

Participatory Budgeting in the City of Kitchener:
Influencing Perceptions of Park Access, Park Use and Citizen Engagement

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

There is consensus among urban researchers that access to public parks and participation in the planning process are important aspects of urban life. Public parks provide mental and physical health benefits to individuals, while also helping to promote sense of community and social cohesion. Involvement in the planning process can help to empower residents and allow them to positively shape their environment, while also creating effective and efficient planning outcomes. Despite these benefits, some city dwellers, particularly low-income and ethnic minority groups, perceive these spaces and opportunities as inaccessible. This can result in poorer health outcomes for these groups, as well as non-inclusive and non-representative participation in the planning process. The purpose of this study was to examine the Participatory Budgeting (PB) process, which more directly involves the public in the planning process, as a potential tool to address these issues. A mixed methods approach was used to assess the City of Kitchener's PB Pilot Project, combining quantitative surveys and qualitative key informant interviews to gather data.

The results showed that PB could help to improve perceptions of access and increase the use of parks, as well as positively influence citizen engagement. Key informants identified that PB gave residents autonomy, influence, and ownership in the decision-making process, which resulted in park space that reflects their needs and over which they have ownership. For these reasons, key informants thought that PB could positively influence perceptions of access and park use. A third of the survey participants indicated that their barriers to park use would be reduced, suggesting their perceptions of access improved, and 57 per cent of participants indicated that their park use would increase. The increased outreach efforts by the City were noted as key to increasing and expanding participation, which was confirmed by the survey results, as 54 per cent of respondents were involved sometimes or never prior to the Pilot Project. Key informants identified the potential for PB to empower and increase future civic engagement, as residents were able to see the direct impacts of their involvement, as well as build relationships, social capital, and democratic capacity. The survey results also indicated that PB could increase civic engagement, as 46 per cent of participants said that their participation would increase. This study recommends PB as a tool for planners to develop positive perceptions of park access, increase park use, and positively influence the citizen engagement process.

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Chapter 1: Introduction

1.1 General Background

1.1.1 Urban Parks and Perceptions of Access

The role of parks and green spaces in the urban landscape has long been an area of examination for urban theorists and researchers. Frederick Law Olmstead argued in an address to the American Social Science Association in 1870, that public parks should be available to all residents because of their benefits for public health through improved sanitation and air quality (Olmstead, 1996). In Jane Jacobs' *The Death and Life of Great American Cities* (1961), she discussed an underutilized park in a housing project in East Harlem, New York. When a social worker inquired why the residents did not use it, one resident answered "Nobody cared what we wanted when they built this place. They threw our houses down and pushed us here and pushed our friends somewhere else. We don't have a place around here to get a cup of coffee or a newspaper even, or borrow fifty cents. Nobody cared what we need. But the big men come and looked at that grass and say 'Isn't it wonderful! Now the poor have everything!'" (Jacobs, 1961, pg. 15, para. 2). In more recent years, urban researchers have examined how urban parks can help to address social isolation and improve sense of community, as well as the impacts of the unequal distribution of these spaces in cities (Rugel, Carpiano, Henderson, & Brauer, 2019; Wolch, Byrne, & Newell, 2014). The consensus among urban theorists and researchers is that parks are essential public services to which all city dwellers should have equitable access.

Research has identified that parks are more than just spaces for gathering and play, they also help to improve the health of the surrounding environment and those who use them. Studies from North American cities have found access to, and use of public parks to be associated with improved physical activity and cardiovascular health, as well as contributing towards improved mental health and cognitive ability (Beyer et al., 2014; Crouse et al., 2017; Richardson, Pearce, Mitchell, & Kingham, 2013;

Tillmann, Clark, & Gilliland, 2018; Villeneuve et al., 2016). The overall health of a community can also benefit from park space as they can help to foster a sense of community, social cohesion and civic engagement (Jennings, Larson, & Yun, 2016; Rugel et al., 2019). The benefits of parks are acknowledged on an international scale as these results were also found in studies from European, Asian and Oceanic countries examining the health benefits associated with use of public parks (Nutsford, Pearson, & Kingham, 2013; Richardson et al., 2013).

Despite these physical and mental health benefits, research has identified that the distribution, size and quality of park space is not equitably distributed within some cities. Studies in the United States and Canadian cities have found that low-income individuals and visible minorities have poorer physical access to park space and when parks are accessible, they are smaller and of poorer quality compared to those in high-income, ethnic majority neighbourhoods (Boone, Buckley, Grove, & Sister, 2009; Gordon-larsen, Nelson, Page, & Popkin, 2006; Wolch et al., 2014). This contributes to poorer health outcomes (i.e., higher rates of obesity, cardiovascular disease and depression) compared to those from high-income, ethnic majority neighbourhoods (Beyer et al., 2014; Gordon-larsen et al., 2006; Richardson et al., 2013; Rugel et al., 2019). This discrepancy in park access across populations has been attributed to a history of racial covenants that segregated visible minorities into affordable neighbourhoods with sparse green space and non-inclusive engagement practices that do not allow them to advocate for their communities (Boone et al., 2009; Pham, Apparicio, Séguin, Landry, & Gagnon, 2012).

While there is a clear connection between park accessibility and the health and well-being of residents, additional research has acknowledged that perceptions of parks also influence access. For example, in some cases, distribution of parks has been found to be similar in high and low-income neighbourhoods, but those in the later perceive their access to be worse (Wang, Brown, Liu, & Mateo-Babiano, 2015). These perceptions of park access can directly affect decisions to access and use a public

park (Wang, Brown, Liu, et al., 2015). Studies have identified this difference and potential causes for it, but there are few studies that suggest ways to address this disconnect and improve perceptions of access to public parks. Given the importance of parks, it is crucial to ensure the park space and park improvements are equally distributed, as well as ensuring that residents feel that these spaces are accessible to them. Using participation methods that more directly involve residents in the planning process, like Participatory Budgeting, may help planners address the disconnect between real and perceived access.

1.1.2 Participation in Planning

Public participation in decision-making is an important part of the planning process. The Ontario *Planning Act* contains statutory requirements for giving notice and the provision for participation opportunities, but members of the public face challenges when engaging in this process. The public is challenged by the complex language and process, as well as statutory requirements that often leave them feeling that they have little influence on the planning process and outcomes (Delitheou, Bakogiannis, & Kyriakidis, 2019; Kahila-Tani, Kytta, & Geertman, 2019; Richards & Dalbey, 2006; Wilson, Tewdwr-Jones, & Comber, 2019). Studies have also found that not all stakeholders have equal resources to participate in the planning process and have their voices heard (Smørddal, Wensaas, Lopez-Aparicio, Pettersen, & Hoelscher, 2016). These challenges have resulted in decreasing participation and non-inclusive engagement opportunities, especially among young people, immigrant communities and low-income individuals (Smørddal et al., 2016; Su, 2012). This can also contribute to lower social capital and democratic capacity, as well as fewer opportunities to develop these and become active citizens (Fagotto & Fung, 2006; Thijssen & Van Dooren, 2016; Zhu, 2015).

Planners are looking for new ways to provide participation opportunities and this includes online and technology-based methods for engagement. The use of Geographic Information Systems, Augmented Reality, Virtual Reality and applications for smart phone devices have increased in the

planning process as ways to engage the public (Kahila-Tani et al., 2019). Research has found that these methods of engagement are effective because they allow for independent participation and encouraged participants to share their opinions, as well as encouraging younger generations to be involved in planning (Allen, Regenbrecht, & Abbott, 2011; Kahila-Tani, Broberg, Kytä, & Tyger, 2016; Wilson et al., 2019). Despite these benefits, technology and web-based methods introduced new challenges to residents, such as financial limitations, and are not as effective at empowering residents as traditional, face-to-face methods (Kahila-Tani et al., 2016; Stern, Gudes, & Svoray, 2009). The findings of this section demonstrate the importance of looking to new ways of engaging the public in the planning process so that these opportunities are inclusive and empowering. Participation methods that more directly involve residents in the planning process, such as Participatory Budgeting may help to address the challenges of public engagement.

1.1.3 Participatory Budgeting and the City of Kitchener Pilot Project

Participatory Budgeting (PB) is a form of deliberative democracy in which citizens, who are non-elected officials, decide how financial resources are allocated within their communities (Global Civic Engagement, 2013). This participation process was developed in Porto Alegre, Brazil, and is now used around the world as a best practice for city management as it promotes trust and transparency (Global Civic Engagement, 2013). The PB process is based on four key principles that distinguish it from other deliberative methods, they are: voice, vote, social justice and, oversight (Wampler, 2012). These principles result in new voices contributing to decision making, generating social change, empowering residents and the redistribution of public resources to the communities with the greatest need (Wampler, 2012). As identified in Section 1.1.2 in this chapter, members of the public and planners face challenges in the engagement process, and PB can be a way to address these issues. Studies of PB processes in North American cities have found that it was effective for broadening the range of people who participated and reaching out to residents who may not have been typically involved in the

planning process, especially youth and immigrant populations (Cabannes, Lipietz, & Cabannes, 2017; Lerner, 2012; Su, 2012).

The PB process has been used in Canada by the Toronto Community Housing Corporation, the City of Hamilton, and the Guelph Neighbourhood Support Coalition to help in decision making. Researchers examining the use of this process in Canada found that it empowered those involved, encourage participants to think of the common good and promoted collaboration (Fuji & Simon, 2009; Schugurensky, 2009). This participation process has also been used for parks planning projects, and studies from Poland and Sweden determined that it resulted in enhanced community and park spaces that reflected the needs of residents (Bernaciak, Rzeńca, & Sobol, 2018; Demediuk, Solli, & Adolfsson, 2012). For example, in Poland, PB has become an important tool for public engagement and has allowed residents to shape their environment (Bernaciak et al., 2018). PB allowed residents to communicate their needs as a community with local government and have those needs reflected in the design of the park space, which will help them to identify with the space and increase its usefulness to them (Bernaciak et al., 2018).

Participatory Budgeting was used in 2018 by the City of Kitchener, Ontario, in a pilot project for parks improvements in collaboration with the University of Waterloo. The Pilot budgeted 200,000 dollars for the redesign of two neighbourhood parks, referred to as Park A and B in this study (Hagey, 2017b). Residents in these neighbourhoods worked in partnership with City Staff to brainstorm and generate ideas of new amenities and improvements that would enhance these spaces. The results of this collaborative idea generation process were organized into bundles by City Staff and residents voted on the bundles in two rounds of voting. The voted upon improvements have been implemented in Park B. When the City began preparations to build the improvements at Park A, an underground landfill was found, and as such, the ground was not stable enough to support some of the improvements. To ensure that the residents still received the improvements they voted for, the hard-infrastructure improvements

will be implemented at a nearby community center and further improvements are planned for Park A. It is important to note that this thesis is not a continuation of the previous work completed by the University of Waterloo on the Pilot Project, but it uses the work as a launching point and guidance.

1.2 Research Purpose and Objectives

The aim this research is to assess the PB process in the City of Kitchener in terms of its impact on perceived park access and use of neighbourhood parks, as well as its effect on citizen engagement. This study is guided by four research objectives to help understand these impacts:

1. To examine how PB was implemented in the City of Kitchener.
2. To explore City Staff and residents' perceptions of the PB process in the two study neighbourhoods.
3. To compare residents' perceptions of physical access and use of the study parks before and after the PB Pilot.
4. To examine the impact of the PB process on citizen engagement in the City of Kitchener in terms of participation, empowerment, and future civic engagement.

In order to address the research purpose and objectives, a mixed methods approach calling on both quantitative and qualitative methods was used to gather and analyse data. The first method of data collection was deductive, web-based surveys to examine the perspective of members of the public who were involved in the City of Kitchener PB Pilot Project. Survey participants were recruited from the two neighbourhoods used in the City of Kitchener PB Pilot Project, which are outlined the Methodology Chapter of this thesis. The data was analysed using SPSS to conduct univariate and bivariate analysis, as well as content analysis for the open-ended questions. The second method used was semi-structured, key informant interviews with City of Kitchener Staff involved in the implementation of the PB Pilot Project. The interviews used an inductive approach, but were theoretically informed by the academic

literature reviewed for this thesis. The grounded theory coding method was used to analyse the interview data. Additional adjustments were made during the research period due to the emergence of the COVID-19 Pandemic and government restrictions on gatherings and physical distancing to prevent the spread of the virus.

