

# Building an Inclusive Park for Holden: Understanding Community Needs, Priorities, and Expectations



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# WPI

# **Building an Inclusive Park for Holden: Understanding Community Needs, Priorities, and Expectations**

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## Abstract

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Holden is a small town in central Massachusetts with highly-rated school systems, competitive youth sports programs, and lively community organizations. However, community-members report that town playgrounds are in poor shape, and equipment is inaccessible for individuals with impaired mobility. For instance, children or parents who use wheelchairs cannot enjoy playscapes that lack ramps and accessible surfacing. The Holden Inclusive Park Committee is spearheading an initiative to design and build a multigenerational inclusive park, which will be located at 1 Holden Street behind the Light Department. A large body of psychological research highlights the social, physical, and mental health benefits of outdoor play for children, parents, and grandparents alike. Building an inclusive park will help ensure that all Holden residents can engage in play and reap such benefits, regardless of their mobility status. This project aimed to understand Holden community members' experiences with inclusive and intergenerational play and to identify their needs and desires for the new park. Surveys of 289 community-members and interviews with 6 stakeholders helped to highlight residents' lived experiences with exclusion and to identify their needs for specific playground equipment. Finally, the information gathered was used to create a website of resources to further inform the Holden community about all aspects of the park, including the committee's timeline and the project's theoretical underpinnings.

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## 1.0 Project Overview

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Play promotes children's physical, social, and emotional development (Ginsburg, 2007). For instance, outdoor play in nature increases children's mental health and self regulation, and interacting with other children increases their social and emotional learning skills (Lynch et al., 2020). Unfortunately, many children with physical and intellectual disabilities face exclusion and cannot regularly play with their peers (Odom et. al, 2006). Additionally, many outdoor play spaces, including public parks and playgrounds, lack accessible equipment (Lynch et al., 2020). This further prevents children with disabilities and mobility impairments from participating in meaningful play with their able-bodied friends and classmates. Similarly, inaccessible public parks prevent parents and grandparents with limited mobility from playing with their children or grandchildren (Agate et al., 2018). Intergenerational play, defined as play between parents, grandparents, and children or grandchildren, yields significant benefits for both children and adults. These include feelings of connection, strengthened relationships, and physical and mental health improvements, among other positive outcomes (Agate et al., 2018). Therefore, it is increasingly important for play spaces to encourage inclusive and intergenerational play.

To alleviate accessibility barriers and encourage play among all individuals, many communities across the globe have designed and implemented inclusive public parks (McLaughlin, 2022). Oftentimes, when developing these parks, designers follow the Universal Design for Learning (UDL) framework (Lynch et al., 2019). UDL encourages designers to include individuals with disabilities and their unique needs from the project's beginning phases, as opposed to adding remedial accommodations as an afterthought (NCSU, 1997). Ultimately, inclusive parks and playgrounds fully integrate equipment that is safe and easy-to-use for all individuals, regardless of their age and mobility levels (e.g., ramps, accessible surfacing, etc.).

In the town of Holden, MA, plans are underway to build an inclusive community park that encourages intergenerational use and accommodates residents with disabilities. The Holden Inclusive Park Committee is spearheading this initiative, and the goal of this Major Qualifying Project (MQP) is to assist in the committee's efforts to design and build the Holden Inclusive Park. Current playgrounds in Holden are outdated and do not accommodate the diverse accessibility-related needs of the community. Therefore, this project aims to better understand the experiences of Holden community members with regard to inclusive and intergenerational

play and to determine residents' specific needs and desires for the new park. Two main methods, surveys and interviews, helped accomplish this goal. 289 Holden residents participated in an online survey, which gauged their general experiences with inclusive and intergenerational play and their expectations and concerns for the new park. Additionally, 6 stakeholders engaged in one-on-one interviews, providing an in-depth understanding of their personal experiences with accessibility-related barriers. The interviews also revealed how the Holden Inclusive Park can provide families with new opportunities for meaningful, inclusive play.

Ultimately, the survey and interview results aided in recommendations for the Holden Inclusive Park committee as they finalize plans for the new park. The committee received quantitative metrics from the survey results and meaningful interview quotes to further strengthen their proposal to the local government. Additionally, they received a grant directory, which contains funding opportunities for elements of the park that will not be covered by the town. Finally, other deliverables for this project include a public-facing website for Holden community members, so they can better understand the theory and motivation behind the park, its goals and timeline, and how it can benefit all residents of the town.

***Key words:*** *Inclusive Play, Intergenerational Play, Universal Design for Learning, Inclusive Parks and Playgrounds*

## 2.0 Literature Review

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### 2.1. Play and Inclusivity

Play is an abstract concept that is difficult to concretely define. According to Agate et al. (2018), play is typically described as a collection of attributes. It “is apparently purposeless, voluntary, outside of the ordinary, fun, and focused by rules’ (Eberle, p. 215)” (Agate et al., p. 396). Play includes engaging in fun activities by oneself or with family and friends, and although some people believe play has no deeper purpose, many scholars argue it is beneficial for childrens’ development (Ginsburg, 2007). An article from the American Academy of Pediatrics highlighted many important benefits of play, stating “play allows children to use their creativity while developing their imagination, dexterity, and physical, cognitive, and emotional strength” (Ginsburg, 2007, p. 183). The article continued, citing additional benefits, including the promotion of healthy brain development, increased levels of social-emotional learning (SEL)

from peer interactions, and increased physical health from engaging in movement (Ginsburg, 2007). In fact, play is so important for children that the United Nations Convention on the Rights of the Child (UNCRC) recognized play as an inherent right for children across the globe. As stated in Article 31 of the UNCRC, “States Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts” (United Nations, 1989, p. 31). Additionally, free-play outdoors and in nature has additional benefits for children’s health, particularly improving their “mental health and self-regulation” (Lynch et al., 2020).

Despite the widespread benefits of play, many children face significant barriers to engaging in play. Children with disabilities particularly encounter difficulties, as they are often excluded from play by their peers (Odom et al., 2006). In a study of preschool students in inclusive classrooms (i.e., classrooms composed of students both with and without disabilities), researchers found that about 28% of children with disabilities experienced social rejection (Odom et al., 2006). In comparison, past research suggests only 13-15% of able-bodied students experience this form of exclusion (Odom et al., 2006). Another study of preschool students by Diamond et al. (2008) found that “preschool children were, overall, more likely to choose a child who was typically developing, rather than a child with a physical disability, to participate in a variety of activities” (p. 150). In this interview-based study, the researchers showed preschool students dolls that were able-bodied or in a wheelchair. They asked students whether or not they would invite the doll to participate in certain activities, requiring minimal, moderate, or substantial motor demands. As anticipated, kids were more likely to include mobility-impaired peers (dolls) in activities that required minimal motor skills (Diamond et al., 2008). Additionally, the participants perceived the physically-disabled dolls as having higher levels of social competence than motor competence, suggesting kids want to socialize and play with one another, but mobility impairments prevent this inclusive play from occurring (Diamond et al., 2008).

## **2.2. Intergenerational Play**

Although play is oftentimes associated with childhood, research suggests people of all ages can benefit from play. Intergenerational play refers to play between children and their parents, grandparents, or guardians, and it yields many benefits for children and adults alike. Agate et al. (2018) conducted a qualitative research study of sixteen grandparents and seventeen grandchildren across the United States. Participants filled out free-response questionnaires,

providing information about playing with their grandchild or grandparent. Ultimately, participants were motivated to engage in intergenerational play because they prioritized family, reaped mutual benefits (i.e., viewed themselves as “helping the other in some way”), and recognized that they might have limited time with one another (Agate et al., 2018, p. 405). Researchers also identified commonly reported benefits of grandparent-grandchild play, such as having fun, bonding and getting to know each other, expressing love and interest, making memories, and teaching lessons (Agate et al., 2018). For instance, Granddaughter #10 likes to play with her grandparent “Because it is fun! And when I say fun it means very, very fun!” (page 406).

While the benefits reported in Agate et al. (2018) were social and emotional in nature, additional research has linked intergenerational support and play to mental and physical health benefits in the elderly. Shu et al. (2021) provided evidence from the Chinese Longitudinal Healthy Longevity Survey (CLHLS), which revealed “family “upward” intergenerational support influences the elderly’s physical health at a percentage of 11.7%, mental health 29.8%, and physiological function 12.6%” (page 1). Overall, the study highlights the importance of intergenerational living and support in Chinese households and how these practices increase longevity in elderly populations.

Not only is play between grandparents and grandchildren important, parent-child play is especially beneficial for childrens’ cognitive health and development. Tamis-LeMonda et al. (2004) found that positive play between toddlers (2-3 years old) and their parents aids in healthy cognitive functioning. In this longitudinal study, researchers assessed participating children’s cognitive and language abilities at two and three years old. Participating children were also videotaped engaging in free play with their parents. Researchers utilized various predetermined scales to determine the nature of the parent-child play (i.e., the degree of sensitivity, positive regard, and cognitive stimulation vs. the amount of detachment, intrusiveness, and negative regard). Ultimately, the study concluded that supportive interactions and play with parents at a young age leads to cognitive and linguistic benefits (Tamis-LeMonda et al., 2004).

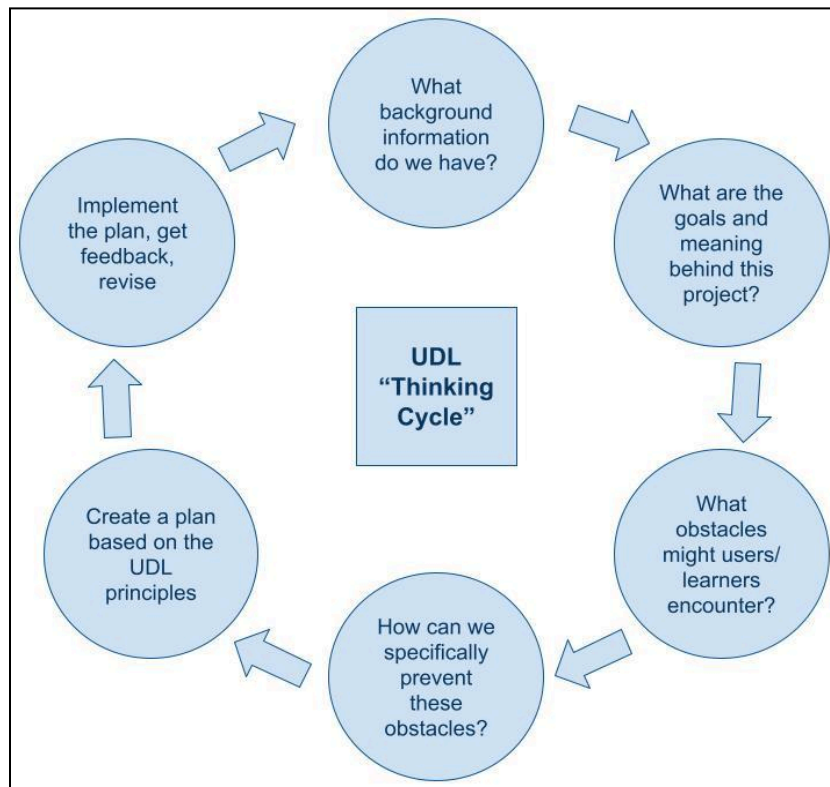
Despite the many benefits of intergenerational play, many barriers prevent this practice from being more commonplace. Agate et al. (2018) found that grandparents reported various barriers to engaging in play with their grandchildren, particularly physical limitations and geographic distance. In terms of physical limitations, “Grandfather #10 commented, 'I'm not able



to be as physically active in playing sports and other physical activities as I used to be” (Agate et al., p. 407). Similarly, Grandmother #7 discussed not being able to participate in certain physically-demanding games, stating “I watch them play the game I can’t play. Then we play ‘Sorry’ or ‘Monopoly’, board games we all enjoy” (p. 409). Because intergenerational play is so beneficial for people of all ages, attempting to mitigate these physical barriers is important to ensure grandparents can fully participate in play with their loved ones.

### **2.3. Universal Design for Learning (UDL)**

One way to remove physical barriers to play for mobility-impaired groups, including children or adults with disabilities or elderly individuals, is by designing public parks, playgrounds, and play spaces that are accessible for all people. Universal Design for Learning (UDL) is a commonly utilized framework for the inclusive design of equipment, infrastructure, and even lessons in school (NCSU, 1997). UDL prioritizes fully including individuals with disabilities and their needs from the very beginning of the design process, rather than adding accessible features or accommodations as an afterthought (NCSU, 1997). Many organizations have created their own “UDL Thinking Models,” which provide a framework for approaching inclusive design. Figure 2.1 below is adapted from the NCEA Education Foundation, and it depicts a “six-step model for universal thinking” to help city-planners, engineers, and educators create inclusive designs.

**Figure 2.1***UDL Thinking Model*

*Note.* Adapted from “Government of New Zealand: Ministry of Education. (2023). *Universal Design for Learning (UDL)*. NCEA. <https://ncea.education.govt.nz/universal-design-learning-udl>

As you can see in Figure 2.1 above, when designing a project, it is important to initially ask oneself, “What background information do I have?,” meaning, “What do you know about your potential users and their current situation?”. This includes demographic information (i.e., age) and disability-status, as well as the community’s current resources and climate. For instance, if you are designing a new park, you should ask yourself “Who needs to access and use the new park?” and “What are the current parks like?”. By answering these initial questions, designers can better orient themselves to the needs of all community members. Ultimately, through this universal thinking cycle, designers can predict accessibility barriers and plan to address them before the project gets underway.

