting points for conversations about age-friendly park retrofits. However, the toolkit's three primary phases—Community Assessment, Age-Friendly Park Assessment, and Recommendations for Age-Friendly Park Retrofits—can be used for various purposes by various people. In other words, the toolkit has a lot of flexibility on who can use it and how it can be used. The following examples envision who might use the toolkit and how it can be applied to their specific needs.

Landscape Architects, Planners, and Other Designers

Landscape architects, planners, and other designers can use this toolkit in a multitude of ways. Phase 1: Community Assessment can be used to guide contextual inventory and analysis, while Phase 2: Age-Friendly Park Assessment can aid in site-level analysis and the determination of key opportunities and constraints in an existing park. These two phases can help initiate conversations with community members to identify their needs and establish relationships with them. These phases can also aid in the concept development stage and help establish project goals. The recommendations in Phase 3 can then be used as a starting point in the design development phase to design age-friendly features, amenities, and activity programs. Since these recommendations are just a starting point, it is essential that design professionals use their expertise to implement context-specific design solutions. Ultimately, landscape architects and designers will have the greatest technical knowledge and expertise to implement changes.

Parks and Recreation Professionals

The Age-Friendly Park Assessment may be especially beneficial for parks and recreation professionals, as it can help them identify the primary needs and issues within a park. It is recommended that multiple parks and recreation professionals complete the park assessments and compare notes to identify the biggest issues and opportunities within parks. Completing the Age-Friendly Park Assessment may then aid in selecting the right design

professionals to achieve the goals identified by the parks and recreation professionals. Parks and recreation professionals can also use the Activity Program Recommendations to gain ideas of what programs to implement in their city's parks to better engage their older community.

Community Leaders

Community Leaders can use the Age-Friendly Park Assessment within the toolkit to assess their existing parks and determine the needs and wants of their older community members. Their findings from the assessment could then be presented to parks and recreation professionals or other public officials to exhibit a need and inspire change. Thus, the toolkit can be used by community leaders to build excitement for the possibilities of age-friendly parks and to foster partnerships with professionals. By beginning the process of assessing the park's needs, they can then partner with landscape architects and other designers to start the redesign process.

Design Students

Students in design disciplines may find this toolkit helpful to guide their design processes and selection of inclusive design features. Since many of the suggestions in the toolkit make parks more inclusive to not just older persons but to all people as well, students can apply these recommendations to many different scenarios. Phase 1: Community Assessment may be particularly helpful for students by providing resources for conducting context and demographic analyses. The Design Recommendations in Phase 3 should also provide helpful age-friendly solutions for the design development phases of their projects. The toolkit should help inspire students to create designs that are more accessible, usable, healthy, and inclusive to a wider range of people.

Introduction

Purpose and Role of the 'Participatory' Principle

In order to understand the needs of the surrounding community and older park users, context, demographic, and needs analyses need to be conducted. The information gathered in this phase is essential for understanding the park's context and the primary user groups of the park. The recommendations in Phase 1 are intended to be a starting point and users of the toolkit may already have other existing reports to reference or may already be aware of other needs that need to be addressed. The primary goal of this phase is to understand as best as possible the needs of the older community and the infrastructure that already exists within or near the park.

This section was informed by the 'Participatory' Principle for Age-Friendly Parks. It is critical to engage with older park users to gain their perspective on their park needs and the current barriers they face. This phase aims to understand more about these older adults' communities, their demographic makeup, and their personal needs and desires for age-friendly park spaces.



Context Analysis

Understand the park's surrounding context and identify nearby public transit, local organizations, and amenities for older adults.



Demographic Analysis

Gain a better understanding of whom the park serves and the demographics of potential park users.



Needs Assessment

Identify community needs and preferences through dialogues with local older adult park users.



Context Analysis

Understand the Park's Surrounding Context

The purpose of a context analysis is to identify existing community infrastructure that supports older adults and to identify potential partnerships. It is important to recognize the existing community amenities available to local older adults and identify gaps that can be filled through the park's design and activity programming.

Analysis

The following is a list of community infrastructure that should be inventoried and analyzed to learn more about the park's context. Consider the questions under each topic to better understand how the surrounding context affects the design and activity programming considerations of the park.

Nearby Parks

Locate nearby parks (within a ~1 mile radius of the park) to understand how they are also currently serving older individuals in the community. It is critical to understand if there are other nearby green spaces, what types of benefits they might offer older adults, and the activities and features they offer. Research existing amenities and activity programs at these nearby parks. Mapping out the existing amenities and activities at nearby parks helps to understand the broader connection of supports and infrastructure being offered to older adults. Consider the questions:

- Are there other parks nearby (within 1 mile, 2 miles, 5 miles)?
- What types of parks are nearby? Are they neighborhood parks, regional parks, botanical gardens, etc.?
- What amenities do nearby parks have? Do they have amenities that would appeal to older adults?

Nearby Community Centers

Community centers often offer various programs for older individuals. Community centers can be great organizations to collaborate with to host health and social programs for older adults in parks. Consider the questions:

- Where are the nearest community centers located?
- What types of programs do they offer?
- What types of programs do they offer specifically for older adults?
- What sort of partnerships could be formed with existing community centers to engage local older adults?

Nearby Senior Living Centers

Nearby senior living centers are another great place to build partnerships with. Consider the types of programming nearby residents might be interested in at their local park. For example, would residents at a local assisted living facility be interested in a bird-watching program or a horticultural therapy program? Consider the questions:

- Where are the nearest senior living centers or assisted living facilities?
- What types of activity programs do these facilities offer?
- How might the park partner with these facilities to provide age-friendly park programs for its residents or other community-dwelling older adults?

Neighborhood Organizations

Finding out more about local groups within surrounding neighborhoods is a great way to learn more about local residents and the activities they enjoy. One way of finding out about the events in the surrounding community is to check local Facebook pages or neighborhood websites. Consider the questions:

- Do the neighborhoods adjacent to the park have a strong presence and leadership in the community?
- What are some pre-existing neighborhood events that take place?

Nearby Public Transit

It is critical to identify the types of public transit available to potential park users. It is also essential to understand how accessible the public transit systems and stops are, as inaccessible or unsafe public transportation is likely to make older adults' use of public transit difficult (WHO 2017). Consider the questions:

- What types of public transit are available?
- How close are the public transit stops to the park? Are the stops universally designed?
- How do older adults typically arrive at the park? By personal vehicle, public transportation, or by foot?

Adjacent Land Uses

Recognizing land uses adjacent to the park is important to understand how the park might interact with adjacent businesses or residences. Consider the questions:

- What are the park's adjacent land uses? Is it surrounded by residences, businesses, civic buildings, etc.?
- Are adjacent amenities universally accessible and welcoming to older adults?

City-Wide Comprehensive Plans

Many cities have developed comprehensive plans for public spaces, parks, or public transit. Some cities are a part of the World Health Organization's Global Network of Age-Friendly Cities and have thus developed age-friendly city-wide plans (WHO 2017). Examining these plans is an important step to understanding the current goals the city has and how it might support age-friendly park improvements. Consider the questions:

- What are the plans' goals for outdoor public spaces? For city parks?
- Are there any age-friendly design recommendations or goals?
- How might the city provide funding for age-friendly improvement projects?



Demographic Analysis

Identify Potential Park Users

The purpose of a demographic analysis is to understand the characteristics of the communities surrounding the park because they are likely park users. Factors to consider with a demographic analysis are age, race, household income, and disability. Though useful, demographic analyses alone do not provide a full picture of the needs of older park users. Thus, additional community engagement is necessary to understand the needs of the community. See 'Needs Assessment' in the next section for recommendations for engaging with older park users.

Age

It is important to identify where most older adults in the surrounding community are living. Consider these questions:

- Where are the most concentrated populations of those aged 65+?
- How close in proximity are they to the park?
- What is the percentage of older adults in this community compared to the rest of the city, state, or the U.S.?
- What are the future trends (i.e., is the population becoming older or younger)?

American Community Survey: Community Census Data

For census data by census tract (very detailed information; helpful for detailed census tract information about a community).

Race and Ethnicity

Understanding the race and ethnicity of the surrounding communities is an essential component of demographic analyses. Studies have found that amongst all ages, individuals of color have different needs and preferences in parks than White park users (Loukaitou-Sideris 1995; Derose et al. 2015). Some diverse neighborhoods may also have a higher

number of households that do not speak English as their first language. Consider this when designing park signage or when organizing community events. Consider these questions:

- What is the racial and ethnic makeup of the community?
- What is the racial and ethnic makeup of older adults within the community?
- Are there areas near the park that primarily do not speak English as their first language?
- What are the future trends (i.e., is the older population getting more diverse)?

Justice Map: Visualizing Race and Income

A tool to visualize race and income in different neighborhoods across the U.S. See the 2020 early edition for the most up-to-date data.

Census Demographic Data Viewer: Race, Population, and Housing Data

For population, race, ethnicity, and housing visualization data.

Housing

Identifying the number of nearby community-dwelling older adults versus institutionalized older individuals can show the living preferences of local older adults. This factor should also be analyzed with race, as older adults of color are more likely to age in place than White older adults (Lehning, Smith, and Dunkle 2015). Census data on the number of older adults living alone should also be studied. Although aging in place provides many benefits, it can lead to loneliness and isolation (Scharlach and Lehning 2013). Thus, greater social opportunities in parks may be beneficial. Consider these questions:

- Are nearby residents primarily renters or homeowners? Are older adults primarily renters or homeowners?
- Are older adults primarily living in the community or in institutional settings?
- Are community-dwelling older adults typically living with others or alone?

Household income

Older adults with higher household incomes are more likely to perform physical activities in parks (Zhai et al. 2020). Designers of parks in low-income areas should recognize these

disparities and develop solutions to encourage low-income older adults to use parks. Consider these questions:

- What is the average household income in the neighborhoods around the park?
- What is the average household income among older adults living in the neighborhoods around the park? How does this compare to the city, state, and national averages?

Census Poverty Status Viewer: Visualizing Poverty

An interactive map displaying high-poverty counties and census tracts in the U.S.

Race, Language, and Technology Access Among Low-Income Older Adults

A map developed by the National Council on Aging (NCOA) to understand racial makeup, English proficiencies, and internet access among low-income older adults.

Disability

Older adults are at a much higher risk for disability than any other age group. Research suggests that approximately 33.5% of non-institutionalized 65+ adults in the U.S. have at least one disability (Erickson, Lee, and von Schrader 2022). It is necessary to study demographic data on the disability status of those 65+ living near the park. Some datasets provide data on the different types of disabilities (mobility, etc.) that affect older adults in certain census tracts. This information is critical for understanding how a park may need to be adapted to better meet older users' needs. For example, if there is a higher-than-average percentage of older adults living near the park with a hearing disability, it would be important to minimize background noises in the park. Consider these questions:

- What percentage of the nearby population lives with any type of disability? What percentage of nearby older adults?
- What disabilities are most prevalent in the census tracts near the park?

ACS Disability Status

An online map viewer showing disability status in the U.S. based on age and sex. This particular layer shows disability status among those aged 65 and older.



Needs Assessment

Engage with Community Elders

Engaging with older adults in the community and understanding their needs in public parks is a critical step in the age-friendly retrofit process. Diverse voices should be included in decision-making and community engagement processes to ensure parks are inclusive to as many older adults as possible. The ultimate goal of engaging with local elders is to ensure older adults of all races, genders, ethnicities, and incomes are included in parks and their needs are met.

Participatory Processes

Including underrepresented groups in the design process is a necessary step to ensuring parks are usable by and inclusive to all. Consider the following:

- Include older adults of all abilities in park decision-making processes.
- Conduct community engagement sessions with local older adults to understand their needs, their wants in a park, and their current barriers to park use.
- For older adults with dementia, engage their caregivers in these participatory processes to understand both the older person's park needs as well as the caregiver's.

Engaging with community elders is incredibly helpful to understand their park needs. The following questions are a starting point to begin a dialogue with older park users, but more rigorous engagement processes should be used.

- Who primarily uses the park? Are there fewer older adults using the park than proportional to the population?
- How are older adults typically arriving to the park (car, on foot, transit, etc.)?
- What activities, amenities, and features already exist in the park that older park users enjoy? What activities, amenities, and features are missing?
- What park features would make them more likely to use the park? What features currently deter them from using the park?
- Are most park spaces physically accessible and usable to them?
- Do they feel safe in the park?

Introduction

Purpose of Conducting a Park Assessment

The purpose of the Age-Friendly Park Assessment is to understand if an existing park is providing the design infrastructure, activity programs, and park amenities necessary to support and benefit older park users. The Age-Friendly Park Assessment will also help identify opportunities within the park and prioritize age-friendly design features. The assessment consists of two parts: 1) the Design Assessment, and 2) the Activity Programs Inventory.



Design Assessment

Assess the park’s infrastructure and amenities and identify opportunities.



Activity Programs Inventory

Identify activity programs within the park or at nearby community amenities.

Notes

For Large Parks:

When completing the Age-Friendly Park Assessment in a large park, the park should be divided into smaller subareas based on use. This ensures a more accurate park assessment since some subareas may currently be more age-friendly than others. This should also help toolkit users to prioritize areas of the park that are in greater need of age-friendly design interventions.

Author’s Note: It is important to note that much of this assessment is subjective, thus for the most accurate and helpful results, multiple individuals should complete the assessment and compare notes. It is also critical to address that the following assessment is intended as a reference to guide age-friendly park design. It is not a thorough compilation of every age-friendly park feature that needs to be assessed, thus individuals should use this assessment as a guide, and ultimately further analysis should be completed to ensure the park’s opportunities and constraints are captured accurately. It should not be the ultimate goal that every individual feature on this list be rated as a ‘great.’ Rather, the goal should be to identify the age-friendly features most needed to ensure the park supports the needs of older parkgoers.



Design Assessment

Assessing Design Features and Amenities

How to Complete the Park Assessment

The assessment is structured by the Principles for Age-Friendly Parks—Accessible, Comfortable, Active, and Social—and design categories derived from document analysis of universal design guidelines. The fifth age-friendly principle, ‘Participatory’, was excluded from the park assessment as it is difficult to score a park on its past efforts to engage with local groups during the park design process.

Organized under each of the design categories are statements about the current state of the park’s design features and amenities. Consider the existing conditions of the park and rate each statement either ‘Great’, ‘Okay’, or ‘Poor’ in the columns to the right.



Great



Okay



Poor

Additionally, there is a ‘n/a’ column if the statement is not applicable to the park. Each of the four age-friendly categories should be completed in order to complete the Design Assessment. The purpose for dividing the assessment into the Principles for Age-Friendly Parks is to identify the park’s needs in each of these categories. For example, a low score in the Comfortable category would indicate improvements to the park’s comfort are needed. Recommendations to mitigate the issues identified through this assessment can be found in Phase 3: Recommendations for Age-Friendly Park Retrofits.

Scoring

The assessment scorecard uses a simple qualitative scoring system. The purpose of scoring the park based on the principles of Accessible, Comfortable, Active, and Social is to prioritize the types of modifications most needed to make the park more supportive of older adults’ needs.

To score each section, each assessment column (great, okay, and poor) should be totaled. The column with the highest number of marks determines the park’s ‘score.’ The possible scores are:

-  Great
-  Okay
-  Poor

A ‘poor’ score indicates there are many issues to address in this category, while an ‘okay’ score might indicate that overall there are some issues that need to be addressed. A ‘great’ score indicates that there may be few design issues to address or that the repairs are minor. For example, a park that receives an ‘okay’ score in the Accessibility category but a ‘great’ score in the Social category might indicate that improvements to accessibility features (i.e., path conditions, wayfinding, etc.) are needed but more social opportunities for older adults are not needed as much.

At the end of the scoring section, a ‘Notes’ box is provided. Here, individuals conducting the park assessment can note any other issues or opportunities not in the assessment that should still be addressed or taken into account when selecting design and activity programming recommendations.

Example Assessment Scorecard:

				n/a
Poor	Okay	Great		
Connections to the Street				
There are designated crosswalks at every street crossing adjacent to the park.			●	
Street crossings within or adjacent to the park provide crosswalks, auditory crossing signals, curb cuts, and tactile paving.		●		
Streets within or adjacent to the park have separate bike lanes and public transit stops.				●
Streets within or adjacent to the park have traffic calming measures and slowed vehicular traffic.		●		
Wayfinding				
Park signage is frequent and consistent. There are multiple types of signage; for example, directional and informational.			●	
Signage is legible from a distance and at a height where those using wheelchairs can see it easily.		●		
Park entries are easily identifiable and completely accessible.		●		
Multi-sensory wayfinding elements have been included; for example, tactile paving, water sounds, or fragrant plants.	●			
Totals	(Add totals for each column)			
	1	4	2	
(Circle highest total)				
				
	Poor	Okay	Great	

Fig. 5.03. Example of the Design Assessment and how to score it.

Accessible



PoorOkayGreatn/a

Pathways

There is a continuous, accessible pedestrian path network throughout the park.				
Path networks accommodate multiple modes of travel (i.e., biking and walking) and are separated into zones for each mode.				
Paths follow ADA and universal design standards.				
Paths (non-ramps) are under 4% slope.				
Primary pathways are wide enough for at least two people with mobility devices to pass each other or for ASL signers to converse.				
Paths are well-maintained, do not have broken and bumpy pavements, and are free of obstructions.				
Path surfaces are smooth, firm, have a good grip, minimize glare, and do not have visually-confusing patterns.				

Level Changes

Access routes are graded to minimize the use of stairs and ramps.				
If stairs or ramps are used, they follow ADA and universal design standards.				

Parking

Parking is available within walking distance from park spaces.				
Parking lots follow ADA and universal design standards.				
Paths from accessible parking to primary areas are accessible.				

Public Transportation

Transit stops and the routes from them to the park are accessible.				
Public transportation stops within or adjacent to the park provide seating, weather protection, clear signage, and are well-lit.				



PoorOkayGreatn/a

Connections to the Street

There are designated crosswalks at every street crossing adjacent to the park.				
Street crossings within or adjacent to the park provide crosswalks, auditory crossing signals, curb cuts, and tactile paving.				
Streets within or adjacent to the park have separate bike lanes and public transit stops.				
Streets within or adjacent to the park have traffic calming measures and slowed vehicular traffic.				

Wayfinding

Park signage is frequent and consistent. There are multiple types of signage; for example, directional and informational.				
Signage is legible from a distance and at a height where those using wheelchairs can easily see it.				
Park entries are easily identifiable and completely accessible.				
Multi-sensory wayfinding elements have been included; for example, tactile paving, auditory signals, or graphic signage.				

Totals	(Add totals for each column)			
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(Circle highest total)



PoorOkayGreat

Notes:

Comfortable







PoorOkayGreatn/a

Safety				
Vegetation buffers street noise and unsightly views to the street but doesn't impede visibility and create unsafe conditions.				
There are barriers or plant buffers between streets and paths.				
Primary pathways are well-lit at night.				
Lighting does not produce glare along pathways.				
There are clear sight lines throughout the park and vegetation does not hinder visibility.				
There is clear visibility at pedestrian crossings and street intersections.				
Protection from the Elements				
There are resting areas out of the sun and wind throughout the park, especially along pathways.				
Seating				
There is frequent seating along primary pathways.				
There are many seating options: in the sun, shade, open areas, private areas, and in spots with a good view.				
There are a variety of seating types and they allow for many uses: movable seating, semi-circular seating, etc.				
Seating is comfortable and accessible, with some seating providing both back rests and arm rests.				







PoorOkayGreatn/a

Site Amenities				
The park includes a sufficient number of restrooms for the park's size.				
Restrooms are fully accessible and have signage identifying their locations.				
There are fully accessible drinking fountains along major pathways, next to restrooms, and near active recreation areas.				
Similar amenities (i.e., restrooms and drinking fountains) are grouped together for ease of access.				
Site furnishings are not obstacles along pathways and are easily visible.				
Totals	(Add totals for each column)			
	(Circle highest total)			
				
	Poor	Okay	Great	

Notes:

Active







PoorOkayGreatn/a

Trees and Vegetation

Plants are non-toxic and are non-thorny in high-traffic areas.				
The use of high-allergen trees is minimal and trees that produce a lot of litter are minimal around pathways.				
The plant palette is diverse and considers seasonality.				
Plants along pathways and parking lots are well-maintained and are not hazards.				

Nature Interactions

There are ways of interacting with nature within the park (i.e., gardening or bird watching).				
Water elements are safe and include cautionary barriers around them when necessary.				
Gardening beds are raised and accessible for wheeled mobility devices.				
There are opportunities to observe wildlife.				

Opportunities for Physical Activity

There are multiple physical activity opportunities for older adults (i.e., walking loops, fitness equipment, sports courts, etc.).				
There is at least one walking loop with a length of around 1 mile.				
There are flat, accessible areas that can accommodate various fitness classes.				
There are fully accessible sports facilities for activities popular with older adults (i.e., pickleball, bocce ball, golf, etc.).				
There is comfortable and accessible spectator seating around sports facilities.				
There are areas of play for both older adults and children to encourage intergenerational interactions.				







PoorOkayGreatn/a

Opportunities for Privacy and Relaxation

There are areas designed for rest within the park.				
Private gardens are located away from main pathways and busy street noise.				

Passive Activities

There are opportunities for passive activities like reading, dog walking, watching a performance, playing board games, etc.				
The park provides sensory experiences that engage older adults' senses of touch, sight, smell, and hearing.				

Totals

(Add totals for each column)

(Circle highest total)







PoorOkayGreat

Notes:

Social







PoorOkayGreatn/a

Variety of Spaces

There are a variety of spaces in the park, including both social areas and private areas.

There are a variety of activities for older adults to engage in (i.e., fitness, nature, socializing, etc.).

Intergenerational Spaces

There are gathering spaces with activities for all ages.

Opportunities for Social Interaction

Seating promotes socialization: it enables eye contact, there are circular arrangements for easier discussion, and some is movable.

Informational signage, seating, or other interesting activities provide opportunities for socialization along major paths.

There is at least one flat, shaded area to host group gatherings.

Gathering areas have ample seating and seating in the shade.

Gathering areas have nearby restrooms and drinking facilities.

Opportunities for Passive Socializing

There are opportunities for older adults to observe others and watch activities from afar.

Totals

(Add totals for each column)

(Circle highest total)







PoorOkayGreat

Notes:

Summary:

Accessible







PoorOkayGreat

(Circle one)

Notes:

Comfortable







PoorOkayGreat

(Circle one)

Notes:

Active







PoorOkayGreat

(Circle one)

Notes:

Social







PoorOkayGreat

(Circle one)

Notes:

Overall Notes:



Activity Programs Inventory

Identify Current Activities and Events

The purpose of completing the Activity Programs Inventory is to catalog the current programs offered to older adults in the park or at nearby community centers. This will enable park planners and designers to determine the needs for new activity programs and also identify existing community programs that could be implemented in the park. The following examples are types of activity programs to inventory:

- Fitness programs
- Sports and games
- Cultural events and celebrations
- Civic demonstrations
- Arts fairs or programs
- Gardening or horticultural therapy programs
- Farmers' markets
- Seasonal activities

When completing the Activity Programs Inventory, the following categories should be considered:

Activity Programs Within the Park

Inventory existing activity programs within the current park, whether they are permanent programs or activities that occur seasonally. Consider which programs are attractive to older adults. It may be helpful to complete a user analysis of the park to understand if older adults are currently using any of these existing activity programs.

Activity Programs at Other Nearby Parks

Consider the types of activity programs occurring at other parks within 1.0 mile of the park. Identify which of these programs are used by older adults in the community.

Activity Programs at Nearby Civic or Community Centers

Many local civic or community centers offer programs for older adults. Identify the types of programs they offer and whether they could be hosted in the park. Pay special attention to community centers within 1.0 mile of the park.

Activity Programs at Nearby Senior Living Centers

Identify the programs for residents at nearby senior living centers. Assess if there are current travel options available to the park. Focus on inventorying senior living centers within 1.0 mile of the park.



(Left) Fig. 5.04. An older couple birdwatching (Guldi 2006).



(Right) Fig. 5.05. Parkgoers using outdoor fitness equipment (Frodesiak 2012b).

Introduction

Design + Activity Program Solutions

Phase 3: Recommendations for Age-Friendly Park Retrofits is intended to aid the park retrofit process by providing a set of recommendations for the design and activity programming of existing parks. This phase is designed to work hand in hand with Phase 2, where park needs and opportunities were identified.

The ‘Design Recommendations’ section uses the same organizational framework as the Age-Friendly Park Assessment, using the Principles for Age-Friendly Parks and the design categories to organize its content. ‘Design Recommendations’ presents design infrastructure recommendations to make a park more age-friendly, while ‘Activity Program Recommendations’ provides examples of activity programs tailored to older adults and the design infrastructure needed to implement each activity program in a park.



Design Recommendations

This section involves the design features and amenities recommended to make parks more supportive of aging in place. The guidelines within this section were developed from the findings of a document analysis of universal design guidelines and from existing age-friendly design guidelines.



Activity Program Recommendations

The Activity Program Recommendations section provides examples of activity programs tailored to older adults that can be used to better activate the park. Each program presented also lists the design infrastructure needed to implement the activity program in a park.

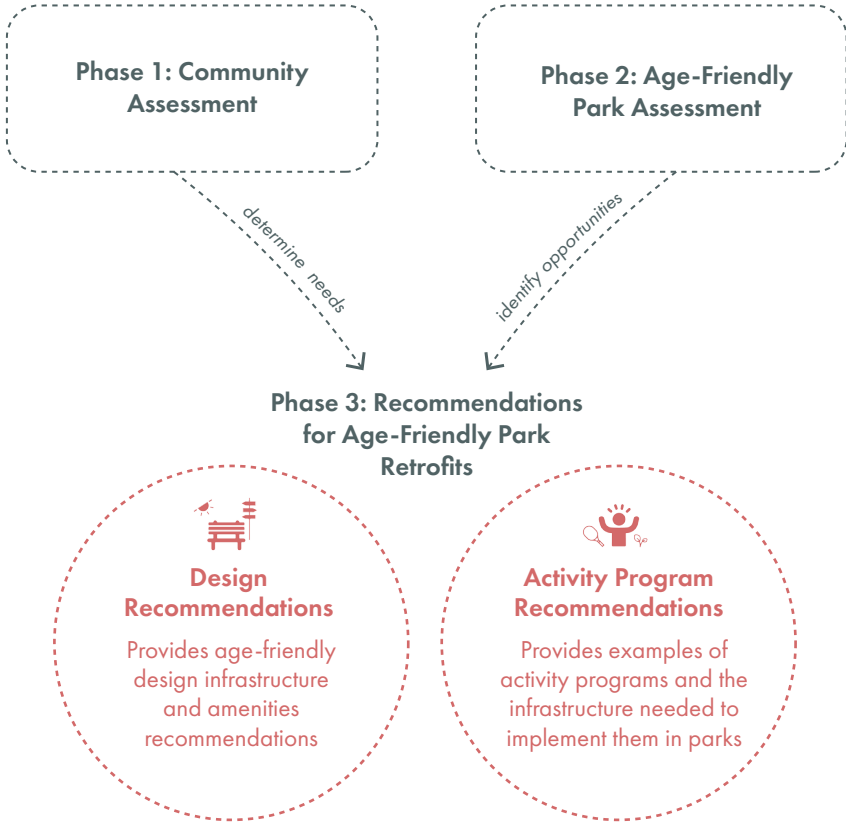


Fig. 5.06. Diagram of the toolkit phases and how they inform Phase 3.



Design Recommendations

Age-Friendly Features and Amenities

This section presents various design recommendations for age-friendly park retrofits. These recommendations are organized by four of the five Principles for Age-Friendly Parks: Accessible, Comfortable, Active, and Social. Each principle contains design categories derived from universal design guidelines and background research on the needs of older park users. The design recommendations are organized as follows:

Accessible

Design Categories:

- Pathways
- Level Changes
- Parking
- Public Transportation
- Connections to the Street
- Wayfinding

Active

Design Categories:

- Trees + Vegetation
- Nature Interactions
- Opportunities for Physical Activity
- Opportunities for Privacy and Relaxation
- Passive Activities

Comfortable

Design Categories:

- Safety
- Protection from the Elements
- Seating
- Site Amenities

Social

Design Categories:

- Variety of Spaces
- Intergenerational Spaces
- Opportunities for Social Interaction
- Opportunities for Passive Socialization

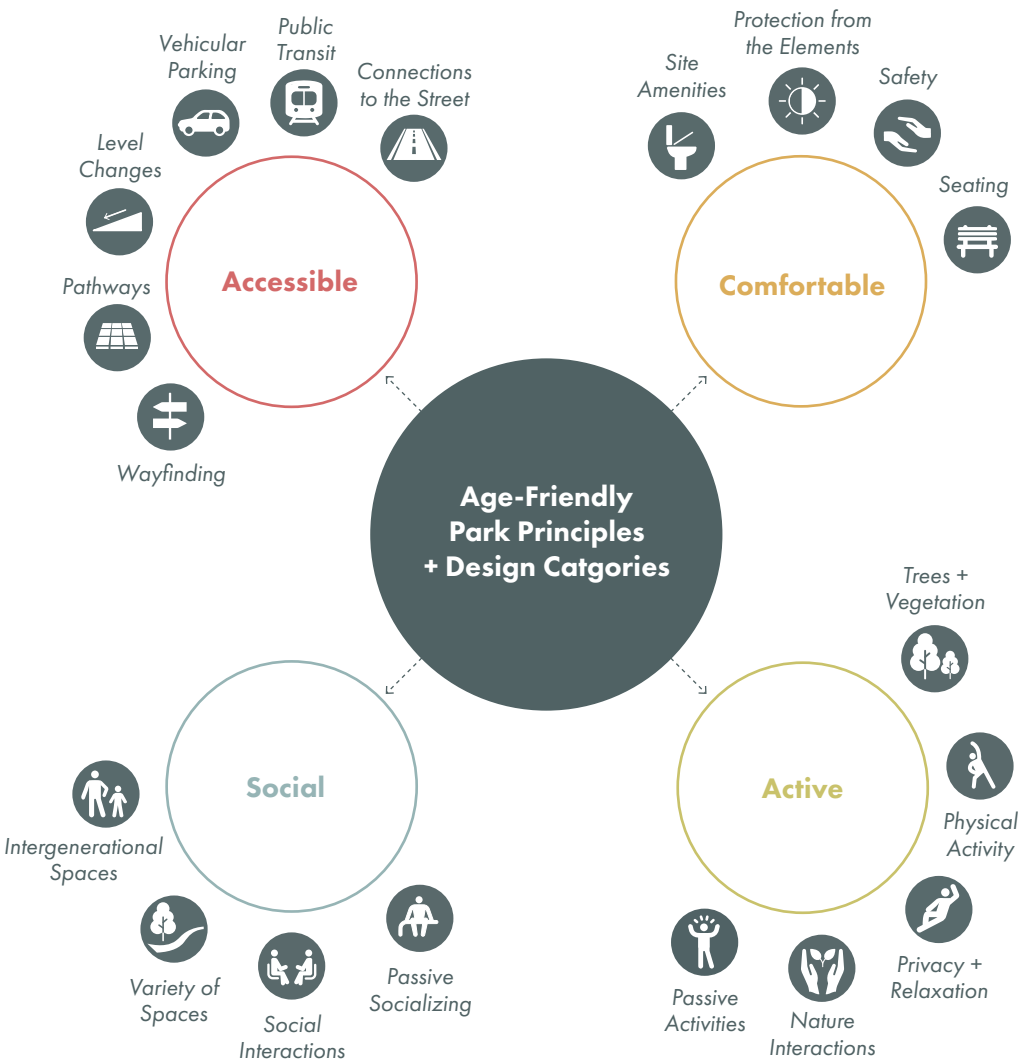


Fig. 5.07. The design categories and Principles for Age-Friendly Parks within the Design Recommendations.