1.3 Implications for Planning and Significance of the Study

1.3.1 Addressing Negative Perceptions of Park Access

The passage from Jane Jacobs' *The Death and Life of Great American Cities* (1961), discussed in the first section of this chapter, provides an example of how perceptions of park space directly impact use, as well as the importance of involving the public in the planning of their public spaces. In this case, the residents of the housing project were provided a park, but they were not involved in the planning of the space, nor did it reflect their needs as a community. This resulted in poor perceptions of access and limited use of the park. This situation and academic literature demonstrate that there is a disconnect between actual and perceived access, but there is limited research that identifies how planning practice can address this issue. A participation method like Participatory Budgeting, which more directly involves the public in the planning of their public spaces through decision-making, may be a way for planning to address poor perceptions of park access and use of these amenities. Planners play an important role in shaping the urban landscape, and this study will contribute to professional practice by identifying if PB is an effective participation method for addressing poor perceptions of access. This will help to ensure that there is equitable access to park space in cities and all residents can benefit from these public services. As previously noted, there is limited research on how to address the disconnect between real and perceived access, and this study will help to fill the gap in academic literature on how to address this issue.

1.3.2 The Provision of Participation Opportunities

The general background outlined the challenges that members of the public and planning practice face in the engagement process, as well as the innovative and emerging methods that planners are using to address these issues. This study also sought to understand the impacts of the PB process on citizen engagement. Both key informants and survey participants were asked questions to examine their perceptions of this participation process. The results of this study will contribute to planning practice by identifying a participation method that will help to address the challenges and make these opportunities more meaningful and inclusive, while still satisfying the statutory requirements set out by the Province. This could encourage planning practitioners to consider greater use of Participatory Budgeting in the citizen engagement process to increase and encourage civic engagement, as well as empower residents. This study will also contribute to scholarship by providing further research that examines the impacts and benefits of PB as an engagement method, as well as further understanding of how PB functions in the Canadian context.

1.3.3 Timing

The general background section of this chapter has demonstrated that inequalities exist in the urban landscape and that there are challenges in the citizen engagement process for 21st Century cities. The purpose of this research was to determine if the Participatory Budgeting Process could help to address these problems by improving perceptions of access to public parks and positively influencing citizen engagement. The timing of this research is important as it offered a relatively quick follow up opportunity to examine how residents' perceptions have changed shortly after the PB Pilot Project concluded and the park improvements were implemented. Had the study taken place at a somewhat later time and neighbourhood change occurred, it would have been more difficult to study residents' perceptions because those involved may have moved to different neighbourhoods or cities. This will allow planning practitioners to see the impact of the PB process on park access and public engagement,

as well as contributing to scholastic understanding of the benefits of the PB process in the Canadian context.

1.4 Structure of this Thesis

This thesis includes six chapters, beginning with this Introduction which provides general background to the study, as well as an outline of the research objectives, research methods, implications for planning and the significance of the study. The Literature Review in Chapter 2 synthesizes the surveyed academic literature on topics relevant to the study. This includes discussions on the following: parks and well-being; public participation in planning; and the Participatory Budgeting process. Chapter 3 discusses the theoretical and methodological approaches used for gathering and analysing data. This study used a mixed methods approach with quantitative web-based surveys and qualitative key-informant interviews, and the results of data gathered through these two methods will be discussed in Chapter 4. This will be followed by Chapter 5, which discusses the findings and how they address the research purpose and objectives, and will also outline the limitations of the study, future research opportunities and unexpected findings. The report concludes with a discussion of how the findings apply to professional practice and recommendations in Recommendations and Conclusions in Chapter 6.

Chapter 2: Literature Review

2.1 Introduction

The objective of my research is to examine the influence of the Participatory Budgeting process, which more directly involves residents in the planning of their public spaces, on perceptions of park access, park use and citizen engagement. This literature review is intended to provide background information on the relevant literature related to this research, as well as identify gaps in the literature and justify conducting this research. The three primary areas of literature examined are:

1. Parks and Well-being
2. Public Participation in Planning
3. The Participatory Budgeting Process

Each section will present research on the topic and will help to identify gaps in the existing literature that will help justify conducting the research.

2.2 Parks and Well-being

2.2.1 The Role of Neighbourhood Parks

There is consensus among urban theorists that parks play an important role in cities by influencing behaviour and health of those who use them. Early urban theorists, like Frederick Law Olmstead and Ebenezer Howard, advocated for park space in cities to combat the poor living conditions of industrial cities (Hodge & Gordon, 2014). Howard developed the Garden City model, in which residential and industrial uses were separated by green and agricultural belts to create healthy living environments (Hodge & Gordon, 2014). At the center of the Garden City was a town center with a central park and garden, to which all residents would have access, for recreation and relaxation (Fishman, 1982). In his address *Public Parks and the Enlargement of Towns* given to the American Social Science Association in 1870, Olmstead advocated for public parks to improve public health and combat social degradation

(Olmstead, 1996). In Jane Jacobs' *The Death and Life of Great American Cities*, she agreed that parks positively influence the neighbourhoods around them, and discussed the importance of considering those who will use a park, rather than planning parks simply for the benefits they provide (Jacobs, 1961).

Researchers have also examined why people use and how they interact with parks, as well as what features make for effective parks and public spaces. In Stephen Carr's book, *Public Spaces*, he found that parks were important parts of communal life because they channel people's movement and provides space to communicate with neighbours (Carr, Mark, Rivlin, & Stone, 1992). William Whyte often used observational studies to understand how individuals interact with public spaces, which includes plazas and parks, and other people who use them (Whyte, 1996). He found that the most effective public spaces have some of the following features: they are close to public transit stops; they have sittable space; they are open to the street and aren't surrounded by fences or walls; and, they are social places that promote visitors to come in groups (Whyte, 1996).

2.2.2 Parks and Health

Urban parks and green space have been found to be beneficial for the mental and physical health of those who use them. Studies from Auckland, New Zealand, have found that close proximity to green spaces was associated with lower levels of mood and anxiety disorder treatment, as well as improved levels of physical activity and cardiovascular health (Nutsford et al., 2013; Richardson et al., 2013). Research from a state-wide study in Wisconsin, United States, also found that symptoms associated with stress, anxiety and depression decreased as amounts of neighbourhood green space increased (Beyer et al., 2014). Characteristics of the natural environment, including green space and parks, positively benefit the quality of life of children who live in the surrounding neighbourhoods (Tillmann et al., 2018). Children's cognitive ability and educational performance can be positively influenced by parks (Jennings et al., 2016). These spaces have also been found to have positive influences on mortality rates. An Ontario-wide cohort study from 2016 found that mortality rates decreased in areas with greater

amounts of green space (Villeneuve et al., 2016). These results were supported by a Canada-wide study published in 2017, and this study also found the health benefits associated with green space to be greatest among males and those from higher incomes (Crouse et al., 2017).

The community surrounding park space will also benefit through opportunities for interaction and increased social cohesion (Jennings et al., 2016). Higher levels of green space are associated with: lower levels of crime; greater social cohesion and civic engagement; fostering social support; and, improving property values and revitalization (Jennings et al., 2016). Accessible urban parks can also help to promote sense of community, which in turn can improve symptoms of depression, negative mental health and psychological distress (Rugel et al., 2019). Many of these studies used cohort and longitudinal analysis to follow participants and examine their health outcomes over time (Villeneuve et al., 2016). These cohort analyses were often coupled with modeling, Geographic Information Systems (GIS) analysis and regression analysis to understand the distribution of green space in connection to health benefits (Nutsford et al., 2013). Urban parks play an important role in benefiting individual and community health for those who use them, but in some cases these spaces are not equally distributed.

2.2.2 Equity and Accessibility of Parks

In some cities, urban parks and green space are not equally distributed, and this can be considered an environmental injustice (Wolch et al., 2014). It is important to note that access can be conceptualized in different ways, including: proximity, the number of parks, total park area, and park area per capita (Wang, Brown, & Mateo-babiano, 2013). Neighbourhood characteristics such as income, age, gender, ethnicity and visible minority can influence the distribution of, and access to green space (Wolch et al., 2014). A United States-wide study, which examined access in terms of proximity and physical activity, found that blocks with greater numbers of low-income individuals and visible minorities had fewer physical activity centers (Gordon-larsen et al., 2006). This differential access resulted in lower levels of activity, and higher rates of being over-weight and obese (Gordon-larsen et

al., 2006). In Baltimore, Maryland, a study examining park access in terms of proximity and environmental justice found that African-American communities had more parks within walking distance, but fewer acreages of park land compared to white communities (Boone et al., 2009). The study found that a history of segregation and racial covenants have left the African-American community underserved with regards to park services (Boone et al., 2009). These results were supported by a study of 99 American cities using ParkScore Data, which found that affluent neighbourhoods, with a majority white population had better quality parks than low-income neighbourhoods with visible minorities (Rigolon, Browning, & Jennings, 2018).

Researchers have also examined the potential causes for the difference in access to greenspace for disadvantaged groups. A Canadian study based in Montreal, Quebec, identified that disparities in the distribution of vegetation and green space were greatest on public lands (Pham et al., 2012). The authors suggested that potential explanations for these disparities were affordability of property in areas with less vegetation, and non-inclusive planning practices that do not allow residents to advocate for their communities (Pham et al., 2012). Research has found that low-income neighbourhoods in Los Angeles, California, lack the financial resources to direct into park improvements, and there is low spending dedicated to park services (Joassart-marcelli, 2010).

Inequality in green space and urban parks can also be found in the quality of these spaces (Jennings et al., 2016). Park accessibility and quality has been measured using social media activity. A study from New York City, found that parks that were connected to public transit and bike routes, and had attractive features (i.e., water bodies and athletic fields) had more social media activity (Hamstead, Fisher, Ilieva, Wood, & Mcphearson, 2018). The authors suggest that these findings mean the parks in low-income areas, that are not as accessible and do not have attractive features, are lower quality and receive fewer visits (Hamstead et al., 2018). These studies used GIS analysis, modelling, satellite

imagery and census data to examine the connections between neighbourhood or individual characteristics and the distribution of green space (Gordon-larsen et al., 2006).

Research on park access has found that some low-income neighbourhoods have an equal distribution of green space as higher-income neighbourhoods, but they perceive themselves to have poorer access in comparison (Wang, Brown, Zhong, Liu, & Mateo-Babiano, 2015). Perceptions of park access are important and can directly influence decisions to use a park (Wang, Brown, Zhong, et al., 2015). A study from Brisbane, Australia, found that perceptions of access are more influential on the decision to use a park than actual geographic access and proximity (Wang, Brown, Liu, et al., 2015). Researchers in Singapore had similar results, finding that perceived accessibility and attitude were influential on park use and behaviour (J. Zhang & Tan, 2019). The study also determined that perceived accessibility was more likely to influence park use than physical accessibility (J. Zhang & Tan, 2019). An individual's physical and socio-personal characteristics can influence their perceptions of park access (Wang, Brown, Zhong, et al., 2015). A study comparing perceived park access in Brisbane, Australia, and Zhongshan, China, found that proximity and travel time had the greatest influence on perceived park access, and that members of low-income groups reported lower levels of access because they do not have the resources to access these spaces (Wang, Brown, Zhong, et al., 2015). This study found that self-reported safety and people of similar cultural background using the space, influenced perceived access (Wang, Brown, Zhong, et al., 2015).

Researchers have examined how the built environment can influence perceptions of access and have found that appearance and maintenance can influence an individual's perceived access. Researchers in New Orleans, Louisiana, found that parks which appeared to have some disorder or poor maintenance influenced perceptions of safety in the space (Knapp et al., 2019). These researchers also found that the appearance of parks had a greater impact in perceived access and safety for female park users (Knapp et al., 2019). A study from Kansas, Missouri, had similar findings with regards to park

appearance (Groshong et al., 2018). The researchers found that the presence of graffiti, trash and poor park maintenance can negatively influence perceptions of access and use of public parks for adult park users (Groshong et al., 2018).