When creating an in-depth plan, or blueprint, for a new project, engineers and designers can follow the UDL principles, which include seven steps to help ensure new infrastructure is inclusive. These seven principles were originally developed by researchers at North Carolina

State University (NCSU), and they assert that infrastructure should afford (1) equitable use, (2) flexibility in use, (3) simple and intuitive use, (4) perceptible information, (5) tolerance for error, (6) low physical effort, and (7) size and space for approach and use (NCSU, 1997). By adhering to these general principles, designers can prevent individuals with disabilities or mobility impairments from being excluded from their communities.

### 2.3.1. Applications for Inclusive Playground Design

To increase opportunities for inclusive and intergenerational play, communities can implement new, inclusive parks that accommodate residents of all ages and mobility-levels. According to James et al. (2022), “An inclusive playground has been defined as a space that allows children of all ages and genders, both with and without disabilities, to access the playground and play together, and allows families to engage in play with their children” (page 2). In order to successfully design and implement an effective inclusive playground, city planners should reflect on the “UDL Thinking Cycle” and “Seven UDL Principles.”

Throughout the world, inclusive playgrounds are gaining popularity, and researchers have started to study their effectiveness. Lynch et al. (2019) studied inclusive parks and playgrounds across Ireland and created specific guidelines for the application of UDL principles to inclusive playground design. Table 2.1 below is adapted from the recommendations provided by Lynch et al. (2019).

**Table 2.1**

*Applying UDL Principles to Inclusive Playground Designs*

UDL Principle	Guidelines for Inclusive Playgrounds
1. <i>Equitable use</i>	Playgrounds are designed so individuals of all abilities have equal opportunity to use and enjoy equipment.
2. <i>Flexibility in use</i>	Playgrounds should include a variety of different equipment and features for different types of play.
3. <i>Simple and intuitive use</i>	Children should be able to understand how to access and utilize equipment. The design should create a reasonable challenge that children can overcome.
4. <i>Perceptible information</i>	Playgrounds should include interesting elements that encourage curiosity.

5. <i>Tolerance for error</i>	Playground equipment should encourage children to take risks, but protect them from significant danger.
6. <i>Low physical effort</i>	Playgrounds should encourage active play, but users should have places/opportunities to rest.
7. <i>Size and space for approach and use</i>	Playgrounds should include elements that are big and small enough to ensure individuals of all ages, abilities, and sizes can play.

*Note.* Adapted from “Advancing play participation for all: The challenge of addressing play diversity and inclusion in community parks and playgrounds,” by H. Lynch et al., 2019, *British Journal of Occupational Therapy*, 83(2),107-117. <https://doi.org/10.1177/0308022619881936>.

## 2.4. Examples of Inclusive Playgrounds

There are many examples of playgrounds that utilize best-practices for inclusivity both locally, in Massachusetts, and in communities abroad. McLaughlin (2022) provided a review of the “thirty most impressive accessible and inclusive playgrounds” around the world, including gold-standard examples across the United States and in other countries, including the United Kingdom and Australia, among others. The Inclusion Matters Organization is also a good resource for identifying inclusive play spaces across the globe. Their website provides a map of inclusive playgrounds worldwide and also specific examples, with addresses, of various inclusive parks in the U.S. (Inclusion Matters, 2022). These parks have their own unique styles and attributes; however, they share many of the same design principles and equipment (e.g., a rubber or accessible-surfaced walking path, ramps on the playgrounds to accommodate wheelchairs, lots of benches, etc.).

### 2.4.1. Inclusive Playgrounds Worldwide

In McLaughlin’s (2022) review of the best inclusive playgrounds, Tatum’s Garden in Salina, CA received the number two ranking. This park “was inspired by 3-year-old Tatum Bakker, who has spina bifida” (McLaughlin, 2022, paragraph 29). The “surface of the 20,000-square-foot playground is covered in cushioning rubber and the park is filled with wheelchair-friendly ramps and structures, as well as adaptive swings” (paragraph 29). As demonstrated in Figure 2.2 below, the playground includes a fun variety of equipment, bright colors, and accessibility-related features, such as ramps, seating, and shaded areas.

## Figure 2.2

### *Example One: Tatum's Garden*



*Note:* From McLaughlin, 2022.

Communities across the globe are beginning to embrace inclusive parks. The United Kingdom is home to many inclusive playgrounds, and The Play Park, located in Exeter, U.K. received a sixth-place ranking in McLaughlin's (2022) review. The "facility features a roundabout, a trampoline, a seesaw and a swing unit, all of which are suitable for children in wheelchairs or with restricted mobility" (paragraph 24). Mencap, a British charity that provides support for those with learning disabilities, spearheaded this project after conversing with a mother whose child has autism. The Mencap organization believes a "playground should be built for kids of all abilities," and The Play Park provides a means for all children to easily play together.

## Figure 2.3

### *Example Two: The Play Park*



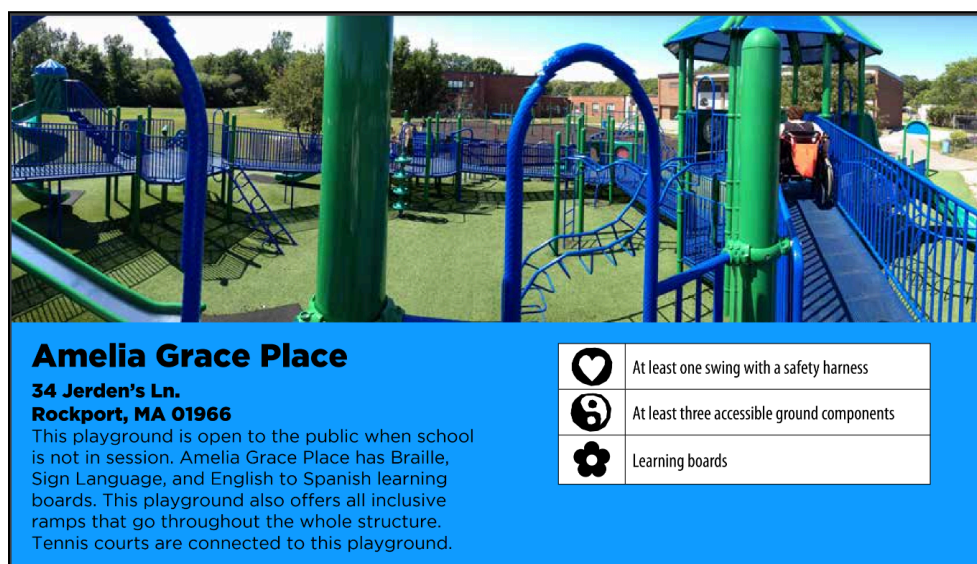
*Note:* From McLaughlin, 2022.

## 2.4.2. Inclusive Playgrounds in Massachusetts

Because this project is based in Holden, MA, it is important to look at local examples of inclusive parks. There are various playgrounds throughout Massachusetts designed to accommodate individuals of all ability levels. The Holden Inclusive Park Committee can reference these examples when considering what equipment to include (or not include) in their park design. With the help of the Gopen Fellowship and the Massachusetts Developmental Disabilities Network, Marie Saldi (2015) created “A Guide to All-Inclusive Playgrounds in Massachusetts.” As a wheelchair user, Saldi has a lot of great insights regarding the parks’ most important features. Figure 2.4 below depicts Amelia Grace Place, located in Rockport, MA. Saldi (2015) identified some of this park’s key features, which include “at least one swing with a safety harness, at least three accessible ground components, and learning boards” (slide 6).

**Figure 2.4**

*Example Three: Amelia Grace Place*



*Note:* From Saldi, 2015 (Slide 6).

Saldi’s (2015) publication includes a wide variety of inclusive parks in MA, and new initiatives are continuously underway. In fact, Worcester, MA is home to Coe’s Park, which is “the region’s first state-of-the-art, universally accessible, multigenerational park and playground” (City of Worcester, 2023, paragraph 1). This park laid the groundwork for inclusive parks in Worcester County. Currently, surrounding towns, like Holden, are following suit with their own

inclusive playground plans. Coe's Park, depicted in Figure 2.5 below, contains "57 accessible playground features," as well as "recreational opportunities (passive and active), support facilities, ADA accessible walkways, a scenic overlook area, benches, landscape plantings, kiosks and signage" (City of Worcester, 2023, paragraph 5). As Worcester is such a large city, Coe's Park is a great resource to help ensure the diverse range of community members can engage in play.

### Figure 2.5

*Example Four: Coe's Park*



*Note.* From City of Worcester, 2023.

## 2.5. Effectiveness of Inclusive Playgrounds

Developmental psychologists, experts in physical and intellectual disabilities, and other researchers have begun studying the impact of inclusive play spaces throughout the world. Various studies have looked into the effectiveness of inclusive playgrounds in terms of planning and implementation. For instance, Jeanes & Magee (2011) performed a case study of an inclusive park in the U.K. They conducted focus groups with children and families who utilize the playground (which is located at a special education school, but open to the public). The focus groups revealed that families of children with disabilities appreciated being included in the design process for this inclusive playground. They perceived that their feedback led to better, more inclusive outcomes when the park was constructed (Jeanes & Magee et al., 2011). As stated by a young participant who uses a wheelchair, "With the park, I had the chance to try out the different play pieces before they put them in, and I got to say what I thought we should have. There's loads I can use now" (page 202). This suggests understanding the needs of stakeholders is important during the planning and design phases of inclusive parks.

Furthermore, the researchers identified that families placed a high value on removing physical barriers in all playground equipment so kids of all abilities could play together. As stated by a participating parent, “With this facility, you see the able bodied kids on the shared swing with children with severe mobility issues, and they are giggling away together” (page 202). This finding supports the UDL framework, which asserts that all children should be able to easily use/access equipment from the parks’ initial phases of opening. Implementing inclusive design frameworks facilitates play and prevents children with disabilities from being excluded or marginalized. Parents also identified that the inclusive setting at this park creates a culture of acceptance, particularly for children who experience intellectual, as well as mobility-related, disabilities, which is a very positive outcome (Jeanes & Magee et al., 2011).

In their study of playgrounds in Ireland, Lynch et al. (2020) concluded that local, inclusive parks are popular among many community members. These parks draw intergenerational crowds, and they are located in convenient, residential locations (Lynch et al., 2020). Interviewed participants enjoyed the social benefits of the parks, felt a sense of belonging in the community, and reported having a lot of fun (Lynch et al., 2020). Positive reviews of inclusive and intergenerational playgrounds across the world further suggest that it is worthwhile for local communities to invest in inclusive park initiatives.

## **2.6. Holden Inclusive Park**

Located right outside of Worcester in central Massachusetts, Holden is a small town with approximately 20,000 residents (U.S. Census, 2022). With highly-rated school systems and a wide variety of town programs, the Holden community is close-knit and an attractive place for young families (Town of Holden, 2022). Despite these great attributes, town parks in Holden are in poor shape, and playground equipment is oftentimes inaccessible for children and family-members with mobility impairments. This motivated a group of Holden residents to form the Holden Inclusive Park Committee in 2022. As previously stated, this committee is working to design and build an inclusive, multigenerational park that accommodates residents of all ability levels, including those with mobility impairments and other disabilities. As stated on the Town of Holden’s website, “The Inclusive Access Playground Committee will assist in the planning and design of a full access playground, located adjacent to the Holden Municipal Light Department, and also assist in the securing of financial support for the project” (Inclusive Park Committee, 2022).



Figure 2.6 below demonstrates the committee’s most recent plans for the Holden Inclusive Park (December 2023). The blueprint includes a variety of accessible features: two accessible playgrounds (for ages 2-5 and 5-12), an adult fitness lot, a sports field with accessible surfacing, a walking path with benches available, a combat & wounded veterans space, a typical basketball court, a miniature basketball court with lower hoops, and a shade pavilion with accessible picnic tables. Table 2.2 describes each of these elements in more detail. While this park will contain accessible equipment for individuals with disabilities and mobility impairments, it is a recreational facility that will provide benefits for all members of the town and surrounding community. Currently, in Holden, there aren’t many places for kids, families, older adults, people with mobility impairments– anyone– to engage in play and connect. The new park will provide a space for all people to reap the many benefits of playing together in nature.

**Figure 2.6**

*Design Plan for the Holden Inclusive Park*



*Note: From the Holden Inclusive Park Committee, 2023.*

**Table 2.2***Description of Park Components*

<b>Park Component</b>	<b>Description</b>
<i>Two fully-inclusive playgrounds (for ages 2-5 and 5-12)</i>	Playground equipment will be age-appropriate for each group and include many challenging elements as well as fully-inclusive infrastructure (e.g., equivalent ramping every time there are stairs, ladders, or another climbing structure, allowing all kids to 'get to the same spot').
<i>Adult fitness lot</i>	A separate area with workout equipment specifically designed for adults of all ages and abilities to encourage outdoor exercise and fitness.
<i>Sports field with accessible surfacing</i>	New field with accessible surfacing to provide a place for Holden Youth Sports to hold practices and games. Turf field will prevent potholes and uneven surfaces, allowing athletes with prosthetics to safely participate.
<i>Walking path with benches available</i>	Walking path located around the park's border to encourage movement and exploring among family members and friends. Benches will be available to stop and rest along the way.
<i>Combat &amp; wounded veterans space</i>	Specific area of the park dedicated to combat & wounded veterans with various amenities.
<i>Typical basketball court</i>	Standard-sized basketball court for pickup games, summer leagues, or other outdoor practices.
<i>Miniature basketball court with lower hoops</i>	Hoops on this court will be lower to facilitate play for smaller children as well as wheelchair basketball.
<i>Shade pavilion with accessible picnic tables</i>	Area for families and friends to gather, while offering some protection from the sun.