Accessible

Parks should be accessible and usable by all older adults, regardless of ability. Amenities and spaces within parks, as well as the public spaces directly adjacent to parks, should follow universal design guidelines.

Pathways

Walking is one of older adults’ most popular activities in parks (Veitch et al. 2020; Cohen et al. 2016; Besenyi et al. 2013), so it is essential that pathways are accessible and comfortable.

Pedestrian Networks

- Create a continuous pedestrian path network throughout the park (Steinfeld and Maisel 2012).
- Path networks should accommodate multiple types of travel (i.e., walking and biking). Provide separate zones on pathways for walking and biking by using different path materials and/or colors (Dillon and Green n.d.).

Slopes

- Follow ADA and universal design guidelines for accessible path slopes.
- Aim to keep pathway slopes under 4% (National Disability Authority 2017).
- Grade paths and adjacent surfaces to avoid water collecting on pathways (Steinfeld and Maisel 2012).

Path Widths

- Paths should have a minimum clear width of 6.5 feet (National Disability Authority 2017). To accommodate those using ASL, provide a minimum width of 10 feet (Dillon and Green n.d.).
- Provide a minimum vertical clearance of 7.5 feet on paths (National Disability Authority 2017). This will ensure pedestrians don’t hit their heads on trees, signs, or any low-hanging objects.



Fig. 5.08. Avoid visually busy ground patterns.

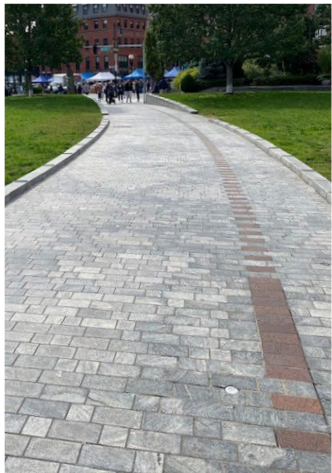


Fig. 5.09. Provide smooth, wide walks for ease of movement.

Surface materials

- Regularly maintain pathways to prevent broken surfaces from becoming tripping hazards (National Disability Authority 2017).
- Use a different type of material and/or color along path edges to protect older adults from straying off walkways (National Disability Authority 2017).
- When selecting path materials, consider older adults’ need for mobility devices, use of strollers, or pavements that reduce strain on joints.

Accessible path surfaces should:

- Have materials and finishes with good grip
- Be firm and stable
- Avoid finishes that will be slippery when wet
- Use materials that won’t produce a glare (very light or shiny materials)
- Not have visually-busy patterns, especially contrasting repeated patterns (National Disability Authority 2017; Dillon and Green n.d.; Steinfeld and Maisel 2012)

Level Changes



Level changes can cause many problems for older adults with mobility issues. Designers should carefully consider the existing topography in parks to minimize the need for stairs and ramps as much as possible. In some retrofit scenarios, ramps and stairs may be the only options to improve usability. In these cases, consider the following:

- When ramps and stairs are necessary, consult universal design standards.
- Clearly indicate ramps and stairs and use tactile paving where there are changes in level (National Disability Authority 2017; Dillon and Green n.d.).

Parking

- Ensure there is vehicular and bike parking at park entrances and near primary activity spaces.
- Consult ADA and universal design standards for parking lot design.
- In some larger parking lots, include priority parking for older adults in addition to the required ADA-accessible spots (Steinfeld and Maisel 2012).
- Ensure the paths between accessible parking and primary activity spaces are accessible by all (National Disability Authority 2017).
- Ensure bikeshare parking areas are protected from the street, are well-lit, and are ADA-accessible.

Public Transportation

- Ensure public transportation stops and the routes from public transportation stops to the park are accessible (Dillon and Green n.d.).
- For public transportation stops that are located within the park or at the park's edges, provide seating, protection from the elements, clear signage, and ensure the stop is well-lit for older adults' safety.

Connections to the Street

Retrofitting street edges ensures older pedestrians can safely access parks by foot. See the resources at the end of this section for the National Recreation and Park Association's "Safe Routes to Parks" guide.

Crossing Areas

- Ensure streets have designated pedestrian crossing areas. Ensure crosswalks are well-marked, place curb cuts in the direction of travel, and use tactile paving (National Disability Authority 2017; Dillon and Green n.d.).
- Include pedestrian signals with longer crossing times at crosswalks to accommodate slower-moving older adults. Ensure these signals are multi-sensory (Steinfeld and Maisel 2012; Dillon and Green n.d.).

Multi-Modal Streets

- For streets within or adjacent to parks, use traffic-calming measures and multi-modal streets. These streets should have separated bike lanes and pedestrian walks that slow traffic and encourage use by older individuals (Steinfeld and Maisel 2012; Dillon and Green n.d.).
- In areas with lowered curbs, use bollards or tactile paving to indicate caution and protect older pedestrians (Steinfeld and Maisel 2012).



Fig. 5.10. Provide separated bike lanes for the safety of older pedestrians (Krueger 2012).



Fig. 5.11. Provide tactile paving along street edges where there are dropped curbs.

Wayfinding

Wayfinding elements are critical to navigating parks and reducing confusion for older adults, especially those experiencing dementia.

Signage

- Directional signage should be used at all park entries and most path intersections to reduce confusion for older adults (Steinfeld and Maisel 2012).
- Provide park information and maps of the park at all entries.
- Park signage should be legible for older adults, including those with low vision or those in wheelchairs (Dillon and Green n.d.). Consider font size, color contrast, and height of signage.

Entries

- Park entries should be easily identifiable and completely accessible. Use landmarks and signage to clearly identify each entry and reduce confusion (Steinfeld and Maisel 2012).
- Provide information about the park's entries online to allow older adults to plan ahead before visiting the park (Steinfeld and Maisel 2012).
- Park entries should ideally be barrier-free to accommodate those with mobility devices or mobility impairments (Dillon and Green n.d.).



Fig. 5.12. Provide frequent informational and directional signage.

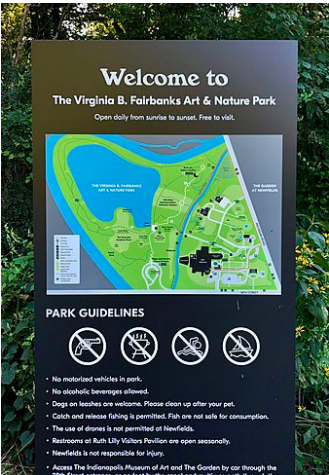


Fig. 5.13. Provide welcome signage with park maps for easy wayfinding (Taylor 2022).

Multi-sensory Wayfinding

On wayfinding elements, utilize the different senses to better suit the needs of older adults and accommodate those with disabilities:

- **Touch:** Use tactile paving in cautionary areas and use different paving materials to indicate different zones of pathways. Include braille on park signage (Dillon and Green n.d.).
- **Sound:** Potentially use auditory buttons on park signage.
- **Sight:** Use graphics to accompany text for better clarity.

Resources

National Recreation and Park Association's "Safe Routes to Parks": <https://www.nrpa.org/our-work/partnerships/initiatives/safe-routes-to-parks/>

Comfortable

Parks should be both physically and psychologically comfortable for older adults. Physical comfort considers older adults’ needs for rest, protection from the elements, and access to amenities like restrooms and drinking fountains. Psychological comfort involves older adults’ perceptions of safety in parks.

Protection from the Elements

- Provide areas for shelter out of the sun and wind.
- Provide resting points along paths with protection from the elements (Steinfeld and Maisel 2012).

Safety

Buffers

- Provide visual buffers to the street with vegetation and consider using sound buffers, like water, for street noise (Dillon and Green n.d.). This can improve safety, reduce pollution, and decrease overstimulating noises.
- Create buffers between streets and pedestrian paths with bollards, tactile paving, or vegetation (National Disability Authority 2017).

Lighting

- Select lighting options that produce little glare, especially along pathways.
- Ensure primary pathways and entry points are well-lit at night. Well-lit areas feel safer and make it easier for older adults with low vision to navigate (Dillon and Green n.d.).

Visibility

- Ensure clear sightlines throughout the park. Routinely maintain the park so overgrown vegetation does not hinder sightlines.
- Ensure visibility at pedestrian crossings and street intersections.

Consider both physical safety features and psychological safety features.



Fig. 5.14. Ensure park lighting does not create a glare on pavement (Татарстана 2015).

Seating

Location

- Provide seating at regular intervals along pathways. For smaller parks, aim to place seating every 50 to 150 feet (National Disability Authority 2017; Dillon and Green n.d.). For larger parks, ensure seating is placed at comfortable distances along major pathways.
- Provide many seating options for older adults. Provide some seating in shade, some in sunny areas, some in private areas, some in visible social areas, and some with nice views (Dillon and Green n.d.).

Arrangement

- Provide seating for a variety of uses. Include semi-circular seating for group activities and those that are hard of hearing. Provide movable seating to accommodate the needs of different groups. Incorporate linear benches or single seats for private seating (Steinfeld and Maisel 2012).

Design

- Seating should ultimately be designed for comfort and accessibility by providing back and arm rests (Dillon and Green n.d.).
- Use powder-coated or wood products rather than shiny materials to account for glare (Dillon and Green n.d.). Use lighter-colored materials to minimize overly-hot seating in the summer.



Fig. 5.15. Select benches with seat backs and arm rests.



Fig. 5.16. Provide frequent places for rest along paths (Pidvalnyi 2022).



Site Amenities

Site amenities are critical park features that enable older adults to spend time in parks. Research has shown that restroom facilities are critical park features for older adults (Perry et al. 2021; Veitch et al. 2020).

Restrooms

- Place restrooms in highly visible and highly used areas of the park, like along pathways or near sports facilities (Dillon and Green n.d.).
- Follow ADA and universal design guidelines to ensure restrooms are usable by all.
- Use wayfinding elements to direct older adults to restrooms. (Dillon and Green n.d.; Steinfeld and Maisel 2012).

Drinking fountains

- Ensure drinking fountains are usable by all.
- Place drinking fountains next to restroom facilities, along major walking routes, or near active recreation facilities.

Design and Placement

- Group similar amenities together for easiest access (i.e., restrooms and drinking fountains) (Steinfeld and Maisel 2012).
- Place site amenities and furnishings in places where they will not be obstacles to the line of travel or sight lines (National Disability Authority 2017).
- Select colors that make site furnishings identifiable from their surroundings (National Disability Authority 2017).



Fig. 5.17. Provide clean and accessible restrooms (Grand Canyon National Park 2012).



Fig. 5.18. Ensure restrooms are identifiable with clear signage (Secretariat 2009).



Fig. 5.19. Provide drinking fountains near restrooms (Eden, Janine, and Jim 2008).

Active

Age-friendly parks should provide a wide variety of activities for older adults, supporting their physical, social, and cognitive health. Park design and activity programming should encourage physical activity, interactions with nature, and private relaxation.



Trees and Vegetation

Trees and vegetation are key aspects of parks that provide many benefits, including shade, reduction in heat island effect, mental restoration, and aesthetics.

Plant Selection

When specifying shrub and tree species, consider the following:

- Specify only non-toxic plants.
- Reduce the use of high-allergen trees.
- To minimize tripping hazards, use trees that produce little tree litter (like acorns and fruits) around pathways and areas with lots of foot traffic.
- Consider the planting palette: for those with low vision, use plants high in color contrast and textures. For relaxation areas, specify plants with muted colors to avoid overstimulating older adults (Dillon and Green n.d.).

Shrub + Perennial Plantings

- Use non-thorny plants around pathways, play areas, or areas that see lots of visitor traffic.
- Maintain shrubs along pathways to avoid tripping hazards and provide clear sightlines to promote feelings of safety.

Placement

- Avoid planting trees too close to pavement, as they will cause the pavement to buckle and cause tripping hazards (Dillon and Green n.d.). Specify trees along pathways that are popular street trees, as they are less likely to buckle pavement.



Fig. 5.20. Use high-contrast plants for those with low vision.



Fig. 5.21. Use muted colors for peaceful environments.



Nature Interactions

Interacting with nature provides many benefits to older adults’ mental and physical health, including reducing anxiety and improving their cognitive abilities (Sia et al. 2020).

Water

- Provide safe ways of interacting with water (Dillon and Green n.d.), whether it be open bodies or more sculptural elements. Water provides an auditory, tactile, and visual way of interacting with nature.

Plants and Gardening

- Incorporate gardening areas for horticultural therapy. Include raised beds for easier access and wheelchair use (Dillon and Green n.d.).
- Incorporate plant identification signage. Include seating near plantings.

Wildlife

- Include wildlife and bird-watching areas.
- Incorporate signage to aid in the identification of various wildlife species such as birds, insects, or small animals.



Fig. 5.22. Provide opportunities to interact with nature (Cruz 2015).

Opportunities for Physical Activity

Walking Loops

- Design walking loops of varying lengths to accommodate different levels of mobility.
- Walking loops should ideally be around 1.0 mile in length to meet the physical activity recommendations for older adults (Gault and Willems 2017).

Fitness Areas

- Create fitness areas for older adults with accessible exercise equipment (Dillon and Green n.d.)
- Design flat, open, and shaded spaces for various recreation classes.

Sports Facilities

- For larger community parks, incorporate sports facilities for activities favored by older adults. These may include pickleball courts, shuffleboard, tennis, golf, or bocce ball.
- Provide comfortable and accessible spectator seating for older adults who choose to watch sporting events in the park. Ensure routes to this seating are accessible.

Play

- Include areas of play for older adults. Create play areas that can be used by both older adults and children to encourage intergenerational interactions (Dillon and Green n.d.).

“We don’t stop playing because we grow old; we grow old because we stop playing.”

- George Bernard Shaw



Fig. 5.23. Older adults in Spain using park fitness stations.

Opportunities for Privacy and Relaxation

Private Gardens

- Restful areas should be designed to reduce sounds, smells, and colors that might cause overstimulation (Dillon and Green n.d.).
- Private gardens should be located away from main pathways or busy street noise (Dillon and Green n.d.; Steinfeld and Maisel 2012).
- To accommodate those with dementia, design circular or figure-eight paths to discourage wandering (Dillon and Green n.d.).

Passive Activities

Activities

- Consider the wide range of activities older adults may want to enjoy in parks (i.e., reading a book, walking a dog, watching a performance, or playing a game). Review the ‘Activity Program Recommendations’ section for activity ideas and suggestions for the design infrastructure needed for them.
- Provide opportunities to engage in board games—such as chess or mahjong—by incorporating board game tables in comfortable, shaded areas.

Sensory Experiences

- **Sound:** Engage older adults’ sense of hearing with features such as water fountains, interactive artwork, or quiet nature areas to listen to wildlife.
- **Smell:** Engage the sense of smell through fragrant plants (Dillon and Green n.d.).
- **Taste:** Consider incorporating food trucks or cafés.

Social

Age-friendly parks should foster social interactions and intergenerational relationships. Parks should provide a variety of activity options to engage as many older adults as possible.



Variety of Spaces

Providing older adults with a variety of engaging activities and opportunities makes them more likely to be actively involved in parks. To accommodate the wide range of activities older adults enjoy in parks, there should be many different types of spaces and options for activities.

- Provide a variety of options for older adults within parks. Incorporate vibrant, social areas as well as quiet, private areas (Dillon and Green n.d.; Steinfeld and Maisel 2012).
- Provide a variety of activities for older adults to engage in. Ensure there are opportunities for physical activity, connecting with nature, socializing, and private reflection. See the Activity Program Recommendations (pg. 120) for activity program ideas.



Fig. 5.24. Equip the park with seating to encourage socialization (Rost 2011).



Intergenerational Spaces

Intergenerational spaces encourage different generations to interact with each other. These spaces can facilitate both formal and informal interactions depending on whether activities are organized or spontaneous.

- Create gathering spaces with activities that appeal to people of all ages (Dillon and Green n.d.).
- Place activities for kids and adults near each other to encourage intergenerational connections. For example, playgrounds and fitness stations adjacent to one another can facilitate intergenerational play.



Fig. 5.25. Engage all generations with play equipment (Kennedy 2008).



Opportunities for Social Interaction

Since many older adults experience social isolation and loneliness (Shankar et al. 2011), spaces for social interaction in parks are incredibly important for their wellbeing.

Seating Areas

To promote social interaction, seating should:

- Have a variety of options.
- Be lightweight and movable to accommodate the needs of different groups.
- Be positioned to allow for eye contact.
- Include circular or semi-circular arrangements for easier discussion (Steinfeld and Maisel 2012).

Active Pathways

- Position areas for social interaction along major pathways and at circulation nodes (Steinfeld and Maisel 2012; Dillon and Green n.d.).
- Program major pathways with seating, board game tables, interesting and/or educational signage, and other interesting activities to encourage meeting others and engaging with them.

Gathering Areas

- Ensure there are flat, shaded areas to host group gatherings. These gatherings could include cultural festivals, concerts, or fitness classes for older adults. See the Activity Program Recommendations on page 120 for more examples of activity programs that could be hosted in gathering areas.
- Provide ample seating within large gathering areas.
- Provide restroom facilities and drinking fountains near gathering spaces.



Opportunities for Passive Socializing

Older adults enjoy using parks to passively socialize with others by watching activities from afar. This type of activity enables older adults to feel included and engaged with their community (Sundevall and Jansson 2020; Veitch et al. 2020; Perry et al. 202).

Observing Others

- Provide opportunities to watch social activities from afar (Steinfeld and Maisel 2012). This gives older adults a sense of inclusion and belonging and allows them to decide whether or not to join in the activities.
- Provide comfortable seating in the shade for observation. See page 109 for design recommendations for comfortable seating.



Fig. 5.26. Provide places for private reflection and to observe park activities (Knight 2015).



Fig. 5.27. A park with a multitude of spaces and activity options (Frodesiak 2012a).



Activity Program Recommendations

Age-Friendly Programs to Activate Parks

The activity programs presented in this section represent some of the most popular park activities for older adults identified in pre-existing research. Activity programs are essential for encouraging older adults to use parks (Cohen et al. 2007), fostering relationships, and encouraging healthy lifestyles (NRPA 2017). The types of activities covered in this section are:

- Walking
- Movement and Fitness
- Swimming
- Sports
- Games
- Meeting Others
- Observation
- Picnicking
- Connecting with Nature



Walking
Walk With Ease
pg. 122



Games
Bocce Ball
pg. 128



Movement and Fitness
Fit and Strong!
pg. 123



Games
Chess
pg. 129



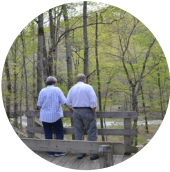
Movement and Fitness
Tai Ji Quan: Moving for Better Balance
pg. 124



Meeting Others
Memory Cafés
pg. 130



Movement and Fitness
SilverSneakers Yoga
pg. 125



Observation
Bird Tales
pg. 131



Swimming
Arthritis Foundation Aquatic Program
pg. 126



Picnicking
Seniors Farmers' Market Nutrition Program
pg. 132



Sports
Pickleball
pg. 127



Connecting with Nature
Seeds for Seniors
pg. 133

Fig. 5.28. These twelve programs provide examples of activity programs for older adults.

Walking

Walk With Ease

Developed by the Arthritis Foundation

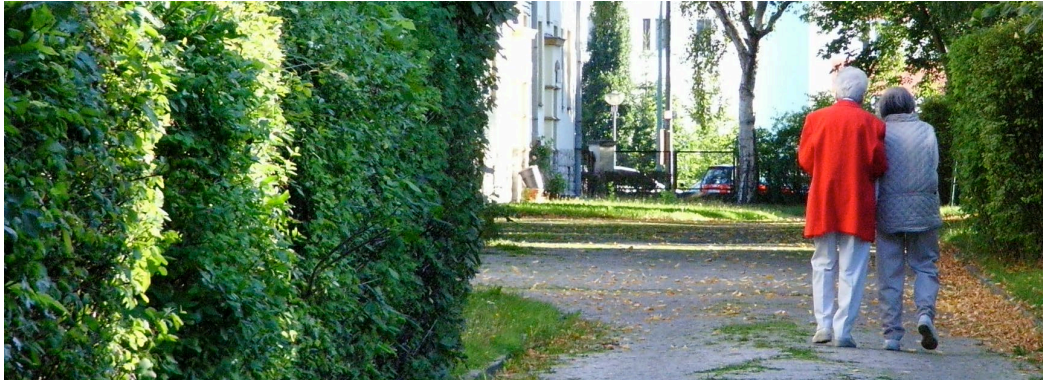


Fig. 5.29. Two individuals going for a walk (Mentorandi 2006).

Overview of Program

- A fitness program that involves walking, strengthening and stretching exercises, and health education

Benefits for Older Adults

- Improves strength, balance, arthritis pain, and overall health
- Builds confidence in being physically active

Setting of Program

- Group or individual, instructor-led group classes

Design Requirements

- Walking loops (pg. 114)
- Vegetative shade
- A flat, hardscape or grassy open space for stretching (pg. 117)

Optional:

- Drinking fountains (pg. 110)

Sources: (The Arthritis Foundation n.d.; National Council on Aging 2020b)

Movement and Fitness

Fit and Strong!

Developed by the Arthritis Foundation



Fig. 5.30. A program combining health education and exercise (Alta Planning + Design 2017).

Overview of Program

- A low-impact exercise program for older adults with osteoarthritis that combines strength training, aerobic walking, flexibility training, and health education

Benefits for Older Adults

- Reduces lower extremity pain and stiffness
- Improves strength, aerobic capacity, mobility, anxiety, and confidence in exercising

Setting of Program

- Group, instructor-led

Design Requirements

- A large, open hardscape area with enough room for participants to comfortably extend both arms; roughly 1,600 square feet
- Moveable armless chairs for exercises

Optional:

- A storage space for equipment
- A shaded area

Sources: (CDC 2019b; UIC Institute for Health Research and Policy n.d.; National Council on Aging 2020a)

Movement and Fitness

Tai Ji Quan: Moving for Better Balance

Developed by the Oregon Research Institute



Fig. 5.31. Older adults performing Tai chi in a park (Hui 2014).

Overview of Program

- A falls prevention program that modifies traditional Tai Ji Quan movements into a movement therapy for older adults

Benefits for Older Adults

- Improves balance, strength, and mobility
- Reduces the risks of falls

Setting of Program

- Group, instructor-led

Design Requirements

- Flat, open space with approximately 500 square feet
- Quiet, reflective space
- Movable armless chairs for exercises

Optional:

- A space surrounded by lots of nature (pg. 112)
- Nearby restrooms (pg. 110)

Sources: (F. Li n.d.)

Movement and Fitness

SilverSneakers Yoga

Developed by SilverSneakers



Fig. 5.32. Older parkgoers doing yoga (RODNAE Productions 2021).

Overview of Program

- A fitness program that encourages physical activity and community participation of older adults through yoga

Benefits for Older Adults

- Improves quality of life and overall health
- Improves strength, flexibility, and breath awareness
- Opportunities for socializing with others

Setting of Program

- Group, instructor-led

Design Requirements

- A flat, hardscape or grassy open space to lay yoga mats

Optional:

- A shaded space surrounded by lots of nature (pg. 112)
- A space with little noise or distractions

Sources: (AgingInPlace 2023; SilverSneakers n.d.)

Swimming

AEA Arthritis Foundation Aquatic Program

Developed by the Arthritis Foundation



Fig. 5.33. A group participating in a swim class (Narodziny 2021).

Overview of Program

- An exercise program for older adults suffering from arthritis that includes water-based activities for all abilities

Benefits for Older Adults

- Improves the joint function, mobility, strength, and quality of life of older adults
- Reduces pain
- Increases opportunities for social interactions

Setting of Program

- Group, instructor-led

Design Requirements

- Swimming pool

Optional:

- Nearby restrooms (pg. 110)

Sources: (CDC 2019a; National Council on Aging 2020c)

Sports

Pickleball

Sponsored by the USA Pickleball Association (USAPA)



Fig. 5.34. An older group plays pickleball (Martin and Martin 2019).

Overview of Program

- One of the fastest growing sports in the U.S. that is easy to learn and fun for all ages and skill levels

Benefits for Older Adults

- Increases opportunities for social interactions
- Allows older adults the opportunity to compete
- Improves strength and cardiovascular health

Setting of Program

- Group or pairs

Design Requirements

- A pickleball court
- Lighting, fencing, and seating on the court

Optional

- Dappled vegetative shade (pg. 112)
- Nearby restrooms and water fountains (pg. 110)
- Spectator seating (pg. 114)

Sources: (USA Pickleball n.d.; U.S. Senior Pickleball n.d.; Buzzelli and Draper 2019)

Games

Bocce Ball

Sponsored by the United States Bocce Federation

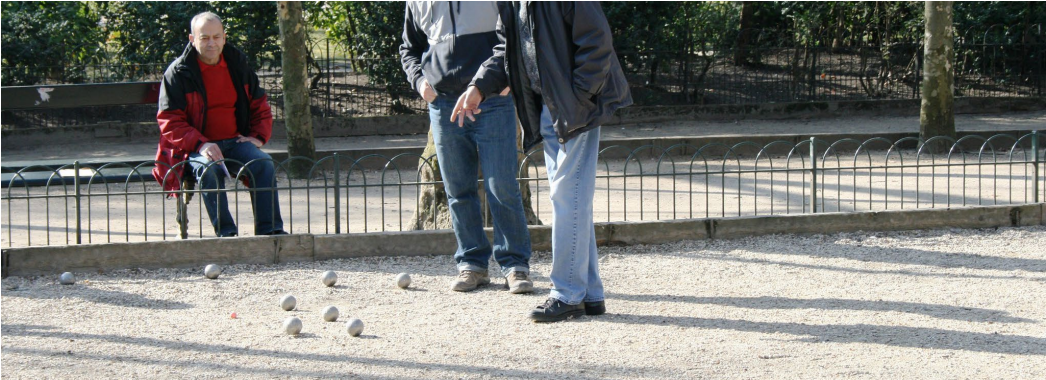


Fig. 5.35. A game of bocce ball being played in the park (BBC World Service 2020).

Overview of Program

- A lawn game for all ages that encourages mild exercise and socializing with others

Benefits for Older Adults

- Encourages social interaction
- Provides opportunities for physical activity

Setting of Program

- Group or pairs

Design Requirements

- Bocce court made of lawn, crushed stone, or artificial material

Optional:

- Lighting (pg. 108)
- Benches around court (pg. 114)
- Located under shade trees

Sources: (United States Bocce Federation n.d.; Bronikowska, Bronikowski, and Schott 2011)

Games

Chess

Sponsored by the United States Chess Federation



Fig. 5.36. An older parkgoer deliberates his next chess move (spDuchamp 2005).

Overview of Program

- A widely known and played board game that encourages problem solving and friendly competition for all ages

Benefits for Older Adults

- Provides opportunities for friendly competition
- Provides cognitive benefits
- Increases opportunities for social interaction

Setting of Program

- Pairs

Design Requirements

- Chess tables and chairs (pg. 115)

Optional:

- Located under shade trees
- Nearby restrooms (pg. 110)

Sources: (U.S. Chess Federation n.d.; Lillo-Crespo et al. 2019)

Meeting Others

Memory Cafés

Developed by Bère Miesen

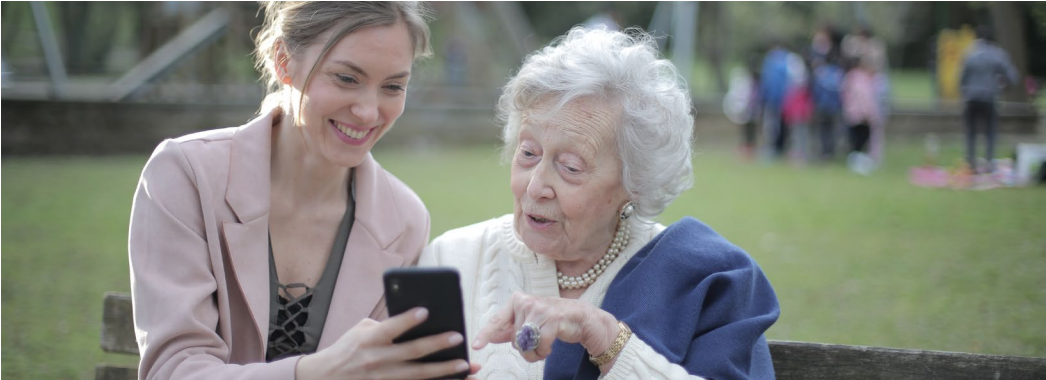


Fig. 5.37. An older adult and caregiver chatting in the park (Piacquadio 2019).