Perceptions of crime and safety can also influence an individual's perception and use of a public park (Derose, Han, Park, Williamson, & Cohen, 2019). Researcher in Los Angeles, California, studying the influence of gender and park pathways on park use, found that crime was a mediating factor for park use and female participants reported higher crime perceptions (Derose et al., 2019). Perceived safety can be a constraint and a facilitator for park use (Groshong et al., 2018). Adolescents in Porto Alegre, Brazil, were more likely to use parks for physical activity when they were within a shorter distance from their home, but perceived safety also influenced this relationship (Dias et al., 2019). Perceived road safety and traffic issues influenced adolescents perceived accessibility and use of parks and sports facilities (Dias et al., 2019). It is important to consider perceptions when planning new parks as well (Confer & Mowen, 2014). Researchers in Cleveland, Ohio, examined perceptions of park access for in-fill parks in the City through questionnaires, and found that safety and distance were influential on residents' perceived access and use of these new spaces (Confer & Mowen, 2014).

The literature on perceived access suggests that planners and park managers must take into account the influence of individuals' perceptions on the use of parks (Park, 2017). Improving quality, safety, cleanliness, attractiveness, and providing for a variety of activities to take place, are all measures that could help to address negative perceptions of park access (Park, 2017). Including the public in the park planning process has been identified as a way to foster a sense of place that could encourage increased park use (Park, 2017). These studies examining perceptions of park access used modelling, surveys and observational analysis to gather primary data on individuals' perceptions of their greenspace (Wang, Brown, Liu, et al., 2015). The disconnect between actual and perceived park access is important to investigate to ensure that all residents benefit from these public services. Understanding

what impacts an individual's perceptions is important, but it also important to find ways to address and improve them. This literature demonstrated how perceptions are influenced and how they impact access, but only a few discuss in detail how to address them. My research intends to fill this gap by examining how different participation methods can improve perceived access and use of parks.

2.3 Public Participation in Planning

2.3.1 Participation in Planning

Planning practice and theory experienced a paradigm shift in the 1960s and 70s, which saw the rise of methods and theories that centered around citizen engagement in the planning process (Fagotto & Fung, 2006). The 1960s were characterized by citizen action and a demand for voice in the planning process (Thomas, 2016). This resulted in a shift away from the Rational Comprehensive Model, which emphasized the role of scientific and expert knowledge, towards planning theories like Transactive and Advocacy Planning, which emphasized the role of the public and their knowledge. Transactive Planning was developed by John Friedman and focuses on the mutual learning that occurs between planners and the public when they interact with each other (Camhis, 1979; Hodge & Gordon, 2014). The expert knowledge of planners and the day-to-day knowledge of the public are combined in this model by directly interacting with the public and learning from them (Camhis, 1979; Hodge & Gordon, 2014). Advocacy Planning seeks for planners to advocate for disadvantaged and minority groups in cities by including them in the planning process so that their perspectives are equally reflected in planning outcomes (Davidoff, 1965). This involvement in the planning process will help to empower disadvantage and minority groups, as well as provide them an opportunity to become more informed and equipped to become further civically engaged in the future (Davidoff, 1965, Hodge & Gordon, 2014).

There was another shift in the 1990s, which saw the introduction of Communicative Planning Theory (CPT) and its strands of Critical Pragmatism and Collaborative Planning (Leffers, n.d.; Umemoto &

Igarashi, 2009). This shift was in response to postmodern thought around single truths in planning and identifying a common approach in unique contexts (Umemoto & Igarashi, 2009). CPT puts forward that communication is very powerful, and that planning is an interactive and communicative process that allows for contextual and mutual learning between planners and stakeholders (Innes & Booher, 2015). This theory encourages the use of deliberative democracy in decision-making to create inclusive participation opportunities that bring together all stakeholders affected by a planning issue (Sager, 2018). It is assumed that deliberative methods will: help participants developed social capital; ensure there is better delivery of services and that they meet the needs of those being served; and, give a voice to those affected (Sager, 2018).

The theory of Critical Pragmatism was developed by John Forester and seeks to restructure communication in planning so that it can address the inequities that exist in the built environment, as well as inequities in the planning process and its outcomes (Forester, 2013). This theory acknowledges that there are many forms of knowledge, including the local and scientific, and that planning and participation are influenced by power structures (Forester, 2013). Structuring planning communication so that to takes into account possible inequities, different knowledges and power structures, mutual learning can take place and planning outcomes will be more fair (Healey, 2009). Collaborative Planning, which can also be known as Communicative Planning, acknowledges that society is diverse with many different views, and focuses on promoting dialogue and consensus-building between stakeholders (Hodge & Gordon, 2014). This dialogue allows the public and planners to better understand each other, as well as give each voice a chance to be heard so that the voices of minority groups are not excluded from the process (Fainstein, 2013). Using a collaborative approach which promotes dialogue can help in place-making efforts as it allows for perceptions and meanings users ascribe to the space to be identified (Healey, 1998).

Planners in the province of Ontario are required to uphold and work on behalf of the broad public interest. This requirement is set out in the *Ontario Planning Act*, as well as the Ontario Professional Planners Institute (OPPI) Professional Code of Practice and the Canadian Institute of Planners (CIP) Code of Professional Conduct. These Codes state that their members have the primary responsibility to define and serve the interests of the public (CIP,2020; OPPI, 2020). This is achieved by respecting the diverse nature of the public, making sure they are fully informed, acknowledging consequences of planning decisions and promoting participation opportunities that are meaningful for all interested parties (OPPI, 2020). This requirement makes public participation and citizen engagement important aspects of planning practice. Public participation helps to resolve conflict that may arise from a proposed development or project, as well as helping to make the decisions timely and cost-effective for all involved (Richards & Dalbey, 2006). Another reason why the role of citizens in decision-making has become more important in the twenty-first century is current inequality and political disaffection, as well as citizens greater awareness and interest in understanding the decision-making process (Vulfovich, 2017)

2.3.2 Common Approaches to Participation

Traditional methods of participation include: public hearings, town hall meetings, open houses, public advisory committees, referenda, and focus groups (Kleinhans, Van Ham, & Evans-Cowley, 2015). These methods often start with a presentation followed by an opportunity for the public to react and ask questions, which does not always allow for dialogue to occur between planners and the public (Richards & Dalbey, 2006). It is important to note that these methods are based on face-to-face interaction and require people to be in attendance at a specific time and place (Kleinhans et al., 2015). The location of meetings and other in-person participation methods can have an influence on the type of people who attend and the feedback provided (Kim, Levin, & Botchwey, 2018). Research from the United States on immigrants, including those who are undocumented, found that community-based and

neutral spaces made them feel more comfortable and willing to participate in the planning process (Kim et al., 2018). This is also important to consider in Canada, which is a multicultural nation, where planning practices should take into account the needs of different communities (Qadeer, 1997).

It has also been suggested that some traditional methods are tokenistic, meaning that they are carried out to the minimum requirements set by legislation and may not give all residents the equal opportunity to be engaged (Hodge & Gordon, 2014). Sherry Arnstein characterized the variability in the depth and breadth of participation methods in the Ladder of Citizen Participation, seen below. Informing, Consultation and Placation, rungs three to five of the ladder, make up the Degrees of Tokenism (Arnstein, 2019). The informing rung means that residents are provided the relevant information on a development or planning project, and this rung is usually characterized by one-way communication (Arnstein, 2019). Residents are then consulted to gain their views through public meetings and open houses, but there is no guarantee that their views will be incorporated and as a result, they are placated (Arnstein, 2019).

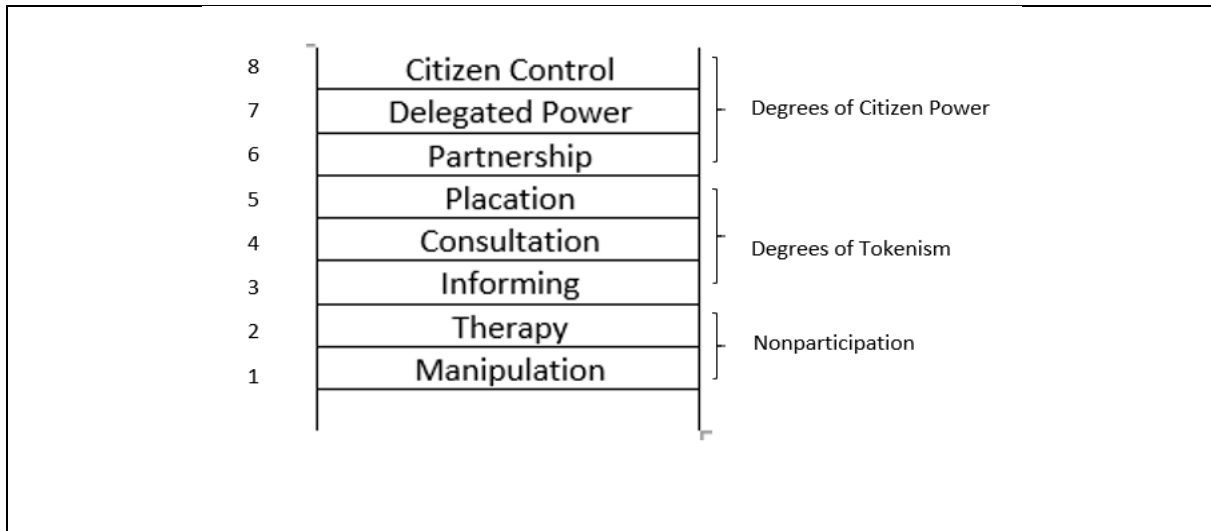


Figure 1 Ladder of Citizen Engagement adapted from (Arnstein, 2019)

2.3.3 Trends and Influences on Participation

Decreasing public participation at the local level has become an increasing problem for local government and for planners across the world (Su, 2012). In the United States, decreasing participation is found particularly among women, young people, immigrant communities and low-income individuals (Johnson, 1984; Su, 2012). This decrease in participation can be related to individual and neighbourhood characteristics, as well as challenges and barriers in the planning process. An individuals' gender, age, educational attainment and ethnicity have been found to influence participation levels (Dekker, 2007; Thijssen & Van Dooren, 2016). Research examining these characteristics have found that levels of participation among those with low socio-economic status, in terms of income and educational attainment, are less likely to be involved in participation opportunities compared to those with higher educational attainment and socio-economic status, who are also homeowners (Johnson, 1984; Thijssen & Van Dooren, 2016).

An individual's connection to their neighbourhood can influence their likelihood to be involved in participation opportunities (Dekker, 2007). Individuals who identify with their neighbourhood and feel like they belong, are encouraged to participate in neighbourhood groups and planning opportunities (Thijssen & Van Dooren, 2016). The built form of a neighbourhood can also influence participation, and studies have found positive relationships between a greater presence of community spaces and levels of participation (Zhu, 2015). This relationship can be explained by opportunities for interactions (Lund, 2003; Zhu, 2015). Street activity and positive perceptions of community spaces provide opportunities for individuals to interact with others in their neighbourhoods, which helps them to build connections and relationships that make them feel they belong (Dekker, 2007; Lund, 2003). These opportunities for interaction are a key component for building social capital and democratic capacity, which are other factors that influence participation (Lund, 2003).

Social Capital was defined by Putnam (1993) as the social networks, norms and trust between individuals that allows them to work together for mutual benefit. There are two types of social capital, bonding and bridging capital (Crawford, Kotval, Rauhe, & Kotval, 2008). Bonding capital occurs between people who belong to a group that connects them, whereas bridging capital occurs between those who are different from each other and this exposes people to varying points of view (Crawford et al., 2008). An individual builds social capital through interpersonal and informal interactions that occur in public spaces, and the built form influences an individual's opportunities for these interactions (Dekker, 2007; Ryu, Lee, & Lee, 2018). Studies from China, Korea and Belgium have identified that urban parks are important places for interaction, and those who have greater access and positive perceptions of these spaces have more opportunities to build social capital (Ryu et al., 2018; Thijssen & Van Dooren, 2016; Zhu, 2015).