Now that plans for the park are gaining traction throughout town, the committee hopes to further spread the word and gain feedback from stakeholders. By understanding residents' needs, desires, and concerns for the new park, the committee can better adjust its plans and articulate to the larger community the widespread benefits of an inclusive, multigenerational park. Thus, through surveys and interviews, this project aimed to understand Holden residents' experiences with inclusive and intergenerational play and how this park can remedy any barriers to play they are currently facing.

## 3.0 Methodology

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The goal of this study is to assist the Holden Inclusive Park Committee in its efforts to design and build a multigenerational, inclusive park by understanding community perceptions and experiences, determining stakeholder needs, and gathering resources to further engage residents. Four objectives helped to achieve this goal:

1. Identify community members' experiences with inclusive and intergenerational play at local public parks and their desires for the new park. (*Surveys*)
2. Understand the barriers to play that stakeholders face and determine how the new park can provide families with equitable opportunities for play. (*Interviews*)
3. Actively communicate results and provide recommendations to committee members.
4. Create a public-facing, informative website for Holden residents to gain more information about the project.

Two main methods aided in the completion of these objectives. First, I administered an online survey to 289 community members regarding their experiences with inclusive and intergenerational play at public parks and their desires for the Holden Inclusive Park. These surveys were anonymous and asked Likert-type questions as well as free responses to better understand the whole community's perspective. The survey items fell under four sub-themes, including *Current Playground Accessibility* (Questions 1-5), *Safety and Social Acceptance* (Questions 6-10), *Current Park Use* (Questions 11 & 12), and *Support for the Holden Inclusive Park* (Questions 13-15). Appendix A contains the full survey. Second, I conducted semi-structured interviews with a small number of community-members. This helped me gather more specific, qualitative information about the barriers to play that stakeholders are currently facing and how the new park will contribute to the wellbeing of their families. Similarly, the interview questions were categorized under four sub-themes: *Introductions*, *Inclusive and Intergenerational Play*, *Barriers to Play*, and *New Park- Opportunities and Concerns*. Appendix B contains the full interview script and question set.

### 3.1. Online Survey of Holden Residents

An online survey was administered through Qualtrics to a sample of 289 Holden residents. Through data cleaning, this was reduced to 216 participants who answered questions

beyond the informed consent. 4 participants indicated they are not Holden residents, but they were still included in the analysis based on their responses, which suggested they have close family or friends who live in Holden. Of the 216 participants, 21 chose not to provide demographic information, which leaves 195 participants for the demographic breakdown. Essentially, the majority of participants (N = 195) were between 35 and 54 years old, with 47.2% indicating they are ages 35-44 and 25.6% indicating they are 45-54. Additionally, 2.6% of participants have a disability themselves, while 20.5% have a child or other family member with a disability. Finally, the majority of respondents, 82.1%, were female.

To recruit participants, I created a flier, which included a link and QR code to the Qualtrics survey. Appendix C contains the flier, which was sent to the town of Holden's Parks and Recreation Department email list, the Senior Center newsletter, and posted on the Holden Inclusive Park Committee's Facebook page. The survey did not collect participants' names or identities, instead, I assigned each survey response a numerical code for use in data analysis.

To take the survey, participants initially saw an informed consent form. After reading through it, they could click "I agree to participate in this research" at the bottom of the page (in place of a signature). After taking the survey, the final question asked participants if they wanted to have their names entered in a raffle to win a \$50 Amazon gift card, and/or if they would be interested in participating in a followup interview. If they answered yes, Qualtrics led them to a separate form to provide their first name and email address (this form was not linked to their survey responses). Otherwise, the survey ended and no names or email addresses were collected.

### **3.2. Semi-structured Interviews**

For the semi-structured interview component of this project, I conducted 6 interviews with Holden residents. The interview sample consisted of people who live in Holden, focusing on important stakeholder groups. This includes (1) adults who have children or family members with disabilities and (2) individuals with professional backgrounds in accessibility-related services. I also interviewed a few mothers of small children who live near the park, who did not necessarily have a personal connection to disabilities or mobility impairments.

All participants were recruited through the surveys described in Section 3.1. At the end of the survey, participants indicated if they were willing to engage in an online or in-person interview and, if so, provided their email addresses. I reached out to each person via email to

confirm a day, time, and place for their interview. Ultimately, I conducted all 6 interviews online using my WPI Zoom link that I provided to participants via email.

The interviews followed a semi-structured format, so I asked participants a set of predetermined questions and also asked follow-ups depending on their responses. The interview questions were open-ended and inquired about participants' personal experiences with inclusive and intergenerational play at public parks and barriers to play that their families (or patients) have faced. Additionally, interview participants were asked about specific park amenities that could increase opportunities for their families and were encouraged to voice any concerns or feedback they might have about the larger project.

As outlined in the interview script, I read all interviewees the same introductory paragraph and obtained their permission to audio-record the interview using voice memos. I emailed participants a link to the consent form (on Qualtrics) prior to the interview, and participants typed their name in place of a physical signature. At the end of each interview, the participant received a debriefing of my motivations for asking the interview questions. Finally, following the conclusion of each interview, the voice-recordings were transcribed using Microsoft Team's transcription software, and the audio files were subsequently deleted. To protect the identity of interview participants, I assigned each participant a code and did not associate their identities with their responses in the interview transcripts.

### **3.3. Creating Community Resources**

In addition to the surveys and interviews, I collaborated with members of the Holden Inclusive Park Committee to create educational resources for community members. This MQP is particularly unique because of its qualitative nature and the emphasis on deliverables for the town committee. Thus, for my third "method," I developed a website using Google Sites containing various infographics, diagrams, and synthesized results from the surveys and interviews. The Holden Inclusive Park Committee then linked this website to their existing web page and Facebook page for all people in Holden to see. Specifically, the website included easy-to-read infographics explaining the importance of inclusive and intergenerational play, Universal Design for Learning (UDL), and examples of other inclusive parks. Also, I created a page on the website containing a description of the project and the current blueprint design/map of the park. Finally, I posted summarized results of the surveys and interviews. I created graphs using Microsoft Excel to easily depict the survey findings and created visuals to highlight

important quotes from the interviews. Additionally, I created a white paper of potential grant funding sources for different park elements, which is not visible to the public. Instead, only committee-members can see this spreadsheet. Finally, I attended regular biweekly meetings with the committee to stay updated on any project developments and ultimately presented my entire finished website to all members.

## 4.0 Results

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### 4.1. Survey Results

As discussed in Section 3.1 above, 216 Holden residents completed an online survey asking about their experiences with inclusive and intergenerational play and their needs and desires for the new park. Overall, survey results were analyzed by looking at participants' most frequent responses (using percentages). Further analysis looked into how average (mean) survey responses differed based on whether respondents have a child with disabilities and/or self-identified as having a disability or mobility impairment. Overall, 20% of participants identified that they have a child or other family member with a disability and/or mobility impairment.

Two, overarching “research questions” helped to guide survey analysis:

1. What are the current experiences of Holden community members in terms of inclusive and intergenerational play at local public parks?
2. What are the needs and desires of Holden community members for the new park?

Survey items asked residents to share their perspectives through Likert-scale and “select all that apply” questions, which were analyzed under four sub-categories, including (1) Current Playground Accessibility, (2) Safety and Social Acceptance, (3) Current Park Use, and (4) Support for the Holden Inclusive Park. Participants also provided open responses about their experiences with play and inclusion or exclusion at local parks. These short-answers fell under subsections 1 & 2 of the survey. Below, survey results are split-up by each of the sub-themes.

#### 4.1.1. Current Playground Accessibility

The first theme, current playground accessibility, covered questions #1-5 of the survey. The graphs below provide a closer look at how residents responded to each question, which is shown as a percentage of total responses. Overall, most participants indicated that they have very positive experiences with playground accessibility; however, there is clearly room for improvement, as not all participants were in this category.

Figure 4.1 below highlights participants' responses to the first question: "I have access to parks and playgrounds where my child or grandchild can play with other children." Here, 57.1% of respondents chose "5" on the Likert scale, which indicated "very easy access."

**Figure 4.1**

*Question 1: Access*

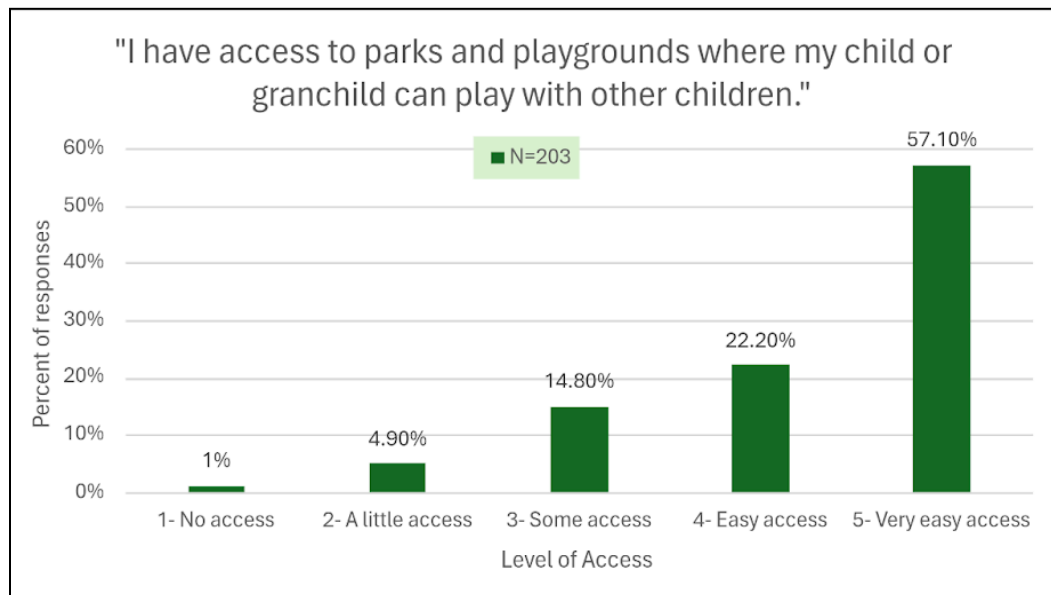


Figure 4.2 below highlights participants' responses to the second question: "It is typically easy for my child or grandchild to utilize playground equipment." This question gets at playground access for children with mobility impairments. Here, 54.1% of respondents chose "5" on the Likert scale, which indicated it is "very easy" for their child(ren) to use equipment.

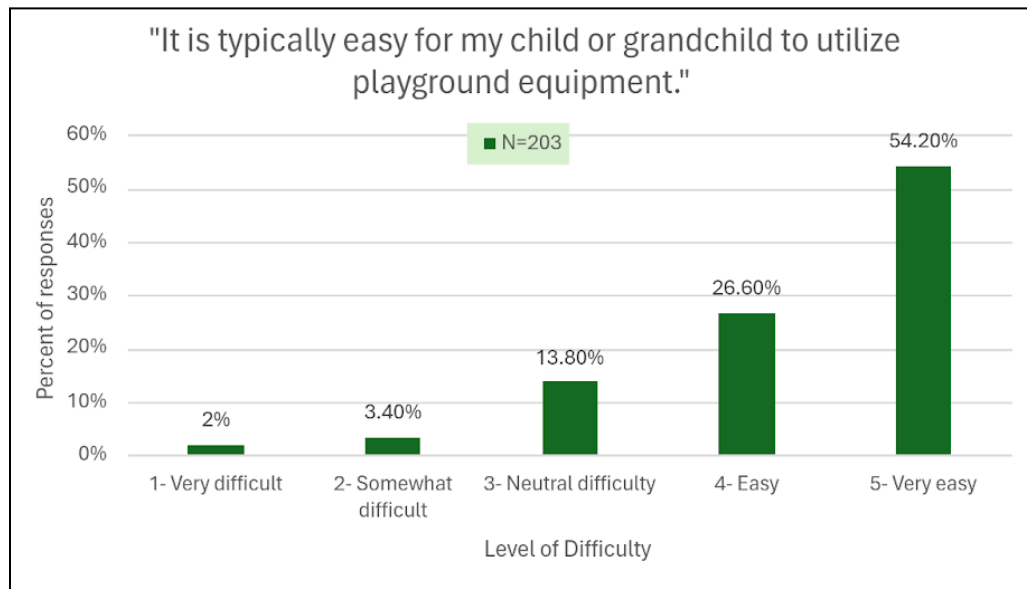
**Figure 4.2***Question 2: Child Easily Uses Equipment*

Figure 4.3 below highlights participants' responses to the third question: "It is typically easy for me to access equipment and play with my child or grandchild." This question gets at playground access for adults with mobility impairments. Here, 46.8% of respondents chose "5" on the Likert scale, which indicated it is "very easy" for them to use equipment.