Overview of Program

- A program that enables those with dementia and their caregivers to meet other individuals experiencing memory loss, fostering social connections and building support networks

Benefits for Older Adults

- Provides support, awareness, and education to older adults and their caregivers
- Provides a sense of belonging
- Enables participants to connect with others going through similar experiences

Setting of Program

- Group, optional group facilitators

Design Requirements

- Seating for both one-on-one conversation and group interactions (pg. 117)
- Quiet place for conversation (pg. 117)

Optional:

- Nearby parking and/or public transit (pg. 104)
- Nearby Restrooms (pg. 110)

Sources: (Alzheimer’s Speaks n.d.; Massachusetts Association of Councils on Aging 2016)

Observation

Bird Tales

Developed by Randy Griffin and the National Audubon Society



Fig. 5.38. An older couple bird watches in a park (Virginia State Parks 2015).

Overview of Program

- A therapeutic program that uses bird watching and interactions with nature to improve the quality of life of those living with dementia

Benefits for Older Adults

- Improves mood
- Encourages meaningful interactions with caregivers and others
- Provides opportunities for interaction with nature

Setting of Program

- Group, individual, instructor-led group classes

Design Requirements

- Plant species and natural habitats that attract birds
- Shaded seating for observation (pg. 118)

Optional:

- Nearby restrooms (pg. 110)
- Informational signage about bird and plant species (pg. 106)

Sources: (aperry 2013; Griffin 2013)

Picnicking

Seniors Farmers’ Market Nutrition Program

Developed by the USDA



Fig. 5.39. An individual shopping at the farmers’ market (Sund 2016).

Overview of Program

- A nutrition program for older adults that provides them access to fresh foods at local farmers’ markets

Benefits for Older Adults

- Increases access to nutritional foods for low-income older adults
- Increases opportunities to engage with others

Setting of Program

- Individual, community setting

Design Requirements

- Flat, open area
- Parking for food trucks
- Picnic tables or moveable tables and chairs (pg. 109, 117)

Optional:

- Covered pavilion

Sources: (National Council on Aging 2022b; USDA n.d.)

Connecting with Nature

Seeds for Seniors

Developed by A.G. Rhodes



Fig. 5.40. A group of individuals gardening (Fairfax County 2012).

Overview of Program

- A horticultural therapy program that uses gardening to improve motor skills and mental health

Benefits for Older Adults

- Encourages physical activity
- Improves psychological well-being due to frequent interactions with nature
- Reduces stress and provides restorative benefits
- Provides opportunities for social interactions

Setting of Program

- Group and individual, instructor-led

Design Requirements

- Raised gardening beds of varying heights (pg. 113)
- Fragrant and edible plants

Optional:

- Spaces for meditation (pg. 115)
- Greenhouses

Sources: (A.G. Rhodes n.d.; T. Scott, Masser, and Pachana 2020)

Additional Activity Programs

More Ideas to Activate Parks

The following are additional activity programs around the world tailored towards older adults. They are intended to serve as ideas for age-friendly park activation.

Cycling Without Age

An intergenerational cycling program that offers bike rides to older adults with limited mobility.

Outdoor Afro

An outdoor recreation network that connects people of color with nature through biking, hiking, kayaking, gardening, and other recreational activities.

The Arts, Health and Seniors Project

A three-year initiative in Vancouver that provided art programs to marginalized older adults.



Fig. 5.41. Cycling Without Age in Copenhagen, Denmark (Cycling Without Age 2015).

Additional Age- Friendly Resources

Supplementary Materials for Age-Friendly Parks

“Creating Community Gardens for People of All Ages” by AARP

A thorough guidebook that includes the benefits of building community gardens for older adults and provides design recommendations for gardens.

“AARP Walk Audit Tool Kit” by AARP

A toolkit explaining how to complete a walking audit along sidewalks and street crossings to determine the walkability of a neighborhood.

“Safe Routes to Parks: Improving Access to Parks through Walkability” by NRPA

A report that highlights the components of safe routes to parks and the primary barriers to accessible park routes.

“Financing Health and Wellness Programs: A Toolkit for Park and Recreation Professionals” by NRPA

A toolkit outlining ways to fund health and wellness programs for older adults.

“Where We Live: Communities for All Ages” by AARP

A report highlighting examples of age-friendly initiatives in every state.

“Physical Activity Guidelines for Americans” by the U.S. Department of Health and Human Services

A report outlining the physical activity recommendations for each age range.

FitLot

An organization that aids communities in the implementation of outdoor fitness parks.

USA Pickleball

More pickleball court design recommendations.

06

Projective Design

Age-friendly design solutions for Franklin Park.

Introduction

This chapter presents the application of the Parks for Aging in Place Toolkit to Franklin Park in Boston, MA. The purpose of providing age-friendly design recommendations for Franklin Park is to show how the Parks for Aging in Place Toolkit can be applied to existing parks and provide inspiration for age-friendly modifications.

Franklin Park is a historic 527-acre park designed by renowned landscape architect Frederick Law Olmsted (The Cultural Landscape Foundation n.d.). Through its 138-year lifespan, the park has undergone many changes and periods of under-investment. Due to a lack of funding and maintenance, many areas of the park have fallen into disrepair (E. Carr 2022). Overgrown vegetation, dilapidated walkways, and poor visibility are likely to deter some older adults from using the park. The park also lacks of critical amenities like lighting, seating, and restrooms—amenities critical to park use by older adults (Perry et al. 2021).

Although there are many usability issues, the park provides many benefits to the surrounding communities. As the largest park in Boston, it serves as essential green space for many Bostonians. Its heavily vegetated terrain provides much-needed access to nature and helps reduce flooding and the urban heat island effect for nearby residents. The park also provides public health infrastructure to many Bostonians, as the park's features can help improve mental health and encourage physical activity (Boston Parks & Recreation Department 2022).

The park's size also enables it to have a wide variety of amenities and activity programs suitable for all ages. Currently, the park includes tennis courts, a golf course, baseball and softball fields, playgrounds, and more. It also has a peaceful pond, wooded trails, and picnic areas. Although these programs serve many of the younger park users, the park currently lacks design and programming features to support the specific needs of older Bostonians. Thus, utilizing the Parks for Aging in Place Toolkit and applying it to Franklin Park helped to develop design solutions to make the park more inclusive of older adults and engage them in this beloved park.



(Top left) Fig. 6.01. Circuit Loop path along Scarboro Pond.



(Top right) Fig. 6.02. The Bear Dens in the Playstead.
(Bottom right) Fig. 6.03. View of the William J. Devine Golf Course from Schoolmaster Hill.



Franklin Park Action Plan

Boston Parks & Recreation Department

In 2018, the city of Boston approved \$28 million to fund improvements to Franklin Park. A portion of this funding went towards the creation of an action plan that would serve as a visionary framework for the park’s future. Released in December 2022, the Franklin Park Action Plan was developed by a core design team including Reed Hilderbrand, Agency Landscape + Planning, and MASS Design Group. This team conducted thorough site analysis and community engagement workshops to understand the site opportunities and needs of the surrounding community. The document provides recommendations for the restoration of historic structures, improved park circulation, ecological restoration, the creation of ‘magnet’ destinations within the park, and improved overall uniformity of the park (Boston Parks & Recreation Department 2022).

The projective design utilized findings from the Franklin Park Action Plan, because a full on-site analysis and community engagement was beyond the scope of the projective design aspect of this project. Thus, the Action Plan’s analysis is used to supplement this project’s community assessment. The design recommendations in this projective design were developed from findings of context and demographic analyses, park assessments, and the identification of project goals. Some of the age-friendly design solutions in this project overlap with the Action Plan’s goals that seek to make the park more accessible and inclusive. This means that there are some similar ideas proposed in this project’s projective design as are in the Action Plan.



(Top) Fig. 6.04. Park subareas studied in this project.

(Bottom) Fig. 6.05. Park subareas not included in the analysis of this project.

Subareas of Franklin Park

Areas Included in Analysis

Five key areas of the park were included in the analysis of the projective design. These areas—Scarboro Pond + Peabody Circle, Ellicottdale, the Wilderness, Circuit Drive + Circuit Loop, and the Playstead—vary in the amenities they offer and the types of uses they provide.

Scarboro Pond + Peabody Circle

Scarboro Pond provides a peaceful space within the park to observe nature while Peabody Circle serves as the main vehicular entry. This subarea also includes the American Legion Playground, which includes board game tables and play and exercise equipment.

Ellicottdale

Ellicottdale includes some active recreation spaces, including tennis courts and a baseball field, as well as a picnicking area. It is located directly adjacent to the Shattuck Hospital.

The Wilderness

The Wilderness is the hilly and lushly-wooded area of Franklin Park. Although mostly inaccessible per ADA standards, nature trails enable parkgoers to engage with the plants and wildlife within this area.

Circuit Drive + Circuit Loop

Circuit Drive is the main vehicular thoroughfare through the park. Circuit Loop is the eastern section of Circuit Drive that has become completely pedestrianized.

The Playstead

The Playstead features most of the active recreation found within Franklin Park. Tennis courts, basketball courts, baseball fields, soccer fields, playgrounds, and a sports stadium are found within this subarea. The Long Crouch Woods and the Bear Dens ruins—formally a Franklin Park Zoo exhibit—are also within the northeastern corner of the Playstead.

Areas Not Included in Analysis

There are four areas that were not included in this analysis: the William J. Devine Golf Course, the Franklin Park Zoo, Shattuck Hospital, and the park maintenance area.

Introduction

The projective design of Franklin Park follows the order of the Parks for Aging in Place Toolkit, thus Phase 1: Community Assessment was completed first. This section presents the results of context and demographic analyses of Franklin Park and its surrounding areas. It is important to note that the data selected to be studied and the findings of these analyses are not comprehensive; due to the project’s limitations, only certain analyses that were most applicable to this study site were conducted. Individuals using the Parks for Aging in Place Toolkit should conduct analyses most applicable to their existing park.

Phase 1: Community Assessment

Context Analysis

A context analysis of Franklin Park was completed to identify and understand nearby transportation, amenities, and future plans and goals for the city’s parks. The following contexts were studied for this existing park:

- Nearby green spaces
- Nearby community amenities that serve older adults
- Public transportation routes and stops
- City-wide comprehensive plans that could affect the development of age-friendly park design solutions (see page 42 in Chapter 2: Background)
- Neighborhoods adjacent to the park

Studying nearby green spaces helped to identify which other parks older adults have available to them and whether they have amenities and activity programs that would attract older adults. Nearby community amenities were identified to understand what programs nearby senior centers offer as well as the other current amenities intended to serve older adults’ needs. It was critical to identify the nearby public transportation routes to determine how some older adults may access the park and where they are most likely to enter the park. Studying the existing city-wide comprehensive plans in Boston helped understand the city’s goals and visions for its public spaces and how the city might support an age-friendly park retrofit. Finally, studying the adjacent neighborhoods to Franklin Park promoted an understanding of the characteristics of nearby communities and the individuals who live within them.

Phase 1: Community Assessment

Demographic Analysis

To understand potential park users and the older adults living near the park, a demographic analysis was conducted. As part of the demographic analysis, the following data of surrounding census blocks was studied:

- **Age:** The percentage of older adults living near the park.
- **Disability:** The percentage of those aged 75+ who identify as having a disability.
- **Race:** The number of individuals who identify as White alone, Black or African American alone, American Indian and Alaska Native alone, Asian alone, and Native Hawaiian and Other Pacific Islander alone.
- **Ethnicity:** The total number of Hispanic or Latino people living near the park.
- **Housing:** The percentage of renter-occupied housing units near the park.
- **Poverty Levels:** The percentage of those aged 65+ living below the poverty line.

Analyzing each of these sets of data provided a greater understanding of the people who live around Franklin Park and enabled a greater awareness of the community characteristics to take into account when proposing design recommendations.

Phase 1: Community Assessment

Needs Assessment

To gain an understanding of the needs of the community surrounding Franklin Park, a needs assessment was conducted. Since conducting community engagement workshops with older Franklin Park users was outside of this project’s scope, the Franklin Park Action Plan document was referenced to understand the needs of Franklin Park users. The Action Plan team conducted thorough community engagement efforts with surrounding neighbors and community groups and gained invaluable data on the community’s connections to the park and priorities for improvements. Unfortunately, the community survey data presented in the Franklin Park Action Plan is aggregated, so the responses specifically from those aged 65+ were unable to be determined.

Context Analysis

Nearby Green Spaces

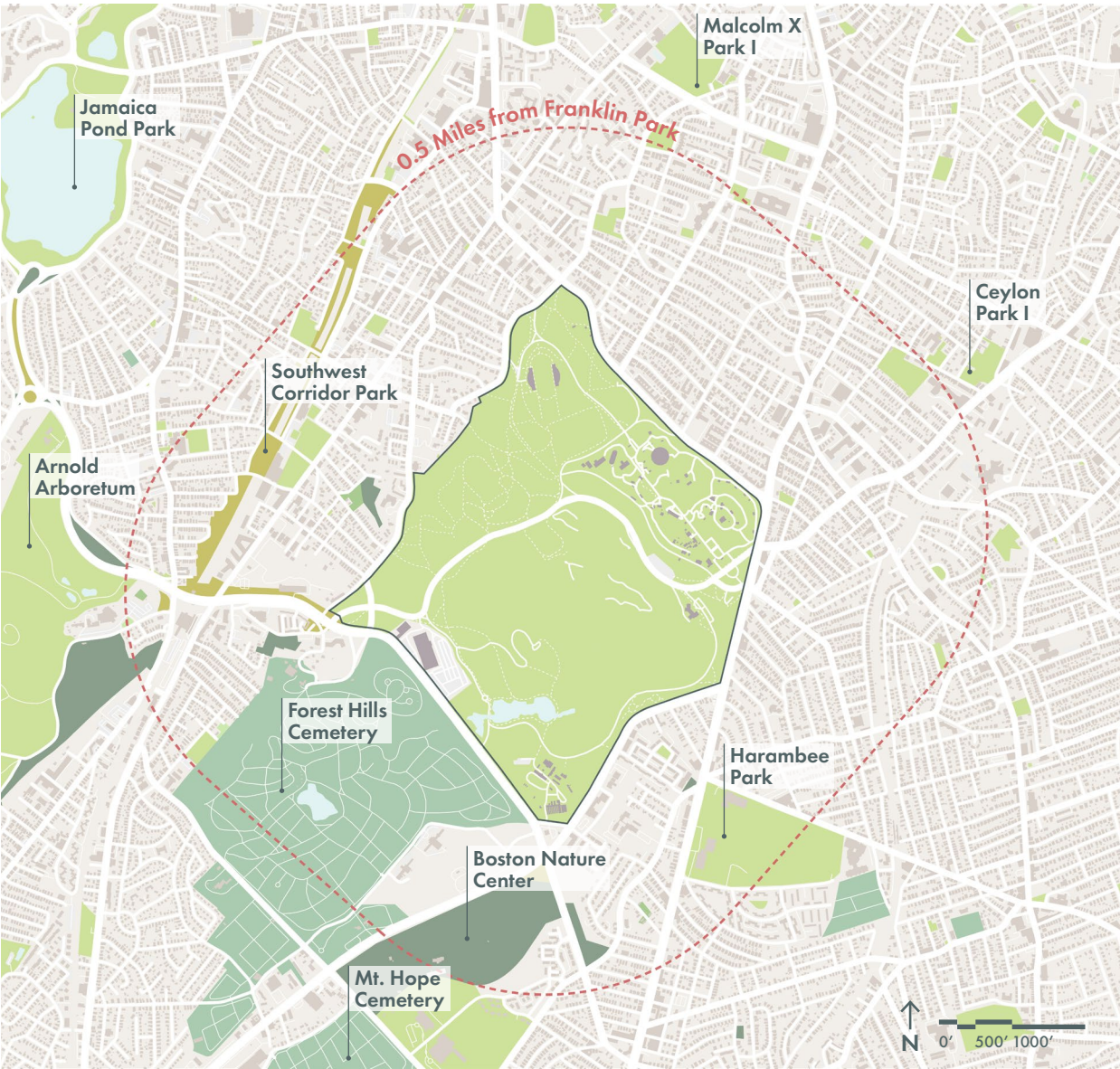


Fig. 6.06. Green spaces near Franklin Park (Adapted from City of Boston Open Space Map 2017).

Parks and Green Space

There are many parks, playgrounds, and athletic fields within walking distance of Franklin Park. The largest parks nearby are the Arnold Arboretum, Harambee Park, the English High School athletic fields, Clayton Park, and Malcolm X Park. Arnold Arboretum offers the opportunity to engage with a variety of flora and fauna. Operated by Harvard University, the 281-acre park provides programs and educational opportunities for people of all ages (The President and Fellows of Harvard College 2023). Harambee Park serves those living in the Dorchester neighborhood. It includes 45 acres of active recreation fields and a large playground (City of Boston 2023a), but offers few amenities for older adults.

Most of the smaller parks around Franklin Park are playgrounds, community gardens, or athletic fields. The playgrounds and athletic fields offer few options for older adults; they mostly provide seating and areas for observing others. In contrast, the gardens provide comfortable seating, peaceful environments, and opportunities for older adults to connect with nature.

- ◀ Key
- Parks, playgrounds, + athletic fields
 - Urban wilds + natural areas
 - Cemeteries
 - Parkways + reservations
 - Community gardens



Fig. 6.07. Harambee Park (Lyons 2018).

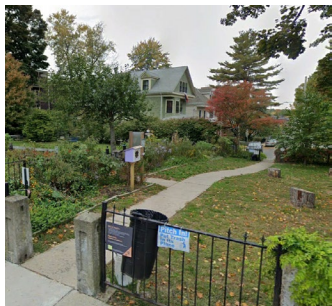


Fig. 6.08. Granada Park Garden (Google Earth 2023).

Context Analysis

Nearby Community Amenities

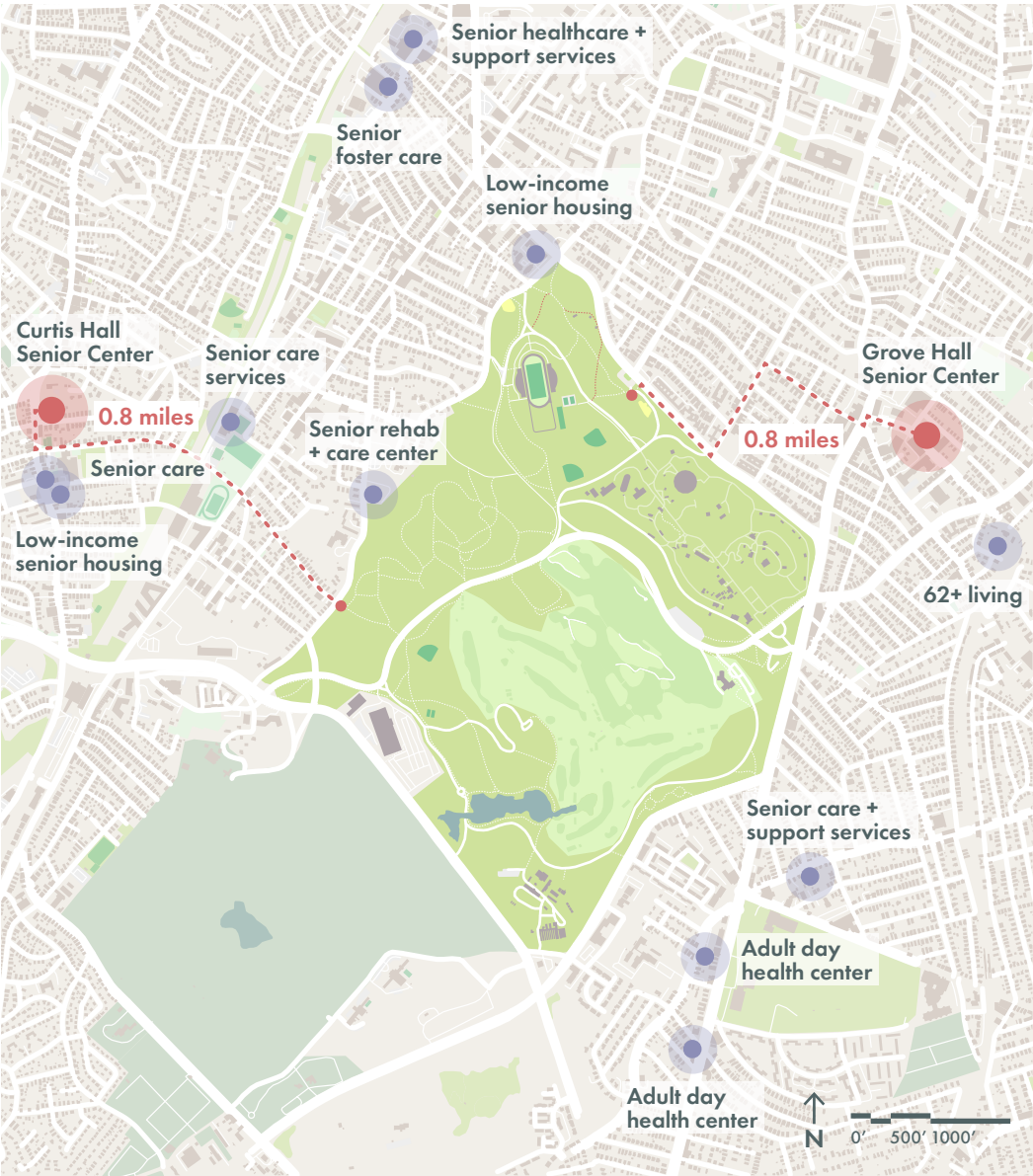


Fig. 6.09. Nearby community amenities that support local older adults (Informed by Google Maps 2023).



Senior Centers

There are two designated senior centers within a walking distance of Franklin Park. These centers are both Boston Centers for Youth & Families (BCYF) facilities. The goal of BCYF is to provide Boston residents with affordable programs that help enhance their quality of life. For older adults, this means providing engaging programs and activities, such as educational sessions about social media or fun instructor-led fitness classes (City of Boston n.d.).

BCYF Grove Hall

The Grove Hall Senior Center is located less than a 15-minute walk from Franklin Park. The center offers many activity programs for older adults, such as arts and crafts; technology cafes; games such as Pokeno, bingo, and Domino; and fun fitness classes such as chair yoga and line dancing (City of Boston 2023d).

BCYF Curtis Hall

Curtis Hall is located in the Jamaica Plain neighborhood and is a 20-minute walk to the park. This BCYF center features a gym, pool, computer lab, and community room in addition to its senior center (City of Boston 2023b).



Senior Living and Care Facilities

There are quite a few senior living and care facilities within a mile of Franklin Park. These facilities range from low-income housing for older adults, adult day health centers, and healthcare and support services for older adults.

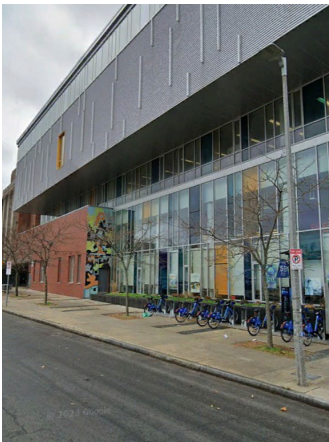


Fig. 6.10. Grove Hall Community Center (Google Earth 2023).



Fig. 6.11. Curtis Hall Community Center (Google Earth 2023).

Context Analysis

Public Transportation



Fig. 6.12. Primary bus routes and transit routes near Franklin Park (Informed by Google Maps 2023).

B MBTA Bus

The City of Boston offers buses, rapid transit, commuter rail, and a harbor ferry as part of its public transit system. Older adults in Boston are eligible for a reduced-fare public transit card (Massachusetts Bay Transportation Authority 2023).

There are several main bus routes that run adjacent to Franklin Park. These routes are located along Blue Hill Avenue, Morton Street, and Seaver Street. Currently, there is one bus route that runs through the park on Circuit Drive, with stops in the center of the park and at Peabody Circle.

Bus stops along Franklin Park’s Perimeter: 25

Bus stops within Franklin Park: 7

T MBTA Rapid Transit

The nearest rapid transit line to the park is the Orange Line. There is also a commuter rail line to the east of the park. All of the rapid transit lines near the park are deemed ADA-accessible (Massachusetts Bay Transportation Authority 2023).

Subway stops within 1.0 mile of Franklin Park: 4

- ◀ Key
- T** Rapid transit stops
 - B** MBTA bus stops within Franklin Park or along its perimeter



Fig. 6.13. Bus stop conditions at Peabody Circle.



Fig. 6.14. Orange line rapid transit (Yu 2008).

Context Analysis

Adjacent Neighborhoods

Roxbury

Favorite Park Areas to Visit: White Stadium, Tiffany Moore Tot Lot, the Zoo, Circuit Loop, Shattuck picnic grounds (Boston Parks & Recreation Department 2022)

Roxbury is a thriving, primarily black community just north of Franklin Park. This neighborhood has a great arts and music community, and people from Roxbury take pride in being from there. Nubian Square is known as the hub of the neighborhood and features hotels, retail, and restaurants, and is considered the center of Black culture in the city. Malcolm X Park is one of the more well-known parks in the neighborhood. Unfortunately, the neighborhood has undergone much disinvestment and crime and faces ongoing fears of gentrification (Johnson 2020).

Dorchester

Favorite Park Areas to Visit: White Stadium, Tiffany Moore Tot Lot, the Zoo, Circuit Loop, American Legion Playground, Shattuck picnic grounds (Boston Parks & Recreation Department 2022)

Dorchester, the largest neighborhood in Boston, is an extremely diverse and engaged community. Its residents are primarily African American, Vietnamese, Irish, and Polish (BU Today Staff 2018). The different areas of Dorchester are very tight-knit and people know their neighbors well. This neighborhood has faced many struggles, though, including historic redlining and gun violence, especially in the areas close to Franklin Park (Johnson 2019).

Mattapan

Favorite Park Areas to Visit: White Stadium, the Zoo, Circuit Loop, American Legion Playground, Shattuck picnic grounds, golf course (Boston Parks & Recreation Department 2022)

Mattapan is a richly diverse community and is home to large Caribbean, African, and Haitian communities. Mattapan Square is at the center of the community and contains mostly commercial businesses (Johnson 2018). Mattapan is home to the Boston Nature Center, an urban sanctuary filled with native wildlife (“About Boston Nature Center” n.d.), and the Fowler Clark Epstein Farm, a historic homestead now transformed into an urban farm for the community (Sutherland 2019).

Jamaica Plain

Favorite Park Areas to Visit: the Zoo, Circuit Loop, 99 steps, the Wilderness, the Overlook (Boston Parks & Recreation Department 2022)

Jamaica Plain is a very popular and up-and-coming area of Boston. It is also considered a very diverse area, though its residents are primarily White. A lot of young families and young professionals live in this area, and there are many things to do. The Arnold Arboretum, Jamaica Pond, and Olmsted Park are all great parks found within this neighborhood (Bilis 2019).



Fig. 6.15. The neighborhoods adjacent to Franklin Park (Adapted from BostonMaps 2020).

Demographic Analysis

Age

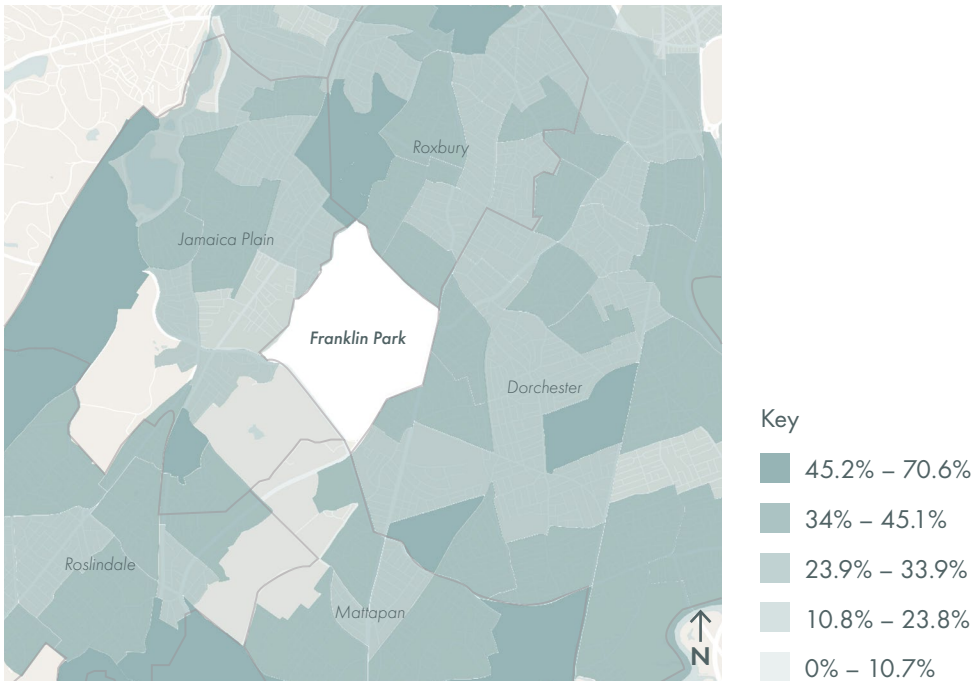


Fig. 6.16. Percent of households with one or more people aged 60+ (Adapted from U.S. Census Bureau 2020b).

Adults 60+

According to the Age-Friendly Boston Action Plan, Boston’s 60+ population is continuing to grow, with its older population expected to grow from 14% in 2010 to 19% in 2030 (City of Boston 2017). In addition, Boston’s older population is increasingly diverse, with over half of Bostonians aged 60+ being persons of color (Mutchler et al. 2020). In the census tracts directly adjacent to the northern areas of Franklin Park, over 34% of households have at least one person aged 60+ years or older (U.S. Census Bureau 2020d).