The social networks, norms and trust that comprise social capital also influence peoples' capacity to participate in the planning process. An individual's social networks allow them to interact with others and become part of their community, which helps to create the connections that encourage people to participate (Dekker, 2007). When individuals accept their communities social norms, as well as trust those in the community and local authorities, they are more likely to be involved in participation opportunities (Dekker, 2007). Being involved in planning participation opportunities can also help individuals build social capital (Thijssen & Van Dooren, 2016). This is called a virtuous cycle, where having social capital encourages people to participate and build more social capital, which can spill over to other individuals in the community and encourage them to become involved (Thijssen & Van Dooren, 2016). This literature has shown that urban planning can influence social capital in two ways. First, through the provision of community spaces, to which all members of the community have access, that provide opportunities to interact and build social capital (Lund, 2003). Second, through the provision of

participation opportunities in which residents can have a role in planning their community and can build social capital (Ryu et al., 2018).

Democratic capacity is an individuals' capacity to become an active citizen and to work together with others to solve problems and build community (Encyclopedia Britannica, n.d.; Scully & Diebel, 2015). It also includes the ability of the a community to promote participation among its members (Encyclopedia Britannica, n.d.). This concept puts forward that citizens have the capacity to be involved in the planning process to positively shape change in their local environment, but this capacity is often overlooked and underutilized (Scully & Diebel, 2015). Decreasing social capital that creates capacity to participate, non-inclusive planning practices and government systems that view citizens as customers can contribute to underutilized democratic capacity and limited opportunities for its' development (Scully & Diebel, 2015). Similar to social capital, individual and community democratic capacities are built through opportunities for interaction and participation in the planning process, which provides them the opportunity to identify and strengthen their capacities (Scully & Diebel, 2015). Community-centered, participatory and deliberative processes have been shown to be the most effective for building democratic capacity, as well as social capital (Fagotto & Fung, 2006; Tepe, 2016). Research on Urban Renewal Projects in Istanbul, Turkey, found that top-down approaches to citizen participation and altering communities without public input are not effective for building democratic capacity or social capital, and can breakdown the networks needed for their development (Tepe, 2016). Minneapolis, Minnesota, used deliberative democracy, in a structure similar to Participatory Budgeting, for its Neighbourhood Revitalization Program and researchers found that it empowered those involved and helped to build the skills and knowledge to become more active citizens (Fagotto & Fung, 2006).

An individual's democratic capacities are based on their public knowledge and personal experiences that help them to understand their community's needs, as well as the capacity to learn from others with different perspectives and to work together to come to a consensus (Scully & Diebel,

2015). Community organizations' democratic capacities also include knowledge on the community and resources for implementation, but they can also help to create opportunities for individuals to contribute their capacities to the planning process by providing spaces for residents to learn and work together with other members of their communities (Scully & Diebel, 2015). Democratic capacity also exists in a virtuous cycle because residents who have democratic capacity and social capital, as well as the opportunities to develop them, are more informed and knowledgeable, which enables them hold decision makers accountable and become more involved in creating positive change in their communities.

Studies on public participation have identified reasons that may account for how aspects of the planning process contribute to decreasing participation, including: complex language and terminology; statutory requirements and confusing processes; and, perceptions that input has little influence (Delitheou et al., 2019; Kahila-Tani et al., 2019; Richards & Dalbey, 2006; Wilson et al., 2019).

Researchers from Oslo, Norway, have classified four major problems in current participation methods that contribute to decreasing and non-inclusive participation (Smørddal et al., 2016). The first major problem is that involvement of stakeholders and those impacted by a project occurs when major decisions have already been made and the influence of the public may be minimal (Smørddal et al., 2016). Second, not all stakeholders have equal resources to be involved and voice their concerns (Smørddal et al., 2016). Third, there are narrow definitions of who is "directly impacted" by a project (Smørddal et al., 2016). These narrow definitions mean that individuals who may be affected by a planning project or development, but do not live directly adjacent to the area are not included in the decision-making process (Smørddal et al., 2016). The final major problem is that only the minimum requirements set out by legislation for public participation opportunities are being met (Smørddal et al., 2016). Encouraging earlier involvement of the public, as well as organizing workshops to promote dialogue and consensus building are a few ways to approach these major problems (Richards & Dalbey, 2006).

2.3.4 Emerging Approaches in Public Participation

Local governments and planners are now looking for new ways to encourage active participation in citizens so that these opportunities are more inclusive and will result in representative planning outcomes. The use of technology in participation has increased, and GIS, Augmented Reality, Virtual Reality and applications for cell phones and other smart devices have become new ways to gain public input. Studies that have examine these methods found that they are effective at encouraging more representative participation and early involvement in the planning process (Kahila-Tani et al., 2016, 2019). One important aspect of these methods is that they encourage independent participation, which means that participants could be involved at a time and place most convenient to them, without having to attended a public meeting or open house (Kahila-Tani et al., 2016). Researchers in Greece found that the degree of freedom in when and where members of the public can participation is related to their degree of participation (Wilson et al., 2019). Opportunities to participate in the planning process independently, either from home or work, can increase civic participation and sense of satisfaction having contributed (Wilson et al., 2019). Technology based methods also have the potential to empower users because it allows them to voice their opinions, and the opportunity for independent participation reduce their barriers to being involved in the planning process (Wilson et al., 2019). These findings were especially true among younger participants (Allen et al., 2011).

Despite the benefits of technology-based participation methods, that were highlighted in the research, there are still challenges and drawbacks association with using them. One important limitation to note is the concept of “rational ignorance”, meaning the time or costs required to learn how to use a participation tool outweigh any benefit from being involved (Allen et al., 2011). This may discourage members of the public from taking part in participation opportunities if they are technology based. It is also important to consider monetary limitations, as not all residents will have the financial resources to purchase smart phones and the technology required to participate (Kahila-Tani et al.,

2019). Researchers have also found that different age groups respond to technology-based participation methods differently. Younger generations are often more willing to participate in these types of methods, and are more familiar with applications and smart devices (Allen et al., 2011). Older generations are sometimes underrepresented in participation when technology is used and are less familiar with the technology required (Kahila-Tani et al., 2016). The use of technology could also result in non-meaningful participation (Kahila-Tani et al., 2019). A comparative study of technology-based and traditional participation methods found that traditional methods were more affective in empowering residents and promoting trust when each were used separately, but they were both the most affective when used together (Stern et al., 2009). The study concludes that technology cannot replace in-person methods, but they should be used to complement each other in participation opportunities (Stern et al., 2009). The findings on traditional and technology-based methods demonstrate the need to consider participation methods that provide in-person, as well as independent opportunities to engage in the planning process. Deliberative decision-making processes, such as Participatory Budgeting, is a way to provide these opportunities.

2.4 The Participatory Budgeting Process

2.4.1 Participatory Budgeting

Participatory Budgeting is a type of deliberative democracy that allows citizens to decide how financial resources should be allocated in their communities (Global Civic Engagement, 2013). This participation method moves the engagement process up the Ladder of Citizen Engagement into the Degree of Citizen Power rungs of the Ladder. PB was first developed in Porto Alegre, Brazil, and is now used around the world (Global Civic Engagement, 2013). It is now recognized as a best practice for city management because it promotes trust and transparency (Global Civic Engagement, 2013). There are three key distinctions between PB and other deliberative participation methods. The first distinction is its' open format that allows any interested citizen to be involved (Wampler & Hartz-karp, 2012). PB is

not legally binding, but requires political commitment to implement what citizens vote upon, which is the second distinction (Wampler & Hartz-karp, 2012). The third distinction is the focus on social justice and focus on empowering those who are politically weak (Wampler & Hartz-karp, 2012). Brian Wampler (2012) identified four principles of participatory budgeting: voice; vote; social justice; and, oversight. The PB process brings forward new voices of those who have been excluded, intentionally or unintentionally, or did not have the capital or capacity to participate (Wampler, 2012). The principle of voice relates to the dialogue that occurs between residents and public officials (Kamrowska-Zaluska, 2016). In PB processes, citizens vote on changes and decisions in their communities, which helps to generate social change and empower citizens (Wampler, 2012). Social justice is a central part of any PB process, and the principles of voice and vote help to redistribute public resources to marginalized communities (Wampler, 2012). The principles of voice and vote also help to increase citizen oversight on government decision-making, but local government bodies have to change their processes to ensure that citizen voice and vote are incorporated into policy (Wampler, 2012).

The various examples of PB included in this literature demonstrate the different ways in which it can be implemented and projects for which it can be used. This also raises a question of what makes a project Participatory Budgeting, does it focus only on decision-making or does it extend to include residents in the implementation? Global Civic Engagement has identified five criteria that could be used to identify a Participatory Budgeting project, which are outlined in Table 1 below.

Table 1 Criteria of Participatory Budgeting (Global Civic Engagement, 2013).

Criteria Number	Criteria Description
1	Discussion on how financial resources should be used and allocated.
2	Municipal or district level government should be involved and have some influence over the implementation of the process and the resources.
3	The process must be implemented multiple times over a period of years.
4	The process must include deliberation with residents and decision-makers.
5	Those implementing the decisions and outcomes of the process must be accountable to residents to ensure that it reflects their decision.

These criteria show that a PB project does not have to include residents implementing the outcomes of the process, and that a focus on decision-making still qualifies as Participatory Budgeting. There are also six typologies of PB which help to classify different projects, they are: Participatory Democracy; Proximity Democracy; Participatory Modernization; Multi-stakeholder Participation; Neo-corporatism; and, Community Development (Global Civic Engagement, 2013). The first type of PB is Participatory Democracy, in which the decision-making power is sanctioned to residents, who are non-elected officials, and their decisions are binding (Global Civic Engagement, 2013). This model is typically found in the Global South and can have significant implications on social justice issues in cities (Global Civic Engagement, 2013). Proximity Democracy is more of a top-down, consultative process that seeks to improve communication between citizens, public administration and local governments, and is often used in North America (Global Civic Engagement, 2013). This type of PB has been criticized as being a process of selectively listening and picking from ideas developed by residents in a deliberative process (Global Civic Engagement, 2013). In Participatory Modernization, state and local government are trying to modernize and become more efficient by implementing deliberative measures for decision-making

(Global Civic Engagement, 2013). This model does not provide much autonomy to residents, and does not always allow for the inclusion of marginalized groups (Global Civic Engagement, 2013). Multi-stakeholder Participation involves not only residents in the deliberative decision process, it also includes private enterprises, NGOs and the local government (Global Civic Engagement, 2013). Neo-corporatism is a top-down approach where local government involves organized and social groups, as well as local institutions for broad consultation (Global Civic Engagement, 2013). This broad consultation is to help build consensus among various interests and values, but those involved have little independence (Global Civic Engagement, 2013). The final type of PB is Community Development, which includes residents and those involved implementing final decisions of the deliberative decision-making process and it is driven from the bottom-up (Global Civic Engagement, 2013). This process is common in the Global South and local government does not always play a significant role in the process (Global Civic Engagement, 2013).

The examples in this literature review from Chicago, Poland, Sweden, Hamilton, and New York would perhaps align with the Proximity Democracy and Participation Modernization typologies outlined above. In these examples, the PB Process was led by local government, who were also responsible for the implementation of the decisions made by the residents involved. The examples from the Toronto Community Housing Corporation (TCHC), Guelph's Neighbourhood Support Coalition and Minnesota's Neighbourhood Revitalization Program (NRP) represent the Community Development typology of PB. In the case of the TCHC, the residents were involved in both the decision-making and the implementation of final decisions (Fuji & Simon, 2009). The examples from Guelph and Minnesota had some involvement of local government for funding, but neighbourhood groups and residents were responsible for the decision-making process and implementation (Fagotto & Fung, 2006; Schugurensky, 2009). The NRP utilizes support from volunteers and residents to implement the final decision, such as local clean-ups and community policing, as ways to save on their resources (Fagotto & Fung, 2006).

One prominent limitation of the PB process is that groups within communities with common interests and greater resources can dominate the process, and as a result, only their interests are reflected in votes (Tranjan, 2012). The City of Kitchener and the University of Waterloo worked together to run the PB Pilot Project for parks planning that will allow Professor Sean Geobey (Professor at the University of Waterloo) to examine different voting methods that work best for Kitchener and address the previously mentioned limitation (Hagey, 2017a). The Kitchener PB process, which aligns with the Proximity Democracy typology, provides an opportunity to address the gap in literature on how to address perceptions of poor access to urban parks, as well as assess the influence of PB on the citizen engagement process. This research will help to examine if participation methods that allow residents to allocate finances into park design and amenities, help to improve their perceptions, and use of neighbourhood parks.