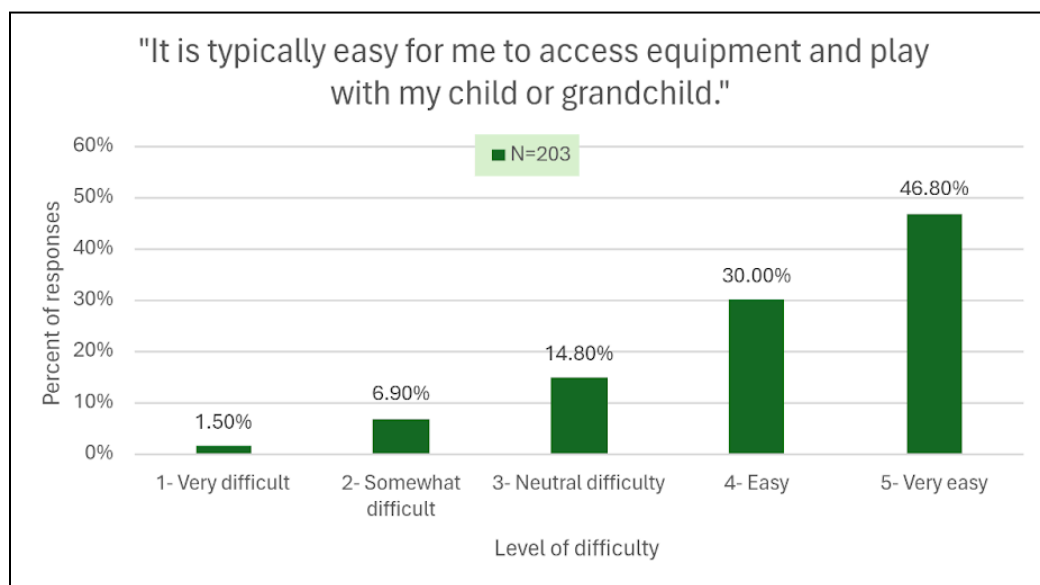
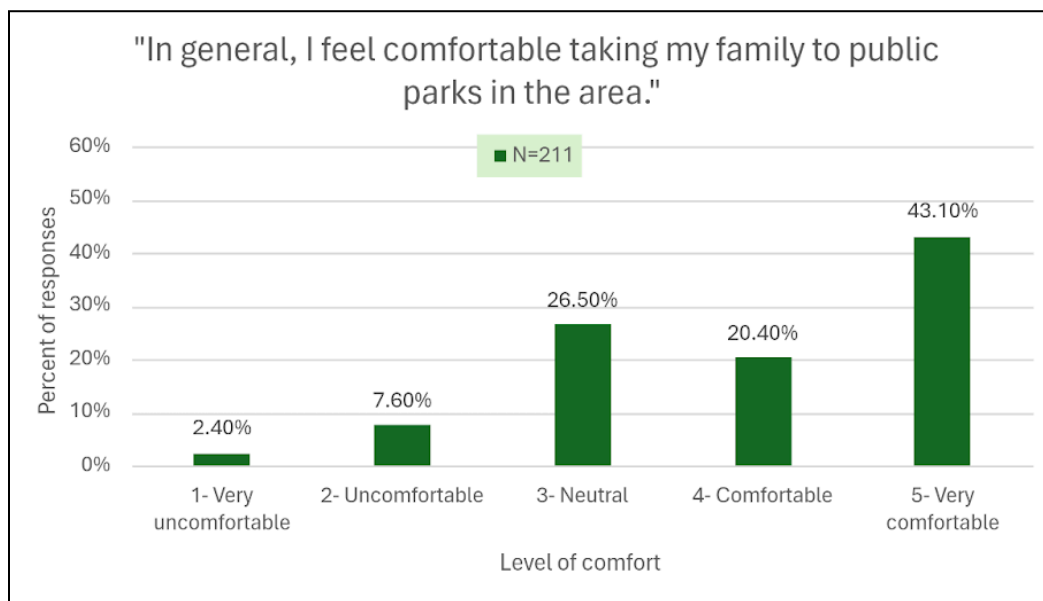
**Figure 4.3***Question 3: Parent Easily Uses Equipment*



Figure 4.4 below highlights participants' responses to the fifth question (the fourth question was open-response): "In general, I feel comfortable taking my family to public parks in the area (Includes amenities like parking, benches, bathrooms, and a variety of easy-to-use equipment)." This question aimed to understand how current park amenities are affecting local families. 43.1% of respondents chose "5" on the Likert scale, which indicated they are "very comfortable" at local public parks.

**Figure 4.4**

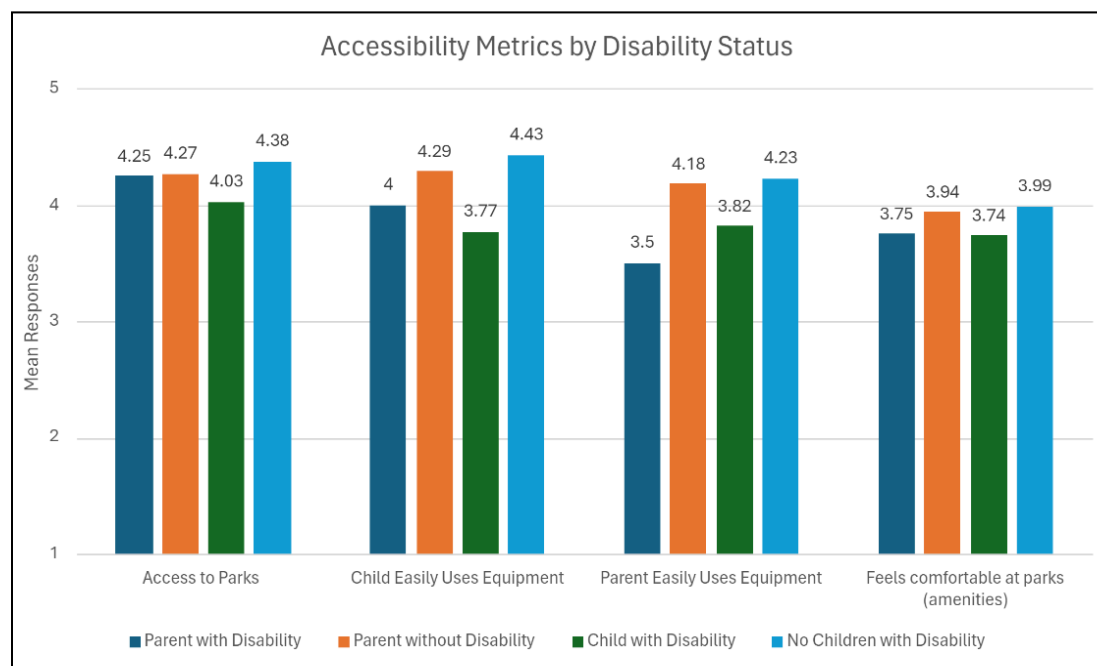
*Question 5: Comfort at Local Parks*



After analyzing each of the Likert-scale questions individually, I computed participants' average responses to each of these questions and looked for differences based on disability status. To do this, I conducted a comparison of means and two independent-samples t-tests. This determined if people's experiences with "current playground accessibility" differed in a statistically significant way based on (1) having a child with disabilities vs. no children with disabilities and (2) being a parent who self-identified as disabled vs. not having a disability. Figure 4.5 below highlights the mean-responses to each question (1 = very low access, 5 = very high access) for each of these four groups of participants (parent with disability, parent without disability, child with disability, no children with disabilities).

**Figure 4.5**

Overall Comparison of “Current Playground Accessibility” Means:



As shown in Figure 4.5, having a child with disabilities (green bar) reduces access in every instance when compared to having no children with disabilities (light blue bar). Similarly, parents who self-identified as having a disability (dark blue bar) reported less access in every instance when compared to parents without a disability (orange bar).

Upon further analysis (independent samples t-tests), these differences were deemed statistically significant in two cases. For question #1 (access to parks), there was a significant effect for child’s disability status,  $t(192) = -2.10$ ,  $p = 0.037$ , with the “child with disabilities” group receiving lower scores than the “no children with disabilities” group. For question #2 (child easily uses equipment), there was a significant effect for child’s disability status,  $t(46) = -3.13$ ,  $p = 0.003$ , with the “child with disabilities” group receiving lower scores than the “no children with disabilities” group. Ultimately, these statistics highlight how children experiencing mobility impairments statistically have less access to playgrounds and more trouble using playground equipment than able-bodied children. There were no statistically significant effects for parental disability status.

In addition to the four likert scale questions, one open response question fell under sub-theme #1 (current playground accessibility). This question asked participants, “How do you

play with your child or grandchild at parks (i.e., types of activities)?”. Participants provided short answers explaining how their families typically play in a few sentences/phrases. The table below includes a few select responses that provided valuable insight into the meaning of “play” for Holden families and how parks could better facilitate play for them.

**Table 4.1**

*Question 4: Short Answers- How Families Play*

<i>“How do you play with your child or grandchild at parks (i.e., types of activities)?”</i>
<i>“It is great when we can access areas that have zip lines or larger equipment that can be shared with kids. Parks would be great if they would have multiple offerings for all ages of kids as well. My children range in age by 10 years and most equipment only appeals to younger kids and not to my older kids.”</i>
<i>“Slides, running around the open areas (would love the softer ground - safer and less messy!) The interactive elements (like wall puzzles, the pretend play elements like pirate eye glasses).”</i>
<i>“The type of swings that are designed for security, i.e., ones with back land bars to prevent falls. Sandbox. We frequent Coe’s pond or Hubbardson.”</i>
<i>“We play soccer or kick the soccer ball back and forth, play basketball when courts are available, we go on the swings together; I will assist them with the monkey bars, still rings, or flying fox/glider. We would love to have a place close with a path to bike, skate, or walk around as we love doing these together as well.”</i>
<i>“My son is autistic and tends to elope and not understand danger. I usually have to try to follow him throughout play structures.”</i>

#### 4.1.2. Safety and Social Acceptance

The second theme, safety and social acceptance, covered questions #6-10 of the survey. The graphs below provide a closer look at how residents responded to each question, which again is shown as a percentage of total responses. Overall, most participants indicated that they have very positive experiences with safety and acceptance at local public parks; however, there is clearly room for improvement, as not all participants feel this way.

Figure 4.6 below highlights participants’ responses to the sixth question: “In general, I feel safe taking my family to public parks in the area. (Includes safety from violence, equipment works properly, playground isn’t too close to street traffic).” 51.4% of respondents chose “5” on the Likert scale, indicating they feel “very safe” at local public parks.

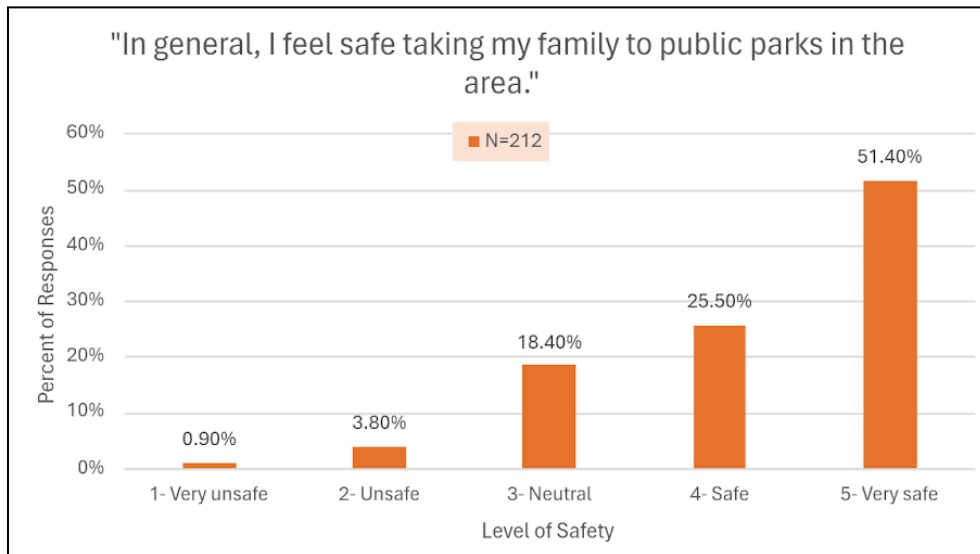
**Figure 4.6***Question 6: Safety*

Figure 4.7 below highlights participants' responses to the seventh question: "My child or grandchild is typically included and accepted by other children at public playgrounds." This question gets at inclusive play and feelings of belonging among children with or without disabilities. Here, 51.9% of respondents chose "5" on the Likert scale, which indicates they "strongly agree" with this statement, meaning their child is typically included at parks.