Demographic Analysis

Disability

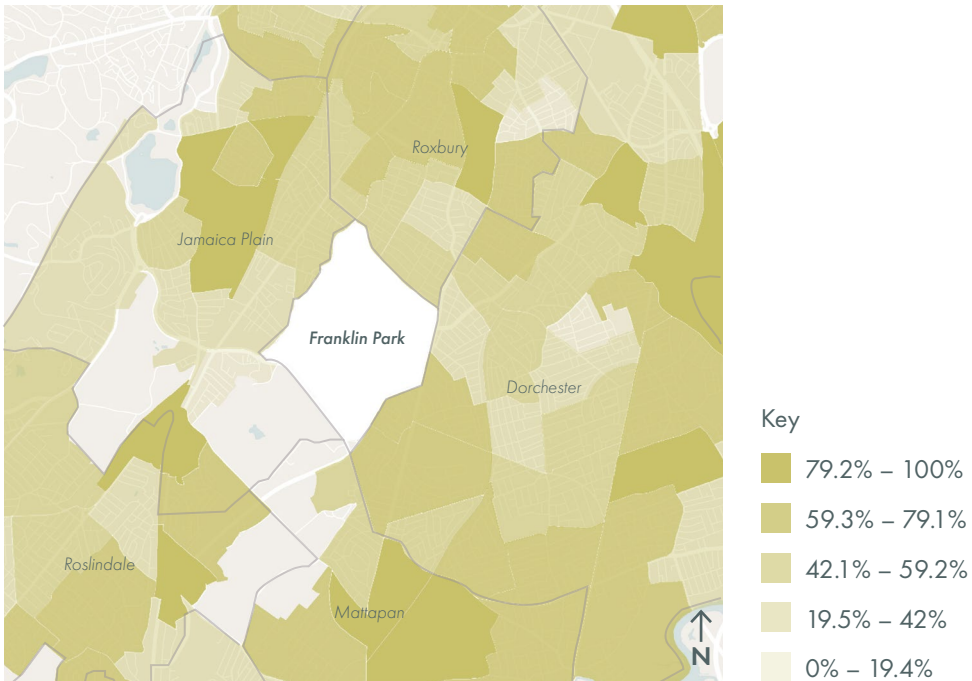


Fig. 6.17. Percent of those aged 75+ with a disability (Adapted from U.S. Census Bureau 2020d).

Older Adults and Disability

Per the Age-Friendly Boston Action Plan released in 2017, 40% of Boston’s older adults have at least one form of disability (City of Boston 2017). The Dorchester tracts directly adjacent to the park have a high percentage of those aged 65 to 74 living with a disability (U.S. Census Bureau 2020h), while areas of both Mattapan and Dorchester have high percents of people aged 75+ with a disability (U.S. Census Bureau 2020i).

Demographic Analysis

Race + Ethnicity

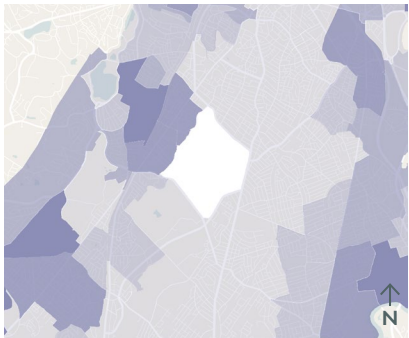


Fig. 6.18. Total Hispanic or Latino people living near the park (Adapted from U.S. Census Bureau 2020a).

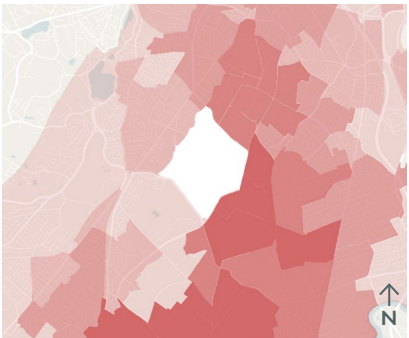
Ethnicity

The areas to the north and east of the park have higher concentrations of Hispanic or Latino people living there than other areas adjacent to the park (U.S. Census Bureau 2020b). There are multiple census tracts adjacent to the Playstead that have over a 25% rate of limited English-speaking households. Many of these households with limited English proficiency speak Spanish in the home (U.S. Census Bureau 2020g).

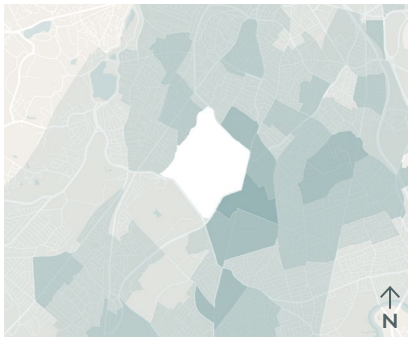
Fig. 6.19. Number of people of each race living near the park (Adapted from U.S. Census Bureau 2020e).



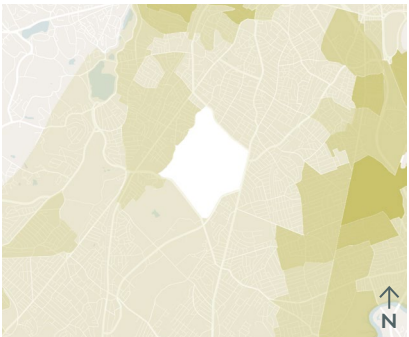
White alone



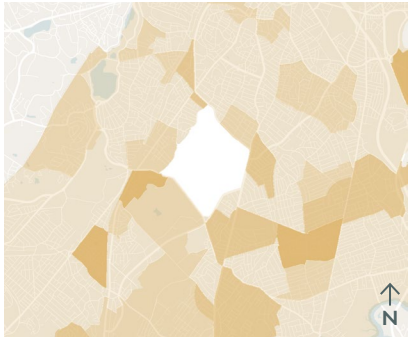
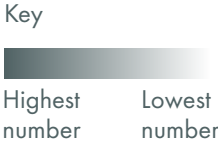
Black or African American alone



American Indian + Alaska Native alone



Asian alone



Native Hawaiian + Other Pacific Islander alone

Race

There is a very stark racial divide on either side of Franklin Park. To the west, in the Jamaica Plain neighborhood, residents are primarily White. To the east, residents in the Dorchester, Roxbury, and Mattapan neighborhoods are primarily Black or African American. According to the Franklin Park Action Plan, 72% of the residents around the park are persons of color (Boston Parks & Recreation Department 2022).

Housing



Fig. 6.20. Percent of renter-occupied housing units (Adapted from U.S. Census Bureau 2020f).

Renters and 65+ Living Alone

There are many renter-occupied units in the areas directly east and west of Franklin Park (U.S. Census Bureau 2020j). In the same areas, there is also a higher percentage of adults aged 65+ living alone than in other tracts around the park (U.S. Census Bureau 2020c).

The Age-Friendly Boston Action Plan has made it apparent that many older Bostonians have a desire to age in place, meaning adaptations to public spaces will be necessary to accommodate these individuals (City of Boston 2017).

Income

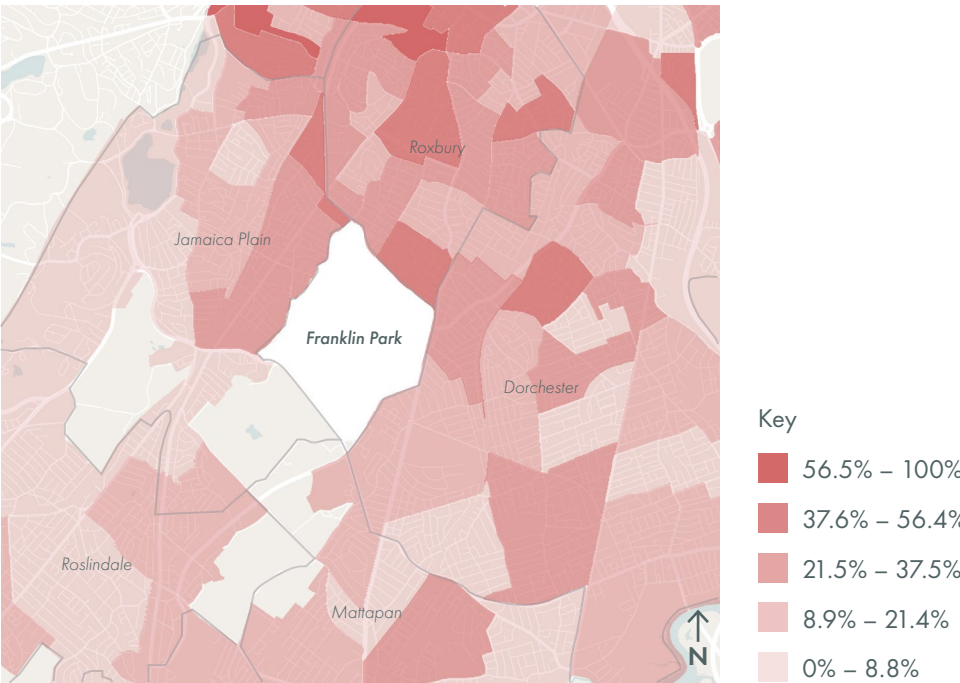


Fig. 6.21. Percent of those aged 65+ that are below the poverty level (Adapted from U.S. Census Bureau 2020c).

Poverty Levels of 65+

The Roxbury, Dorchester, and Mattapan neighborhoods have high percentages of the general population living below the poverty level. Jamaica Plain, a predominantly White community, has a much lower rate of poverty (U.S. Census Bureau 2020e). Of the poverty rates of those aged 65+, the Roxbury neighborhood seems to have higher rates than the other neighborhoods adjacent to Franklin Park (U.S. Census Bureau 2020f).

Needs Assessment

User Groups

Results from public engagement workshops and a community survey from the Franklin Park Action Plan (Boston Parks & Recreation Department 2022) were used to understand the needs of the communities surrounding Franklin Park. It is important to note that the results from the engagement survey and the workshops are responses from all ages, not just older adults. Although data from specifically the 65+ age group would have been most beneficial for this research, understanding the needs and wants of the general community is still beneficial.

The Franklin Park Action Plan team surveyed Franklin Park users on their demographics and the neighborhoods they live in. Of the survey respondents, 53% were African American or Black and 33% were White. 19% of the survey respondents were between the ages of 60 and 79 years old. Most of the respondents were also residents of the neighborhoods directly adjacent to the park.

Park Access

Many survey respondents appreciate the proximity of the park to their homes, and 35% of people who live near the park said they visit it at least weekly. Most survey respondents enter the park from the east at the Blue Hill Avenue entry (Boston Parks & Recreation Department 2022). As for how parkgoers typically access the park, most survey respondents said they arrived by car or foot (City of Boston 2020). It is necessary then to study the pedestrian and vehicular entries to ensure they are accessible to all park users, as well as ensure the wayfinding makes the entries clear and visible.



75% of people said they access the park by car



43% of people said they access the park by walking or running



Restrooms were the top amenity that would encourage more people to use the park

Needs Assessment

Park Uses and Amenities

According to the Franklin Park Action Plan, the most popular activity in Franklin Park is exercising. People also said they highly enjoy attending special events, spending time with loved ones, and enjoying nature in the park (Boston Parks & Recreation Department 2022). Survey respondents said they appreciate the nature and wildlife within the park as well as the park’s proximity to their homes (City of Boston 2020).

The types of features and amenities Franklin Park users enjoyed or wanted to see more of were also documented. Survey respondents identified the lack of restrooms in the park as being a major issue and a significant factor in their park visitation. They also stated they would be more likely to visit the park if it had more activities like picnicking, organized events, and classes. Franklin Park users also mentioned they believe greater safety features like lighting, increased park ranger presence, and greater security features would improve the park (City of Boston 2020).

Overall, the Franklin Park community wanted to see more activity options, more necessary amenities like restrooms, and better maintenance and safety. Ultimately, the biggest takeaway from these community engagement efforts was that Franklin Park users desire the park to be a space that is inclusive to people of all cultures, ages, and backgrounds (City of Boston 2020; Boston Parks & Recreation Department 2022).

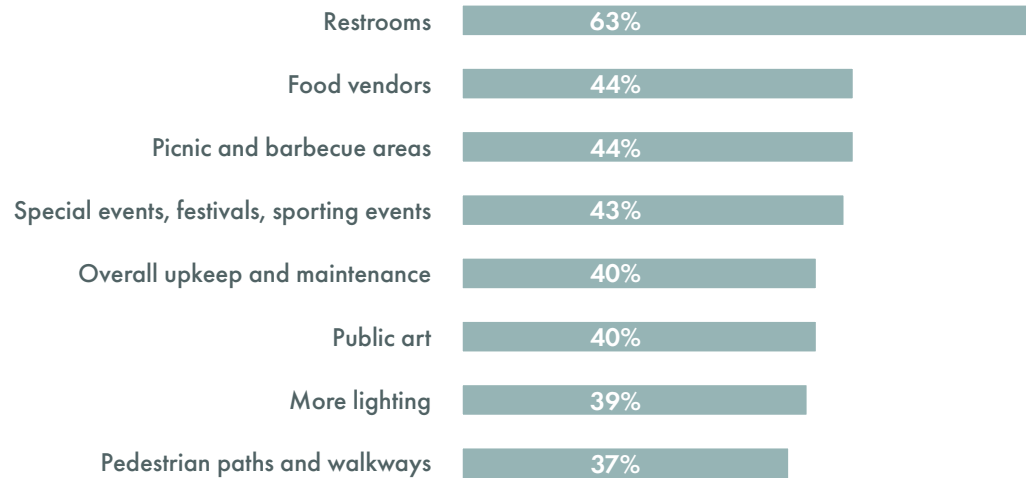


Fig. 6.22. The features and amenities that survey respondents reported would make them more likely to visit Franklin Park (Adapted from City of Boston 2020).

Activity Programs Inventory

Activities Offered in Franklin Park

After completing Phase 1 of the Parks for Aging in Place Toolkit, the Phase 2 Age-Friendly Park Assessments were completed. First, a brief inventory of the existing activity programs within the park was conducted. To gather information on the activity programs currently offered in Franklin Park, a examination into the City of Boston’s upcoming park events page and calendar was first completed. Websites and Facebook pages of park conservancy websites like the Franklin Park Coalition and Emerald Necklace Conservancy were used in the inventory as well. The website Eventbrite was used to identify upcoming events such as festivals or concerts in the park. Since the Franklin Park Action Plan had already completed a thorough assessment of park activities and amenities, its document was also referenced to identify annual events and seasonal activities. Finally, some activity programs were identified during the on-site park visit completed in September 2022. Activity programs offered at other nearby community amenities are more thoroughly discussed in the detailed site analysis of the Playstead later in this chapter.

Sources Used

The following is a list of the sources used to identify the existing activity programs offered in Franklin Park. Ultimately, to gain a more thorough understanding of all the park activities offered, engaging with local parks and recreation officials or local residents would be highly beneficial.

- City of Boston park events page and calendar (City of Boston 2023c)
- The Franklin Park Action Plan (Boston Parks & Recreation Department 2022)
- Franklin Park Coalition website and Facebook page (Franklin Park Coalition n.d.b)
- Emerald Necklace Conservancy page on Franklin Park (Emerald Necklace Conservancy n.d.)
- Eventbrite’s page showing upcoming events in the park (Eventbrite n.d.)
- On-site visit



Fig. 6.23. The types of activity programs offered at Franklin Park.

Design Assessment

Areas Assessed

To assess the infrastructure and amenities the park currently provides for older adults, the Design Assessment was completed. Due to the park’s size (527 acres), the park was subdivided into five different areas for assessment. The areas assessed were Scarboro Pond + Peabody Circle, Ellicottdale, the Wilderness, Circuit Drive + Circuit Loop, and the Playstead. Each area was assessed by on-site observations or through Google Earth street view imagery. Through the assessment, it was found that the Playstead would benefit most from further study and was thus selected as the focus area for this project. The following pages present a summary of the assessment of each subarea. The Playstead’s full assessment was included to provide a better understanding of the issues and opportunities of this subarea. The full assessments of the other areas can be found in Appendix A.

Overall Scores

The following are the overall scores determined for each subarea of Franklin Park.

Scarboro Pond + Peabody Circle 😞

Ellicottdale 😞

The Wilderness 😞

Circuit Drive + Circuit Loop 😞

The Playstead 😞



Fig. 6.24. Play equipment in the American Legion Playground.

Scarboro Pond + Peabody Circle

Design Assessment

Accessible
Score:



Circuit Loop and other main pathways in this area are mostly well-maintained with newer paving. The secondary paths and entry pathways are in much poorer condition. Many of these entry paths are inaccessible and unmarked. Wayfinding is an issue due to a lack of directional signage especially around the Scarboro Pond area.

Comfortable
Score:



Most primary pathways have no lighting or seating. The American Legion Playground has the most variety of seating within this section of the park, but the other areas have few seating options. The nearest and only restroom in the park is located in the golf clubhouse. Most of these areas are shaded well with large, mature trees.

Active
Score:



The Scarboro Pond area includes lots of opportunities for interaction with nature, including a quiet pond and heavily vegetated areas. Circuit loop provides opportunities for physical activity and the American Legion Playground includes exercise equipment for all ages. There are some flat areas that have potential to be used for fitness classes, but in their current state are not yet serving those needs.

Social
Score:



Chess tables in the American Legion Playground, opportunities for chatting with others along Circuit Loop, and nature opportunities around the pond encourage the social engagement of older adults. There are several areas in the shade for rest and observing others, but the seating could be more comfortable and engaging.

Design Recommendations

- Incorporate drinking fountains and trash receptacles along major pathways.
- Improve the condition of park entries and paths from the entries.
- Improve wayfinding by incorporating directional, informational, and educational signage.
- Incorporate more seating along the Circuit Loop.

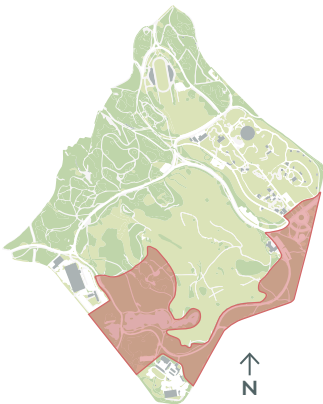


Fig. 6.25. Key map of Scarboro Pond + Peabody Circle.



(Left) Fig. 6.26. Picnic tables and play equipment in the American Legion Playground.
(Right) Fig. 6.27. Scarboro Pond.

Ellicottdale

Design Assessment

Accessible
Score:



Most pathways in Ellicottdale are accessible with hard surfaces and minimal glare. Some paths are steep and do not meet ADA accessibility standards. The nearby public transportation stops are completely inaccessible and poorly marked. Signage is either too high or too low with small text that is difficult to read.

Comfortable
Score:



Ellicottdale includes many picnic tables but most are not accessible or are not in shaded, comfortable areas. There is an unusually large amount of trash receptacles, yet most are not located along paths and are rather scattered throughout the lawns. There is no lighting in this area or around the tennis courts, limiting safe evening use. There are a couple of portable restrooms, but they are largely inaccessible.

Active
Score:



There are several opportunities for physical activities, including two tennis courts, a baseball field, and walking paths. These sports facilities are largely inaccessible and are not very comfortable to use. Large, mature trees provide shade in some sections.

Social
Score:



There are several activities for older adults to participate in in Ellicottdale: tennis, picnicking, and watching sports, for example. This park area could be better activated by incorporating activity programs where older adults can meet new people, share a meal, or engage in fitness activities.

Design Recommendations

- Incorporate drinking fountains and permanent restroom structures.
- Remove unnecessary trash receptacles and move others to more ideal areas.
- Improve wayfinding by incorporating directional, informational, and educational signage.
- Make tennis courts accessible and add pickleball lines to the courts to encourage greater older adult use.
- Incorporate lighting along major pathways and over tennis courts.

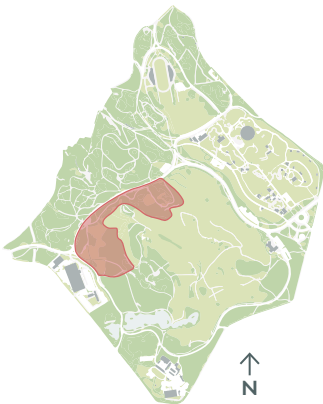
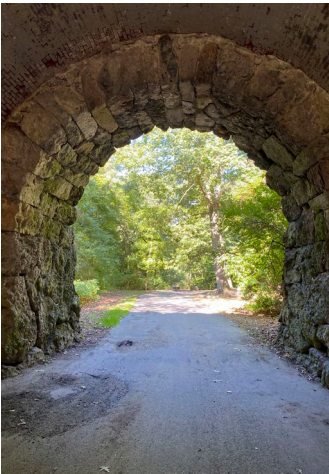


Fig. 6.28. Key map of Ellicottdale.



(Left) Fig. 6.29. The historic Ellicott Arch.



(Right) Fig. 6.30. Picnic tables and trash cans scattered in Ellicottdale.

The Wilderness

Design Assessment

Accessible
Score:



The Wilderness includes a couple of primary paved paths, but mainly consists of unpaved nature trails. Most of the areas do not meet accessibility standards as some paths are very steep, include stairs, are made of gravel, or are not maintained well. A lack of signage makes wayfinding confusing.

Comfortable
Score:



A lack of lighting, clear sightlines, and emergency light towers makes this area feel unsafe. There is not enough seating along trails, although there is one maintained picnicking area. No restrooms or drinking fountains likely makes the Wilderness very uncomfortable for older adults.

Active
Score:



The biggest strength of the Wilderness is its opportunities to connect with nature and experience wildlife. Better educational signage and comfortable areas to observe nature would improve older users' experience in the Wilderness.

Social
Score:



There is one picnicking area for socializing. Most seating within the Wilderness does not encourage social interactions. Better safety and activation of primary spaces would encourage greater older adult use.

Design Recommendations

- Incorporate drinking fountains, trash receptacles, and a permanent restroom structure.
- Improve wayfinding by incorporating directional, informational, and educational signage. Incorporate educational wildlife signage.
- Focus on activating primary paved pathways with seating, signage, and bird watching outlooks.
- Incorporate more lighting and cut back vegetation along paths to increase visibility and thus improve perceptions of safety.

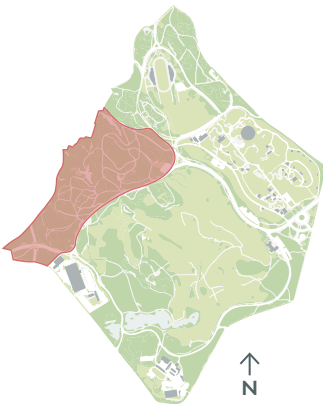


Fig. 6.31. Key map of the Wilderness.



(Left) Fig. 6.32. The rich forest floor in the Wilderness (Canfield 2022a).
(Right) Fig. 6.33. Steps within the Wilderness (Canfield 2022b).

Circuit Drive + Circuit Loop

Design Assessment

Accessible
Score:



The fully pedestrianized southeastern section of Circuit Loop includes wide, smooth pedestrian paths, while paths along the vehicular section of Circuit Drive are less wide and not maintained as well. An unclear path hierarchy and lack of signage make wayfinding along Circuit Loop difficult. Public transportation stops lack seating, lighting, and accessible pathways to park areas. Cars speed very quickly along Circuit Drive, making pedestrians feel unsafe especially when crossing the drive at poorly marked pedestrian crossings.

Comfortable
Score:



While there is some lighting along Circuit Drive, the rest of the loop lacks lighting, making these areas feel dangerous at night. There are long stretches of the loop without seating and no restrooms or drinking fountains nearby. These conditions would likely make Circuit Drive and Circuit Loop uncomfortable for older park users.

Active
Score:



The loop includes areas for walking and many opportunities for nature interactions. Circuit Drive and Circuit Loop have a lot of potential for promoting healthy lifestyles for older adults. With some accessibility and comfort improvements, the loop could become an important fitness feature within the park.

Social
Score:



Circuit Drive and Circuit Loop provide great opportunities for social interactions along their paths, but they could include better programming to encourage interactions between older individuals. The loop lacks social seating areas along it as well as activity programs that engage older adults.

Design Recommendations

- Completely pedestrianize the southern half of Circuit Drive to create a full 2.5 mile Circuit Loop.
- Make Circuit Loop a multi-modal path by creating separate zones for walkers/runners, bikers, and resting pedestrians.
- Introduce comfortable seating every 150 feet along the loop and incorporate lighting and drinking fountains.
- Improve the condition of park entries and paths from the entries.
- Improve wayfinding by incorporating directional, informational, and educational signage.
- Relocate bus stops to safer sections of Circuit Drive and provide seating, shelter, and lighting at each stop.



Fig. 6.34. Key map of Circuit Drive + Circuit Loop.



(Left) Fig. 6.35. An unpaved and flooded parking lot along Circuit Drive.



(Right) Fig. 6.36. A shaded portion of the newly-repaved and pedestrianized Circuit Loop.

The Playstead

Design Assessment

Accessible
Score:



Most of the paths around White Stadium are very poorly maintained and the parking lots do not follow ADA or universal design standards. Park signage is very minimal and path hierarchy is unclear, making it confusing to navigate the Playstead.

Comfortable
Score:



The Playstead lacks lighting and drinking fountains. There are several portable restrooms but no permanent restroom structures. There are several seating options—including benches, picnic tables, and spectator seating—but not all of these options are comfortable, protected from the elements, or accessible.

Active
Score:



The sports fields and courts need better lighting and accessibility, and there could be more opportunities for sports for older adults. There are two children’s playgrounds in this area, but there are no adult play or exercise areas. There are opportunities for a roughly 1-mile walking loop around the Playstead, but currently its paths are poorly maintained and lack lighting and other programming.

Social
Score:



There are many sports activities and spectator options for older adults in the Playstead. There is some fully accessible picnic seating for socializing. The primary activities in the Playstead are youth sports, so this space could better engage older adults through activities like farmers’ markets, fitness classes, or walking groups for older individuals.

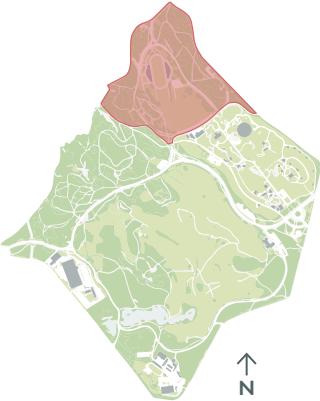


Fig. 6.37. Key map of the Playstead.



(Top Left) Fig. 6.38. Vehicular road security gate.
(Bottom Left) Fig. 6.39. The historic White Stadium.
(Bottom Right) Fig. 6.40. Picnic area overlooking the Playstead multi-purpose fields.

Design Assessment Scorecard

The Playstead

Accessible

				n/a
Pathways				
There is a continuous, accessible pedestrian path network throughout the park.		●		
Path networks accommodate multiple modes of travel (i.e., biking and walking) and are separated into zones for each mode.		●		
Paths follow ADA and universal design standards.		●		
Paths (non-ramps) are under 4% slope.		●		
Primary pathways are wide enough for at least two people with mobility devices to pass each other or for ASL signers to converse.		●		
Paths are well-maintained, do not have broken and bumpy pavements, and are free of obstructions.	●			
Path surfaces are smooth, firm, have a good grip, minimize glare, and do not have visually-confusing patterns.		●		
Level Changes				
Access routes are graded to minimize the use of stairs and ramps.		●		
If stairs or ramps are used, they follow ADA and universal design standards.				●
Parking				
Parking is available within walking distance from park spaces.		●		
Parking lots follow ADA and universal design standards.	●			
Paths from accessible parking to primary areas are accessible.		●		
Public Transportation				
Transit stops and the routes from them to the park are accessible.			●	
Public transportation stops within or adjacent to the park provide seating, weather protection, clear signage, and are well-lit.		●		

				n/a
Connections to the Street				
There are designated crosswalks at every street crossing adjacent to the park.			●	
Street crossings within or adjacent to the park provide crosswalks, auditory crossing signals, curb cuts, and tactile paving.		●		
Streets within or adjacent to the park have separate bike lanes and public transit stops.			●	
Streets within or adjacent to the park have traffic calming measures and slowed vehicular traffic.		●		
Wayfinding				
Park signage is frequent and consistent. There are multiple types of signage; for example, directional and informational.	●			
Signage is legible from a distance and at a height where those using wheelchairs can easily see it.	●			
Park entries are easily identifiable and completely accessible.		●		
Multi-sensory wayfinding elements have been included; for example, tactile paving, auditory signals, or graphic signage.	●			
Totals	(Add totals for each column)			
	5	13	3	
(Circle highest total)				
				
	Poor	Okay	Great	

Comfortable



PoorOkayGreatn/a

Safety

Vegetation buffers street noise and unsightly views to the street but doesn't impede visibility and create unsafe conditions.				
There are barriers or plant buffers between streets and paths.				
Primary pathways are well-lit at night.				
Lighting does not produce glare along pathways.				
There are clear sight lines throughout the park and vegetation does not hinder visibility.				
There is clear visibility at pedestrian crossings and street intersections.				

Protection from the Elements

There are resting areas out of the sun and wind throughout the park, especially along pathways.				
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Seating

There is frequent seating along primary pathways.				
There are many seating options: in the sun, shade, open areas, private areas, and in spots with a good view.				
There are a variety of seating types and they allow for many uses: movable seating, semi-circular seating, etc.				
Seating is comfortable and accessible, with some seating providing both back rests and arm rests.				



PoorOkayGreatn/a

Site Amenities

The park includes a sufficient number of restrooms for the park's size.				
Restrooms are fully accessible and have signage identifying their locations.				
There are fully accessible drinking fountains along major pathways, next to restrooms, and near active recreation areas.				
Similar amenities (i.e., restrooms and drinking fountains) are grouped together for ease of access.				
Site furnishings are not obstacles along pathways and are easily visible.				
Totals	(Add totals for each column)	3	10	2

(Circle highest total)



PoorOkayGreat

Active



PoorOkayGreatn/a

Trees and Vegetation

Plants are non-toxic and are non-thorny in high-traffic areas.				
The use of high-allergen trees is minimal and trees that produce a lot of litter are minimal around pathways.				
The plant palette is diverse and considers seasonality.				
Plants along pathways and parking lots are well-maintained and are not hazards.				

Nature Interactions

There are ways of interacting with nature within the park (i.e., gardening or bird watching).				
Water elements are safe and include cautionary barriers around them when necessary.				
Gardening beds are raised and accessible for wheeled mobility devices.				
There are opportunities to observe wildlife.				