2.4.2 Participatory Budgeting and Citizen Engagement

Inclusive and representative participation has become a challenge, but the PB process can be used to broaden the range of people who are involved and enable those who may not have been involved in traditional participation methods to have a voice in decision-making (Cabannes et al., 2017). PB can address concerns around tokenistic participation when it is designed to encourage grassroots leaders to come forward, opportunities to engage are accessible, and there is targeted outreach to residents who may not have been involved previously (Lerner, 2012). Analysis of Chicago's PB process in the 49th Ward found that the process increased inclusion, and revealed residents' priorities were different from those identified by traditional methods (Stewart, Miller, Hildreth, & Wright-Phillips, 2014). Residents involved in the process reported an increased sense of community and a greater understanding of municipal finances and decision-making (Pin, 2016). New York City has also used PB to address infrastructural improvements, which included public park upgrades (Su, 2012). Researchers found that those who participated were not previously involved in their neighbourhood and did not trust the

government (Su, 2012). The New York PB process was also effective at engaging youth in the decision-making process, as well as the immigrant and undocumented communities in the City (Su, 2012). Those involved noted that the bottom-up method used, which had stakeholders determine the process and rules, was key to its success (Su, 2012).

Local government in Barra Mansa, Brazil, has worked to engage children and youth in decision making, and feel that they should play a role in urban management (Guerra, 2002). The City created the Children's Participatory Budgeting Council to address the needs of young people in their communities (Guerra, 2002). The Council was found to be effective at integrated youth and children into public engagement, and helps to prepare them to become active citizens in the future (Guerra, 2002). The money that local governments designate for PB processes does not always represent a large portion of a city's capital budget, but it is still a tool for mobilizing citizens and building trust between the public and those who represent them (Kamrowska-Zaluska, 2016). These studies demonstrate the ability of PB and deliberative democracy to move beyond tokenistic participation identified in Arnstein's Ladder of Citizen Engagement, and towards opportunities for the public to have greater power and influence in the planning process (Arnstein, 2019).

Participatory Budgeting has been used in Canadian cities, including: Toronto, by the TCHC; Hamilton, to vote on projects to receive funding from the City's capital budget; and, Guelph, by the Neighbourhood Support Coalition for the allocation of public and private funds (Fuji & Simon, 2009; Kearney, 2015; Schugurensky, 2009). A study of deliberative democracy projects in Canada found that the PB process designed by the TCHC was the most effective at empowering people because all residents were given the opportunity to participate, and as a result they were making decisions for the common good of residents of the Corporation (Fuji & Simon, 2009). The Neighbourhood Support Coalition in Guelph, Ontario, uses PB in its decision-making, and researchers studying this organization have found the PB process is effective when: community members are committed to the process, City

Staff and community members collaborate in a transparent manner; and, there are skills development opportunities for participants (Schugurensky, 2009).

2.4.3 Participatory Budgeting and Parks Planning

Participatory Budgeting has been used in many cities in Poland for planning public spaces, and in 2018 was brought into legislation to increase citizen participation (Bernaciak et al., 2018). A case study of three Polish cities, Poznan, Lodz and Katowice, found that this form of decision-making allows for the needs of residents to be reflected in public space and residents to better identify with the space (Bernaciak et al., 2018). PB gave residents the tools they needed to share their ideas and work with government representatives (Bernaciak et al., 2018). This study connects with my own research, demonstrating that PB can be an effective tool for planning public spaces for creating spaces that reflect the needs of the public and they may perceive as more accessible to them. Researchers in Sweden, examining PB and parks planning, determined that this process is a “powerful tool for change” and can result in good decisions, as well as increasing the capacity of an improved government and an enhanced community (Demediuk et al., 2012).

An American study has found that involvement in the Participatory Budgeting process can also benefit an individuals’ health through empowerment, and this can lead to better psychological and overall health (Hagelskamp & Silliman, 2018). This process can also empower a community to come together to advocate for policy change and more equitable redistribution of financial resources so that the communities and resident who have the greatest need are given they support they require (Hagelskamp & Silliman, 2018). These benefits are important to note in relation to my research interest because they demonstrate that access and use of green space, as well as the opportunity to participate in planning activities are beneficial for those involved and the community.

2.5 Justification for this Study

This literature review has highlighted the value of urban parks for physical and mental health, and why it is important that all residents feel these spaces are accessible to them. Despite these benefits, park space is not always equally distributed in cities and those from low income and minority groups have poorer access (Wolch et al., 2014). The literature review also identified the influence of perceptions on park access, and in some cases, the distribution of parks has been found to be similar in high and low income neighbourhoods, but the later perceive their access to be worse (Wang, Brown, Liu, et al., 2015). These differences in real and perceived access to park space result in poorer health outcomes for these groups compared to those from higher-income, majority groups. While this literature review identified where and how poor perceptions of park access might occur, there was limited research on how to address these poor perceptions. Although the Kitchener Participatory Budgeting process only recently took place in the summer of 2018, there is also a gap in examining its influence on the residents who were involved. The literature highlighted there is debate about a topic (e.g., the disconnect between real and perceived access), and that past studies have been limited in examining how to address poor perceptions. Conducting this research will determine if the PB process in Kitchener did positively influence perceptions of park access, which could lead to recommending this process as a method to address the negative perceptions of park access that can occur among low-income and visible minority groups.

This review also outlined the important role of citizen engagement in the planning process, as well as the challenges that have resulted in decreasing and non-inclusive engagement opportunities (Smørddal et al., 2016; Su, 2012). Planners are looking to new ways to engage citizens in the planning process, and past studies on the PB process have identified its potential to address the challenges and improve engagement opportunities (Su, 2012). Research on the use of PB in Canada was presented, but further research on PB and its influences on the citizen engagement process would aid in understanding

this process in the Canadian context. This study will fill this gap in the literature by examining the PB process and will contribute to the knowledge about participation and participatory practices in Canada.

2.6 Chapter Summary

This chapter provided a review of the relevant literature for the provision of park space and opportunities for public participation. The first section of the literature review focused on the provision of park space, and began by outlining how urban theorists, including Jane Jacobs and Frederick Law Olmstead, have studied and identified the important role that park space plays in cities. This was followed by a discussion of the literature on the physical and mental health benefits that parks and urban green space provide to those who use them. These health benefits included: lower levels of mood and anxiety disorder treatment; improved cardiovascular health; improved cognitive ability, especially among children; and, better social cohesion among communities. The next section identified that there are differences in real and perceived accessibility to park space. In some cities, there is unequal distribution of parks and green space and those from low income and minority group neighbourhoods have poorer physical access, in terms of distance and proximity, and poorer quality park space. There is also research that has found that low-income neighbourhoods have an equal distribution of green space as higher income neighbourhoods, but they perceive themselves to have poorer access in comparison. This literature demonstrated the importance of parks and green space in the urban landscape, and the need to address differences in real and perceived access to ensure that residents can benefit from these public services.

The next section of this literature review examined trends in participation in planning practice. There has been a decrease in public participation at the local level, which has been a focus of research as to why this is occurring. Studies have identified many contributing factors to this decrease, including: complex language and terminology; statutory requirements and confusing processes; and, the perception that public input has little influence. Traditional participation methods, which are often in

person and face-to-face, have often been criticized as being tokenistic. Planning authorities are looking to new methods to gain public input, such as GIS and smart phone applications to allow for independent and broader participation. Traditional and technology-based methods have both been criticized, and studies have recommended that combining the two could help to address decreasing public participation in planning. This was followed by a discussion on Participatory Budgeting, and its potential to address both decreasing participation and negative perceptions of access to park space. Participatory Budgeting allows citizens, who are non-elected officials, to allocate financial resources in their communities. This process has been found to be affective at broadening participation, empowering those involved and encouraging people to work for the common good.

This review identified three gaps in the literature, which include: how to address poor perceptions of park access; examining the influence of the PB process on residents in the City of Kitchener; and, examining participatory practices in Canada. The purpose of this research is to address these gaps and determine if involvement in the PB process can positively influence an individual's perceived access to, and use of, their neighbourhood park, as well as the citizen engagement process. The following chapter will outline the theoretical and methodological approaches used in this study.

Chapter 3: Methodology

3.1 Overview

A mixed methods approach was chosen for this study, that combines quantitative web-based surveys in the first phase and qualitative key informant interviews in the second phase. This chapter will discuss the theoretical context of the research, background on the study sites and the rationale, design, implementation, and analysis for each research method.

3.2 Research Purpose and Theoretical Approach

3.2.1 Research Purpose and Objectives

The aim this research is to assess the PB process in the City of Kitchener in terms of its impact on perceived park access and use of neighbourhood parks, as well as its effect on citizen engagement. This study is guided by four research objectives to help understand these impacts:

1. To understand how PB was implemented in the City of Kitchener.
2. To explore City Staff and residents' perceptions of the PB process in the two study communities.
3. To compare residents' perceptions of physical access and use of the study parks before and after the PB Pilot.
4. To examine the impact of the PB process on citizen engagement in the City of Kitchener in terms of participation, empowerment, and future civic engagement.

3.2.2 Theoretical Approach

The ontological position of my research was constructivist and my epistemological position was interpretivist. Norman Blackie characterizes ontological claims as those that center around an individual's ideas of what makes a social reality (Grix, 2002). The constructivist position states that social phenomena are influenced by social actors and are constantly revised (Grix, 2002). This position

means my research examined how residents in the study areas define their perceived access to the neighbourhood parks. Epistemology is a branch of philosophy about what can be known and how knowledge is gathered (Grix, 2002). The interpretivist position acknowledges that there are differences between the people and objects that make up reality, and it is important to understand the subjective meanings of their actions (Grix, 2002). I have chosen the interpretivist position to understand what influenced participants perceptions of access to their park, as well as how involvement in the Participatory Budgeting process has changed their perceptions.

This research was a mixed methods and explanatory study, in which both the deductive and inductive approaches were used. Explanatory research seeks to answer “why” questions to build social theory around events that happen and the effect they have (Neuman, 2007). This type of research also seeks to test theories that are developed by explanatory research to support, refute or extend them to new topics or issues (Neuman, 2007). In this research the event studied was the PB Pilot Project in the City of Kitchener, and the research examined the effect of the PB Pilot Project to either support or refute the theory that PB can positively influence perceptions of public parks and civic participation. The deductive approach was used to conduct the surveys and begins with a hypothesis that is tested, which will guide the rest of the research (Farthing, 2016). Once the hypothesis is developed, the researcher selects a case, generates data, analyses the data and generates an understanding or explanation (Farthing, 2016). The hypothesis for this research was that the PB process can positively influence perceived access to the study parks and civic participation, and could be used elsewhere to help address the disconnect between real and perceived access to public parks. The surveys were used to collect ordinal data which indicates differences among categories, including opinion measures, and these categories can be ordered (Neuman, 2007).

The interviews used an inductive approach but were theoretically informed through the academic literature reviewed for this thesis. Unlike deductive research, the inductive approach does not

begin with a hypothesis that guides research. Through the inductive approach a researcher builds theory, beginning with some concepts and topics (Neuman, 2007). While gathering and analysing data the researcher refines these concepts to establish relationships between concepts and generalized theory that is grounded in the data (Neuman, 2007). The research was cross-sectional, examining one point in time studying the City of Kitchener PB Pilot Project. The surveys examined the influence of the PB process on the public's perceptions of park access and civic engagement, while the interviews were used to examine the PB process from the perspective of those who implemented the Project. The flow diagram in Appendix A outlines the research processes and phases of data collection.