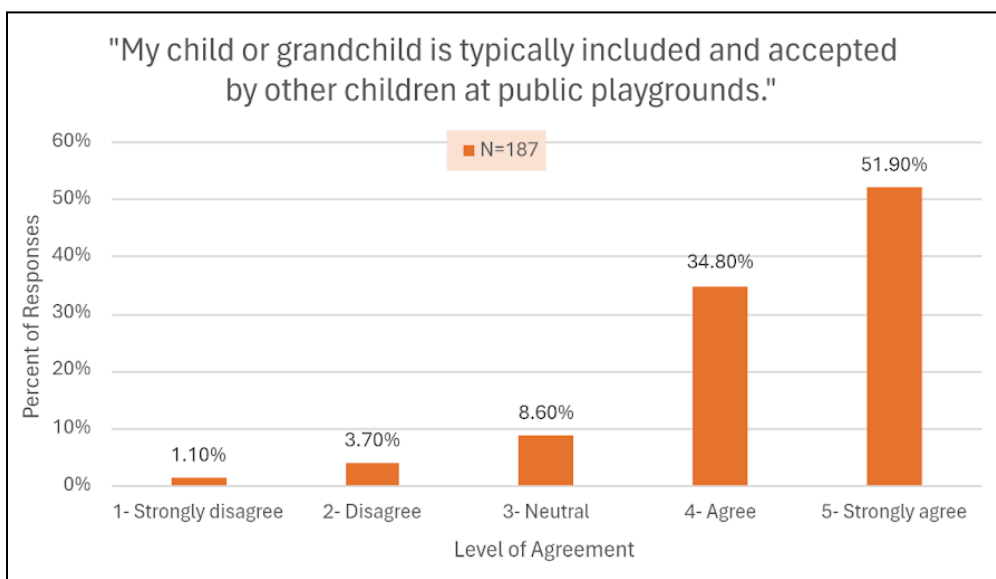
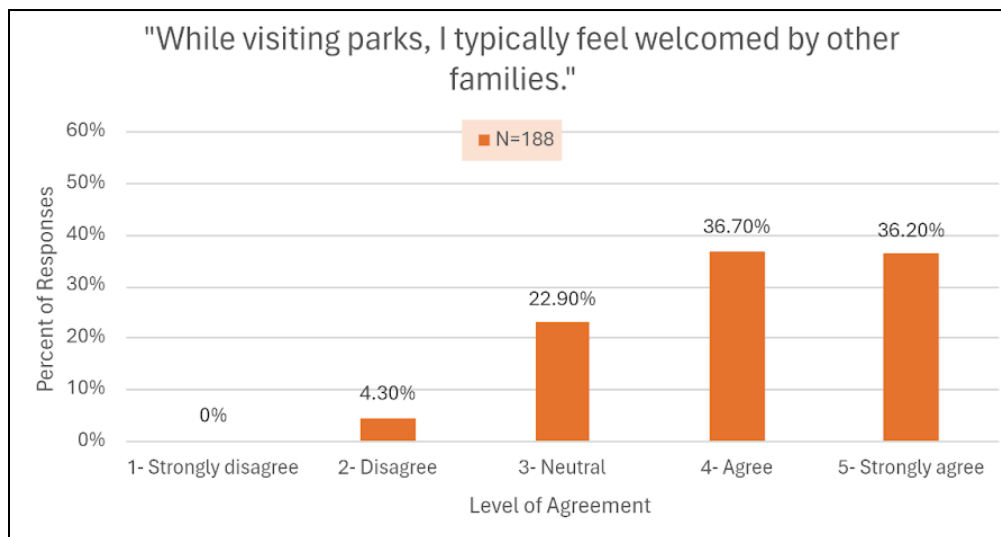
**Figure 4.7***Question 7: Inclusion*

Figure 4.8 below highlights participants' responses to the ninth question (the eighth question was open response): "While visiting parks, I typically feel welcomed by other families." This question gets at the overall atmosphere of current parks in terms of inclusion and social comfortability. Here, 36.2% of respondents chose "5" on the Likert scale, which indicates they "strongly agree" with this statement, and 36.7% of respondents selected that they "agree."

**Figure 4.8**

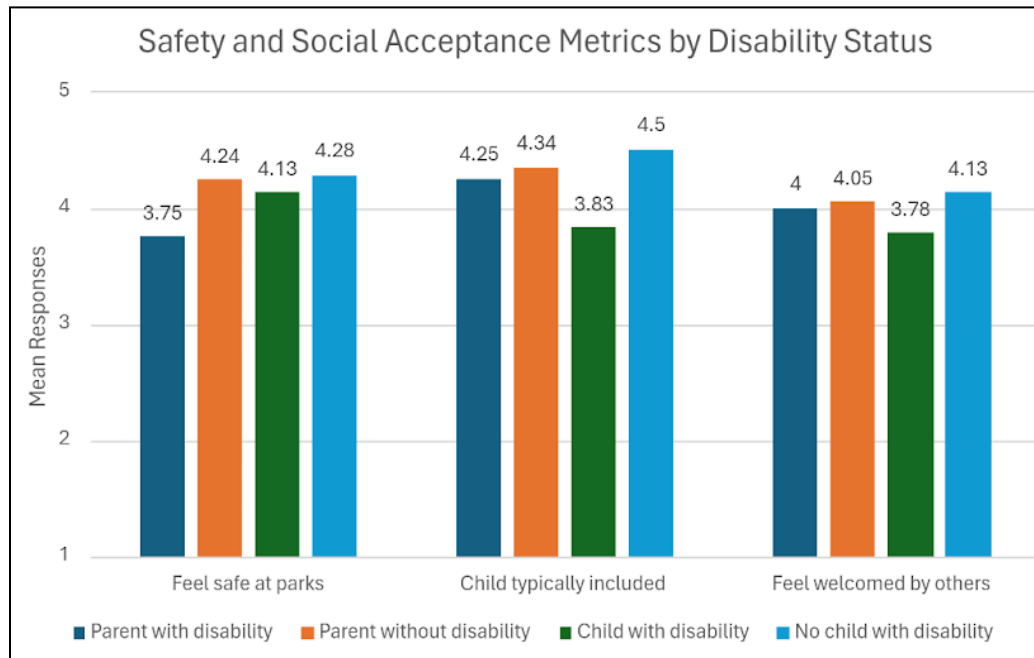
*Question 8: Welcoming Environment*



After analyzing each of the three Likert-scale questions individually, I again computed participants' average responses and looked for differences based on disability status. I employed the same procedure for independent samples t-tests that was used for sub-theme #1 in section 4.1.1 above. These t-tests determined if people's experiences with "safety and social acceptance" differed in a statistically significant way based on (1) having a child with disabilities vs. no children with disabilities and (2) being a parent who self-identified as disabled vs. not having a disability. Figure 4.5 below highlights the mean-responses to each question (1 = very low safety and acceptance, 5 = very high safety and acceptance).

**Figure 4.9**

*Overall Comparison of “Safety and Social Acceptance” Means:*



As shown in Figure 4.9, having a child with disabilities (green bar) reduces feelings of safety and acceptance in every instance when compared to having no children with disabilities (light blue bar). Similarly, parents who self-identified as having a disability (dark blue bar) reported feeling less safe and accepted in every instance when compared to parents without a disability (orange bar).

Upon further analysis (independent samples t-tests), these differences were deemed statistically significant in two cases. For question #7 (child typically included), there was a significant effect for child’s disability status,  $t(46) = -3.48$ ,  $p < 0.001$ , with the “child with disabilities” group receiving lower scores than the “no children with disabilities” group. For question #9 (feel welcomed by others), there was a significant effect for child’s disability status,  $t(53) = -2.04$ ,  $p = 0.023$ , with the “child with disabilities” group receiving lower scores than the “no children with disabilities” group. Ultimately, these statistics highlight how children experiencing disabilities and/or mobility impairments statistically feel less safe and accepted at playgrounds than able-bodied children. There were no statistically significant effects for parental disability status.

In addition to the four likert scale questions, two open response questions fell under sub-theme #2 (safety and social acceptance). Question #8 asked participants, "Could you describe a time when your child or grandchild felt included or excluded at a playground?" The table below includes a few select responses that provided valuable insight into families' experiences with inclusion and exclusion at parks.

**Table 4.2**

*Question 8: Short Answers- Feeling Included or Excluded*

<b><i>"Could you describe a time when your child or grandchild felt included or excluded at a playground?"</i></b>
<i>"A child realized that my child couldn't access all of the equipment and changed the play to the field. They had races with the other child only fast walking. My child felt so included."</i>
<i>"My son has autism and is non verbal. At times he reaches out to touch other kids to say hello or just stands at the top of the slide for example and kids don't understand."</i>
<i>"My children tend to be shy and usually find a friend or another child who is similar in age and extroverted so they will play together. One child is medically fragile and they tire faster so finding an activity which they can sit and do usually consists of the swings. When younger it was harder as finding a swing with a back didn't exist locally and once they outgrew the smaller spring toys there isn't much of a selection besides the swings or play with wood chips."</i>
<i>"My child is ASD level 1 with a speech delay and often children don't play the same."</i>

Question 10 was also an open response question, asking "In what ways have other families made you feel welcomed or not welcomed at a park?". A few select responses are included in Table 4.3 below, and they provide insight into the current social atmosphere at local, public parks.

**Table 4.3**

*Question 10: Short Answers- Feeling Welcomed*

<b><i>"In what ways have other families made you feel welcomed or not welcomed at a park?"</i></b>
<i>"There is not a ton of communication but a simple hello or laughing along with children."</i>
<i>"It has been my child who has felt not welcomed. This has affected me as a parent emotionally"</i>

*"It would be great if there were seating and areas where parents and families could gather that would encourage conversation and community near the playground/park."*

*"... Having areas of social interaction like benches and tables have been helpful as it is close enough to have a conversation, but not necessarily at the same bench so it allows for some space as well. [Veteran's Memorial Park]"*

### 4.1.3. Current Park Use

The third theme, current park use, covered questions #11 & 12 of the survey. The graphs below provide a closer look at how residents responded to each question, which again is shown as a percentage of total responses. These two questions provide insight into how often residents currently visit Holden's parks and what barriers prevent them from using these parks more frequently.

Figure 4.10 below highlights participants' responses to the eleventh question: "Currently, playing at parks with my child or grandchild is part of my regular routine." 48.2% of participants indicated that they visit parks regularly, which demonstrates that over half of respondents are *not* prioritizing time at parks/playgrounds in their daily lives.

**Figure 4.10**

*Question 11: Current Park Routine*

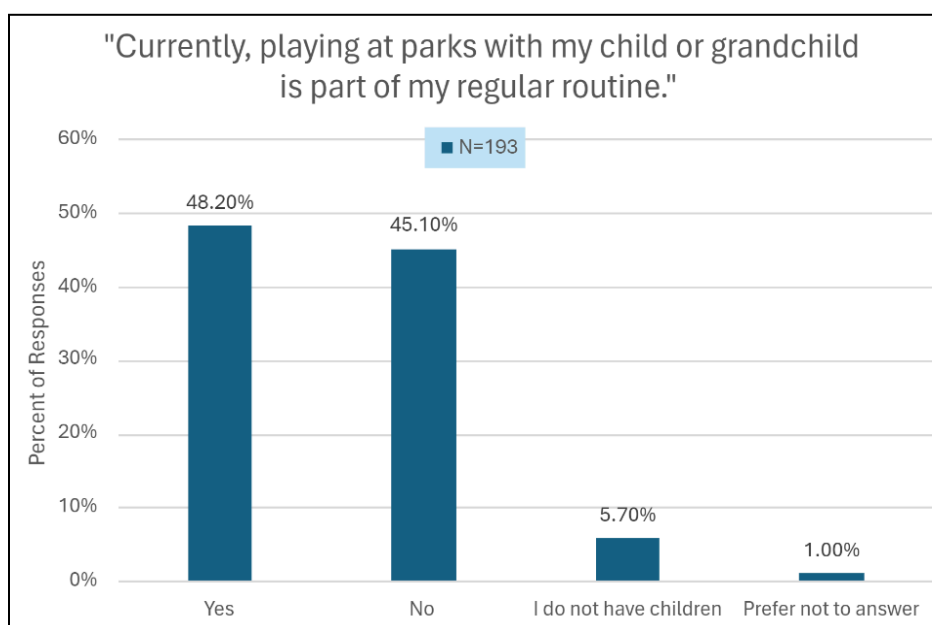
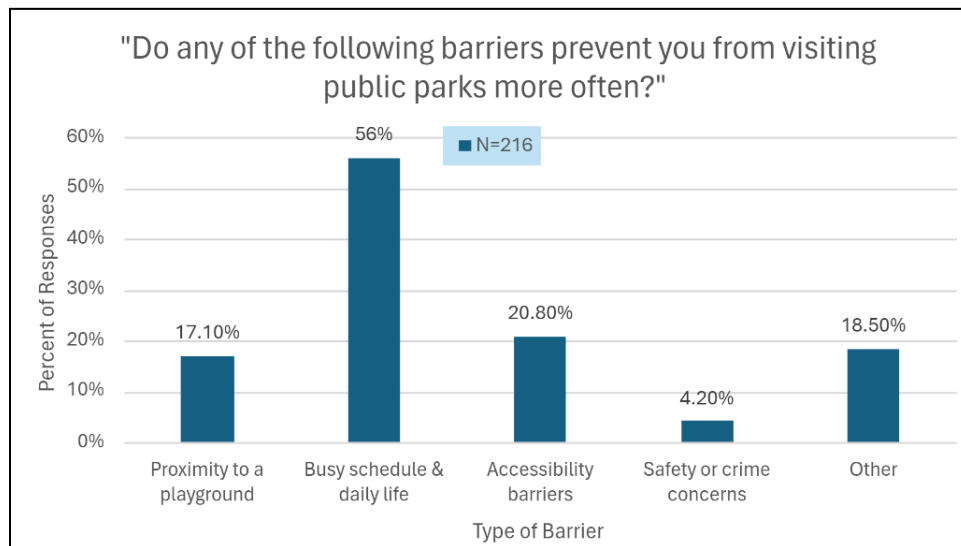




Figure 4.11 below highlights participants' responses to the twelfth question: "Do any of the following barriers prevent you from visiting public parks more often? (Select all that apply)." Respondents reported that a "busy schedule and daily life" is the top barrier preventing park use (56%), and accessibility is the second-most-reported barrier (20.8%).

**Figure 4.11**

*Question 12: Current Park Barriers*



#### 4.1.4. Support for the Holden Inclusive Park

Finally, the fourth theme, support for the Holden Inclusive Park, covered questions #13-15 of the survey. Once again, the graphs below provide a breakdown of how residents responded to each question, which is shown as a percentage of responses. Overall, residents seem to view the park project positively and appear willing to support the initiative financially.

Figure 4.12 below highlights responses to the thirteenth question: "How often do you see yourself visiting the Holden Inclusive Park?" Most participants would use the park monthly (28.3%), weekly (25.7%), or somewhere in between (i.e., a few times a month- 19.4%).