Opportunities for Physical Activity

There are multiple physical activity opportunities for older adults (i.e., walking loops, fitness equipment, sports courts, etc.).				
There is at least one walking loop with a length of around 1 mile.				
There are flat, accessible areas that can accommodate various fitness classes.				
There are fully accessible sports facilities for activities popular with older adults (i.e., pickleball, bocce ball, golf, etc.).				
There is comfortable and accessible spectator seating around sports facilities.				
There are areas of play for both older adults and children to encourage intergenerational interactions.				



PoorOkayGreatn/a

Opportunities for Privacy and Relaxation

There are areas designed for rest within the park.				
Private gardens are located away from main pathways and busy street noise.				

Passive Activities

There are opportunities for passive activities like reading, dog walking, watching a performance, playing board games, etc.				
The park provides sensory experiences that engage older adults' senses of touch, sight, smell, and hearing.				

Totals(Add totals for each column)285

(Circle highest total)



PoorOkayGreat

Social



Poor Okay Great n/a

Variety of Spaces

There are a variety of spaces in the park, including both social areas and private areas.

There are a variety of activities for older adults to engage in (i.e., fitness, nature, socializing, etc.).

Intergenerational Spaces

There are gathering spaces with activities for all ages.

Opportunities for Social Interaction

Seating promotes socialization: it enables eye contact, there are circular arrangements for easier discussion, and some is movable.

Informational signage, seating, or other interesting activities provide opportunities for socialization along major paths.

There is at least one flat, shaded area to host group gatherings.

Gathering areas have ample seating and seating in the shade.

Gathering areas have nearby restrooms and drinking facilities.

Opportunities for Passive Socializing

There are opportunities for older adults to observe others and watch activities from afar.

Totals

(Add totals for each column)

3

5

1

(Circle highest total)



Poor Okay Great

Summary:

Accessible



Poor Okay Great

(Circle one)

Notes:

Comfortable



Poor Okay Great

(Circle one)

Notes:

Active



Poor Okay Great

(Circle one)

Notes:

Social



Poor Okay Great

(Circle one)

Notes:

Overall Notes:

There are many sports activities but most are not tailored toward older adults.

The seemingly biggest issues are unmaintained pathways, lack of path hierarchy, and poor wayfinding tools.

The multi-purpose fields are used for festivals and large group gatherings, but it seems there needs to be a secondary gathering space for other smaller activities.

Selection of Focus Area - The Playstead

A Space for Active Aging and Intergenerational Connections

Upon completing the Age-Friendly Park Assessment for each subarea of Franklin Park, the Playstead was selected for a more focused and detailed age-friendly park retrofit. The Playstead was chosen for its many opportunities for physical activity, its potential to connect older adults to nature, and its possibilities to create intergenerational spaces.

According to Olmsted’s original plan for Franklin Park, the Playstead was always intended to be an area of active recreation (Hilderbrand 2022). It hosts most of the park’s sports facilities and multi-purpose areas. The Playstead is also home to many cultural events and seasonal activities. An urban arts festival, jazz and R&B music festival, and summer performances are all popular events hosted in this area of the park (Boston Parks & Recreation Department 2022). Although the Playstead is engaging to a lot of younger adults, it does not meet many of the needs or wants of older park users.

The following pages present a more thorough site analysis of the Playstead to identify the areas most in need of age-friendly design and activity programming modifications. From the key issues identified, project goals were developed to guide the creation of age-friendly design solutions. The last part of this section presents the age-friendly design and programming solutions for the Playstead. Plans, diagrams, and images are provided to graphically represent the projective design.



Fig. 6.41. Key map of focus area.



Fig. 6.42. Subareas within the Playstead.

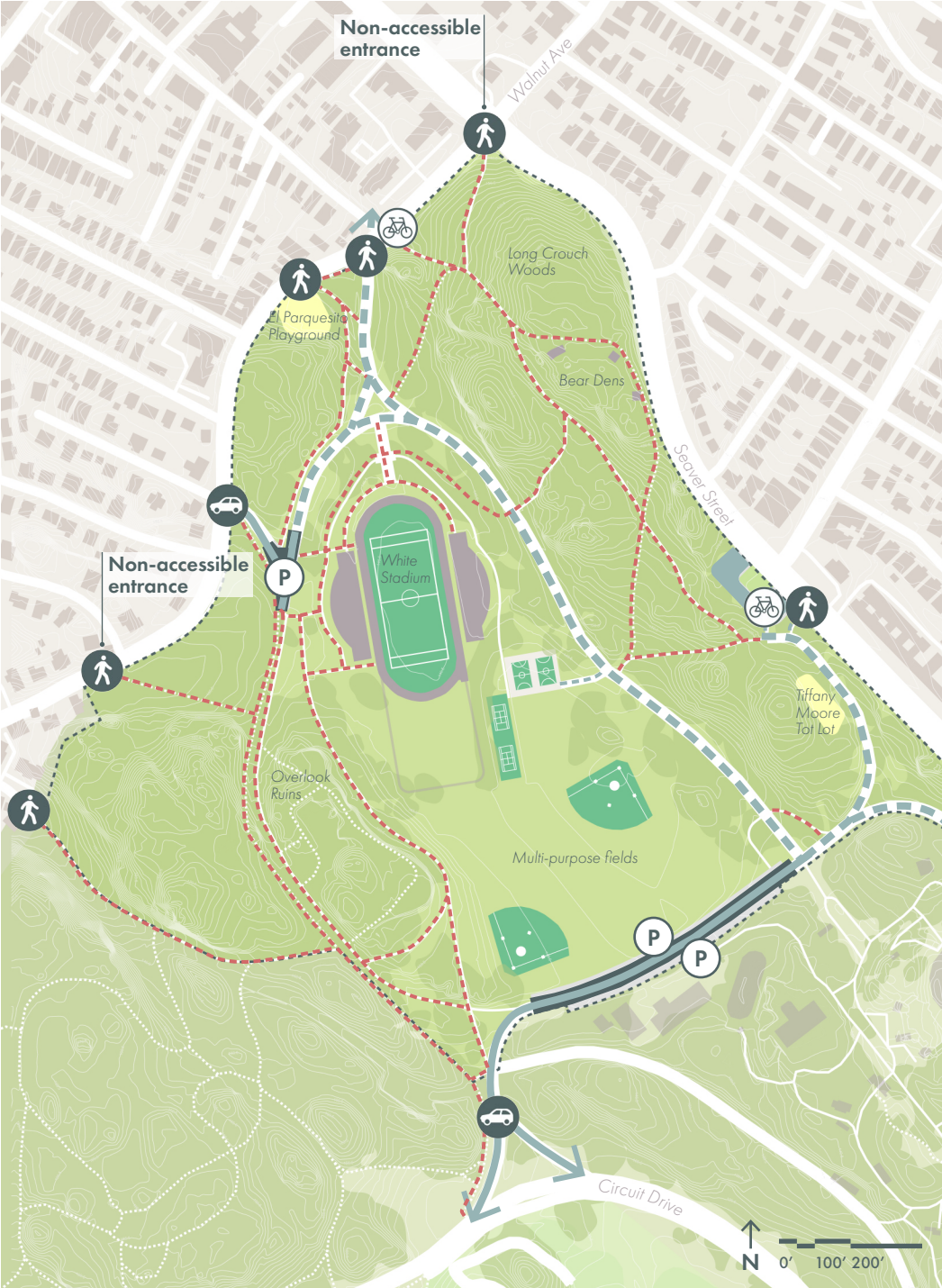


Fig. 6.43. Existing park entries, pedestrian paths, roads, parking lots, and bikeshare parking.

Detailed Site Analysis - the Playstead

Current Entry Experience



Pedestrian

There are quite a few pedestrian entries in the Playstead; all but two were deemed to meet ADA-accessibility standards. Current pedestrian entries are underwhelming experientially, as many of the entry paths are not very wide and don't feature distinct entry signage with maps and park information.

Pedestrian entries: 6

Fully accessible pedestrian entries: 4



Vehicular

There are two vehicular entries in the Playstead; the first and primary entrance is located off of Circuit Drive and leads to the main parking lot south of the multi-purpose fields. The second vehicular entrance is located off Walnut Avenue. This entrance is also not a through street as it only leads to minimal parking near White Stadium. This entrance is very poorly marked for vehicles.

Vehicular entries: 2



- Existing pedestrian paths
- Existing vehicular roads
- Former vehicular paths, now pedestrian paths



Fig. 6.44. Current park entry signage.



Fig. 6.45. Playstead entry off of Circuit Drive.

Detailed Site Analysis - the Playstead

Current Pathways

--- Pedestrian Paths

Many of the pedestrian paths in the Playstead have crumbling surfaces, are unmaintained, and lack seating and lighting along them. Some paths are blocked by maintenance gates or blockades that do not provide enough clear-width space through them. Most paths are asphalt or concrete, while some paths in the Long Crouch Woods and near the Overlook Ruins are gravel. Most paths need repairs to become fully accessible.

— Vehicular Paths

There are two vehicular paths in the Playstead. Pierpont Road, located just south of the multi-purpose fields, is not a through street so motorists are required to turn around in the parking lot and exit back out onto Circuit Drive. The vehicular drive off Walnut Avenue leads to a parking area just west of White Stadium. This drive is the most confusing, as there is no signage that demarcates where the road ends and where the road turns into pedestrian paths.

■ ■ Former Vehicular Paths

Some paths in the Playstead are former vehicular roads that are now primarily used by pedestrians. Although they provide a nice, wide walking space, they cause confusion for pedestrians and motorists because their intended use is not well defined.



Fig. 6.46. Poor conditions of the Playstead’s paths.



Fig. 6.47. Former vehicular road now used by pedestrians.

Detailed Site Analysis - the Playstead

Current Parking

Ⓟ Vehicular Parking

Neither of the two parking lots in the Playstead meet ADA or universal design standards. There are no accessible paths from the parking lots, and the parking spots marked as ADA-accessible in the Pierpont lot are not up to ADA standards. The parking experience could be greatly improved to make older adults feel more comfortable when visiting the park.

Parking lots: 2



Fig. 6.48. Pierpont parking lot.

Ⓢ Bike-share Parking

There are two BlueBikes locations in the Playstead; one at the Seaver Street entrance and one at the Walnut Avenue entrance. BlueBikes are the public bike share program that the City of Boston uses. The current bike-share parking areas are nicely organized and seemingly easy to use. However, there could be more bike parking areas for the general public to use.

Bike-share parking locations: 2



Fig. 6.49. Bikeshare parking at the north entrance (Kalamaja 2022).



Fig. 6.50. Existing restrooms, drinking fountains, and seating.

Detailed Site Analysis - the Playstead

Existing Site Amenities



Restrooms

There are no permanent restroom structures in the Playstead, but there are eight portable restrooms clustered near the basketball courts. The nearest permanent restroom structure—and only one in the entire park—is located at the William J. Devine clubhouse, located 0.6 miles away from the multi-purpose fields.

Portable restrooms: 9

Permanent restrooms: 0



Drinking Fountains

There was one public drinking fountain identified within the Playstead, even though there are multiple sports facilities in the area.

Drinking fountains: 1



Seating

There is minimal seating located throughout the Playstead. There is an accessible picnic table grove just to the east of the multi-purpose fields, and there is minimal spectator seating along the fields.



Fig. 6.51. Portable restrooms in the Playstead.



Fig. 6.52. Wheelchair-accessible picnic tables in the picnic grove.



Fig. 6.53. Sports and play areas in the Playstead.

Detailed Site Analysis - the Playstead

Existing Activity Programs



Sports

White Stadium

Built in 1945, White Stadium has hosted sporting events, concerts, and rallies for many years. Today, it is used by Boston Public Schools for high school games and practices (Franklin Park Coalition n.d.c).

- Track and field
- Soccer
- Football

Multi-Purpose Fields

Roughly seven square acres in the Playstead is dedicated to multi-purpose sports use. Youth practices and games are held here.

- Tennis
- Baseball + softball
- Basketball
- Soccer
- Rugby



Play

Tiffany Moore Tot Lot

The Tiffany Moore Tot Lot features a commercial playground set for children. It is well-shaded with some benches but is far away from restrooms and lacks activities for adults.

El Parquesito Playground

Similarly to the Tiffany Moore Tot Lot, the El Parquesito Playground features a playground, seating, and sufficient shade.



Fig. 6.54. Playstead tennis courts (Kordonowy 2022b).



Fig. 6.55. Playstead baseball fields (Kordonowy 2022a).



Fig. 6.56. Playstead basketball courts.



Fig. 6.57. Areas where seasonal activities and cultural events occur.

Detailed Site Analysis - the Playstead

Existing Activity Programs

Seasonal Activities

The Elma Lewis Playhouse was created in the 1960s by Elma Lewis as an open-air performance space for all ages (Franklin Park Coalition n.d.a). Although the playhouse structure is temporarily erected during the summer, the Franklin Park Action Plan has proposed to build a permanent facility for performances near the Overlook Ruins (Boston Parks & Recreation Department 2022). White Stadium in the Playstead is also the starting and finish point for the annual B.A.A. Half Marathon (Boston Athletics Association n.d.). In the fall, the trails around the woods and multi-purpose fields act as cross country courses for local high schools. The following are the identified seasonal activities in the Playstead:

- Elma Lewis Playhouse in the Park
- Cross country meets
- Boston Athletic Association Half Marathon

Cultural Events

The Playstead hosts several annual cultural events. These events are typically held on the flat multi-purpose fields. The annual Kite & Bike festival is a fun event for Bostonians to gather and fly kites, bike, and picnic. A jazz festival and arts festival fill the Playstead with music, good food, and art in the late summer. The following are the identified annual cultural events that take place in the Playstead:

- Franklin Park Jazz and R&B Festival
- Park Science Children’s Summer Festival
- BAMS Fest
- Kite & Bike Festival



Fig. 6.58. Cross country meet (W 2014).

Summary of Issues Identified in the Playstead

Introduction

From the Phase 2 Design Assessment and the detailed site analysis of the Playstead, five key issues were identified:

1 Circulation and Wayfinding

One of the primary issues identified through the park assessment was the inaccessibility of the existing circulation paths. Most paths are unlevel and unmaintained, increasing the risk for falls and injury. Almost no signage exists along paths, making wayfinding difficult and worsening safety perceptions. The current path hierarchy is confusing, and it is difficult to comprehend if certain paths are meant for pedestrians, bikers, or vehicles. Thus, improving the Playstead’s circulation and pedestrian experience is one of the primary goals of this retrofit.

2 Entry Experience

While most of the park entries in the Playstead meet ADA-accessibility standards, they lack clear and attractive entry signage. There are only two parking areas in the Playstead, and one of them is shared with the zoo. There is very little parking for White Stadium, and both the stadium parking lot and the parking lot south of the multi-purpose fields do not meet universal design standards. There is no Playstead vehicular entry off of Seaver Street and no street parking, making it difficult to access the northeastern parts of the park, especially the Tiffany Moore Tot Lot. There is also only one pedestrian entry along Seaver Street. Improving both vehicular and pedestrian entries will make the park more inviting and accessible to older adults.

3 Comfort

Much of the Playstead would not be comfortable for older parkgoers. One of the biggest issues in the park is the lack of permanent, accessible restrooms. There are several portable restrooms near the multi-purpose fields, but a clean, permanent facility would be more comfortable for older adults. There are no stadium seats near the multi-purpose fields, which would make watching friends or grandchildren play sports difficult. There could be more seating options along major pathways and in areas for private reflection or socialization. Increasing the amount of lighting along pathways would also make park areas feel safer.

4 Activity Programming

There are quite a few sports activity options in the Playstead, but few are likely to interest older adults. Simple modifications to some of the existing options, like more seating or shade, would make them more attractive to older park users. There is an absence of flat, shaded gathering spaces for group events both in the Playstead and in the rest of Franklin Park. An accessible gathering space would enable more activity programs for older adults to occur in this area of the park, including fitness classes and cultural celebrations. Since there are quite a few senior living and senior centers near the Playstead, partnerships could be formed to host events in the park for older residents.

5 Intergenerational Connections

Many of the existing amenities and programs in the Playstead serve the needs of young adults and children but do not serve the needs of older adults. According to the U.S. Census Bureau (2020a), there are quite a few grandparents living in the same household as their grandchildren in the Dorchester and Roxbury neighborhoods adjacent to the park. Park activities that foster connections between grandparents and young people would better activate the Playstead for all ages. Activities that capitalize on the lush natural habitats of Franklin Park would especially foster both connections with nature and connections between people of all ages.

Toolkit Design Recommendations

Accessible

- Pathways
- Level Changes
- Parking
- Public Transportation
- Connections to the Street
- Wayfinding

Comfortable

- Safety
- Protection from the Elements
- Seating
- Site Amenities

Active

- Trees and Vegetation
- Nature Interactions
- Opportunities for Physical Activity
- Opportunities for Privacy and Observation
- Passive Activities

Social

- Variety of Spaces
- Intergenerational Spaces
- Opportunities for Social Interaction
- Opportunities for Passive Socializing

Opportunities for Playstead Improvements

- Opportunity 1**
Circulation and Wayfinding
- Opportunity 2**
Entry Experience
- Opportunity 3**
Comfortability
- Opportunity 4**
Activity Programming
- Opportunity 5**
Intergenerational Connections

Fig. 6.59. The Principles for Age Friendly Parks that informed the development of opportunities within the Playstead.

Identification of Project Goals

Introduction

From the identification of the primary issues in the Playstead, five project goals were identified. For each of the key issues identified on pages 194 and 195, goals were developed to guide the age-friendly design and activity programming solutions.

1 Circulation and Wayfinding

Key Issue identified: Inaccessible pathways, confusing path hierarchy, and lack of wayfinding signage.

Goal: Improve pedestrian circulation and wayfinding.

Objectives:

- Create a 1.0-mile age-friendly loop through the Playstead.
- Repair unmaintained pavements.
- Introduce informational, directional, and educational signage in key locations.
- Install lighting along all pathways.

- Key
- Accessible
 - Comfortable
 - Active
 - Social
 - Participatory

2 Entry Experience

Key Issue identified: Underwhelming and unclear park entries, and minimal and inaccessible vehicular parking.

Goal: Enhance entry experiences through greater accessibility, signage, and improved parking.

Objectives:

- Improve existing entry signage and incorporate new directional signage and maps of the park at all entries.
- Create a new park entrance along Seaver Street.
- Create a new vehicular entrance by continuing Pierpont Road to Seaver Street.
- Create a new parking lot along Seaver Street.
- Increase the amount of vehicular parking near White Stadium off Walnut Avenue.
- Redesign the parking lot south of the multi-purpose fields to meet universal design standards.

3 Comfort

Key Issue identified: Lack of comfortable and accessible restrooms, and lack of seating in gathering areas and along major pathways.

Goal: Improve comfortability for older adults by introducing seating and restrooms.

Objectives:

- Introduce seating along a new age-friendly walking loop.
- Provide seating next to tennis courts and multi-purpose fields.
- Replace portable restrooms with a permanent restroom near the multi-purpose fields.

4 Activity Programming

Key Issue identified: Lack of activity programs and amenities for older adults.

Goal: Introduce new activity programs to better engage older park users.

Objectives:

- Retrofit the existing tennis courts to include pickleball use.
- Add a bocce ball court near the existing sports courts.
- Design a shaded pavilion space for group gatherings and group fitness classes.
- Install board game tables.
- Partner with the nearby Grove Hall Senior Center to engage with older adults in the community and incorporate popular senior center programs in the park.

5 Intergenerational Connections

Key Issue identified: Lack of amenities and activity programs that encourage intergenerational interactions.

Goal: Introduce new amenities and activity programs that foster intergenerational connections.

Objectives:

- Design a nature scavenger hunt for all ages.
- Introduce birding areas with educational signage.
- Create an adult fitness space near the Tiffany Moore lot to encourage intergenerational play.

- Key
- Accessible
 - Comfortable
 - Active
 - Social
 - Participatory

Age-Friendly Design Retrofit Recommendations

Introduction

The following pages address the five project goals discussed on the previous pages and provide design and activity programming recommendations to achieve these goals. Design solutions are provided to address and achieve each goal identified. These recommendations are intended to serve as an example application and show how the design and activity program recommendations provided in Phase 3 of the Toolkit can be applied to an existing park. Ultimately, these recommendations are intended to provide inspiration, but more thorough analysis and design efforts are required to achieve a park retrofit that benefits the older adults in this community.



Fig. 6.60. View of the Playstead’s multi-purpose fields.

Summary

The Playstead Age-Friendly Retrofit Goals

- 1 Improve pedestrian circulation and wayfinding.
- 2 Enhance entry experiences through greater accessibility, wayfinding, and improved parking.
- 3 Improve comfortability for older adults by introducing seating and restrooms.
- 4 Introduce new activity programs to better engage older park users.
- 5 Introduce new amenities and activity programs that foster intergenerational connections.

Fig. 6.61. Summary of the Playstead’s age-friendly retrofit goals.

① Goal: Improve pedestrian circulation + wayfinding



Fig. 6.62. Proposed sidewalks and wayfinding signage.

Improving Path Conditions

Objectives:

- Repair unmaintained pavements.
- Install lighting along all pathways.

To make the park more accessible and comfortable for older adults, this retrofit prioritized improving the conditions of existing sidewalks, increasing the amount of wayfinding signage, and designing a new 1.0-mile age-friendly pedestrian loop. Since many of the pathways in the Playstead are in poor condition (see diagram to the right), improvements to repair their surfaces and ensure primary paths are under a 2% slope are proposed.

Wayfinding Elements

Objectives:

- Introduce informational, directional, + educational signage in key areas.

Logical wayfinding is critical for older adults to understand a park's layout, which minimizes confusion and frustration. Three types of wayfinding are proposed to be incorporated in the Playstead: directional, informational, and educational. Directional wayfinding includes signage directing to different areas of the park and is especially important at path intersections and park entries. Informational wayfinding will provide information about the park times, how to use certain programming features, and maps of the park. Educational wayfinding will communicate information about the history of the park and identification of park ecology.

◀ Key

- Proposed pedestrian loop
- - - Proposed new sidewalks
- ★ Proposed directional signage
- ☆ Proposed informational signage
- ☆ Proposed educational signage



Fig. 6.63. Pathways in need of repair.

Age-Friendly Pedestrian Loop

Objectives:

- Create a 1.0-mile age-friendly loop through the Playstead.

A 1.0-mile pedestrian loop was designed to better connect the different areas of the Playstead and to provide a comfortable and engaging walking loop for older adults. The loop begins at the proposed parking lot along Seaver Street to best accommodate those arriving by car as well as those arriving at that entry's bus stop. The loop passes through some of the lushly



Fig. 6.64. Amenities and activities located along the 1.0 mile loop.

▲ Key

- Fitness (existing + proposed)
- Play (existing + proposed)
- Seated games (proposed)
- Parking (existing + proposed)
- Bike-share parking (existing)
- Restrooms (proposed)
- Bus stops (existing)

wooded areas, by White Stadium, past proposed fitness stations, and around the multi-purpose fields. The path also grants easy access to the Pierpont parking lot, picnic and birding area, and the tennis, pickleball, and bocce ball courts. The loop also considers the comfort of older adults by routing it by the proposed restrooms and ensuring there is consistent seating, lighting, and wayfinding along the pathway. The loop contains mileage signage for those using it for fitness and educational signage for those wanting to learn more about the park and its ecology.



Fig. 6.65. Current conditions (Herrera 2022).



Fig. 6.66. Amenities like seating, lighting, and widened pathways make park spaces more comfortable and accessible to older adults.

② Goal: Enhance entry experiences through accessibility, signage, and parking



Fig. 6.67. Proposed entries, roads, and parking to improve older adults’ entry experiences.

New Entries and Parking

Objectives:

- Create a new park entrance along Seaver Street.
- Improve existing entry signage and incorporate new directional signage and maps of the park at all entries.
- Create a new vehicular entrance by continuing Pierpont Road to Seaver Street.
- Create a new parking lot along Seaver Street.
- Increase the amount of vehicular parking near White Stadium off Walnut Avenue.

To better accommodate older adults that access the park from the east, another parking lot was proposed in an area that was either formerly a parking lot or served for maintenance parking. Both a pedestrian and vehicular entrance were added along Seaver Street as well. The pedestrian entry should provide quicker access to the Bear Dens and the Long Crouch Woods from the east. The vehicular entry is intended to make accessing the multi-purpose fields and sports courts easier, reducing the length an older park user would have to walk from their car to a park amenity. Modifications to the parking lot west of White Stadium are also intended to make accessing park areas easier and to make the parking area less confusing and more usable. These modifications include repaving the parking area, adding a small lot adjacent to the existing parking, and adding bollards at the end of parking areas to differentiate vehicular paths from pedestrian paths.

◀ Key

— — —

Proposed vehicular road

— — —

Proposed vehicular parking

— — —

Existing vehicular parking

Proposed pedestrian entry

Proposed vehicular entry



Fig. 6.68. Handicap parking sign in the Pierpont parking lot.



Fig. 6.69. White Stadium existing parking conditions.

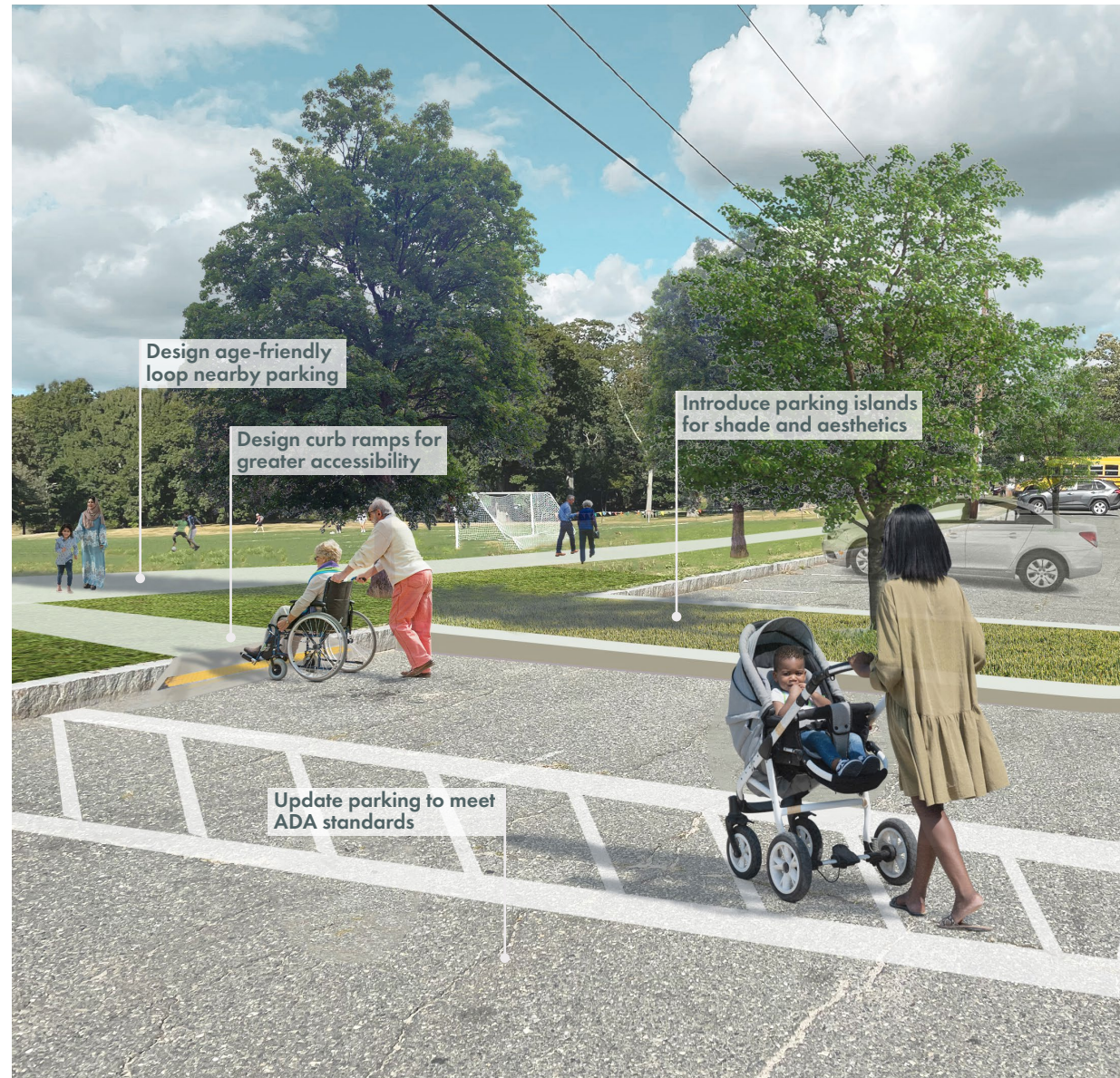


Fig. 6.70. Improvements to the Pierpont parking lot to improve accessibility and comfort.

Retrofit Pierpont Parking Lot to Meet Universal Design Standards

Objectives:

- Redesign the parking lot south of the multi-purpose fields to meet universal design standards.

The Pierpont parking lot, just south of the multi-purpose fields, is the largest parking area in the Playstead, yet it does not meet universal design standards. The parking stalls considered ADA-accessible do not meet ADA standards, there is a lack of accessible routes from the parking lot, and there is no vegetation to collect stormwater and provide shade in the parking area. The current parking lot feels dismal and uninviting, potentially discouraging older adults to park there.

However, with some simple design features, the Pierpont parking lot can be made much more comfortable and accessible to older adults, further encouraging them to visit the park. Ensuring it is accessible to all abilities through access routes, curb cuts, and accessible stalls makes the Playstead more inclusive. Comfort and perceptions of safety can be improved by providing more lighting and vegetative shade. Finally, to make drop-offs and turning around easier, a roundabout in front of the zoo entrance is proposed as the new terminus of the parking lot.



Fig. 6.71. Current conditions (Herrera 2022).

③ Goal: Improve comfortability for older adults by introducing seating and restrooms.



Fig. 6.72. Recommended seating areas and location of restrooms.

Comfortable Seating

Objectives:

- Introduce seating along a new age-friendly walking loop.
- Provide seating next to tennis courts and multi-purpose fields.