3.3 Study Location and PB Pilot Project

3.3.1 Description of Pilot Project

In the 2017-2019 Business Plan for the City of Kitchener, PB was identified as a strategic action for open government and a potential pilot project (Hagey, 2017a). In May of 2017 a proposal in partnership with the University of Waterloo was proposed to Council as a way to achieve the collaborate and entrust levels of the City's Engagement Framework, as well as test different PB voting methods (Hagey, 2017b). The Pilot budgeted 200,000 dollars for the redesign of two neighbourhood parks (Hagey, 2017b). The first stage of the process was Idea Generation, in which residents brainstormed ways to improve their park, as well as being asked what features they did and did not like about their neighbourhood park (Hagey, 2017b). This was then reviewed by City Staff to determine which were feasible to implement. Stage two was Idea Prioritization, where residents were asked to prioritize their ideas through a vote and the results of this vote were used to create bundles of improvements that were voted upon in stage three (City of Kitchener, 2019). As noted in the Introduction Chapter, the voted upon improvements have been implemented in Park B but further work was required at Park A due to the unstable ground. To ensure that the residents still received the improvements they voted for, the hard-infrastructure improvements will be implemented at a nearby community center and

further improvements are planned for the Park. It is important to note that this thesis is not a continuation of the previous work completed by the University of Waterloo on the Pilot Project, but it uses the work as a launching point and guidance.

3.3.2 Study Sites

This study examined two neighbourhood parks in Kitchener, in Southwestern Ontario. The boundaries for this study were drawn from the original catchment areas identified in the City of Kitchener's PB Pilot Project. The target populations for the surveys were the residents involved in the PB Pilot Project, so it is important to draw from the same neighbourhoods. To comply with ethical requirements, the parks are referred to as A and B in this study. Figures 2 and 3, seen below, shows the two study areas in the context of the Kitchener-Waterloo area, and the City of Kitchener. Park A is indicated by the purple polygon and Park B is indicated by the blue polygon.

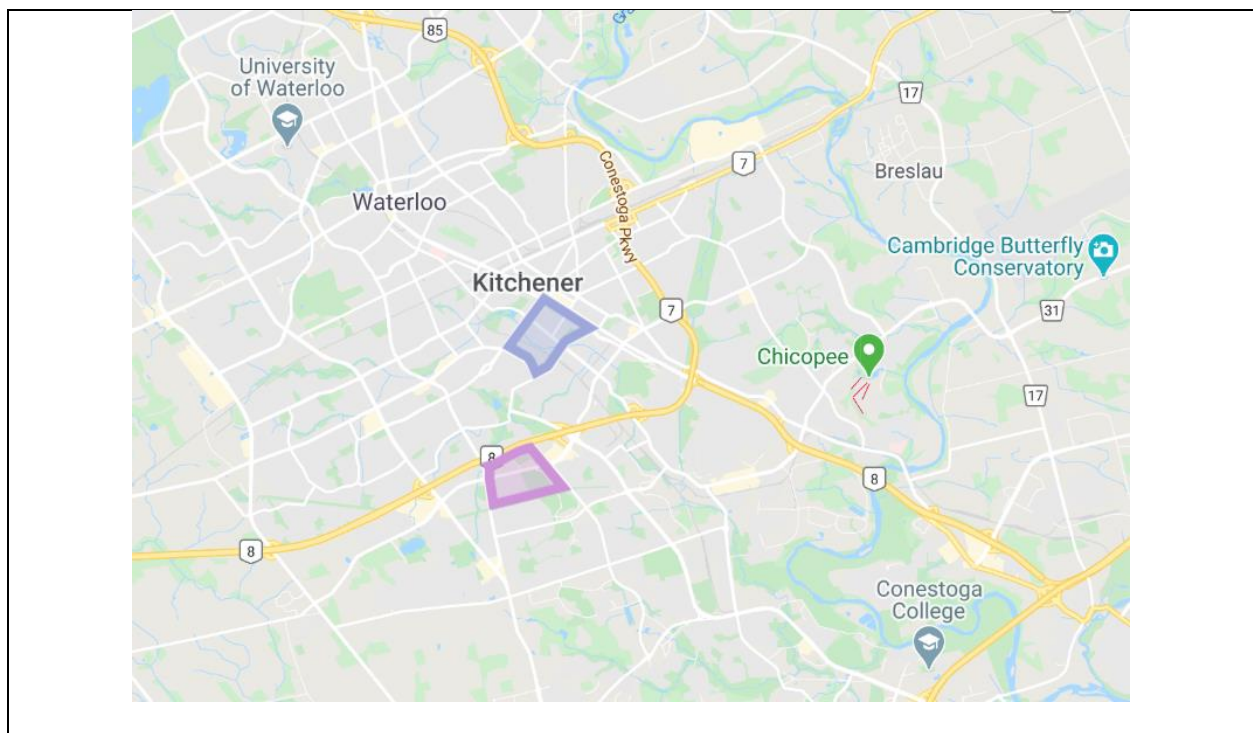


Figure 2 Park A and B Study Areas in the Kitchener-Waterloo area (Google Maps, 2020).

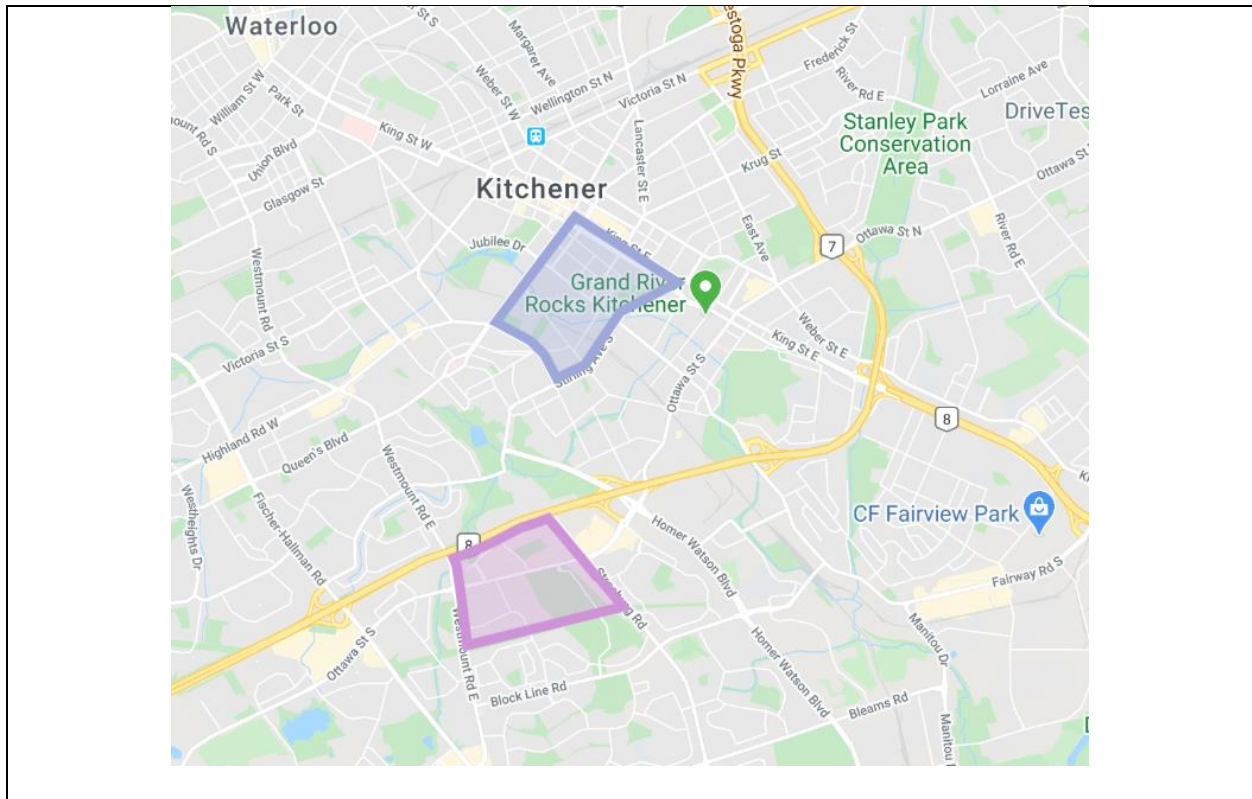


Figure 3 Park A and B Study Areas in the City of Kitchener (Google Maps, 2020a).

3.3.3 Policy Context

Planning in Ontario is policy led and driven, and as such, it is important to understand the provincial and local policies for parks and participation. In Ontario, the *Planning Act* establishes the statutory framework that municipalities must follow, as well as delegates much of the authority to municipalities to undertake land use planning within their jurisdiction. The *Planning Act* identifies 20 matters of Provincial Interest that all municipalities shall have regard to when carrying out their planning responsibilities. There are three matters of Provincial Interest that apply specifically to the provision of, and access to public parks:

- h) the orderly development of safe and healthy communities
- i) the adequate provision and distribution of educational, health, social, cultural and recreational facilities
- (r) the promotion of built form that,
 - (i) is well-designed,

(ii) encourages a sense of place, and

(iii) provides for public spaces that are of high quality, safe, accessible, attractive and vibrant

Section 51.1 - Parkland, of the *Planning Act* sets out policies with regards to the conveyance of parkland and preparation of parks plans by a municipality. Subsections (1) and (2) outline how land for parks can be conveyed as a percentage or hectares per dwelling unit as a condition for plan of subdivision approval. A municipality can accept payment in lieu as outlined in subsection (3). Before the policies in subsection (1) and (2) can be adopted in an Official Plan, a parks plan must be prepared in consultation with school boards within the municipality's jurisdiction and other persons or public bodies that are considered appropriate by the municipality. Requirements for public consultation are also included in the *Planning Act*, examples of which can be found in sections: 17(15) Approvals; 22(3.1) Request for an Amendment; and, 26(3) Updating an Official Plan.

The *Provincial Policy Statement (PPS)* provides policy direction on the matters of Provincial Interest that are identified in the *Planning Act* and sets the foundation for the regulation of development and land use in the Province (Province of Ontario, 2014). There are three main policy sections of the PPS that seek to ensure effective and efficient land use planning, as well as improving the quality of life for all Ontarians (Province of Ontario, 2014). These three policy areas are: Building Strong Healthy Communities; Wise Use and Management of Resources; and, Protecting Public Health and Safety. Policy 1.5 – Public Spaces, Recreation, Parks, Trails and Open Space is found in the Building Strong Healthy Communities section of the PPS, and provides guidance on promoting healthy and active communities through park space (Province of Ontario, 2014). Subsection 1.5.1 (b) specifically refers to providing for a full range and equitable distribution of publicly accessible parks and open space (Province of Ontario, 2014).

The Region of Waterloo and City of Kitchener are also required to conform to requirements set out in *A Place to Grow: Growth Plan for the Greater Golden Horseshoe*, which is commonly called the Growth Plan. The Growth Plan is created by the Provincial Government to promote growth and development that allows for economic prosperity, as well as protecting the environment and achieving high quality of life in communities (Ministry of Municipal Affairs and Housing, 2019). In Section 4 – Protecting What is Valuable, subsection 4.2.5 (1), local and regional municipalities are required to create a system of publicly-accessible parks and open space that clearly indicates what areas are for public access using a coordinated approach, and good land stewardship (Ministry of Municipal Affairs and Housing, 2019).

The Region of Waterloo is an upper-tier municipality, and as such, is the approval authority for lower-tier municipalities in the Region, including the City of Kitchener. Planning at the Regional level focuses on broader issues and those that might cross local municipal boundaries. The Regional Official Plan provides policy for the Greenlands Network and larger conservation issues with regards to green space, but the local municipality, Kitchener, is responsible for neighbourhood park planning. The City of Kitchener Official Plan sets out the goals and policies to direct land use within the City, with the vision to promote healthy and complete communities, including the implementation of parks and open space (City of Kitchener, 2014). Section Eight of the Official Plan outlines the policies for Parks, Open Space, Urban Forests and Community Facilities with a commitment to ensure there is enough publicly accessible park space and that these spaces are maintained (City of Kitchener, 2014). These policies include: balancing the types of services provided; expanding and enhancing access to underserved areas; and, participating in joint ventures with community groups and other institutions (City of Kitchener, 2014). This section also outlines the parks classification system, which includes: Natural Areas; City-Wide Parks; District Parks; Neighbourhood Parks; Urban Greens; Urban Plazas; and, Greenways (City of Kitchener, 2014). The parks used for the Kitchener Participatory Budgeting Pilot

Project were Neighbourhood Parks, which are defined as “local parks within walking distance of neighbourhoods to provide passive open space areas, playground facilities, and other neighbourhood scale outdoor recreational amenities to support unorganized, unstructured and spontaneous activities” (City of Kitchener, 2015 pp. 8-5).