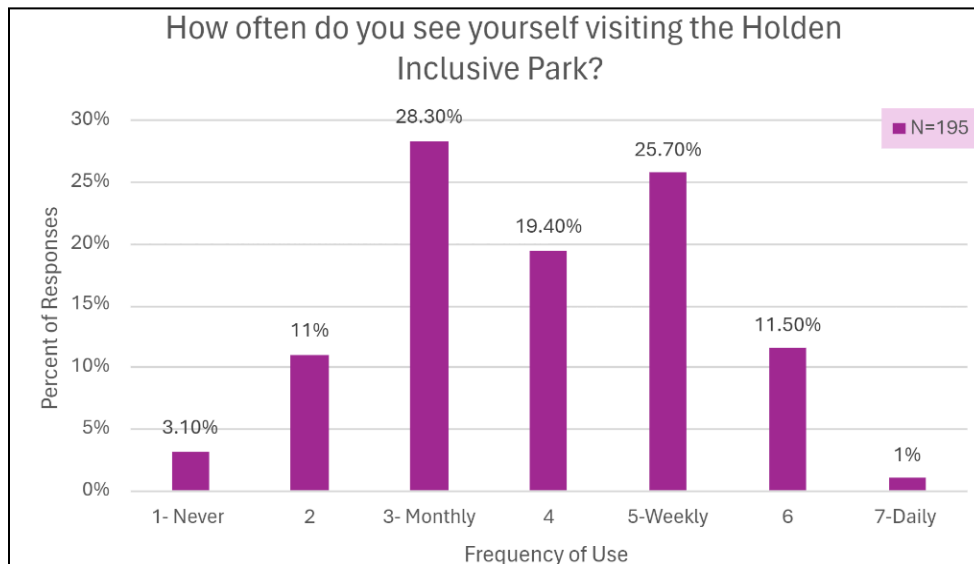
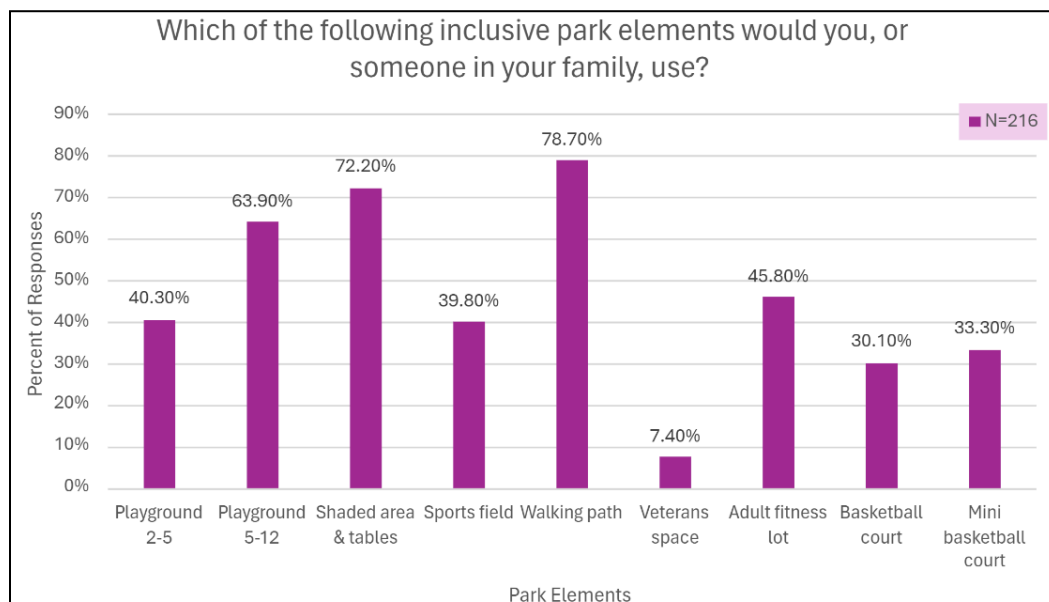
**Figure 4.12***Question 13: Visiting the New Park*

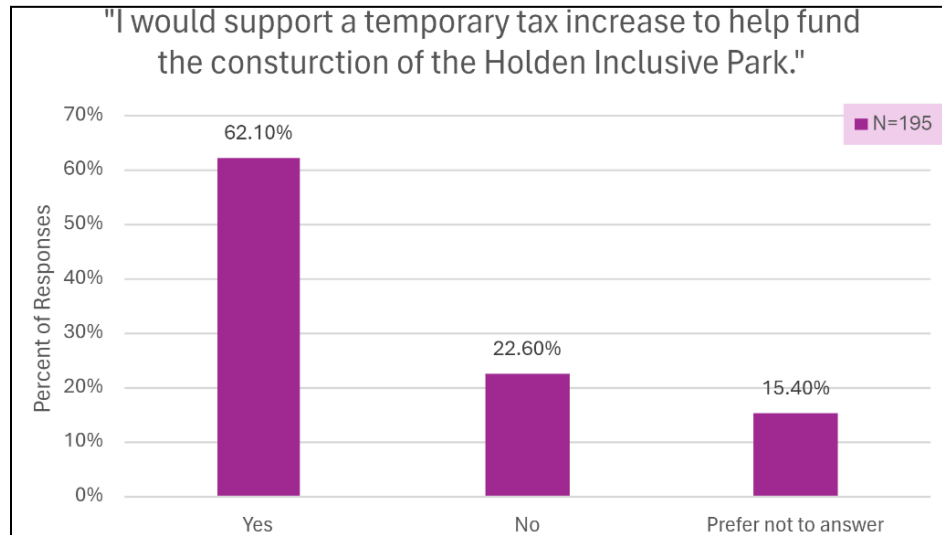
Figure 4.13 below highlights responses to the fourteenth question: “Which of the following inclusive park elements would you, or someone in your family, use?” The top three park components that interest residents are (1) the walking path (78.7%), (2) the shaded area with picnic tables (72.2%), and (3) the inclusive playground for ages 5-12 (63.9%).

**Figure 4.13***Question 14: Desires for the New Park*

Finally, Figure 4.14 below highlights responses to the fifteenth and final question: “I would support a temporary tax increase to help fund the construction of the Holden Inclusive Park.” Well over half of participants, 62.1%, said they would support a potential tax increase for this capital project.

**Figure 4.14**

*Question 15: Potential Tax Increase*



## 4.2. Interview Results

For the interview method, six Holden residents participated in 30-minute interviews, which took place over Zoom video calls. Most of these participants were considered “stakeholders” in the inclusive park project, as they had personal experiences and insights regarding playground accessibility (i.e., they had children with varying disabilities or worked in a professional setting with kids with mobility impairments). The purpose of these interviews was to hear residents’ stories and understand how accessibility barriers have impacted their play– and how the new park can provide additional opportunities for their families (or patients).

The “research question(s)” that guided interview analysis was:

1. What barriers are stakeholders facing regarding inclusive and intergenerational play at public parks? How can the new park best meet their needs?

All interviewees provided informed consent, and the conversations were audio-recorded and later transcribed. The interviews followed a semi-structured format, and questions were split

into four sub-themes, including (1) Introduction Questions, (2) Inclusive and Intergenerational Play, (3) Barriers to Play, and (4) New Park- Opportunities and Concerns.

To analyze the interview data, I read through and coded the transcripts and identified common themes that interviewees mentioned. For instance, all interview participants noted that *current parks are in inadequate condition*. In addition to extracting common themes from the interview transcripts, I pulled out meaningful quotes that would be helpful for understanding residents' experiences, wants, and needs for the inclusive park. I chose quotes based on what really struck me during my conversations with each individual. After each interview, I reviewed the transcripts again to locate and highlight participants' direct quotes during these memorable moments.

#### 4.2.1. Common Themes

To identify common themes across interview transcripts, I utilized a “coding” method. After transcribing each interview using Microsoft Teams software, I read through each transcript individually. For each question, I highlighted and categorized participants' main points, and if there were any repeating themes throughout each interview, I noted those as well. Then, I compared all of the transcripts to determine what important ideas all participants were conveying. Ultimately, I chose to focus on five main takeaways from all of the interviews: (1) inadequacy of current parks, (2) excitement about the new park, (3) desire for more information about the park project, (4) experiences with barriers and exclusion, and (5) feedback about the new park. Table 4.4 below includes each of these themes and corresponding explanations.

**Table 4.4**

*Common Themes in Stakeholder Interviews*

Theme	Explanation
Inadequacy of current parks	The first theme, <i>inadequacy of current parks</i> , encompasses participants' negative feedback about Holden's current parks. Essentially, interviewees provided insights about how these parks are not meeting their families' needs. They reported that current parks have accessibility barriers, dangerous or low-quality playground equipment, and poorly-surfaced fields (e.g., potholes and weeds). Various interviewees reported that their families prefer

	to go into Worcester or surrounding towns to utilize more accessible, higher-quality playgrounds.
Excitement about the new park	The second theme, <i>excitement about the new park</i> , includes participants' desires for a nice, updated facility that will provide opportunity for play and connection close to home. All interviewees responded very positively to the question, "How do you feel about the plans to construct an inclusive community park in Holden?"
Desire for more information	The third theme, <i>desire for more information</i> , highlights how residents want to hear more about the project's progress, particularly through Facebook posts or other marketing efforts. This will help ensure that everyone in town remains updated about the park timeline.
Experiences with exclusion and accessibility barriers	The fourth theme, <i>experiences with exclusion and accessibility barriers</i> , encompasses participants' personal accounts of raising children with disabilities or mobility impairments. These individuals provided insight into how current park setups are not ideal for their children, both physically and socially-emotionally.
Feedback about the new park	The fifth and final theme is <i>feedback about the new park</i> . In order to combat current accessibility and social barriers, interviewees want to see specific elements included in the new park, particularly: shaded or covered areas, walking paths, fencing, bathrooms, sensory tables or boards, accessible surfacing— specifically no wood chips, accessible-swings (with a back and strap), and stations with musical elements.

#### 4.2.2. Quote Analysis

In addition to identifying common themes across all six interviews, I extracted various quotes to further highlight participants' individual stories and demonstrate their families' struggles with Holden's current parks and desires for the new park. The first quote, from a mother whose daughter has autism and several physical disabilities, shows how her family faces social exclusion on playgrounds. She describes how a new park that facilitates inclusion would be so beneficial for her daughter.

*"Sometimes I feel like she cannot understand, so please give her a chance. She's not going to hurt you in any way. She's trying to be your friend, that is all. Most of the families don't*

*understand. I have heard people say. “She’s different” or “just move away,” so that hurts, it’s not easy.” [...] “If we can get this park where we can include her, it is just so amazing that she can be included and part of everything. She is such a sweetheart.”*

The second quote, from a music therapist who works with children with both physical and intellectual disabilities, demonstrates how park elements like accessible surfacing (i.e., even terrain) is super important for children who experience difficulty with walking.

*“I work with kids who may be able to walk with assistance, or supervision, but they may not be super steady on their feet. They may trip over things easily; they may have difficulty with ground that is either really squishy or really uneven. And wheelchairs also can be a huge issue when it comes to, you know, wood chips and sand and mud. There’s a lot of challenges and some families have access to equipment, like getting the wheelchair with the big wheels meant for outdoor terrain, and some do not have that.”*

The third quote, from a mother whose family-members experience various disabilities, draws attention to the importance of facilitating inclusion for individuals who are neuro-diverse—not only those with mobility-impairments. She stresses the need for equipment that appeals to children with sensory needs.

*“I would hope to see a variety of special needs encompassed, not just thinking about ADA compliant, you know, things like a wheelchair ramp, but also how are we being inclusive of kids who are neuro-diverse, kids who have sensory needs? How are we making the equipment large enough for all different sizes as well?”*

Finally, the fourth quote, from a mother of kids with a wide age range, talks about how she would love to see equipment that appeals to children (and adults) of all ages. An environment that facilitates intergenerational play is extremely important for her and her family.

*“I think something that comes to my mind is kids aging out of playing with equipment. It would be nice to have things that appeal to older audiences as well so that it continues to be something families can do together. Especially for families like mine, where the kids have a large age range between them.”*

## 5.0 Website Deliverables

After finishing data analysis, I put together a website for the Holden Inclusive Park Committee to help summarize my findings and to spread awareness about the park project to other residents in town. The website contains background information about the park and synthesized psychological research regarding the importance of inclusive and intergenerational play. The survey results are also broken-down by theme on different sub-pages of the website. Below are screenshots to highlight some of the important website content. The entire website can be accessed using the following link: <https://sites.google.com/view/holdeninclusivepark/home>

Figure 5.1 below shows a portion of the website's home page, which provides a general overview of the Holden Inclusive Park project. Across the top of the screen, viewers can click on various menu items to see the current plan for the park, background research about inclusive playgrounds, or survey and interview data, among other things.

**Figure 5.1**

*Website Home Page*



Figure 5.2 below is a compilation of four infographics, which are located under the website's "Learn More" tab. I created these visuals in Canva, and they summarize the background research conducted for the literature review portion of this project. The infographics cover four important topics pertaining to the park project, including (1) inclusive play, (2) intergenerational play, (3) universal design for learning (UDL), and (4) inclusive playgrounds to provide community-members with important, theoretical information in a more fun and accessible way.