To address the issue of an inadequate amount of seating next to active recreation areas (the multi-purpose fields, tennis courts, and basketball courts) accessible spectator seating is recommended. These seating areas should have accessible pathways to them, have places for individuals to store mobility devices, and should have backrests and armrests. Along the proposed 1.0-mile pedestrian loop, seating should be placed every 100 feet apart to allow many opportunities for rest and passive observation. Seating areas along this path should also encourage social interactions and meeting new people. To do this, some seating areas are recommended to include tables or curvilinear seating. On secondary paths, seating should be placed between 150 and 200 feet apart to ensure older adults have places to rest and have conversation with others.

Restroom Addition

Objectives:

- Replace portable restrooms with a permanent restroom near the multi-purpose fields.

Since the only restrooms in the Playstead are temporary restrooms, a new permanent restroom structure is proposed near the basketball courts and multi-purpose fields. This location was selected due to its central location in the Playstead and proximity to many of the active recreation amenities. These restrooms are no more than a quarter of a mile from most Playstead amenities. Accessible and clean restrooms will make older park visitors more comfortable, thus making it more likely they will visit and use the Playstead. Design professionals should ensure this location has water, sanitary sewer, and electrical access.

Key

- Proposed seating areas
- Existing seating areas
- Proposed age-friendly walking loop
- Proposed permanent restroom structure

④ Goal: Introduce new activity programs to better engage older park users.



- Key
- Proposed age-friendly pedestrian loop
 - Proposed activity areas
 - 🏃 Fitness area
 - 🧑 Play area
 - 🧑 Seated games area

Fig. 6.73. Activity programs and park amenities proposed to encourage park use by older users.

Fitness and Play Areas

Objectives:

- Retrofit the existing tennis courts to include pickleball use.
- Add a bocce ball court near the existing sports courts.

In order to better activate the Playstead for older parkgoers, several new amenities and activity programs were incorporated into the retrofit. Firstly, it is recommended that the existing tennis courts be retrofitted to allow both tennis and pickleball use since pickleball is popular with older adults. It is also recommended to add two bocce ball courts next to the tennis courts to encourage fitness and social engagement. It is also suggested to add two small fitness stations next to the existing playgrounds. This recommendation is discussed further on page 221. The 1.0-mile age-friendly loop is also an addition that hopes to encourage older adults to walk and access the other activities in the park.



Fig. 6.74. Older men playing chess in a park (Alvarez 2019).

Seated Play

- Objectives:
- Install board game tables.

Seated games, such as chess, mahjong, checkers, or playing cards, are often popular with older adults in parks. There are a few board game tables in the Scarboro Pond + Peabody Circle subarea, but there are none in this area of the park. In an effort to engage with local older residents, it is proposed to partner with the nearby Grove Hall Senior Center to host game days in the Playstead. Currently, the center hosts 'Player's Club': an opportunity for older adults to compete in games of Domino Smackdown and Pokeno (City of Boston 2023d). Introducing a seated game area under the trees near the Tiffany Moore Tot Lot provides a nice setting for older adults to engage in play with each other. It is also located near the proposed parking lot and an existing bus stop and is only a 15-minute walk from the Grove Hall Senior Center.



Key

- Proposed age-friendly pedestrian loop
- Proposed activity areas
- ⚽ Fitness area
- ⚾ Play area
- ♫ Seated games area

Fig. 6.75. Activity programs and park amenities proposed to encourage park use by older users.

Group Gathering

Objectives:

- ● ● ● Design a shaded pavilion space for group gatherings and group fitness classes.
- ● ● Partner with the nearby Grove Hall Senior Center to engage with older adults in the community and incorporate popular senior center programs in the park.

In the Age-Friendly Park Assessment, it was noted that there were no flat, paved gathering areas for groups to host classes or small events. It is recommended that a roughly 5,000-square-foot gathering and covered pavilion space be added to the Playstead. The location of this pavilion is just north of the basketball courts, ensuring the pavilion is close to the proposed restrooms, pickleball courts, bocce ball, and the age-friendly walking loop. A gathering area of this size could host different activity programs, like the nationally recognized fitness class Tai Ji Quan: Moving for Better Balance or local neighborhood events.

It is also recommended that park and recreation officials partner with the nearby Grove Hall Senior Center to host activities and events for the older community in this proposed gathering area. The senior center’s line dancing or yoga classes could be hosted in this area. By hosting the Grove Hall Senior Center’s programs in this space, older adults will hopefully be encouraged to use other park amenities and visit Franklin Park more frequently.

It is proposed to improve the existing picnicking area near the multi-purpose fields to encourage socializing while watching sports games. These improvements include incorporating more biodiverse grass and shrub plantings for aesthetics and to provide a buffer between sports facilities and the parking lot; plant identification signage to encourage nature connections; more picnic tables for more socialization opportunities; and new types of various seating including individual benches for private reflection and movable seating to accommodate groups of various sizes.

5 Goal: Introduce new amenities and activity programs that foster intergenerational connections.



Fig. 6.76. Locations of proposed intergenerational activity areas.

Intergenerational Nature Scavenger Hunt

Objectives:

- Design a nature scavenger hunt for all ages.

An intergenerational nature scavenger hunt has the potential to engage people of all ages and would bring a unique activity to the park. Boards with prompts to find wildlife in the park, plant species, or historical structures would be an intriguing way to engage both older and younger park users. It is recommended that this activity be installed throughout the park so older adults are encouraged to explore other areas of the park besides the Playstead. The scavenger hunt prompt signs could either be permanent park installations or rotating installations that are updated periodically.

Franklin Park is a great location for a scavenger hunt like this because of its many nuances and areas to explore. It has many remnants of historical structures scattered throughout the park, including now-decaying bear exhibit structures and ruins from historic buildings that burned long ago. A scavenger hunt to find some of these enigmas would allow older adults to learn more about the history of the park. Clues to find native plants and wildlife could correspond with the other plant identification signage proposed in the Playstead.

◀ Key

- Proposed activity area
- ☆ Locations of nature scavenger hunt signage + the park features to be found in that area



Fig. 6.77. Individuals on an outdoor scavenger hunt (Kennisland 2013).



Fig. 6.78. Multi-sensory birding and ecology signage provide opportunities for older adults of all abilities to connect with nature.



Fig. 6.79. Audible bird identification sign in the Phoenix Botanical Garden.

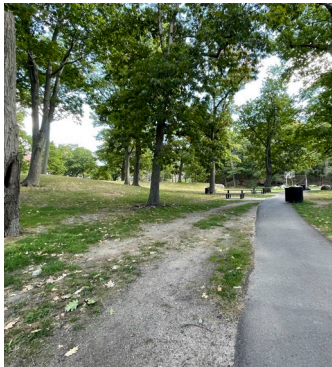


Fig. 6.80. Current conditions (Herrera 2022).

Bird Watching and Nature Opportunities

Objectives:

- Introduce birding areas with educational signage.

This retrofit takes advantage of the beautiful natural areas in the Playstead by incorporating designated areas for observing nature and wildlife. In the picnicking areas and along parts of the age-friendly loop are areas with interactive signage to bird watch and identify local plants. Multi-sensory signage is recommended to engage users with visual impairments. One idea for this type of signage is bird identification boards with auditory buttons that play local bird songs. In this way, older park users of all abilities can enjoy the park's wildlife.

Incorporating plant identification signage along paths is also recommended. Plant signs encourage older park users to learn more about their local ecology and engage with nature. Being in nature provides many health benefits for older adults such as mental restoration and stress reduction (D. Li et al. 2019). In addition, older parkgoers may be more likely to use the park if there is engaging, educational signage.



Fig. 6.81. To support healthy lifestyles and encourage intergenerational play, fitness stations are recommended to be placed alongside play equipment.

Play and Fitness Stations

Objectives:

- Create an adult fitness space near the Tiffany Moore lot to encourage intergenerational play.

To encourage intergenerational play and fitness in the Playstead, two fitness stations were designed near the existing playgrounds. They are proposed to be adjacent to the playgrounds to enable older adults to watch kids or grandkids on the playground while they exercise and to encourage play amongst all ages.

These types of fitness stations have been popular in Asia and Europe for several years and are becoming increasingly popular in the U.S. (El Nasser 2012). They facilitate cardio, muscle strengthening, and balance exercises (Levinger et al. 2021) in a way that still feels fun.

Informational signage with how to use each piece of fitness equipment are also recommended, as these make fitness stations more enticing for older adults and make it more likely the equipment will be used as intended to achieve full health benefits (Levinger et al. 2021).



Fig. 6.82. Current conditions (Canfield 2022c).

Projective Design Conclusion

This process of using the Parks for Aging in Place Toolkit to assess Franklin Park and propose age-friendly design recommendations exhibited how the toolkit can be applied to existing parks. The Community Assessment and the Age-Friendly Park Assessment highlighted critical issues to address and influenced the establishment of project goals. In response to these goals, design and programming solutions were proposed to better serve older Bostonians who use Franklin Park. The recommendations provided in this chapter should serve as inspiration for those seeking to retrofit existing parks to be more inclusive of older parkgoers.

This application demonstrated that with simple age-friendly modifications, like improved pathways and restrooms, the park can become more usable and comfortable for older adults. However, with more significant modifications, like new gathering and fitness spaces, the park can support the physical and social health of older adults.

Design Limitations

There were several limitations faced during the development of the projective design of Franklin Park. The first being the size of the park, which limited the ability to only provide recommendations for one subarea of the park. There are many other opportunities in other subareas of the park to design engaging activities and comfortable amenities to attract older adults to Franklin Park.

Second, due to the scope of this project, most recommendations were limited to a broader scale. This design focused on providing potential locations for amenities and programs as well as vignettes of select activity spaces. The next step for this project would be to design at a smaller scale and consider the smaller details like signage design, materials, or layout design of smaller activity areas.

Lastly, the project would have ideally engaged with older residents living near Franklin Park to understand their needs in the park and the amenities most likely to encourage their use of the park. Due to project constraints, obtaining first-hand feedback from older locals was unfeasible but would have been very helpful. Direct design input from older Bostonians would have added a deeper layer of understanding and site-specificity to the design.

07

Conclusion

Project conclusions and end matter.

Conclusion

This project used document analysis of universal design guidelines and precedent studies of activity programs for older adults to understand how existing parks can be more inclusive to older parkgoers. Through background research on the needs of older adults in parks, universal design principles, and aging in place principles, five new Principles for Age-Friendly Parks were developed. These principles are Accessible, Comfortable, Active, Social, and Participatory. These principles can be used in multiple ways to facilitate age-friendly park retrofits.

The first outcome of this project was the development of the Parks for Aging in Place Toolkit: a guide to aid designers, students, parks and recreation professionals, and community members in the process of retrofitting existing parks to better support the needs of older adults. The toolkit facilitates community assessments, age-friendly park assessments, and the selection of design and activity program recommendations. To test its application and provide inspiration, the Parks for Aging in Place Toolkit was applied to Franklin Park in Boston, MA. This application produced recommendations for the Playstead section of the park; these recommendations were intended to improve the experience of older park users, address their accessibility and comfort needs, and engage them in activity programs.

From this methodology, the project demonstrated that parks should be accessible, comfortable, active, social, and participatory to support older members of society. While some research on park design for older adults has been conducted, this project furthered this research by providing a comprehensive tool for the park retrofit process and selection of age-friendly design solutions. In addition, this project furthered research on design for aging in place as most existing guidelines in this area focus on home modifications rather than outdoor public space improvements. Finally, this project also demonstrated that simple modifications to a park's features and activities can have significant impacts on older park users. Retrofitting parks to be more usable by and inclusive to older adults benefits not only the older population but all people as well.

Project Limitations

Toolkit Limitations

The limited testing of the toolkit was one limitation of this project. Due to the project's scope and time constraints, the Parks for Aging in Place Toolkit was only tested on Franklin Park. Ideally, the toolkit would be tested on a variety of existing parks and by multiple other people to understand its limitations and needs for improvement. Testing the toolkit on parks of different types, sizes, contexts, and ages would increase its usability.

Along with the limited testing of the toolkit, not implementing the toolkit to confirm its success was also a limitation. While the application of the toolkit to Franklin Park exhibited a hypothetical example of the toolkit's implementation, the recommendations within the toolkit need to be fully implemented in parks to test their function and success. The toolkit also needs a way to complete post-occupancy evaluations after the age-friendly recommendations have been implemented. This would help determine if the recommendations have improved park conditions for older users and would inform adjustments to the toolkit to improve its success.

Another limitation of the Parks for Aging in Place Toolkit is the scoring of the Design Assessment in Phase 2. Since the toolkit is intended to be used by many different people, the Design Assessment was intentionally designed to use simple qualitative scoring. However, several types of scoring were explored in the development of the toolkit. To make the scoring results more functional, a weighted scoring process could be implemented to put more emphasis on 'poor' ratings. It may also be beneficial to have more scoring categories than 'poor', 'okay', and 'great.' The type of scoring may also be dependent on who is using the toolkit. For parks and recreation officials, it may be more beneficial to use letter grades or percentages so that the assessment results can be easily communicated to the general public. Whereas for designers, a score may be less important than the general identification of key issues so that they can develop design priorities and goals.

Projective Design Limitations

In addition to general project limitations, there were several limitations related to the projective design of Franklin Park. Although beyond the scope of this project, community engagement efforts with older adults living near Franklin Park would have been valuable to this research. Obtaining input from local residents and understanding the needs of older parkgoers would have led to a better understanding of the community's needs and made

the design even more context-specific. To mitigate this limitation, the Franklin Park Action Plan's community engagement results were studied. However, this was another limitation as the action plan's data was aggregated and contained responses from the whole population rather than just older adults.

Another limitation of the projective design was the timing of the site visit to Franklin Park. Since the site visit was conducted in the very early stages of this project, site analysis was conducted before the development of the Age-Friendly Park Assessment tool. Visiting the park later in the research process would have been more beneficial, as the park assessment could have been conducted on-site and a more thorough exploration of the Playstead could have occurred.

Further Research

The outcomes of this project serve as a foundation for future research on age-friendly park retrofits. Continued development of the Parks for Aging in Place Toolkit would strengthen its contents and make it more beneficial to designers, students, and parks and recreation professionals. More thorough development of the Age-Friendly Park Assessment tool, the age-friendly design recommendations, and the identification of activity programs for older adults would make the toolkit more applicable to parks of different types.

More research is also needed on dementia-friendly and intergenerational park design. Much of the existing dementia-friendly design research focuses on outdoor design in long-term care facilities, but it would be beneficial for park designers to understand more about the needs of those with dementia. More research on intergenerational park design is needed so that older adults feel included in all park spaces.

Ultimately, this project continues the conversation on design for an aging population and serves as a foundation for future research in this area. The hope of this project is that it inspires designers and community members to design with more empathy and with a wider range of ages and abilities in mind.

References

2020 Profile of Older Americans. 2021. Administration on Aging, U.S. Department of Health and Human Services. https://acl.gov/sites/default/files/Profile%20of%20OA/2020ProfileOlderAmericans_RevisedFinal.pdf.

“About Boston Nature Center.” n.d. Mass Audubon. Accessed March 21, 2023. <https://www.massaudubon.org/get-outdoors/wildlife-sanctuaries/boston-nature-center/about>.

A.G. Rhodes. n.d. “Seeds For Seniors.” A.G. Rhodes. Accessed April 18, 2023. <https://www.agrhodes.org/seedsforseniors/>.

AgingInPlace. 2023. “Guide To The SilverSneakers Program Near Me.” AgingInPlace. April 6, 2023. <https://aginginplace.org/guide-to-the-silversneakers-program/>.

Alzheimer’s Association. 2019. “2019 Alzheimer’s Disease Facts and Figures.” *Alzheimers Dement* 2019 15 (3): 321–87.

Alzheimer’s Speaks. n.d. “Memory Cafes.” Alzheimer’s Speaks. Accessed April 18, 2023. <https://alzheimersspeaks.com/memory-cafes/>.

Annele, Urtamo, K. Jyv  korpi Satu, and E. Strandberg Timo. 2019. “Definitions of Successful Ageing: A Brief Review of a Multidimensional Concept.” *Acta Bio Medica : Atenei Parmensis* 90 (2): 359–63. <https://doi.org/10.23750/abm.v90i2.8376>.

aperry. 2013. “Innovative Audubon Program Connects Elders with Alzheimer’s to the Outdoors While Creating Healthy Bird Habitats.” Audubon. February 6, 2013. <https://www.audubon.org/news/innovative-audubon-program-connects-elders-alzheimers-outdoors-while-creating>.

Azevedo, Cl  udia. 2020. “Urban Public Parks: Magnets for Social Inclusion and Engagement Across Generations.” In *Intergenerational Contact Zones: Place-Based Strategies for Promoting Social Inclusion and Belonging*. New York: Routledge.

Ball, Scott. 2012. *Aging in Place: A Toolkit for Local Governments*. Atlanta: Atlanta Regional Commission (ARC).

Besenyi, Gina M., Andrew T. Kaczynski, Sonja A. Wilhelm Stanis, and Katherine B. Vaughan. 2013. “Demographic Variations in Observed Energy Expenditure across Park Activity Areas.” *Preventive Medicine* 56 (1): 79–81. <https://doi.org/10.1016/j.ypmed.2012.10.011>.

- Bilis, Madeline. 2019. "So You Want to Live in Jamaica Plain." *Boston Magazine* (blog). July 11, 2019. <https://www.bostonmagazine.com/property/neighborhood-guide-jamaica-plain/>.
- Binette, Joanne, and Kerri Vasold. 2018. *2018 Home and Community Preferences: A National Survey of Adults Age 18-Plus*. Washington, DC: AARP Research. <https://doi.org/10.26419/res.00231.001>.
- Bodner, Ehud. 2009. "On the Origins of Ageism among Older and Younger Adults." *International Psychogeriatrics* 21 (6): 1003–14. <https://doi.org/10.1017/S104161020999055X>.
- Boston Athletic Association. n.d. "B.A.A. Half Marathon Course Information." B.A.A. Accessed March 19, 2023. <https://www.baa.org/races/baa-half-marathon/watch/course-information>.
- Boston in Context: Neighborhoods*. 2022. Boston Planning & Development Agency Research Division. <http://www.bostonplans.org/getattachment/86f801a8-f8a6-4d0c-83ed-b9a63684d6b5>.
- Boston Parks & Recreation Department. 2022. "Franklin Park Action Plan." Boston, MA. <https://franklinparkactionplan.com/>
- Brim, Brianna, Stacy Fromhold, and Shannon Blaney. 2021. "Older Adults' Self-Reported Barriers to Aging in Place." *Journal of Applied Gerontology* 40 (12): 1678–86. <https://doi.org/10.1177/0733464820988800>.
- Bronikowska, Malgorzata, Michal Bronikowski, and Nadja Schott. 2011. "'You Think You Are Too Old to Play?' Playing Games and Aging." *Human Movement* 12 (1): 24–30. <https://doi.org/10.2478/v10038-010-0030-2>.
- BU Today Staff. 2018. "Getting to Know Your Neighborhood: Dorchester." *BU Today*, December 18, 2018, sec. In the City. <https://www.bu.edu/articles/2017/getting-to-know-your-neighborhood-dorchester>.
- Buzzelli, Armand A., and Jason A. Draper. 2019. "Examining the Motivation and Perceived Benefits of Pickleball Participation in Older Adults." *Journal of Aging and Physical Activity* 28 (2): 180–86. <https://doi.org/10.1123/japa.2018-0413>.
- Carr, Ethan. 2022. "The Past and Future of Boston's Franklin Park." *VIEW*, 2022.
- Carr, Kelly, Patricia L. Weir, Dory Azar, and Nadia R. Azar. 2013. "Universal Design: A Step toward Successful Aging." *Journal of Aging Research* 2013 (324624). <https://doi.org/10.1155/2013/324624>.
- Centers for Disease Control and Prevention. 2011. "Cognitive Impairment: A Call for Action, Now!" <http://www.cdc.gov/aging/healthybrain/index.htm>.
- . 2013. "The State of Aging and Health in America 2013." Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services.
- . 2017. "Healthy Places Terminology." Centers for Disease Control and Prevention. December 11, 2017. <https://www-cdc-gov.er.lib.k-state.edu/healthyplaces/terminology.htm>.
- . 2019a. "Arthritis Foundation Aquatic Program (AFAP)." Centers for Disease Control and Prevention. October 18, 2019. <https://www.cdc.gov/arthritis/interventions/programs/afap.htm>.
- . 2019b. "Fit & Strong!" Centers for Disease Control and Prevention. October 18, 2019. <https://www.cdc.gov/arthritis/interventions/programs/fit-strong.htm>.
- . 2020a. "Chronic Diseases and Cognitive Decline — A Public Health Issue." Centers for Disease Control and Prevention. September 10, 2020. <https://www.cdc.gov/aging/publications/chronic-diseases-brief.html>.
- . 2020b. "Symptoms of Depression Among Adults: United States, 2019." Centers for Disease Control and Prevention. September 24, 2020. <https://www.cdc.gov/nchs/products/databriefs/db379.htm>.
- . 2021. "Loneliness and Social Isolation Linked to Serious Health Conditions." Centers for Disease Control and Prevention. April 30, 2021. <https://www.cdc.gov/aging/publications/features/lonely-older-adults.html>.
- . 2022. "How Much Physical Activity Do Older Adults Need?" Centers for Disease Control and Prevention. June 3, 2022. https://www.cdc.gov/physicalactivity/basics/older_adults/index.htm.
- Chi, Winnie, Emily Graf, Landon Hughes, Jean Hastie, Galina Khatutsky, Sari B. Shuman, E. Andrew Jessup, and Sarita Karon. 2019. "Community-Dwelling Older Adults with Dementia and Their Caregivers: Key Indicators from the National Health and Aging Trends Study." US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE). January 29, 2019. <https://aspe.hhs.gov/reports/community-dwelling-older-adults-dementia-their-caregivers-key-indicators-national-health-aging-0>.
- Choi, Yeon Jin. 2022. "Understanding Aging in Place: Home and Community Features, Perceived Age-Friendliness of Community, and Intention Toward Aging in Place." *The Gerontologist* 62 (1): 46–55. <https://doi.org/10.1093/geront/gnab070>.
- Chung, Soondool, Miri Kim, Erica Y. Auh, and Nan Sook Park. 2021. "WHO's Global Age-Friendly Cities Guide: Its Implications of a Discussion on Social Exclusion among Older Adults." *International Journal of Environmental Research and Public Health* 18 (15): 8027. <https://doi.org/10.3390/ijerph18158027>.
- City of Boston. 2017. "Age-Friendly Boston Action Plan 2017." Boston, MA. https://www.boston.gov/sites/default/files/embed/f/full_report_0.pdf.

- . 2020. "Franklin Park Master Plan Survey." Franklin Park Action Plan. Accessed October 1, 2022. <https://static1.squarespace.com/static/5da8b9342a4fea6a5c56ca00/t/5ebefb96cb8c5651cdc5893b/1589574575413/Franklin+Park+Community+Survey+Results.pdf>.
- . 2023a. "Improvements to Harambee Park." City of Boston. January 20, 2023. <https://www.boston.gov/departments/parks-and-recreation/improvements-harambee-park>.
- . 2023b. "BCYF Curtis Hall." City of Boston. January 31, 2023. <https://www.boston.gov/departments/boston-centers-youth-families/bcyf-curtis-hall>.
- . 2023c. "Programming, Activities, and Special Events in Boston's Parks." City of Boston. February 27, 2023. <https://www.boston.gov/departments/parks-and-recreation/parkarts>.
- . 2023d. "BCYF Grove Hall Senior Center." City of Boston. March 7, 2023. <https://www.boston.gov/departments/boston-centers-youth-families/bcyf-grove-hall-senior-center>.
- . n.d. "Boston Centers for Youth & Families." City of Boston. Accessed March 16, 2023. <https://www.boston.gov/departments/boston-centers-youth-families>.
- Cohen, Deborah A., Bing Han, Catherine J. Nagel, Peter Harnik, Thomas L. McKenzie, Kelly R. Evenson, Terry Marsh, Stephanie Williamson, Christine Vaughan, and Sweatha Katta. 2016. "The First National Study of Neighborhood Parks: Implications for Physical Activity." *American Journal of Preventive Medicine* 51 (4): 419–26. <https://doi.org/10.1016/j.amepre.2016.03.021>.
- Cohen, Deborah A., Bing Han, Sujeong Park, Stephanie Williamson, and Kathryn P. Deroose. 2019. "Park Use and Park-Based Physical Activity in Low-Income Neighborhoods." *Journal of Aging and Physical Activity* 27 (3): 334–42. <https://doi.org/10.1123/japa.2018-0032>.
- Cohen, Deborah A., Terry Marsh, Stephanie Williamson, Kathryn Pitkin Deroose, Homero Martinez, Claude Setodji, and Thomas L. McKenzie. 2010. "Parks and Physical Activity: Why Are Some Parks Used More than Others?" *Preventive Medicine* 50 (January): S9–12. <https://doi.org/10.1016/j.ypmed.2009.08.020>.
- Cohen, Deborah A., Thomas L. McKenzie, Amber Sehgal, Stephanie Williamson, Daniela Golinelli, and Nicole Lurie. 2007. "Contribution of Public Parks to Physical Activity." *American Journal of Public Health* 97 (3): 509–14. <https://doi.org/10.2105/AJPH.2005.072447>.
- Corbin, David E. 1998. "Intergenerational Programs." *Journal of Physical Education, Recreation & Dance* 69 (8): 20–23.
- Cunningham, Conor, Roger O' Sullivan, Paolo Caserotti, and Mark A. Tully. 2020. "Consequences of Physical Inactivity in Older Adults: A Systematic Review of Reviews and Meta-Analyses." *Scandinavian Journal of Medicine & Science in Sports* 30 (5): 816–27. <https://doi.org/10.1111/sms.13616>.
- Curl, Angela, and Phil Mason. 2019. "Neighbourhood Perceptions and Older Adults' Wellbeing: Does Walking Explain the Relationship in Deprived Urban Communities?" *Transportation Research Part A: Policy and Practice*, Walking and Cycling for better Transport, Health and the Environment, 123 (2019): 119–29. <https://doi.org/10.1016/j.tra.2018.11.008>.
- Deroose, Kathryn Pitkin, Bing Han, Stephanie Williamson, and Deborah A. Cohen. 2015. "Racial-Ethnic Variation in Park Use and Physical Activity in the City of Los Angeles." *Journal of Urban Health : Bulletin of the New York Academy of Medicine* 92 (6): 1011–23. <https://doi.org/10.1007/s11524-015-9994-8>.
- Dillon, Ian, and Jared Green. n.d. "Universal Design." ASLA. Accessed September 22, 2022. <https://www.asla.org/universaldesign.aspx>.
- El Nasser, Haya. 2012. "'Fitness Parks' Catch on in Cities." *USA TODAY*. December 9, 2012. <https://www.usatoday.com/story/news/nation/2012/12/08/fitness-parks-cities/1755249/>.
- Emerald Necklace Conservancy. n.d. "Franklin Park." Emerald Necklace Conservancy. Accessed March 1, 2023. <https://www.emeraldnecklace.org/park-overview/franklin-park/>.
- Erickson, W., C. Lee, and S. von Schrader. 2022. "Disability Statistics from the American Community Survey (ACS)." Ithaca, NY: Cornell University Yang-Tan Institute (YTI). Retrieved from Cornell University Disability Statistics website: <http://www.disabilitystatistics.org/>.
- Eventbrite. n.d. "Boston, MA Franklin Park Events." Eventbrite. Accessed April 2, 2023. <https://www.eventbrite.com/d/ma--boston/franklin-park/>.
- Farber, Nicholas, and Douglas Shinkle. 2011. *Aging in Place: A State Survey of Livability Policies and Practices*. National Conference of State Legislatures and AARP.
- Fong, Polly, Catherine Haslam, Tegan Cruwys, and S. Alexander Haslam. 2021. "'There's a Bit of a Ripple-Effect': A Social Identity Perspective on the Role of Third-Places and Aging in Place." *Environment and Behavior* 53 (5): 540–68. <https://doi.org/10.1177/0013916520947109>.
- Franklin Park Coalition. n.d.a. "Elma Lewis Playhouse in the Park." Franklin Park Coalition. Accessed March 19, 2023a. <https://www.franklinparkcoalition.org/featured-events/elma-lewis-playhouse-in-the-park/>.
- . n.d.b. "Upcoming Events." Franklin Park Coalition. Accessed May 2, 2023b. <https://www.franklinparkcoalition.org/event/fairy-house-building/>.
- . n.d.c. "White Stadium." Franklin Park Coalition. Accessed March 19, 2023c. <https://www.franklinparkcoalition.org/whitestadium/>.