The City of Kitchener’s Parks Strategic Plan provides a strategic framework and direction for investment to ensure that the parks system is balanced, continuous and contributes to the health and sustainability of the physical, social and economic environments within the City (City of Kitchener, 2010). The Strategic Framework is guided by eight principles, and principles 3 (Engaged Community), 5 (Urban Quality), and 7 (Accessible Participation) are relevant to this study. These three principles focus on including the community in the parks planning process, while ensuring this process is inclusive and the parks system contributes to quality of life for residents (City of Kitchener, 2010). The Plan identifies six Strategic Themes to build on the Framework, and two relate to this study (City of Kitchener, 2010). The first is the Building and Renewing our Neighbourhood Parks Theme. This theme acknowledges the important role that accessible neighbourhood parks play in promoting healthy communities and focuses on creating new park space; renewing existing park space; addressing gaps and weakness in park provision; and, encouraging the implementation of community gardens (City of Kitchener, 2010). The second Strategic Theme is Engaging and Activating the Community, which is in response to residents’ willingness and interest to participate in the parks planning process (City of Kitchener, 2010). This theme focuses on building community capacity, increasing public awareness about participation and safe park use, and encouraging education and stewardship (City of Kitchener, 2010).

3.3.4 Socio-Demographic Profiles

The following table shows a comparison of the demographic characteristics of the Park A and B Study Areas, as well as the City of Kitchener and the Province of Ontario.

Table 2 Demographic table comparing Study Parks, the City of Kitchener, and the Province of Ontario.

Variable	Park A		Park B*		Kitchener		Ontario	
	2006	2016	2006	2016	2006	2016	2006	2016
Population and Sex								
Population	6026	5876	11704	11845	204668	233222	12160282	13448494
Population % Change	-7.5	-1.3	-5.8	10.7	7.5	6.4	6.6	4.6
Male Population	2985	2875	5595	5945	100750	114715	5930705	6559390
Female Population	3040	3006	5810	5905	103920	118510	6229580	6889100
Age								
0 to 14	1275	1080	1770	1505	37915	39875	2210800	1907990
15 to 29	1295	1275	2560	2585	44120	48050	2374075	2580405
30 to 44	1320	115	2875	2710	47930	49910	2708250	2579130
45 to 59	1305	1220	2350	2600	42065	48890	2635905	2983185
60 to 74	595	955	1300	1575	20900	31345	1450171	2112535
75+	145	215	930	880	11735	14150	780990	985565
Income								
Median Income (15 years and older)	27602	30308	0011.00 - \$22121 0007.00- \$26577	0011.00 - \$29888 0007.00 \$29248	28629	34520	27258	33539

Tenure								
Total Number of Private Dwellings	2295	2360	5455	5815	79485	92215	4555025	5169175
Occupied Private Dwellings - Owned	1305	1280	2670	3170	51140	57240	3235495	3601825
Occupied Private Dwellings - Rented	990	1035	2790	1300	28340	34975	1312295	1559715
Occupied Private Dwellings - Band Housing	0	0	0	0	0	0	7235	7630
Employment								
Participation Rate	74%	64.90%	0011.00 - 64.5% 0007.00 - 73.9%	0011.00 - 68% 0007.00 - 67%	71.10%	68.70%	67.10%	64.70%
Employment Rate	70.50%	59.20%	0011.00 - 60.6% 0007.00 - 66%	0011.00 - 62.3% 0007.00 - 60.8%	67.10%	64%	62.80%	59.90%
Unemployment Rate	4.90%	8.50%	0011.00 - 6% 0007.00 - 10.1%	0011.00 - 8.6% 0007.00 - 9.4%	5.70%	6.80%	6.40%	7.40%
Educational Attainment ages 25-64								
No certificate, diploma or degree	710	510	1480	1150	18050	14835	899525	752995
High school certificate or equivalent	1050	935	1855	2015	31095	34815	1660670	1768960
Apprenticeship of trades certificate or diploma	360	220	605	460	10585	8705	581125	446390
College, CEGEP, or other non-university	685	925	1520	1740	26105	33695	1461630	1782530
University certificate, diploma or degree	585	470	1065	1685	27575	35165	2035375	2307315

Immigration								
Non-Immigrants	4365	4175	8165	8855	147165	166040	8512020	9188815
Immigrants	1615	1470	3280	2545	53340	60430	3398725	3852145
Non-permanent residents	50	75	85	185		3535		201200

*Park B includes two census tracts, 0011.00, 0007.0. Unless indicated, the Park B columns represent a combined total for both census tracts.

3.4 Phase 1 - Web-based Survey

3.4.1 Introduction and Survey Development

The first component of data collection was a self-administered, web-based survey to examine park use, perceptions of park access, and the Participatory Budgeting process from the perspective of members of the public. Surveys allow researchers to ask questions about individuals' behaviour, attitudes, beliefs, opinions, expectations, knowledge, and self-classification (Neuman, 2007). There was a mix of multiple-choice questions, asking participants to select from a set of answers, and open-ended questions where participants could provide their own answer. Multiple-choice questions are close-ended and allow for quicker responses but make it more difficult to capture individual perceptions and feelings (Neuman, 2007). Open-ended questions may take more time to analyze but are intended to allow participants to expand upon their answers in the multiple-choice questions to reflect their own perceptions and feelings (Neuman, 2007).

The survey was designed to address the overall research purpose and objectives, as seen in section 3.2.1 of this chapter. The first section of the survey examined the residents' perceptions of park access and use prior to the PB Pilot Project. Participants were asked how often they used their neighbourhood park, for what purposes they used the park, and what barriers prevented them from using the space. The second section of the survey focused on understanding residents' perceptions of PB as a participation method. The goals of this section were to determine why they did or did not choose to participate in the Pilot Project, what they thought about PB, and how it might impact their civic participation in the future. Future use of the park space and new perceptions of park access were the focus of the final section of the survey. This section asked participants to consider if they will use the park more, if they will use it for different purposes and if their barriers to using the space have been reduced. A full list of survey questions can be found in Appendix B.

Qualtrics, a web-based survey platform was used to create the survey. This platform is compatible with the quantitative analysis program SPSS Statistics, which was used to analyse the data. The survey was piloted on other graduate students in the School of Planning who provided feedback on structure, ease of understanding, choice of answers and general observations. The survey was refined based on comments from the pilot and then published so members of the public could complete the survey. Participants could access the survey through the link provided on the survey flyer and could enter themselves in a draw for one of four, \$25 Tim Horton's Gift Cards as an incentive to participate.

3.4.2 Benefits and Limitations of Surveys

Surveys allow for researchers to collect a large amount of data in a quick and cost-efficient manner, making them one of the most widely used data collection methods (Neuman, 2007; Palys, 2003). Web-based surveys allow for flexibility, lower costs, a large population to sample from, 24/7 availability of population, a vehicle for data entry, and a degree of confidentiality and privacy for participants (Neuman, 2007; Palys, 2003). Being able to collect data quickly and efficiently through web-based surveys is a benefit for researchers, but it is also important to note the disadvantages that come with using them. Not all potential participants recruited will have access to the internet, which will affect the representativeness of the sample, and greater consideration must be given to the design of the survey to make sure it is not complex and is easy to follow (Neuman, 2007). It is also important to consider the implications of privacy if there is third-party interference and online etiquette that could see individuals misuse the survey when using online platforms like Qualtrics (Palys, 2003). With this study in particular, it was important to work with the City of Kitchener to ensure that participants were not confused that this study was a continuation of the City's work, or that completion of the survey would impact the work being done at their neighbourhood park. Key messages were included in the recruitment materials to help prevent this confusion, and the second wave of recruitment was timed with work the City was doing in the Park A community.

Surveys, both web-based and hard copy versions, come with disadvantages associated with the data collected. A low response rate is a common challenge when using surveys, especially hard copy versions that require participants to mail their responses to the researcher (Farthing, 2016). The following section outlines the incentivization strategy put in place to try to encourage participation and increase the response rate. Respondents' answers may reflect what they say they do but not what they actually do, which can affect the accuracy of the data (Neuman, 2007). It is suggested that mixing open- and closed-ended questions is a way to address this challenge, as it allows researchers to ask about respondents' feelings and beliefs to dig deeper into their answers (Neuman, 2007). There are also constraints to consider when respondents are answering questions in self-administered surveys. These types of surveys assume that participants are literate and that the language and vocabulary can be understood, as well as that those responding are the intended target of the survey (Palys, 2003). There are two types of biases that can arise when conducting survey research, both of which can affect the validity and reliability of the data (Farthing, 2016). Non-response bias occurs when there is a low response rate to a survey, and the results are not representative of the population (Neuman, 2007). This bias has been associated with survey research, especially mail-out and web-based surveys. Self-selection bias also affects the representativeness of the sample as those who have chosen to participate may have a vested interest, can benefit from the results, or have general interest in the topic, which could skew the results (Palys, 2003; Farthing, 2016).

3.4.3 Incentivization Strategy

There are various theories and studies which examine why people choose to participate in research, and researchers have identified three categories to outline why people choose to participate. The categories are as follows: altruism, where the respondents have a social obligation to complete the survey or to further an important cause; survey-related reasons, where the participant is interested in the topic or researcher; and, egoistic reasons, where the participants are motivated by an incentive

(Singer & Bossarte, 2006). There are also three theories that consider why people choose to participate. The first is Classical Economic Theory, and according to this theory individuals are influenced by the value of the reward, or incentive, and the probability of receiving the reward (Boulianne, 2013). This theory, which aligns with the egoistic reasons for participation, would suggest that large cash incentives are the most effective to encourage participation (Boulianne, 2013). The second theory is the Social Exchange Theory, which aligns with the altruistic reasons and examines how social benefits and personal connections can encourage participation when there is no direct benefit to the participant (Boulianne, 2013). The third theory which can help explain why people choose to participate in research is the Leverage-Saliency Theory developed by Grooves et al. 2000 (C. Zhang, Lonn, & Teasley, 2017). According to this theory there are three factors that influence the decision to participate: survey-specific, where the topic or survey sponsorships are important to the participant; person-specific, an example of which could be an individual's concern for privacy dissuades them from participating; and, influences specific to the participants social and physical environment (Singer & Bossarte, 2006).

Participation in research surveys has been decreasing in recent years, resulting in low response rates and the potential for non-response bias. One potential reason for this is the increasing use of surveys in many different fields as methods for data collection (Yu et al., 2017). Rising telemarketing, increasing concerns for privacy and a decline in volunteering have also contributed to reduced participation in research surveys (Yu et al., 2017). This declining participation can result in low response rates, which can negatively impact the validity and reliability of the data (Farthing, 2016). A low response rate can also result in non-response bias, which means the survey results are not representative of the sample population (Farthing, 2016).

Researchers are now relying on the provision of incentives to encourage survey response rates and to limit non-response bias (McGovern, Canning, & Bärnighausen, 2018). In some research, offering an incentive can help to establish a connection between a researcher and potential participants, which

can encourage them to be involved in a study (Sherrod, Campbell, Davern, & Rockwood, 2003). Incentives can come in a variety of forms, and their effectiveness can be dependent upon the characteristics of the individual and population to whom they are being offered (Boulianne, 2013). Some of the basic forms of incentives are monetary, gifts, and altruistic benefits (Sherrod et al., 2003). Altruistic incentives, such as social appeals to participate or charitable donations are most effective when the target group is socially-minded (Conn, Mo, & Sellers, 2019). There is inconsistent evidence, but much of the literature demonstrated that monetary incentives are effective at increasing response rates for surveys (Conn et al., 2019; Yu et al., 2017). This may be particularly helpful for online surveys given the impersonal nature of the internet (Deutsekens, Ruyter, Wetzels, & Oosterveld, 2004). Monetary incentives can be given prior to survey completion, after survey completion, or as a lottery. Studies have found that the lottery method is cost effective, as well as beneficial for increasing response rates and encouraging more timely responses (Sauermann & Roach, 2013). In some instances, researchers found that monetary incentives offered through a lottery increased the number of low-income participants (C. Zhang et al., 2017). There are various studies that examine how the size or amount of the incentive influences participation, and there are varying results. Some studies have found that there was no statistically significant difference between a smaller and larger value incentive (Boulianne, 2013), while others have found the opposite (Deutsekens et al., 2004). This can all be influenced by the number of incentives provided and the study design. A common finding among the literature was that fewer and larger incentives were more likely to increase response rates and were more cost-effective than offering many smaller valued incentives (Sherrod et al., 2003).