**Figure 5.2**

*Background Research Infographics*

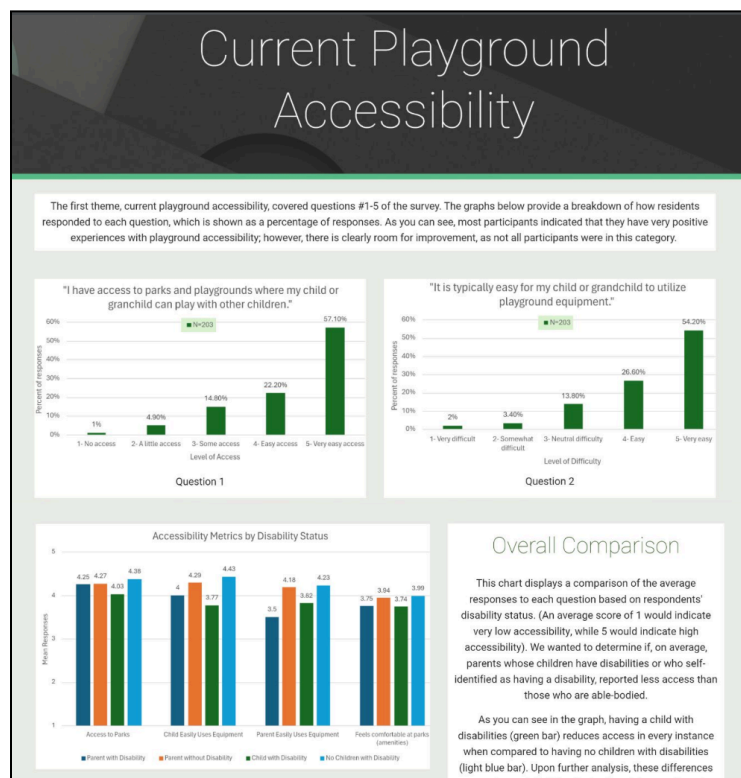


Finally, Figure 5.3 below exemplifies one of the website's survey results sub-pages. As you can see, the results are synthesized into a few graphs and brief explanations of the data to help committee members and Holden residents understand the main takeaways from each of the surveys' sub-themes.



**Figure 5.3**

Survey Sub-Page Example



Ultimately, this website is now linked to the Holden Town Website, allowing residents to easily access updates about the Holden Inclusive Park project and to read more about the survey and interview findings. Going forward, members of the Holden Inclusive Park Committee will be able to make edits to the website, keeping the community informed about their progress.

## 6.0 Discussion

### 6.1 General discussion:

There are a few important takeaways from the community survey results. First of all, there were statistically significant differences in terms of (1) playground access and (2) feeling safe and socially accepted at playgrounds. In multiple cases, participants who have children with disabilities reported *less access* and felt *less accepted* at playgrounds than parents with able-bodied children. These results demonstrate how the town of Holden is experiencing a real problem in terms of equitable access to play-spaces for children with various disabilities.

Statistically significant results suggest that these disparities are not due to chance, rather, families are experiencing less access and less social acceptance *because of* their child's disability.

Ultimately, an inclusive playground is necessary to ensure children of all ability-levels in Holden can reap the benefits of play.

Additionally, survey and interview results show that residents really want the town to build a nice, new facility that encourages play (particularly intergenerationally), regardless of whether they have a child with disabilities. As demonstrated in the survey results, almost all respondents indicated that they would use the Holden Inclusive Park regularly (many people said weekly). Participants also reported that they would love to see specific elements like the walking path, shaded areas with accessible picnic tables, and the accessible playground for ages 5-12, which is important for the committee to keep in mind as they finalize the park's design.

Finally, the interview results highlight Holden residents' lived experiences with exclusion. Listening to others' stories is an important and powerful experience, and their accounts demonstrate how inaccessibility is an impactful issue for many Holden community-members. Hopefully, the new park can help to remedy some of their barriers and foster a more inclusive and positive environment.

## **6.2 Recommendations for the Holden Inclusive Park Committee**

Ultimately, the interview and survey results have led to several recommendations for the Holden Inclusive Park Committee, as they finalize their plan for the new park and seek approval from the local government. The first recommendation is to focus on implementing the most highly-desired park elements. This includes the top three elements identified in the survey (walking path, shaded area, and inclusive playground for ages 5-12), and it also encompasses the specific equipment identified during stakeholder interviews (accessible swings, sensory tables or boards, musical stations, fencing, accessible bathrooms, etc.). Additionally, because the majority of community-members are not stakeholders, and they have very little experience with accessibility barriers and exclusion from play, it is important to continue educating the community about the meaning of inclusive and intergenerational play. It is necessary for everyone to understand how this park will facilitate play for all community-members, regardless of disability-status or age. The committee should also continue to engage with community-members regarding updates about the park. During the stakeholder interviews, I realized that residents feel like they are slightly "in the dark" in terms of understanding where the

new park will be located, what phase the project is in, etc. Residents would like to see more posts on Facebook, updated signage at the park site, and additional information about funding and special committee meetings.

Finally, because the committee has struggled with obtaining sufficient funding from the local government, I recommend that they consider applying for various grants, offered by local businesses, nonprofits, or community organizations. The Holden Inclusive Park Committee received a spreadsheet of various grant-funding opportunities, but table 6.1 below summarizes some of these potential funding sources.

**Table 6.1**

*Potential Sources of Grant Funding*

Grant Sponsor	Title or Description of Grant	Link to Learn More
National Recreation and Park Association (NRPA)	Provides various grants for park projects, promotes equity and access to recreation as a core value  E.g., Musco Sports Lighting and US Soccer Foundation Soccer Fund Grant ( <i>For Field Lighting</i> )	<a href="https://www.nrpa.org/">https://www.nrpa.org/</a>  <a href="https://www.nrpa.org/our-work/Grant-Fundraising-Resources/">https://www.nrpa.org/our-work/Grant-Fundraising-Resources/</a>
The Christopher Reeve Foundation	Quality of Life Grants Program: Seeks to empower individuals with disability by funding projects that increase access and inclusion.	<a href="https://www.christopherreeve.org/todays-care/get-support/grants-for-non-profits/">https://www.christopherreeve.org/todays-care/get-support/grants-for-non-profits/</a>
Kaboom!	Community-Built Playspace Grants: Provides funding to “design, plan, and build a new play space using our signature community-build model.”	<a href="https://kaboom.org/grants/community-built">https://kaboom.org/grants/community-built</a>
National Fitness Campaign	Massachusetts Campaign: Funding Outdoor Fitness Courts Across the State	<a href="https://www.nationalfitnesscampaign.com/massachusetts">https://www.nationalfitnesscampaign.com/massachusetts</a>
ExoFit	ExoFit Outdoor Fitness: Online Grants ( <i>Could help fund adult fitness lot at the Holden Park</i> )	<a href="https://www.exo.fit/grants/">https://www.exo.fit/grants/</a>

### 6.3 Limitations

This research falls short in various ways, and I experienced several obstacles throughout each phase of the project. For instance, I originally wanted to get more feedback from the elderly population; however, I was unable to do so. Because the older population experiences a higher percentage of mobility-impairments, and they have first-hand experience with intergenerational play with grandchildren, their perspectives are very important to this project and were ultimately not well-represented. Due to time constraints, I was not able to adequately administer a paper version of the survey at the local senior center, and the online Qualtrics platform was a barrier for some potential respondents. Additionally, I was unable to talk to many people who themselves had disabilities, which is another important stakeholder perspective. Furthermore, I was unable to talk to any children, and I would have particularly liked to hear from children with mobility-impairments. It would have been very beneficial to hear their first-hand experiences with exclusion and barriers to play on local playgrounds. But, in dealing with the Institutional Review Board (IRB), I found it too challenging to adequately prepare for interviews with children, given the extensive protocol and this project's time constraints. I do think it would have been interesting to learn, from a child's perspective, what types of equipment they value in the new park (i.e., adults want a walking path and shade, but kids might want swings, slides, etc.).

Finally, this survey received only about 216 valid responses, while the Town of Holden has approximately 20,000 residents. So, the sample may not necessarily be representative of the whole community's beliefs. Additionally, in terms of the larger park project in Holden, there are many competing budget constraints that may prevent fast progress from being made on such an important initiative. Hopefully, given the clear community need, the Holden Inclusive Park will be officially approved, funded, and constructed in the near future.

## References

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- About Holden*. Town of Holden. (2022). <https://www.holdenma.gov/about-holden>
- Agate, J. R., Agate, S. T., Liechty, T., & Cochran, L. J. (2018). Roots and wings: An exploration of intergenerational play. *Journal of Intergenerational Relationships*, 16(4), 395-421. <https://doi.org/10.1080/15350770.2018.1489331>

- City of Worcester. (2023). *Coes Pond Parks*. Coes Pond Parks | City of Worcester, MA.  
<https://www.worcesterma.gov/city-parks/coes-pond-parks>
- Diamond, K. E., Hong, S., & Tu, H. (2008). Context Influences Preschool Children's Decisions to Include a Peer with a Physical Disability in Play. *A Special Education Journal*, 16(3), 141-155. <https://doi.org/10.1080/09362830802198328>
- Ginsburg, K. R., Committee on Communications, & Committee on Psychosocial Aspects of Child and Family Health (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics*, 119(1), 182-191.  
<https://doi.org/10.1542/peds.2006-2697>
- Government of New Zealand: Ministry of Education. (2023). *Universal Design for Learning (UDL)*. NCEA. <https://ncea.education.govt.nz/universal-design-learning-udl>
- Inclusive Park Committee*. Town of Holden. (2022).  
<https://www.holdenma.gov/inclusive-park-committee>
- James, M. E., Jianopoulos, E., Ross, T., Buliung, R., & Arbour-Nicitopoulos, K. P. (2022). Children's usage of inclusive playgrounds: A naturalistic observation study of play. *International Journal of Environmental Research and Public Health*, 19(20), 13648.  
<https://doi.org/10.3390/ijerph192013648>
- Jeanes, R. & Magee, J. (2011). ‘Can we play on the swings and roundabouts?’” Creating inclusive play spaces for disabled young people and their families. *Leisure Studies*, 31(2), 193-210. <https://doi.org/10.1080/02614367.2011.589864>
- Lynch, H., Moore, A., Edwards, C., & Horgan, L. (2020). Advancing play participation for all: The challenge of addressing play diversity and inclusion in community parks and playgrounds. *British Journal of Occupational Therapy*, 83(2),107-117.  
<https://doi.org/10.1177/0308022619881936>
- McLaughlin, M. (2022, November 14). *30 most impressive accessible and inclusive playgrounds*. Special Education Degrees.  
<https://www.special-education-degree.net/30-most-impressive-accessible-and-inclusive-playgrounds/>
- NC State University. (1997). *Center for Universal Design*. College of Design.  
<https://design.ncsu.edu/research/center-for-universal-design/>

- Odom, S. L., Zercher, C., Li, S., Marquart, J. M., Sandall, S., & Brown, W. H. (2006). Social acceptance and rejection of preschool children with disabilities: A mixed-method analysis. *Journal of Educational Psychology*, 98(4), 807-823.  
<https://doi.org/10.1037/0022-0663.98.4.807>
- Saldi, M. (2015). All kids have the right to play together: A guide to all-inclusive playgrounds in Massachusetts . Massachusetts Developmental Disabilities Network.  
<https://www.mass.gov/doc/guide-to-all-inclusive-playgrounds/download>
- Shu, Z., Xiao, J., Dai, X., Han, Y., & Liu, Y. (2021). Effect of family "upward" intergenerational support on the health of rural elderly in China: Evidence from Chinese Longitudinal Healthy Longevity Survey. *PLoS One*, 16(6).  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8213075/>
- Tamis-LeMonda, C. S., Shannon, J. D., Cabrera, N. J., & Lamb, M. E. (2004). Fathers and mothers at play with their 2- and 3-year-olds: Contributions to language and cognitive development. *Child Development*, 75(6), 1806-1820.  
<https://doi.org/10.1111/j.1467-8624.2004.00818.x>
- United Nations. (1989, November 20). *Convention on the Rights of the Child (UNCRC)- Article 31*. United Nations Human Rights: Office of the High Commissioner.  
<https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child#:~:text=Article%2031,-1.&text=States%20Parties%20recognize%20the%20right,cultural%20life%20and%20the%20arts>
- U.S. Census Bureau *Quick facts: Holden Town, Worcester County, Massachusetts*. United States Census Bureau. (2022).  
<https://www.census.gov/quickfacts/fact/table/holdentownworcestercountymassachusetts/SBO010217>
- Where we play: Inclusive playgrounds around the world*. Inclusion Matters Organization. (2022).  
<https://inclusionmatters.org/playgrounds-list/>

## Appendices

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### Appendix A: Surveys

Welcome to the Holden Inclusive Park Community Survey! This survey is intended for Holden residents who are 18 years or older. Minors should refrain from participating. Before beginning the survey, please read the informed consent statement below.

#### **Informed Consent Agreement for Participation**

**Investigator:** Samantha Curtis ([slcurtis@wpi.edu](mailto:slcurtis@wpi.edu))

Faculty Advisor: Erin Ottmar ([erottmar@wpi.edu](mailto:erottmar@wpi.edu))

**Title of Research Study:** Building an Inclusive Park for Holden: Understanding Community Needs, Priorities, and Expectations

Sponsor: Holden Inclusive Park Committee

#### **Introduction:**

You are being asked to participate in a survey about your experiences with inclusive and intergenerational play at public parks and your expectations for the Holden Inclusive Park. Before you agree, however, you must be fully informed about the purpose of the study, the procedures to be followed, and any benefits, risks or discomfort that you may experience as a result of your participation. This form presents information about the study so that you may make a fully informed decision regarding your participation.