- Gardner, Paula J. 2011. "Natural Neighborhood Networks — Important Social Networks in the Lives of Older Adults Aging in Place." *Journal of Aging Studies*, Special Section: Age and the Cultivation of Place, 25 (3): 263–71. <https://doi.org/10.1016/j.jaging.2011.03.007>.
- Gault, Mandy Lucinda, and Mark Elisabeth Theodorus Willems. 2017. "The Metabolic Equivalents of One-Mile Walking by Older Adults; Implications for Health Promotion." *Health Promotion Perspectives* 7 (4): 216–22. <https://doi.org/10.15171/hpp.2017.38>.
- Gibson, Stephen C. 2018. "'Let's Go to the Park.' An Investigation of Older Adults in Australia and Their Motivations for Park Visitation." *Landscape and Urban Planning* 180 (December): 234–46. <https://doi.org/10.1016/j.landurbplan.2018.08.019>.
- Gibson, Stephen, Anastasia Loukaitou-Sideris, and Vinit Mukhija. 2019. "Ensuring Park Equity: A California Case Study." *Journal of Urban Design* 24 (3): 385–405. <https://doi.org/10.1080/13574809.2018.1497927>.
- Griffin, Randy. 2013. "Bird Tales: A Program For Engaging People With Dementia Through The Natural World of Birds (Excerpt)." Scribd. 2013. <https://www.scribd.com/document/201940071/Bird-Tales-A-Program-for-Engaging-People-with-Dementia-through-the-Natural-World-of-Birds-Excerpt>.
- Guo, Hui Jun, and Amit Sapra. 2021. "Instrumental Activity of Daily Living." In StatPearls. Treasure Island, FL: StatPearls Publishing. <http://www.ncbi.nlm.nih.gov/books/NBK553126/>.
- Hagestad, Gunhild O., and Peter Uhlenberg. 2005. "The Social Separation of Old and Young: A Root of Ageism." *Journal of Social Issues* 61: 343–60. <https://doi.org/10.1111/j.1540-4560.2005.00409.x>.
- Harnik, Peter, and Ben Welle. 2011. *From Fitness Zones to the Medical Mile: How Urban Park Systems Can Best Promote Health and Wellness*. Washington, DC: The Trust for Public Land. <http://cloud.tpl.org/pubs/ccpe-health-promoting-parks-rpt.pdf>.
- Hilderbrand, Gary. 2022. "An Action Plan for Franklin Park." *VIEW*, 2022.
- Hoffman, Alexander von. 1988. "'Of Greater Lasting Consequence': Frederick Law Olmsted and the Fate of Franklin Park, Boston." *Journal of the Society of Architectural Historians* 47 (4): 339–50. <https://doi.org/10.2307/990380>.
- HUD User, Office of Policy Development and Research. 2013. "Measuring the Costs and Savings of Aging in Place." HUD User. 2013. <https://www.huduser.gov/portal/periodicals/em/fall13/highlight2.html#title>.
- Inclusive Design Research Centre. n.d. "Co-Designing Inclusive Cities." Inclusive Design Research Centre. Accessed November 29, 2022. <https://cities.inclusivedesign.ca/>.
- Iwarsson, S., and A. Ståhl. 2003. "Accessibility, Usability and Universal Design--Positioning and Definition of Concepts Describing Person-Environment Relationships." *Disability and Rehabilitation* 25 (2): 57–66. <https://doi.org/10.1080/dre.25.2.57.66>.
- Johnson, Megan. 2018. "So You Want to Live in Mattapan." *Boston Magazine* (blog). December 4, 2018. <https://www.bostonmagazine.com/property/2018/12/04/mattapan-neighborhood-guide/>.
- . 2019. "So You Want to Live in Dorchester." *Boston Magazine* (blog). October 18, 2019. <https://www.bostonmagazine.com/property/dorchester-neighborhood-guide/>.
- . 2020. "So You Want to Live in Roxbury." *Boston Magazine* (blog). January 10, 2020. <https://www.bostonmagazine.com/property/roxbury-neighborhood-guide/>.
- Kaczynski, Andrew T, Gina M Besenyi, Sonja A Wilhelm Stanis, Mohammad Javad Koohsari, Katherine B Oestman, Ryan Bergstrom, Luke R Potwarka, and Rodrigo S Reis. 2014. "Are Park Proximity and Park Features Related to Park Use and Park-Based Physical Activity among Adults? Variations by Multiple Socio-Demographic Characteristics." *The International Journal of Behavioral Nutrition and Physical Activity* 11 (December): 146. <https://doi.org/10.1186/s12966-014-0146-4>.
- Kaczynski, Andrew T., Sonja A. Wilhelm Stanis, Tanis J. Hastmann, and Gina M. Besenyi. 2011. "Variations in Observed Park Physical Activity Intensity Level by Gender, Race, and Age: Individual and Joint Effects." *Journal of Physical Activity & Health* 8 Suppl 2 (September): S151–160.
- Kimic, Kinga, and Paulina Polko. 2022. "The Use of Urban Parks by Older Adults in the Context of Perceived Security." *International Journal of Environmental Research and Public Health* 19 (7): 4184. <https://doi.org/10.3390/ijerph19074184>.
- Kweon, Byoung-Suk, William C. Sullivan, and Angela R. Wiley. 1998. "Green Common Spaces and the Social Integration of Inner-City Older Adults." *Environment and Behavior* 30 (6): 832–58. <https://doi.org/10.1177/001391659803000605>.
- Lee, Janet Lok Chun, and Rainbow Tin Hung Ho. 2022. "Creating Exercise Spaces in Parks for Older Adults With Fitness, Rehabilitation, and Play Elements: A Review and Perspective." *Gerontology and Geriatric Medicine* 8 (March): 23337214221083404. <https://doi.org/10.1177/23337214221083404>.
- Lehning, Amanda J., Richard J. Smith, and Ruth E. Dunkle. 2015. "Do Age-Friendly Characteristics Influence the Expectation to Age in Place? A Comparison of Low-Income and Higher Income Detroit Elders." *Journal of Applied Gerontology* 34 (2): 158–80. <https://doi.org/10.1177/0733464813483210>.
- Levinger, Pazit, Maya Panisset, Helen Parker, Frances Batchelor, Marian Tye, and Keith D. Hill. 2021.

"Guidance about Age-friendly Outdoor Exercise Equipment and Associated Strategies to Maximise Usability for Older People." *Health Promotion Journal of Australia* 32 (3): 475–82. <https://doi.org/10.1002/hpja.367>.

Li, Dongying, Yujia Zhai, Yayuan Xiao, Galen Newman, and De Wang. 2019. "Subtypes of Park Use and Self-Reported Psychological Benefits Among Older Adults: A Multilevel Latent Class Analysis Approach." *Landscape and Urban Planning* 190 (October): 103605. <https://doi.org/10.1016/j.landurbplan.2019.103605>.

Li, Fuzhong. n.d. "Tai Ji Quan: Moving for Better Balance - Program Information." Tai Ji Quan: Moving for Better Balance. https://tjqmbb.org/wp-content/uploads/2022/01/TJQMBB-Program-Information-1.7_2022.pdf.

Lillo-Crespo, Manuel, Mar Forner-Ruiz, Jorge Riquelme-Galindo, Daniel Ruiz-Fernández, and Sofía García-Sanjuan. 2019. "Chess Practice as a Protective Factor in Dementia." *International Journal of Environmental Research and Public Health* 16 (12): 2116. <https://doi.org/10.3390/ijerph16122116>.

Loukaitou-Sideris, Anastasia. 1995. "Urban Form and Social Context: Cultural Differentiation in the Uses of Urban Parks." *Journal of Planning Education and Research* 14 (2): 89–102. <https://doi.org/10.1177/0739456X9501400202>.

Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. "Placemaking for an Aging Population: Guidelines for Senior-Friendly Parks." UCLA Luskin School of Public Affairs. <https://www.lewis.ucla.edu/research/placemaking-for-aging-population/>.

Martin, Diane, Owen Long, and Linda Kessler. 2019. "Planning for Aging in Place: Incorporating the Voice of Elders to Promote Quality of Life." *Journal of Housing For the Elderly* 33 (4): 382–92. <https://doi.org/10.1080/02763893.2019.1593280>.

Massachusetts Association of Councils on Aging. 2016. "Massachusetts Memory Cafe Toolkit." <https://d3s4bwez5h2fgv.cloudfront.net/documents/Massachusetts-Memory-Caf%C3%A9-Toolkit.pdf>.

Massachusetts Bay Transportation Authority. 2023. "2023 System Map." <https://cdn.mbta.com/sites/default/files/2023-03/2023-3-13-system-map.pdf>.

Matthews, Kevin A., Wei Xu, Anne H. Gaglioti, James B. Holt, Janet B. Croft, Dominic Mack, and Lisa C. McGuire. 2019. "Racial and Ethnic Estimates of Alzheimer's Disease and Related Dementias in the United States (2015–2060) in Adults Aged ≥65 Years." *Alzheimer's & Dementia* 15 (1): 17–24. <https://doi.org/10.1016/j.jalz.2018.06.3063>.

Mayo, Chantel D., Rebecca Kenny, Vanessa Scarapicchia, Lisa Ohlhauser, Robin Syme, and Jodie R. Gawryluk. 2021. "Aging in Place: Challenges of Older Adults with Self-Reported Cognitive Decline." *Canadian Geriatrics Journal* 24 (2): 138–43. <https://doi.org/10.5770/cgj.24.456>.

Mohlenkamp, Jami, Rob Rydel, Julie Edwards, Lana Rimboym, and OZ Architecture. 2016. *Aging*

in Place Design Guidelines for Independent Living in Multifamily Buildings. Enterprise Community Partners. https://www.greencommunitiesonline.org/sites/default/files/aging_in_place_design_guidelines.pdf.

Mutchler, Jan, Caitlin Coyle, Nidya Velasco Roldán, Paul Watanabe, Cedric Woods, Lorna Rivera, Quito Swan, Elena Stone, and Laurie Nsiah-Jefferson. 2020. "Aging Strong for All: Examining Aging Equity in the City of Boston." Boston, MA: ScholarWorks at UMass Boston. <https://scholarworks.umb.edu/cgi/viewcontent.cgi?article=1048&context=demographyofaging>.

National Council on Aging. 2020a. "Evidence-Based Program: Fit & Strong!" NCOA. August 20, 2020. <https://www.ncoa.org/article/evidence-based-program-fit-strong>.

———. 2020b. "Evidenced-Based Program: Walk with Ease." NCOA. August 20, 2020. <https://www.ncoa.org/article/evidence-based-program-walk-with-ease>.

———. 2020c. "Evidence-Based Program: AEA Arthritis Foundation Aquatic Program." NCOA. September 3, 2020. <https://www.ncoa.org/article/evidence-based-program-aea-arthritis-foundation-aquatic-program>.

———. 2022a. "About Evidence-Based Programs." National Council on Aging. February 17, 2022. <https://www.ncoa.org/article/about-evidence-based-programs>.

———. 2022b. "The Senior Farmers' Market Nutrition Program: Key Facts for Older Adults." NCOA. March 10, 2022. <https://www.ncoa.org/article/the-senior-farmers-market-nutrition-program-key-facts-for-older-adults>.

National Disability Authority. 2017. "External Environment." In *Building for Everyone: A Universal Design Approach*. Dublin, Ireland: Centre for Excellence in Universal Design, National Disability Authority. <https://universaldesign.ie/built-environment/building-for-everyone/>.

National Recreation and Park Association. n.d.a. "Park Access Campaign." National Recreation and Park Association. Accessed March 15, 2023. <https://www.nrpa.org/our-work/partnerships/initiatives/park-access/>.

National Recreation and Park Association. n.d.b. "Park and Chronic Disease Management." National Recreation and Park Association. Accessed April 4, 2023. <https://www.nrpa.org/our-work/Three-Pillars/health-wellness/ParksandHealth/fact-sheets/parks-chronic-disease-management/>.

National Recreation and Park Association. 2017. "Parks and Recreation: Serving a Growing, Older Population." National Recreation and Park Association. July 1, 2017. <https://www.nrpa.org/parks-recreation-magazine/2017/july/parks-and-recreation-serving-a-growing-older-population/>.

NC State University. 1997. "The Principles of Universal Design." The Center for Universal Design.

- April 1, 1997. https://projects.ncsu.edu/ncsu/design/cud/about_ud/udprinciplestext.htm.
- Nelischer, Claire, and Anastasia Loukaitou-Sideris. 2022. "Intergenerational Public Space Design and Policy: A Review of the Literature." *Journal of Planning Literature* 38 (1): 19–32. <https://doi.org/10.1177/08854122221092175>.
- Onose, Diana Andreea, Ioan Cristian Iojă, Mihai Răzvan Niță, Gabriel Ovidiu Vânău, and Ana Maria Popa. 2020. "Too Old for Recreation? How Friendly Are Urban Parks for Elderly People?" *Sustainability* 12 (3): 790. <https://doi.org/10.3390/su12030790>.
- Perry, Meredith, Lucy Cotes, Benjamin Horton, Rebecca Kunac, Isaac Snell, Blake Taylor, Abbey Wright, and Hemakumar Devan. 2021. "'Enticing' but Not Necessarily a 'Space Designed for Me': Experiences of Urban Park Use by Older Adults with Disability." *International Journal of Environmental Research and Public Health* 18 (2): 552. <https://doi.org/10.3390/ijerph18020552>.
- Projections and Implications for Housing a Growing Population: Older Households 2015-2035*. 2016. Harvard Joint Center for Housing Studies. <https://www.jchs.harvard.edu/research-areas/reports/projections-and-implications-housing-growing-population-older-households>.
- "Race and Hispanic Origin by Selected Age Groups: Main Projections Series for the United States, 2017-2060." 2018. Washington, DC: US Census Bureau, Population Division. <https://www.census.gov/data/tables/2017/demo/popproj/2017-summary-tables.html>.
- Raymore, Leslie, and David Scott. 1998. "The Characteristics and Activities of Older Adult Visitors to a Metropolitan Park District." *Journal of Park and Recreation Administration* 16 (4): 1–21.
- Rémillard-Boilard, Samuèle, Tine Buffel, and Chris Phillipson. 2017. "Involving Older Residents in Age-Friendly Developments: From Information to Coproduction Mechanisms." *Journal of Housing For the Elderly* 31 (2): 146–59. <https://doi.org/10.1080/02763893.2017.1309932>.
- Scharlach, Andrew E., and Amanda J. Lehning. 2013. "Ageing-Friendly Communities and Social Inclusion in the United States of America." *Ageing & Society* 33 (1): 110–36. <https://doi.org/10.1017/S0144686X12000578>.
- Scott, David, and Wayne Munson. 1994. "Perceived Constraints to Park Usage among Individuals with Low Incomes." *Journal of Park and Recreation Administration* 12 (4): 79–96.
- Scott, Theresa L, Barbara M Masser, and Nancy A Pachana. 2020. "Positive Aging Benefits of Home and Community Gardening Activities: Older Adults Report Enhanced Self-Esteem, Productive Endeavours, Social Engagement and Exercise." *SAGE Open Medicine* 8 (January): 2050312120901732. <https://doi.org/10.1177/2050312120901732>.
- Shankar, Aparna, Anne McMunn, James Banks, and Andrew Steptoe. 2011. "Loneliness, Social Isolation, and Behavioral and Biological Health Indicators in Older Adults." *Health Psychology: Official Journal of the Division of Health Psychology, American Psychological Association* 30 (4): 377–85. <https://doi.org/10.1037/a0022826>.
- Sia, Angelia, Wilson W. S. Tam, Anna Fogel, Ee Heok Kua, Kenneth Khoo, and Roger C. M. Ho. 2020. "Nature-Based Activities Improve the Well-Being of Older Adults." *Scientific Reports* 10 (1): 18178. <https://doi.org/10.1038/s41598-020-74828-w>.
- SilverSneakers. n.d. "SilverSneakers LIVE Online Classes." SilverSneakers. Accessed April 18, 2023. <https://tools.silversneakers.com/Search/OnlineClasses>.
- Steenland, Kyle, Felicia C. Goldstein, Allan Levey, and Whitney Wharton. 2016. "A Meta-Analysis of Alzheimer's Disease Incidence and Prevalence Comparing African-Americans and Caucasians." *Journal of Alzheimer's Disease* 50 (1): 71–76. <https://doi.org/10.3233/JAD-150778>.
- Steinfeld, Edward, and Jordana L. Maisel. 2012. *Universal Design: Creating Inclusive Environments*. Hoboken, NJ: John Wiley & Sons, Inc.
- Steptoe, Andrew, Aparna Shankar, Panayotes Demakakos, and Jane Wardle. 2013. "Social Isolation, Loneliness, and All-Cause Mortality in Older Men and Women." *Proceedings of the National Academy of Sciences of the United States of America* 110 (15): 5797–5801. <https://doi.org/10.1073/pnas.1219686110>.
- Sundevall, Elin P., and Märit Jansson. 2020. "Inclusive Parks across Ages: Multifunction and Urban Open Space Management for Children, Adolescents, and the Elderly." *International Journal of Environmental Research and Public Health* 17 (24): 9357. <https://doi.org/10.3390/ijerph17249357>.
- Sutherland, Amy. 2019. "A Revitalized Historic Farm Thrives in One of Boston's Oldest Neighborhoods." *Preservation Magazine*, 2019. <https://savingplaces.org/stories/a-revitalized-historic-farm-thrives-in-one-of-bostons-oldest-neighborhoods>.
- The Arthritis Foundation. n.d. "Walk With Ease: About the Program." Arthritis Foundation. Accessed April 18, 2023. <https://www.arthritis.org/health-wellness/healthy-living/physical-activity/walking/walk-with-ease/ww-e-about-the-program>.
- The Cultural Landscape Foundation. n.d. "Franklin Park." The Cultural Landscape Foundation. Accessed September 15, 2022. <https://www.tclf.org/landscapes/franklin-park>.
- The President and Fellows of Harvard College. 2023. "About Us." The Arnold Arboretum. 2023. <https://arboretum.harvard.edu/about/>.
- Thomas, William H., and Janice Blanchard. 2009. "Moving Beyond Place: Aging in Community." *Journal of the American Society on Aging* 33 (2): 12–17.

- Trucil, Daniel E., Nancy E. Lundebjerg, and Daniel S. Busso. 2021. "When It Comes to Older Adults, Language Matters and Is Changing: American Geriatrics Society Update on Reframing Aging Style Changes." *Journal of the American Geriatrics Society* 69 (1): 265–67. <https://doi.org/10.1111/jgs.16848>.
- UIC Institute for Health Research and Policy. n.d. "About Fit & Strong!" Fit & Strong! Accessed April 18, 2023. <https://www.fitandstrong.org/about/about.html>.
- United States Bocce Federation. n.d. "Home." United States Bocce Federation. <https://usbf.us/>.
- USA Pickleball. n.d. "What Is Pickleball?" USA Pickleball. Accessed April 18, 2023. <https://usapickleball.org/what-is-pickleball/>.
- U.S. Census Bureau. 2014. "Mobility Is Most Common Disability Among Older Americans, Census Bureau Reports." United States Census Bureau. December 2, 2014. <https://www.census.gov/newsroom/archives/2014-pr/cb14-218.html>.
- . 2020a. "Grandparents Living with Own Grandchildren Under 18 Years." *American Community Survey 5-Year Estimates* (S1002 | Grandparents). Accessed February 25, 2023. [https://data.census.gov/map?t=g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1002&cid=S1002_C01_001E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044](https://data.census.gov/map?t=g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1002&cid=S1002_C01_001E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044)
- . 2020b. "Hispanic or Latino." *American Community Survey 5-Year Estimates* (P2 | Hispanic or Latino, and Not Hispanic or Latino by Race). Accessed February 25, 2023. [https://data.census.gov/map?q=race&g=050XX00US25025\\$1400000&y=2020&tid=DECENNIALPL2020.P2&cid=P2_002N&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?q=race&g=050XX00US25025$1400000&y=2020&tid=DECENNIALPL2020.P2&cid=P2_002N&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)
- . 2020c. "Householder Living Alone—65 Years and Over." *American Community Survey 5-Year Estimates* (S1101 | Households and Families). Accessed February 25, 2023. [https://data.census.gov/map?t=g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_013E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044](https://data.census.gov/map?t=g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_013E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044)
- . 2020d. "Households with One or More People 60 Years and Over." *American Community Survey 5-Year Estimates* (S1101 | Households and Families). Accessed February 25, 2023. [https://data.census.gov/map?t=g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_011E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044](https://data.census.gov/map?t=g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_011E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044)
- . 2020e. "Percent Below Poverty Level." *American Community Survey 5-Year Estimates* (S1701 | Poverty Status in the Past 12 Months). Accessed February 25, 2023. [https://data.census.gov/map?q=pov&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1701&cid=S1701_C03_001E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3008,-71.0959,z12.9615](https://data.census.gov/map?q=pov&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1701&cid=S1701_C03_001E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3008,-71.0959,z12.9615)
- . 2020f. "Percent Below Poverty Level—65 Years and Over." *American Community Survey 5-Year Estimates* (S1701 | Poverty Status in the Past 12 Months). Accessed February 25, 2023. [https://data.census.gov/map?q=pov&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1701&cid=S1701_C03_010E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?q=pov&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1701&cid=S1701_C03_010E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)
- . 2020g. "Percent Limited English-Speaking Households—Spanish." *American Community Survey 5-Year Estimates* (S1602 | Limited English Speaking Households). Accessed February 25, 2023. [https://data.census.gov/map?q=race&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1602&cid=S1602_C04_002E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3079,-71.0744,z12.9615](https://data.census.gov/map?q=race&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1602&cid=S1602_C04_002E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3079,-71.0744,z12.9615)
- . 2020h. "Percent with a Disability—65 to 74 Years." *American Community Survey 5-Year Estimates* (S1810 | Disability Characteristics). Accessed February 25, 2023. [https://data.census.gov/map?q=disability&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1810&cid=S1810_C03_017E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?q=disability&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1810&cid=S1810_C03_017E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)
- . 2020i. "Percent with a Disability—75 Years and Over." *American Community Survey 5-Year Estimates* (S1810 | Disability Characteristics). Accessed February 25, 2023. [https://data.census.gov/map?q=disability&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1810&cid=S1810_C03_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?q=disability&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1810&cid=S1810_C03_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)
- . 2020j. "Renter-Occupied Housing Units." *American Community Survey 5-Year Estimates* (S1101 | Households and Families). Accessed February 25, 2023. [https://data.census.gov/map?t=g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?t=g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)
- U.S. Chess Federation. n.d. "About." US Chess Federation. Accessed April 18, 2023. <https://new.uschess.org/about>.
- U.S. Senior Pickleball. n.d. "US Senior Pickleball: Built by Seniors, for Seniors." US Senior Pickleball. Accessed April 18, 2023. <https://www.usseniorpickleball.com>.
- USDA. n.d. "Seniors Farmers' Market Nutrition Program | Food and Nutrition Service." USDA Food and Nutrition Service. Accessed April 18, 2023. <https://www.fns.usda.gov/sfmnp/senior-farmers-market-nutrition-program>.
- Veitch, Jenny, Elliott Flowers, Kylie Ball, Benedicte Deforche, and Anna Timperio. 2020. "Designing Parks for Older Adults: A Qualitative Study Using Walk-along Interviews." *Urban Forestry & Urban Greening* 54 (October): 126768. <https://doi.org/10.1016/j.ufug.2020.126768>.

- Vespa, Jonathan, Lauren Medina, and David Armstrong M. 2020. *Demographic Turning Points for the United States: Population Projections for 2020 to 2060*. P25-1144. Washington, DC: U.S. Census Bureau. <https://purl.fdlp.gov/GPO/gpo93743>.
- Washington, Tracy L., Debra Flanders Cushing, Janelle Mackenzie, Laurie Buys, and Stewart Trost. 2019. "Fostering Social Sustainability through Intergenerational Engagement in Australian Neighborhood Parks." *Sustainability* 11 (16): 4435. <https://doi.org/10.3390/su11164435>.
- Wiles, Janine L., Annette Leibing, Nancy Guberman, Jeanne Reeve, and Ruth E. S. Allen. 2012. "The Meaning of 'Aging in Place' to Older People." *The Gerontologist* 52 (3): 357–66. <https://doi.org/10.1093/geront/gnr098>.
- Winick, Bradley H., and Martin Jaffe. 2015. *Planning Aging-Supportive Communities*. Chicago, IL: American Planning Association.
- World Health Organization. 2002. *Active ageing : a policy framework*. World Health Organization. <https://apps.who.int/iris/handle/10665/67215>.
- World Health Organization. 2007. *Global Age-Friendly Cities: A Guide*. France: World Health Organization. <https://apps.who.int/iris/handle/10665/43755>.
- World Health Organization. 2017. *Age-Friendly Environments in Europe: A Handbook of Domains for Policy Action*. <https://apps.who.int/iris/bitstream/handle/10665/334251/9789289052887-eng.pdf>.
- Yazdanyar, Ali, and Anne B. Newman. 2009. "The Burden of Cardiovascular Disease in the Elderly: Morbidity, Mortality, and Costs." *Clinics in Geriatric Medicine* 25 (4): 563–vii. <https://doi.org/10.1016/j.cger.2009.07.007>.
- Zhai, Yujia, Dongying Li, De Wang, and Cheng Shi. 2020. "Seniors' Physical Activity in Neighborhood Parks and Park Design Characteristics." *Frontiers in Public Health* 8 (July). <https://doi.org/10.3389/fpubh.2020.00322>.

Figure References

- Alta Planning + Design. IMG_3194. August 2, 2017. Photograph. Flickr. <https://www.flickr.com/photos/altaplanning/38846897942/>
- Alvarez, Andres. Elderly Men Playing Chess in a Park. March 23, 2019. Photograph. Pexels. <https://www.pexels.com/photo/elderly-men-playing-chess-in-a-park-3372681/>
- B, Ron. Pickleball-5. January 24, 2017. Photograph. Flickr. <https://www.flickr.com/photos/clamcake/31662070704/in/photostream/>
- BBC World Service. A Typical Afternoon in a French Park. March 15, 2020. Photograph. Flickr. <https://www.flickr.com/photos/bbcworldservice/4451043790>
- BostonMaps. 2020. "Boston Neighborhoods." GIS Layer. https://bostonopendata-boston.opendata.arcgis.com/datasets/3525b0ee6e6b427f9aab5d0a1d0a1a28_0/about.
- Canfield, Jessica. Franklin park – the wilderness nature. September 2022a. Photograph.
- Canfield, Jessica. Franklin park – the wilderness stairs. September 2022b. Photograph.
- Canfield, Jessica. Playstead playground. September 2022c. Photograph.
- Cederskjold, Jens. Israel Square – Central Copenhagen. April 24, 2015. Photograph. Flickr. <https://www.flickr.com/photos/184898381@N07/50733084927/>
- City of Boston. 2017. "Open Space Map." <http://www.bostonplans.org/getattachment/ae9915c0-9cb0-4a93-be8a-344d59443468/>.
- City of Boston. 2020. "Franklin Park Master Plan Survey." Franklin Park Action Plan. Accessed October 1, 2022. <https://static1.squarespace.com/static/5da8b9342a4fea6a5c56ca00/t/5ebefb96cb8c5651cdc5893b/1589574575413/Franklin+Park+Community+Survey+Results.pdf>.
- Cruz, Jose. A day in Osaka Bampaku Expo Park. October 8, 2015. Photograph. Flickr. <https://www.flickr.com/photos/jose-cruz/22066684385/>
- Cycling Without Age. Israel Plads (2 Year Anniversary Ride). April 6, 2015. Photograph. Flickr. <https://www.flickr.com/photos/cyklingudenalder/17053588822/>

Eden, Janine, and Jim. High Line Drinking Fountain. June 17, 2008. Photograph. Flickr. <https://www.flickr.com/photos/edenpictures/3638487212/>

Fairfax County. Gardening Group. May 7, 2012. Photograph. Flickr. <https://www.flickr.com/photos/fairfaxcounty/8616354307/>

Frodesiak, Anna. Haikou People's Park - 01. April 17, 2012a. Photograph. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Haikou_People%27s_Park_-_01.jpg

Frodesiak, Anna. Haikou People's Park – People Exercising on Exercise Equipment. April 17, 2012b. Photograph. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Haikou_People%27s_Park_-_people_exercising_on_exercise_equipment_-_02.jpg

Google Maps. 2023. <https://www.google.com/maps/@42.3042796,-71.0979138,14.5z>

Grand Canyon National Park. Grand Canyon National Park: Desert View Restrooms 5107. May 6, 2012. Photograph. Flickr. https://www.flickr.com/photos/grand_canyon_nps/7230013292

Guldi, Jo. Consulting the bird book. May 13, 2006. Photograph. Flickr. <https://www.flickr.com/photos/landschaft/145830160/>

Herrera, Katherine. Pierpont parking lot. September 2022. Photograph.

Herrera, Katherine. Pierpont road. September 2022. Photograph.

Herrera, Katherine. Playstead trail. September 2022. Photograph.

Hui, Wilson. Tai Chi at the People's Park. January 15, 2014. Photograph. Flickr. <https://www.flickr.com/photos/wilsonhui/12097239876/in/photostream/>

Johnson, Ryan. Completion of Improvements at Murray Hill Community Center. April 17, 2014. Flickr. <https://www.flickr.com/photos/northcharleston/13900183191/>

Kalamaja, John. The playstead bikeshare. September 2022. Photograph.

Kennedy, Niall. Exercise in Kowloon Park. May 31, 2008. Photograph. Flickr. <https://www.flickr.com/photos/niallkennedy/2538957802>

Kennisland. Scavenger Hunt. July 9, 2013. Photograph. Flickr. <https://www.flickr.com/photos/kl/9281418421/>

Knight, Gary. A Nice Sit Down. February 27, 2015. Photograph. Flickr. <https://www.flickr.com/photos/garryknight/16516992367/>

Kordonowy, Kye. Franklin park baseball fields. September 2022a. Photograph.

Kordonowy, Kye. Franklin park tennis courts. September 2022b. Photograph.