#### **Purpose of the study:**

The Holden Inclusive Park Committee has developed plans for the construction of a multigenerational inclusive park in town, located at 1 Holden Street behind the Light Department. This research project seeks to understand the experiences of adults in the Holden community with respect to inclusive and intergenerational play. This will help inform committee members about the community's needs, priorities, and expectations for the new park.

#### **Procedures to be followed:**

You are asked to participate in 1 survey that will take approximately 5-10 minutes. You have the right to stop taking the survey at any time during this process.

#### **Risks to research participants:**

By participating in this study, you will not experience any direct risks. All information gathered during the survey will remain confidential and no responses will be associated with your name.

**Benefits to research participants and others:**

By participating in this study, you will contribute to my senior thesis research on inclusive and intergenerational play through community parks, and you will benefit your community by providing feedback on the initiative to build an inclusive park.

**Record keeping and confidentiality:**

All survey responses you give during the study will be kept on WPI's confidential research portal. Any collection, publication, or presentation of data will not identify you. Your name will never be used in publication.

**Cost/Payment:**

Participants will not receive payment for participating in this survey. However, at the end of the survey, participants will have the option of filling out a form to enter a raffle to receive one of five \$50 gift cards to Amazon.

**For more information about this research or about the rights of research participants, or in case of research-related injury, contact:** Samantha Curtis, Email: [slcurtis@wpi.edu](mailto:slcurtis@wpi.edu), Erin Ottmar, Email: [erottmar@wpi.edu](mailto:erottmar@wpi.edu). In addition, you can contact the IRB Manager (Ruth McKeogh, Tel. 508 831- 6699, Email: [irb@wpi.edu](mailto:irb@wpi.edu)) and the Human Protection Administrator (Gabriel Johnson, Tel. 508-831-4989, Email: [gjohnson@wpi.edu](mailto:gjohnson@wpi.edu)).

**Your participation in this research is voluntary.** Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits.

By selecting "I agree to participate in this research" below, you acknowledge that you have been informed about and consent to be a participant in the study described above. Make sure your questions are answered to your satisfaction before agreeing. You are entitled to retain a copy of this consent agreement.

- I agree to participate in this research
- I do not agree to participate in this research (do not continue to the next page)



The Holden Inclusive Park Committee greatly appreciates your feedback as they finalize plans for the new community park, which will be located at 1 Holden Street behind the Light Department. As you go through the survey, please reflect on your experiences in the past few years while visiting parks in the local area (i.e., in Holden and the surrounding towns). Please circle your answers or check the boxes below.

- 1) "I have access to parks and playgrounds where my child or grandchild can play with other children."

1- No Access                      2                      3                      4                      5- Very Easy Access

- I do not have children  
 Prefer not to answer

- 2) "It is typically easy for my child or grandchild to utilize playground equipment."

1- Very difficult                      2                      3                      4                      5- Very Easy

- I do not have children  
 Prefer not to answer

- 3) "It is typically easy for me to access equipment and play with my child or grandchild."

1- Very difficult                      2                      3                      4                      5- Very Easy

- I do not have children  
 Prefer not to answer

- 4) How do you play with your child or grandchild at parks (i.e., types of activities)? (If not applicable, please write "N/A")

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- 5) "In general, I feel comfortable taking my family to public parks in the area." (Includes amenities like parking, benches, bathrooms, and a variety of easy-to-use equipment).

1- Very uncomfortable      2            3            4            5- Very comfortable

N/A

- 6) “In general, I feel safe taking my family to public parks in the area.” (Includes safety from violence, equipment works properly, playground isn’t too close to street traffic).

1- Very unsafe      2            3            4            5- Very safe

N/A

- 7) “My child or grandchild is typically included and accepted by other children at public playgrounds.”

1- Strongly Disagree    2            3            4            5- Strongly agree

I do not have children

Prefer not to answer

- 8) Could you describe a time when your child or grandchild felt included or excluded at a playground? (If not applicable, please write “N/A”)

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- 9) “While visiting parks, I typically feel welcomed by other families.”

10) 1- Strongly Disagree    2            3            4            5- Strongly agree

N/A

- 11) In what ways have other families made you feel welcomed or not welcomed at a park?  
(If not applicable, please write "N/A")

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- 12) "Currently, playing at parks with my child or grandchild is part of my regular routine."

- Yes  
 No  
 I do not have children  
 Prefer not to answer

- 13) Do any of the following barriers prevent you from visiting public parks more often?  
Select all that apply.

- Proximity to a public park or playground  
 Busy schedule and daily life  
 Accessibility barriers– (no parking, uneven surfaces, no benches, unable to use playground or other equipment)  
 Safety or crime concerns  
 Other (please specify) \_\_\_\_\_

- 14) How often do you see yourself visiting the Holden Inclusive Park after it is constructed?

1- Never      2      3- Monthly 4      5- Weekly      6      7- Daily

- Prefer not to answer

- 15) Which of the following inclusive park elements would you, or someone in your family, use? Select all that apply.

- Accessible playground for ages 2-5  
 Accessible playground for ages 5-12

- Adult fitness lot
- Sports field with accessible surfacing
- Walking path with benches available
- Combat & wounded veterans space
- Basketball court
- Mini basketball court with lower hoops
- Shade pavilion with accessible picnic tables

16) "I would support a temporary tax increase to help fund the construction of the Holden Inclusive Park at 1 Holden Street behind the Light Department."

- Yes
- No
- Prefer not to answer

17) Please select your age range

- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65-74 years old
- 75-84 years old
- 85+ years old
- Prefer not to disclose

18) Please select your gender

- Male
- Female
- Non-binary
- Other
- Prefer not to disclose

19) Do you have a disability or mobility impairment?

- Yes
- No
- Prefer not to disclose

20) Do you have a child or other family member who has a disability?

- Yes
- No
- Prefer not to disclose

21) Are you currently a resident of Holden, MA?

- Yes
- No
- Prefer not to disclose

If you are interested in participating in an in-person or virtual follow-up interview and/or you would like to enter your name in a raffle to win a \$50 Amazon gift card, please complete the additional form on the next page.

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Thank you for your interest! Note- the questions below are optional and any information you provide in this form will not be associated with your survey responses.

1. If you would like your name to be entered in a raffle to win one of five \$50 Amazon gift cards for your participation in this survey, please write your first name and email address below.  

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2. If you are interested in participating in a 30 minute interview about your experiences with inclusive and intergenerational play and your needs and desires for the new park, please write your first name and email address below.  

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3. Please indicate if you would prefer an in-person (Holden) or virtual (Zoom) interview.
  - In-person
  - Virtual

Thank you for your time spent taking this survey! Please place your completed survey in the provided envelope and then in the “finished surveys” bin. Thank you again for your feedback!

## Appendix C: Interview Script

### Introduction:

Thank you for taking the time to talk with me today- I really appreciate it!

My name is Sam Curtis, and I am a senior psychology major at WPI. I am working with the Holden Inclusive Park Committee, and I am conducting these interviews for my senior thesis, called a Major Qualifying Project. I am interested in learning about your experiences with inclusive and intergenerational play and am gathering your insights about the ways that this park can facilitate opportunities for both children and residents of our community. I'm most interested in understanding how universally designed playgrounds and outdoor spaces can help improve play in childhood and adulthood with children or grandchildren. As a part of this project, I am conducting 30 minute interviews with town members and stakeholders.

\*Do you have any questions about what I just explained?\*

So that I can focus on our discussion today, I'll be audio recording this conversation as we talk using Apple's Voice Memos software. When this interview is over, I will be keeping the audio file until I have finished transcribing the interview. Your name will not be recorded in the transcription, but rather I will replace all names with an anonymous code to protect your identity. After that, the audio file will be deleted. If you make any identifiable statements, I will not include them in the transcript. Additionally, feel free to stop and let me know throughout the interview to inform me of any information you would not like included in the transcript.

\*I know that was a lot of information to take in, so, do you have any questions?\*

Will you be okay with me recording today's session?

Great! *\*Hand them informed consent or prompt them to open it online. Read highlights out loud\** With that, here is a consent form for you to read over. Do you still consent to participating in this interview? If so, could you sign the bottom of the consent form/type your name?

Great! Thank you! And just to remind you, if you want to stop or take a break during the interview, please just let me know. *\*Start recording\**

## **Interview Questions:**

### ***Introduction Questions:***

- 1) Could you tell me a little bit about yourself and your family?
- 2) What do you know about the plan to construct an inclusive community park in Holden?
- 3) How do you feel about the plan to construct an inclusive community park in Holden?

### ***Questions about Inclusive and Intergenerational Play:***

- 4) When you play outside with your children, grandchildren, or other family members, what do you like to do, and where do you typically play?
- 5) Do you tend to go to local parks, and if so, which parks do you tend to visit?
- 6) When visiting parks, how do you engage with your children or grandchildren?
  - a) How do you engage with your peers?
- 7) Do you feel like playing with your family at parks is beneficial for you and them?
  - a) Could you talk about some of the benefits you've experienced?

### ***Questions about Barriers to Play:***

- 8) Have you or your family members ever experienced physical or social barriers when playing at parks?
  - a) Could you describe some of those barriers for me?
  - b) Do these barriers prevent you or your family members from visiting local parks?
- 9) How have those barriers affected you and your family physically, socially, or emotionally?
- 10) In an ideal environment, what would help mitigate some of these barriers?

### ***Questions about the New Park:***

- 11) How would you utilize the Holden Inclusive Park?
- 12) What new opportunities would this park provide for you and your family?
- 13) What would you like to see in the new park to satisfy your family's needs? This could be specific equipment, amenities, or anything else you can think of.
- 14) What concerns do you have about the town of Holden building this park? These can be financial, physical, emotional, or anything else that comes to mind.

## **Conclusion:**

In conclusion, I am working alongside the Holden Inclusive Park Committee in its efforts to build an inclusive, community park in town. One of my objectives in this research study is to understand the experiences and needs of Holden community members with respect to inclusive and intergenerational play. Your participation in this interview has given me important insights

and will help me draw conclusions and make recommendations to the committee. I really appreciate your time and feedback! If you have any other thoughts, you are welcome to share them with me through email at [slcurtis@wpi.edu](mailto:slcurtis@wpi.edu).

## **Appendix D: Informed Consent for Interviews**

### **Informed Consent Agreement for Participation**

**Investigator:** Samantha Curtis ([slcurtis@wpi.edu](mailto:slcurtis@wpi.edu))

**Faculty Advisor:** Erin Ottmar ([erottmar@wpi.edu](mailto:erottmar@wpi.edu))

**Title of Research Study: Building an Inclusive Park for Holden: Understanding Community Needs, Priorities, and Expectations**

**Sponsor:** Holden Inclusive Park Committee

#### **Introduction:**

You are being asked to participate in an interview about your experiences with inclusive and intergenerational play, which includes experiences as a child or playing with children or grandchildren. Before you agree, however, you must be fully informed about the purpose of the study, the procedures to be followed, and any benefits, risks or discomfort that you may experience as a result of your participation. This form presents information about the study so that you may make a fully informed decision regarding your participation.

#### **Purpose of the study:**

The Holden Inclusive Park Committee has developed plans for the construction of an inclusive community park in town. This research project seeks to understand the experiences of Holden community members with respect to inclusive and intergenerational play. This will help inform committee members about the community's needs, priorities, and expectations for the new park.

#### **Procedures to be followed:**

You are asked to participate in 1 interview that will last approximately 30 minutes. You have the right to end the conversation at any time during this process.

#### **Risks to research participants:**

By participating in this study, you will not experience any direct risks. However, I will be audio-recording the interview using voice memos. The transcripts from the audio will be coded to help identify themes across interview responses. All information gathered during the session will remain confidential and no recordings, analysis, or research findings will be publically associated with your name.

#### **Benefits to research participants and others:**

By participating in this study, you will contribute to my research on inclusive and intergenerational play, and you will benefit your community by discussing the initiative to help build an inclusive park.

#### **Record keeping and confidentiality:**



The audio recordings will be deleted after the interview is transcribed. Records of your participation in this study will be held confidential so far as permitted by law. All transcriptions and information you give during the study will be kept on WPI's confidential research portal. The researcher, faculty advisor, and sponsor will keep a list of participants and contact information of those who consented for our confidential records. Any publication or presentation of the data will not identify you. Your name will never be used in publication.

**Cost/Payment:**

Participants will not receive payment for participating in this interview; however, you can opt into entering your name to win a \$50 giftcard.

**For more information about this research or about the rights of research participants, or in case of research-related injury, contact:** Samantha Curtis, Email: [slcurtis@wpi.edu](mailto:slcurtis@wpi.edu), Erin Ottmar, Email: [erottmar@wpi.edu](mailto:erottmar@wpi.edu). In addition, you can contact the IRB Manager (Ruth McKeogh, Tel. 508 831- 6699, Email: [irb@wpi.edu](mailto:irb@wpi.edu)) and the Human Protection Administrator (Gabriel Johnson, Tel. 508-831-4989, Email: [gjohnson@wpi.edu](mailto:gjohnson@wpi.edu)).

**Your participation in this research is voluntary.** Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits.

By signing (or typing your name) below, you acknowledge that you have been informed about and consent to be a participant in the study described above. Make sure that your questions are answered to your satisfaction before signing. You are entitled to retain a copy of this consent agreement.

\_\_\_\_\_  
Study Participant Signature

Date: \_\_\_\_\_

\_\_\_\_\_  
Study Participant Name (Please print)

\_\_\_\_\_  
Signature of Person who explained this study

Date: \_\_\_\_\_