Krueger, Paul. Cycling the Olympic Village Seawall. June 20, 2012. Photograph. Flickr. <https://www.flickr.com/photos/pwkrueger/7409059354/in/album-72157625160007617/>

Lyons, Ed. Dennis DJ Simmons Playground. October 18, 2018. Photograph. Flickr. <https://www.flickr.com/photos/140979282@N02/44496930555>

Martin, Michael and Sherry Martin. Kokopelli Klassic Pickleball Tournament, Pubelo El Mirage AZ. February 16, 2019. Photograph. Flickr. <https://www.flickr.com/photos/martinvirtualtours/47160477161>

Mentorandi. R0010646.JPG. September 10, 2006. Photograph. Flickr. <https://flic.kr/p/nhJHg>

Narodziny. Older adults swim class. August 16, 2021. Photograph. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Aqua_Aerobik_z_Figur%C4%85.jpg

Piacquadio, Andrea. Cheerful Senior Mother and Adult Daughter Using Smartphone Together. April 8, 2019. Photograph. Pexels. <https://www.pexels.com/photo/cheerful-senior-mother-and-adult-daughter-using-smartphone-together-3791664/>

Pidvalnyi, Oleksandr. An Elderly Couple Sitting on the Bench at the Park. October 7, 2022. Photograph. Pexels. <https://www.pexels.com/photo/an-elderly-couple-sitting-on-the-bench-at-the-park-13923247/>

RODNAE Productions. People on the Park Doing Yoga. June 2, 2021. Photograph. Pexels. <https://www.pexels.com/photo/people-on-the-park-doing-yoga-8172947/>

Rost, Jens. Four pretty birds in a row. April 1, 2011. Photograph. Flickr. <https://www.flickr.com/photos/56380734@N05/8669423883/>

Secretariat, SuSanA. Public Toilet Block in the OFP. July 9, 2009. Photograph. Flickr. <https://www.flickr.com/photos/gtzecosan/3706208000>

spDuchamp. Chess in the Park. April 15, 2005. Photograph. Flickr. <https://www.flickr.com/photos/duchamp/9844794/>

Sund, Sheila. Farmers Market. August 6, 2016. Photograph. Flickr. https://www.flickr.com/photos/sheila_sund/50187422087/

Татарстана, Парки. MZF_0021. October 6, 2018. Photograph. Flickr. <https://www.flickr.com/photos/parktatar/44457354544/in/album-72157674266898978/>

Taylor, Indy. 100 Acres Entrance Signage 2. September 8, 2022. Wikimedia Commons. https://commons.m.wikimedia.org/wiki/File:100_Acres_entrance_signage_2.jpg

U.S. Census Bureau. 2020a. "Hispanic or Latino." American Community Survey 5-Year Estimates (P2 | Hispanic or Latino, and Not Hispanic or Latino by Race). Accessed February 25, 2023. [https://data.census.gov/map?q=race&g=050XX00US25025\\$1400000&y=2020&tid=DECENNIALPL2020.P2&cid=P2_002N&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?q=race&g=050XX00US25025$1400000&y=2020&tid=DECENNIALPL2020.P2&cid=P2_002N&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)

U.S. Census Bureau. 2020b. "Households with One or More People 60 Years and Over." American Community Survey 5-Year Estimates (S1101 | Households and Families). Accessed February 25, 2023. [https://data.census.gov/map?t=&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_011E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044](https://data.census.gov/map?t=&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_011E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2844,-71.1048,z12.2044)

U.S. Census Bureau. 2020c. "Percent Below Poverty Level—65 Years and Over." American Community Survey 5-Year Estimates (S1701 | Poverty Status in the Past 12 Months). Accessed February 25, 2023. [https://data.census.gov/map?q=poverty&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1701&cid=S1701_C03_010E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?q=poverty&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1701&cid=S1701_C03_010E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)

U.S. Census Bureau. 2020d. "Percent with a Disability—75 Years and Over." American Community Survey 5-Year Estimates (S1810 | Disability Characteristics). Accessed February 25, 2023. [https://data.census.gov/map?q=disability&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1810&cid=S1810_C03_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?q=disability&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1810&cid=S1810_C03_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)

U.S. Census Bureau. 2020e. "Population of One Race." American Community Survey 5-Year Estimates (P1 | Race). Accessed February 25, 2023. [https://data.census.gov/map?t=&g=050XX00US25025\\$1400000&y=2020&tid=DECENNIALPL2020.P1&cid=P1_002N&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2946,-71.1222,z12.2044](https://data.census.gov/map?t=&g=050XX00US25025$1400000&y=2020&tid=DECENNIALPL2020.P1&cid=P1_002N&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.2946,-71.1222,z12.2044)

U.S. Census Bureau. 2020f. "Renter-Occupied Housing Units." American Community Survey 5-Year Estimates (S1101 | Households and Families). Accessed February 25, 2023. [https://data.census.gov/map?t=&g=050XX00US25025\\$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615](https://data.census.gov/map?t=&g=050XX00US25025$1400000&y=2020&tid=ACSST5Y2020.S1101&cid=S1101_C01_018E&layer=VT_2020_140_00_PY_D1&basemap=none&palette=Blues&mode=thematic&loc=42.3004,-71.1002,z12.9615)

Vespa, Jonathan, Lauren Medina, and David Armstrong M. 2020. Demographic Turning Points for the United States: Population Projections for 2020 to 2060. P25-1144. Washington, DC: U.S. Census Bureau. <https://purl.fdlp.gov/GPO/gpo93743>.

Virginia State Parks. Spend a day in the park. May 3, 2015. Photograph. Flickr. <https://www.flickr.com/photos/vastateparksstaff/38826104160/>

W, Paul. MHS Cross Country at Franklin Park Meet 239-6x9. October 4, 2014. Photograph. Flickr. <https://www.flickr.com/photos/paul-w-locke/15253006137>

Yu, Derek. PCC 3263 at Mattapan. May 1, 2008. Photograph. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:PCC_3263_at_Mattapan.jpg

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Appendix A.

Age-Friendly Park Assessment – Scarborough Pond + Peabody Circle

Accessible

				n/a
Pathways				
There is a continuous, accessible pedestrian path network throughout the park.		●		
Path networks accommodate multiple modes of travel (i.e., biking and walking) and are separated into zones for each mode.		●		
Paths follow ADA and universal design standards.		●		
Paths (non-ramps) are under 4% slope.			●	
Primary pathways are wide enough for at least two people with mobility devices to pass each other or for ASL signers to converse.		●		
Paths are well-maintained, do not have broken and bumpy pavements, and are free of obstructions.		●		
Path surfaces are smooth, firm, have a good grip, minimize glare, and do not have visually-confusing patterns.		●		
Level Changes				
Access routes are graded to minimize the use of stairs and ramps.			●	
If stairs or ramps are used, they follow ADA and universal design standards.				●
Parking				
Parking is available within walking distance from park spaces.		●		
Parking lots follow ADA and universal design standards.		●		
Paths from accessible parking to primary areas are accessible.		●		
Public Transportation				
Transit stops and the routes from them to the park are accessible.	●			
Public transportation stops within or adjacent to the park provide seating, weather protection, clear signage, and are well-lit.		●		

				n/a
Connections to the Street				
There are designated crosswalks at every street crossing adjacent to the park.			●	
Street crossings within or adjacent to the park provide crosswalks, auditory crossing signals, curb cuts, and tactile paving.		●		
Streets within or adjacent to the park have separate bike lanes and public transit stops.			●	
Streets within or adjacent to the park have traffic calming measures and slowed vehicular traffic.		●		
Wayfinding				
Park signage is frequent and consistent. There are multiple types of signage; for example, directional and informational.	●			
Signage is legible from a distance and at a height where those using wheelchairs can easily see it.	●			
Park entries are easily identifiable and completely accessible.	●			
Multi-sensory wayfinding elements have been included; for example, tactile paving, auditory signals, or graphic signage.		●		
Totals	(Add totals for each column)			
	4	13	4	
(Circle highest total)				
				
	Poor	Okay	Great	

Scarboro Pond + Peabody Circle

Comfortable

				n/a
Safety				
Vegetation buffers street noise and unsightly views to the street but doesn't impede visibility and create unsafe conditions.				
There are barriers or plant buffers between streets and paths.				
Primary pathways are well-lit at night.				
Lighting does not produce glare along pathways.				
There are clear sight lines throughout the park and vegetation does not hinder visibility.				
There is clear visibility at pedestrian crossings and street intersections.				
Protection from the Elements				
There are resting areas out of the sun and wind throughout the park, especially along pathways.				
Seating				
There is frequent seating along primary pathways.				
There are many seating options: in the sun, shade, open areas, private areas, and in spots with a good view.				
There are a variety of seating types and they allow for many uses: movable seating, semi-circular seating, etc.				
Seating is comfortable and accessible, with some seating providing both back rests and arm rests.				

				n/a
Site Amenities				
The park includes a sufficient number of restrooms for the park's size.				
Restrooms are fully accessible and have signage identifying their locations.				
There are fully accessible drinking fountains along major pathways, next to restrooms, and near active recreation areas.				
Similar amenities (i.e., restrooms and drinking fountains) are grouped together for ease of access.				
Site furnishings are not obstacles along pathways and are easily visible.				
Totals	(Add totals for each column)	5	7	3
	(Circle highest total)			
		Poor	Okay	Great

Scarboro Pond + Peabody Circle

Active

				n/a
Trees and Vegetation				
Plants are non-toxic and are non-thorny in high-traffic areas.				
The use of high-allergen trees is minimal and trees that produce a lot of litter are minimal around pathways.				
The plant palette is diverse and considers seasonality.				
Plants along pathways and parking lots are well-maintained and are not hazards.				
Nature Interactions				
There are ways of interacting with nature within the park (i.e., gardening or bird watching).				
Water elements are safe and include cautionary barriers around them when necessary.				
Gardening beds are raised and accessible for wheeled mobility devices.				
There are opportunities to observe wildlife.				
Opportunities for Physical Activity				
There are multiple physical activity opportunities for older adults (i.e., walking loops, fitness equipment, sports courts, etc.).				
There is at least one walking loop with a length of around 1 mile.				
There are flat, accessible areas that can accommodate various fitness classes.				
There are fully accessible sports facilities for activities popular with older adults (i.e., pickleball, bocce ball, golf, etc.).				
There is comfortable and accessible spectator seating around sports facilities.				
There are areas of play for both older adults and children to encourage intergenerational interactions.				



	Poor	Okay	Great	n/a
Opportunities for Privacy and Relaxation				
There are areas designed for rest within the park.				
Private gardens are located away from main pathways and busy street noise.				
Passive Activities				
There are opportunities for passive activities like reading, dog walking, watching a performance, playing board games, etc.				
The park provides sensory experiences that engage older adults' senses of touch, sight, smell, and hearing.				
Totals	(Add totals for each column) 0	5	7	
(Circle highest total)				
				Poor Okay Great

Scarboro Pond + Peabody Circle

Social

				n/a
Variety of Spaces				
There are a variety of spaces in the park, including both social areas and private areas.			●	
There are a variety of activities for older adults to engage in (i.e., fitness, nature, socializing, etc.).			●	
Intergenerational Spaces				
There are gathering spaces with activities for all ages.		●		
Opportunities for Social Interaction				
Seating promotes socialization: it enables eye contact, there are circular arrangements for easier discussion, and some is movable.	●			
Informational signage, seating, or other interesting activities provide opportunities for socialization along major paths.	●			
There is at least one flat, shaded area to host group gatherings.		●		
Gathering areas have ample seating and seating in the shade.		●		
Gathering areas have nearby restrooms and drinking facilities.	●			
Opportunities for Passive Socializing				
There are opportunities for older adults to observe others and watch activities from afar.		●		
Totals	(Add totals for each column)	3	4	2
	(Circle highest total)			
		Poor	Okay	Great

Scarboro Pond + Peabody Circle
Summary:

Accessible


Poor


Okay


Great

(Circle one)

Notes:

Comfortable


Poor


Okay


Great

(Circle one)

Notes:

Active


Poor


Okay


Great

(Circle one)

Notes:

Social


Poor


Okay


Great

(Circle one)

Notes:

Overall Notes:

Since the Scarboro Pond + Peabody Circle subarea encompasses much of the eastern side of the park, there are a wide range of activity options (pond, playground, fitness equipment, walking path, etc.).

One of the biggest issues is the entry experience, as many of the pedestrian entries do not meet ADA standards or lack proper wayfinding. There is also a lack of vehicular parking.

Appendix A.

Age-Friendly Park Assessment – Ellicottdale

Accessible

				n/a
Pathways				
There is a continuous, accessible pedestrian path network throughout the park.		●		
Path networks accommodate multiple modes of travel (i.e., biking and walking) and are separated into zones for each mode.	●			
Paths follow ADA and universal design standards.		●		
Paths (non-ramps) are under 4% slope.		●		
Primary pathways are wide enough for at least two people with mobility devices to pass each other or for ASL signers to converse.			●	
Paths are well-maintained, do not have broken and bumpy pavements, and are free of obstructions.		●		
Path surfaces are smooth, firm, have a good grip, minimize glare, and do not have visually-confusing patterns.			●	
Level Changes				
Access routes are graded to minimize the use of stairs and ramps.			●	
If stairs or ramps are used, they follow ADA and universal design standards.				●
Parking				
Parking is available within walking distance from park spaces.			●	
Parking lots follow ADA and universal design standards.			●	
Paths from accessible parking to primary areas are accessible.			●	
Public Transportation				
Transit stops and the routes from them to the park are accessible.	●			
Public transportation stops within or adjacent to the park provide seating, weather protection, clear signage, and are well-lit.	●			

				n/a
Connections to the Street				
There are designated crosswalks at every street crossing adjacent to the park.		●		
Street crossings within or adjacent to the park provide crosswalks, auditory crossing signals, curb cuts, and tactile paving.		●		
Streets within or adjacent to the park have separate bike lanes and public transit stops.		●		
Streets within or adjacent to the park have traffic calming measures and slowed vehicular traffic.		●		
Wayfinding				
Park signage is frequent and consistent. There are multiple types of signage; for example, directional and informational.		●		
Signage is legible from a distance and at a height where those using wheelchairs can easily see it.	●			
Park entries are easily identifiable and completely accessible.		●		
Multi-sensory wayfinding elements have been included; for example, tactile paving, auditory signals, or graphic signage.	●			
Totals	(Add totals for each column)			
	5	10	6	
(Circle highest total)				
				
	Poor	Okay	Great	

Ellicottdale

Comfortable

				n/a
Safety				
Vegetation buffers street noise and unsightly views to the street but doesn't impede visibility and create unsafe conditions.		●		
There are barriers or plant buffers between streets and paths.			●	
Primary pathways are well-lit at night.	●			
Lighting does not produce glare along pathways.				●
There are clear sight lines throughout the park and vegetation does not hinder visibility.		●		
There is clear visibility at pedestrian crossings and street intersections.			●	
Protection from the Elements				
There are resting areas out of the sun and wind throughout the park, especially along pathways.		●		
Seating				
There is frequent seating along primary pathways.		●		
There are many seating options: in the sun, shade, open areas, private areas, and in spots with a good view.		●		
There are a variety of seating types and they allow for many uses: movable seating, semi-circular seating, etc.		●		
Seating is comfortable and accessible, with some seating providing both back rests and arm rests.		●		

				n/a
Site Amenities				
The park includes a sufficient number of restrooms for the park's size.	●			
Restrooms are fully accessible and have signage identifying their locations.	●			
There are fully accessible drinking fountains along major pathways, next to restrooms, and near active recreation areas.	●			
Similar amenities (i.e., restrooms and drinking fountains) are grouped together for ease of access.	●			
Site furnishings are not obstacles along pathways and are easily visible.			●	
Totals	(Add totals for each column) 5	7	3	
	(Circle highest total)			
	Poor	Okay	Great	

Ellicottdale

Active



Poor	Okay	Great	n/a
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Trees and Vegetation

Plants are non-toxic and are non-thorny in high-traffic areas.				●
The use of high-allergen trees is minimal and trees that produce a lot of litter are minimal around pathways.			●	
The plant palette is diverse and considers seasonality.			●	
Plants along pathways and parking lots are well-maintained and are not hazards.			●	

Nature Interactions

There are ways of interacting with nature within the park (i.e., gardening or bird watching).		●		
Water elements are safe and include cautionary barriers around them when necessary.				●
Gardening beds are raised and accessible for wheeled mobility devices.				●
There are opportunities to observe wildlife.	●			

Opportunities for Physical Activity

There are multiple physical activity opportunities for older adults (i.e., walking loops, fitness equipment, sports courts, etc.).		●		
There is at least one walking loop with a length of around 1 mile.	●			
There are flat, accessible areas that can accommodate various fitness classes.		●		
There are fully accessible sports facilities for activities popular with older adults (i.e., pickleball, bocce ball, golf, etc.).		●		
There is comfortable and accessible spectator seating around sports facilities.		●		
There are areas of play for both older adults and children to encourage intergenerational interactions.		●		



Poor	Okay	Great	n/a
------	------	-------	-----

Opportunities for Privacy and Relaxation

There are areas designed for rest within the park.		●		
Private gardens are located away from main pathways and busy street noise.				●

Passive Activities

There are opportunities for passive activities like reading, dog walking, watching a performance, playing board games, etc.		●		
The park provides sensory experiences that engage older adults' senses of touch, sight, smell, and hearing.	●			

Totals	(Add totals for each column)	3	8	3	
	(Circle highest total)				
		Poor	Okay	Great	

Ellicottdale

Social

				n/a
Variety of Spaces				
There are a variety of spaces in the park, including both social areas and private areas.		●		
There are a variety of activities for older adults to engage in (i.e., fitness, nature, socializing, etc.).		●		
Intergenerational Spaces				
There are gathering spaces with activities for all ages.		●		
Opportunities for Social Interaction				
Seating promotes socialization: it enables eye contact, there are circular arrangements for easier discussion, and some is movable.		●		
Informational signage, seating, or other interesting activities provide opportunities for socialization along major paths.	●			
There is at least one flat, shaded area to host group gatherings.		●		
Gathering areas have ample seating and seating in the shade.		●		
Gathering areas have nearby restrooms and drinking facilities.	●			
Opportunities for Passive Socializing				
There are opportunities for older adults to observe others and watch activities from afar.		●		
Totals	(Add totals for each column)			
	2	7	0	
(Circle highest total)				
	Poor	Okay	Great	

Ellicottdale
Summary:

Accessible


Poor


Okay


Great

(Circle one)

Notes:

Comfortable


Poor


Okay


Great

(Circle one)

Notes:

Active


Poor


Okay


Great

(Circle one)

Notes:

Social


Poor


Okay


Great

(Circle one)

Notes:

Overall Notes:

Although there are quite a few picnic tables, most of them are not designed for wheelchair access or with accessible routes leading to them. Many of them are not located in comfortable areas shaded by vegetation.

There are opportunities to design this area to be a picnicking/gathering space with the addition of more lighting, wayfinding, and comfortable areas for rest.

Appendix A.

Age-Friendly Park Assessment – The Wilderness

Accessible

				n/a
Pathways				
There is a continuous, accessible pedestrian path network throughout the park.	●			
Path networks accommodate multiple modes of travel (i.e., biking and walking) and are separated into zones for each mode.	●			
Paths follow ADA and universal design standards.	●			
Paths (non-ramps) are under 4% slope.	●			
Primary pathways are wide enough for at least two people with mobility devices to pass each other or for ASL signers to converse.		●		
Paths are well-maintained, do not have broken and bumpy pavements, and are free of obstructions.	●			
Path surfaces are smooth, firm, have a good grip, minimize glare, and do not have visually-confusing patterns.		●		
Level Changes				
Access routes are graded to minimize the use of stairs and ramps.	●			
If stairs or ramps are used, they follow ADA and universal design standards.				●
Parking				
Parking is available within walking distance from park spaces.	●			
Parking lots follow ADA and universal design standards.				●
Paths from accessible parking to primary areas are accessible.				●
Public Transportation				
Transit stops and the routes from them to the park are accessible.				●
Public transportation stops within or adjacent to the park provide seating, weather protection, clear signage, and are well-lit.				●

				n/a
Connections to the Street				
There are designated crosswalks at every street crossing adjacent to the park.		●		
Street crossings within or adjacent to the park provide crosswalks, auditory crossing signals, curb cuts, and tactile paving.		●		
Streets within or adjacent to the park have separate bike lanes and public transit stops.		●		
Streets within or adjacent to the park have traffic calming measures and slowed vehicular traffic.	●			
Wayfinding				
Park signage is frequent and consistent. There are multiple types of signage; for example, directional and informational.	●			
Signage is legible from a distance and at a height where those using wheelchairs can easily see it.	●			
Park entries are easily identifiable and completely accessible.	●			
Multi-sensory wayfinding elements have been included; for example, tactile paving, auditory signals, or graphic signage.	●			
Totals	(Add totals for each column)	12	5	0
(Circle highest total)				
				
	Poor	Okay	Great	

The Wilderness

Comfortable

				n/a
Safety				
Vegetation buffers street noise and unsightly views to the street but doesn't impede visibility and create unsafe conditions.				
There are barriers or plant buffers between streets and paths.				
Primary pathways are well-lit at night.				
Lighting does not produce glare along pathways.				
There are clear sight lines throughout the park and vegetation does not hinder visibility.				
There is clear visibility at pedestrian crossings and street intersections.				
Protection from the Elements				
There are resting areas out of the sun and wind throughout the park, especially along pathways.				
Seating				
There is frequent seating along primary pathways.				
There are many seating options: in the sun, shade, open areas, private areas, and in spots with a good view.				
There are a variety of seating types and they allow for many uses: movable seating, semi-circular seating, etc.				
Seating is comfortable and accessible, with some seating providing both back rests and arm rests.				

				n/a
Site Amenities				
The park includes a sufficient number of restrooms for the park's size.				
Restrooms are fully accessible and have signage identifying their locations.				
There are fully accessible drinking fountains along major pathways, next to restrooms, and near active recreation areas.				
Similar amenities (i.e., restrooms and drinking fountains) are grouped together for ease of access.				
Site furnishings are not obstacles along pathways and are easily visible.				
Totals	(Add totals for each column) 8	6	1	
(Circle highest total)				
				
	Poor	Okay	Great	

The Wilderness

Active

				n/a
Trees and Vegetation				
Plants are non-toxic and are non-thorny in high-traffic areas.		●		
The use of high-allergen trees is minimal and trees that produce a lot of litter are minimal around pathways.				●
The plant palette is diverse and considers seasonality.			●	
Plants along pathways and parking lots are well-maintained and are not hazards.	●			
Nature Interactions				
There are ways of interacting with nature within the park (i.e., gardening or bird watching).			●	
Water elements are safe and include cautionary barriers around them when necessary.				●
Gardening beds are raised and accessible for wheeled mobility devices.				●
There are opportunities to observe wildlife.			●	
Opportunities for Physical Activity				
There are multiple physical activity opportunities for older adults (i.e., walking loops, fitness equipment, sports courts, etc.).		●		
There is at least one walking loop with a length of around 1 mile.		●		
There are flat, accessible areas that can accommodate various fitness classes.	●			
There are fully accessible sports facilities for activities popular with older adults (i.e., pickleball, bocce ball, golf, etc.).				●
There is comfortable and accessible spectator seating around sports facilities.				●
There are areas of play for both older adults and children to encourage intergenerational interactions.		●		

				n/a
Opportunities for Privacy and Relaxation				
There are areas designed for rest within the park.		●		
Private gardens are located away from main pathways and busy street noise.				●
Passive Activities				
There are opportunities for passive activities like reading, dog walking, watching a performance, playing board games, etc.	●			
The park provides sensory experiences that engage older adults' senses of touch, sight, smell, and hearing.		●		
Totals	(Add totals for each column)	3	6	3
(Circle highest total)				
				
	Poor	Okay	Great	

The Wilderness

Social

	 Poor	 Okay	 Great	n/a
Variety of Spaces				
There are a variety of spaces in the park, including both social areas and private areas.		●		
There are a variety of activities for older adults to engage in (i.e., fitness, nature, socializing, etc.).	●			
Intergenerational Spaces				
There are gathering spaces with activities for all ages.	●			
Opportunities for Social Interaction				
Seating promotes socialization: it enables eye contact, there are circular arrangements for easier discussion, and some is movable.	●			
Informational signage, seating, or other interesting activities provide opportunities for socialization along major paths.	●			
There is at least one flat, shaded area to host group gatherings.		●		
Gathering areas have ample seating and seating in the shade.		●		
Gathering areas have nearby restrooms and drinking facilities.	●			
Opportunities for Passive Socializing				
There are opportunities for older adults to observe others and watch activities from afar.		●		
Totals	(Add totals for each column) 5	4	0	
	(Circle highest total)  Poor	 Okay	 Great	

The Wilderness
Summary:

Accessible

 Poor

 Okay

 Great

(Circle one)

Notes:

Comfortable

 Poor

 Okay

 Great

(Circle one)

Notes:

Active

 Poor

 Okay

 Great

(Circle one)

Notes:

Social

 Poor

 Okay

 Great

(Circle one)

Notes:

Overall Notes:

Overall, the Wilderness poses many accessibility issues to older adults, with unmaintained and unpaved trails, steep slopes, and poor visibility.

Due to the topography, natural vegetation, and historical significance of this area, it is not recommended to propose major reconstruction that would alter the natural landscape of this area. This would not be the best subarea to propose age-friendly modifications.

Appendix A.

Age-Friendly Park Assessment – Circuit Drive + Circuit Loop

Accessible

				n/a
Pathways				
There is a continuous, accessible pedestrian path network throughout the park.		●		
Path networks accommodate multiple modes of travel (i.e., biking and walking) and are separated into zones for each mode.		●		
Paths follow ADA and universal design standards.		●		
Paths (non-ramps) are under 4% slope.		●		
Primary pathways are wide enough for at least two people with mobility devices to pass each other or for ASL signers to converse.		●		
Paths are well-maintained, do not have broken and bumpy pavements, and are free of obstructions.		●		
Path surfaces are smooth, firm, have a good grip, minimize glare, and do not have visually-confusing patterns.			●	
Level Changes				
Access routes are graded to minimize the use of stairs and ramps.			●	
If stairs or ramps are used, they follow ADA and universal design standards.				●
Parking				
Parking is available within walking distance from park spaces.		●		
Parking lots follow ADA and universal design standards.	●			
Paths from accessible parking to primary areas are accessible.		●		
Public Transportation				
Transit stops and the routes from them to the park are accessible.	●			
Public transportation stops within or adjacent to the park provide seating, weather protection, clear signage, and are well-lit.	●			

				n/a
Connections to the Street				
There are designated crosswalks at every street crossing adjacent to the park.		●		
Street crossings within or adjacent to the park provide crosswalks, auditory crossing signals, curb cuts, and tactile paving.		●		
Streets within or adjacent to the park have separate bike lanes and public transit stops.		●		
Streets within or adjacent to the park have traffic calming measures and slowed vehicular traffic.	●			
Wayfinding				
Park signage is frequent and consistent. There are multiple types of signage; for example, directional and informational.	●			
Signage is legible from a distance and at a height where those using wheelchairs can easily see it.	●			
Park entries are easily identifiable and completely accessible.	●			
Multi-sensory wayfinding elements have been included; for example, tactile paving, auditory signals, or graphic signage.		●		
Totals	(Add totals for each column)	7	12	2
(Circle highest total)				
				
	Poor	Okay	Great	

Circuit Drive + Circuit Loop

Comfortable

				n/a
Safety				
Vegetation buffers street noise and unsightly views to the street but doesn't impede visibility and create unsafe conditions.				
There are barriers or plant buffers between streets and paths.				
Primary pathways are well-lit at night.				
Lighting does not produce glare along pathways.				
There are clear sight lines throughout the park and vegetation does not hinder visibility.				
There is clear visibility at pedestrian crossings and street intersections.				
Protection from the Elements				
There are resting areas out of the sun and wind throughout the park, especially along pathways.				
Seating				
There is frequent seating along primary pathways.				
There are many seating options: in the sun, shade, open areas, private areas, and in spots with a good view.				
There are a variety of seating types and they allow for many uses: movable seating, semi-circular seating, etc.				
Seating is comfortable and accessible, with some seating providing both back rests and arm rests.				

				n/a
Site Amenities				
The park includes a sufficient number of restrooms for the park's size.				
Restrooms are fully accessible and have signage identifying their locations.				
There are fully accessible drinking fountains along major pathways, next to restrooms, and near active recreation areas.				
Similar amenities (i.e., restrooms and drinking fountains) are grouped together for ease of access.				
Site furnishings are not obstacles along pathways and are easily visible.				
Totals	(Add totals for each column)	5	8	2
	(Circle highest total)			
		Poor	Okay	Great

Circuit Drive + Circuit Loop

Active

				n/a
Trees and Vegetation				
Plants are non-toxic and are non-thorny in high-traffic areas.				
The use of high-allergen trees is minimal and trees that produce a lot of litter are minimal around pathways.				
The plant palette is diverse and considers seasonality.				
Plants along pathways and parking lots are well-maintained and are not hazards.				
Nature Interactions				
There are ways of interacting with nature within the park (i.e., gardening or bird watching).				
Water elements are safe and include cautionary barriers around them when necessary.				
Gardening beds are raised and accessible for wheeled mobility devices.				
There are opportunities to observe wildlife.				
Opportunities for Physical Activity				
There are multiple physical activity opportunities for older adults (i.e., walking loops, fitness equipment, sports courts, etc.).				
There is at least one walking loop with a length of around 1 mile.				
There are flat, accessible areas that can accommodate various fitness classes.				
There are fully accessible sports facilities for activities popular with older adults (i.e., pickleball, bocce ball, golf, etc.).				
There is comfortable and accessible spectator seating around sports facilities.				
There are areas of play for both older adults and children to encourage intergenerational interactions.				



	Poor	Okay	Great	n/a
Opportunities for Privacy and Relaxation				
There are areas designed for rest within the park.				
Private gardens are located away from main pathways and busy street noise.				
Passive Activities				
There are opportunities for passive activities like reading, dog walking, watching a performance, playing board games, etc.				
The park provides sensory experiences that engage older adults' senses of touch, sight, smell, and hearing.				
Totals	(Add totals for each column) 0	9	2	
(Circle highest total)				
				
	Poor	Okay	Great	

Circuit Drive + Circuit Loop

Social

				n/a
Variety of Spaces				
There are a variety of spaces in the park, including both social areas and private areas.		●		
There are a variety of activities for older adults to engage in (i.e., fitness, nature, socializing, etc.).		●		
Intergenerational Spaces				
There are gathering spaces with activities for all ages.		●		
Opportunities for Social Interaction				
Seating promotes socialization: it enables eye contact, there are circular arrangements for easier discussion, and some is movable.	●			
Informational signage, seating, or other interesting activities provide opportunities for socialization along major paths.		●		
There is at least one flat, shaded area to host group gatherings.		●		
Gathering areas have ample seating and seating in the shade.		●		
Gathering areas have nearby restrooms and drinking facilities.	●			
Opportunities for Passive Socializing				
There are opportunities for older adults to observe others and watch activities from afar.		●		
Totals	(Add totals for each column)	2	7	0
	(Circle highest total)			

Circuit Drive + Circuit Loop
Summary:

Accessible


Poor


Okay


Great

(Circle one)

Notes:

Comfortable


Poor


Okay


Great

(Circle one)

Notes:

Active


Poor


Okay


Great

(Circle one)

Notes:

Social


Poor


Okay


Great

(Circle one)

Notes:

Overall Notes:

It seems as if there was a recent reconstruction effort to pedestrianize and repave the loop in the Scarboro Pond and Peabody Circle area. These new paths are wide, smooth, and nice walking areas but lack seating and lighting.

The pedestrian experience walking on sidewalks along Circuit Drive is very poor and feels very unsafe and uncomfortable.