It is important to note that offering monetary incentives and lotteries can have negative effects. In some cases, it may increase the number of participants who choose to be involved for egoistic reasons and to “win” the incentive (C. Zhang et al., 2017). Researchers are beginning to consider if monetary incentives for participation can coerce an individual into participating, particularly for

vulnerable populations (Singer & Bossarte, 2006). It is also interesting to note that researchers have found that gender can impact the influence of monetary incentives on participation (Boulianne, 2013). A study from Edmonton, Alberta, found that those identifying as females were more responsive to a five dollar incentive, while those identifying as male were more responsive to a ten dollar incentive (Boulianne, 2013).

My research study sought to examine the influence of the PB process on perceived access and use of neighbourhood parks in Kitchener, Ontario. The first phase of my data collection involved surveying residents in the two neighbourhoods used for the City's PB Pilot Project. Households received a hand delivered copy of the survey flyer, which directed them to the survey and a description of remuneration they may receive following completion of the survey. My chosen strategy for incentivization was to provide a monetary incentive through a lottery. Participants could enter their email, which was not tied to their survey responses, and be entered in a draw to receive one of four \$25 Tim Horton's Gift Cards. This incentive was intended to encourage participation, prevent a low response rate and non-response bias, as well as being cost effective.

3.4.4 Recruitment

Survey participants were recruited from the two neighbourhoods used in the City of Kitchener PB Pilot Project using purposive sampling. This method of sampling comes from the Deductive Method of Explanatory Research and is used when the researcher wants to identify particular cases for in-depth analysis (Neuman, 2007). In this study, the population was residents who were involved in the PB process, and the sampling frame was residents within the two neighbourhoods used for the Pilot Project. Figures 2 and 3 in section 3.3.2 of this chapter outline the study areas used. In the first stage of recruitment, approximately 1900 survey flyers, seen in Appendix C, were hand delivered to residences within the study boundaries with a link directing them to the online survey. Survey flyers were also posted in front entryways to apartment buildings. The second stage of recruitment was to connect with

the two neighbourhood associations, asking them to distribute the survey flyer to their email list. This stage of recruitment was sent out shortly before COVID-19 was declared a global pandemic, and the Provincial and Federal governments introduced restrictions on public movement within communities. Both stages of survey recruitment were approved by the Ethics Review Board. As discussed in the previous section of this chapter, to address non-response bias, survey participants could enter themselves into a lottery for one of four \$25 Tim Horton's Gift Cards. There were 43 survey responses, 33 of which came from the first round of recruitment and ten from the second round.

3.4.5 Survey Analysis

The surveys were analysed using SPSS, which is compatible with the Qualtrics survey platform, and descriptive statistics was used to analyze that data. Univariate analysis is used to describe one variable, and is suitable for nominal, ordinal, interval and ratio-level data (Neuman, 2007). This type of analysis is usually demonstrated through graphs, including histograms, bar charts and pie charts (Neuman, 2007). The first step of analysis was to create frequency tables and histograms to identify the most frequent answers by participants. The second step was to conduct bivariate analysis, which examines two variables and the relationships between them (Neuman, 2007). Statistical relationships between two variables are based on covariation and independence (Neuman, 2007). Covariation means that two variables vary together, meaning change in one variable will result in change in another, while independence is the opposite.

The most common ways to conduct bivariate analysis are scattergrams, cross-tabulation, and measures of association (Neuman, 2007). Each of these were used to examine the relationship between involvement in the PB process, the independent variable, and perceptions of access and use of neighbourhood parks. Scattergrams plot cases on a graph in which the x axis represents the independent variable and the y axis represents the dependent variable (Neuman, 2007). A line of best fit is plotted on the graph to indicate if a relationship is positive or negative and the spread of the cases

around the line demonstrates the strength of the relationship (Neuman, 2007). Cross-tabulation through percentage tables show relationships between variables using raw counts (Neuman, 2007). The third method used was the chi-squared measure of association. This method is used to calculate a number that demonstrates the strength of a relationship for nominal and ordinal data (Neuman, 2007). Multiple regression using more than two variables could not be conducted because interval or ratio data would have been required (Neuman, 2007).

The open-ended survey questions were analysed using the content analysis method. Content analysis allows researchers to quantify written or symbolic qualitative data in the form of tables and graphs (Neuman, 2007). This method can be used to analyse songs, newspaper articles, textbooks, films, open-ended survey questions and other forms of text or symbolic materials (Neuman, 2007). There are two methods for content analysis, manifest coding and latent coding. Manifest coding is used to code the actions and terms that are on the surface of the data which are developed after a preliminary review, which is then analysed using the code list (Neuman, 2007). In contrast, latent coding takes into account the implicit meanings of the data and the codes are centered around themes that are identified while analysing the data (Neuman, 2007). These two methods are often used together, but latent coding requires greater depth in the data than manifest coding (Neuman, 2007).

Manifest coding was used for this study as some of the answers provided by survey participants were only two or three words, and did not have the required depth to do latent coding. There were four steps in the analysis process, they were: familiarizing the data; assigning codes; comparing the text and final list; and compiling. The first step of this analysis was to familiarize the data by reviewing the answers and determining the size of the meaning units, which is the amount of text that was coded. In some cases, the questions required participants to record two or three words for the answers, while others required longer answers with sentences. To accommodate for this range, the meaning units were one word to one sentence. This was followed by generating a coding list with rules for

classification, and a recording sheet to track the number of times the code appears and quotes from the answers. An example of the recording sheet can be seen in Appendix D. Once the code list and recording sheet were finalized, the survey answers were coded based on the meaning units and the code list was updated if any other codes were revealed in the analysis. The text was read alongside the final list of codes to ensure the analysis met the aims of the research and to ensure that the data was labeled properly, and no important text excluded. The final step was to compile the data by reviewing the recording sheets to create frequency charts and graphs that represented the number of times a code appeared in the data. This was followed by the identification of categories and subcategories, as well as comparing the results to findings in the academic literature and the interview data.

3.5 Phase 2 - Key Informant Interviews

3.5.1 Introduction and Interview Development

The key informant interviews with members of City Staff were used to understand the impact of Participatory Budgeting on park access and citizen engagement from the perspective of those who implemented the process. Interviews allow researchers to examine the facts surrounding a phenomenon or event, as well as individuals' behaviours, beliefs and attitudes (Farthing, 2016). This study used semi-structured interviews, which allow for the researcher to use a set of major questions and probe further with additional questions that arise from answers provided by the key informant (Farthing, 2016). City of Kitchener Staff were sampled as key informants as they were involved in implementing the process and worked with the communities involved.

The interview script, seen in Appendix E, was theoretically informed by the academic literature reviewed for this thesis and was divided into five sections: Introduction Questions; Why Participatory Budgeting; Implementation; Participation; and Outcomes and Future Use. The interviews sought to understand the PB process and how it was implemented in Kitchener, as well as the reasoning for

choosing parks and the two neighbourhoods used in the Pilot Project. Participants were asked for their perspective on the outcomes of the Pilot for parks and engagement to understand if the process had a positive influence.

3.5.2 Benefits and Limitations of Interviews

Interviews often have the highest response rate, and this is particularly true for face-to-face interviews (Palys, 2003). They also allow for researchers to ask more complex questions with the chance of being able to clarify any confusion or misunderstanding (Neuman, 2007; Palys, 2003). Face-to-face interviews allow the researcher to observe the surroundings and how they might be influencing the participants, as well as non-verbal communication exhibited by the participants (Neuman, 2007). Researchers can also probe participants further, especially when conducting less formal and unstructured interviews (Farthing, 2016).

Using interviews comes with limitations, such as the time and travel required to conduct in-person interviews (Neuman, 2007). Travelling to and from interviews takes time on the researcher's part and may also influence a potential participants willingness to be involved (Neuman, 2007). It is also important to consider interviewer bias. This occurs when the researcher's tone of voice or choice of wording affects the participants responses (Neuman, 2007). The role of the interviewer is to collect accurate data by asking questions and controlling the tone, pace and direction of the interview (Neuman, 2007). While carrying out this role, the researcher must ensure they are non-judgemental and do not express their opinions, through verbal or non-verbal means, so as to not introduce interviewer bias and potentially influence the participants opinions or beliefs (Neuman, 2007).

3.5.3 Recruitment and Interview Process

Key informants were recruited from City of Kitchener Staff, who were involved in implementing the PB Pilot Project, through purposive and snowball sampling. Purposive sampling occurs when a

researcher selects certain cases for in-depth analysis of an event, phenomenon or process (Neuman, 2007). City of Kitchener documents, including Staff Reports and Council Agendas were reviewed to identify staff that were involved in the Pilot Project. These individuals were sent the recruitment email containing the information letter, consent form and sample interview questions to inquire if they would be interested in participating. As public servants their email and other contact information is available as public record. A few key informants recommended other City Staff that would be interested in participating and were involved in the Pilot Project. This is called snowball sampling, which occurs when researchers are passed onto other potential participants after making first contact (Farthing, 2016). A total of nine participants were contacted and six responded to the request for participation, four of which were recruited through purposive sampling and two were recruited using snowball sampling.

When those recruited indicated their interest in participating, a date and time that worked best with their schedules was established and they were sent the full list of interview questions. They were also provided the option to conduct the interview in-person or over the phone. If interview participants requested an in-person interview, they were asked to choose a quiet location in which they felt most comfortable and would allow for confidentiality. Before conducting the interview, participants were asked if they consented to the interview being recorded with a recording device, specifically the Olympus Digital Voice Recorder VN-702PC. The interviews ranged in length from half an hour to 57 minutes. The interviews were then transcribed by the student researcher and provided to the participant, with an appreciation letter, for their review to ensure their answers were accurately captured. The interview process was halted due to the COVID-19 Pandemic, as well as restrictions on gatherings and in-person research to help prevent the spread of the virus.

3.5.4 Interview Analysis

The interviews were transcribed by the student researcher and analysed using the grounded theory coding method, which is an iterative and inductive process that is used to develop theory that is “grounded” in the data (Charmaz, 2014). This process is characterized by three stages of coding that identify behaviours, events, activities, meanings, relationships, and consequences that describe what is occurring and the theory that results from analysis (Neuman, 2007; Charmaz, 2014). The first stage of coding is open coding, in which the data are broken down into concepts that are labeled as codes (Strauss & Corbin, 1998). Open coding began with labeling the concepts by analysing the interviews line-by-line, which Charmaz (2014) identified as the first step for many grounded theorists and is an effective method for analyzing interviews. The concepts were highlighted and labeled with the title of the code in square brackets. The second and third stages of the open coding process were classifying codes and comparative analysis. In these stages, the codes were classified based on their attributes and compared to each other to see how they may fit together to describe a process or reveal new codes.

The classifying and comparative stages helped in developing categories and subcategories, which was the next stage of the open coding process. Strauss and Corbin, 1998, define categories as “concepts that stand for phenomenon”, and subcategories as “concepts that pertain to a category, giving it further clarification and specification”. The codes that fit together to describe a larger concept or process were put together into categories or subcategories, which were given names that would help to explain the category. The final stage of the open coding process was a deeper analysis to help determine the properties and dimensions of the categories. Strauss and Corbin, 1998, define properties as characteristics of category that define and give it meaning, and dimensions as the range upon which properties vary. Throughout the open coding process memos were taken to outline the codes (code notes), directions for analysis of other interviews (operational notes) and memos about categories and their potential properties and dimensions (theoretical notes).

The next stage of analysis was axial coding, in which the concepts made through open coding were reassembled into categories and the categories were analysed to determine if there were any relationships (Strauss & Corbin, 1998). This stage is termed axial because the coding focused on the axis of the categories (Strauss & Corbin, 1998). The first stage of the process was to create a visual organization of the codes to confirm categories established during open coding and determine new ones. In this first stage the codes and their attributes from the text were recorded on cue cards to help visually determine categories and subcategories, as well as determine how they related to each other. The second stage of axial coding was giving the categories and subcategories formal names, as well as describing them through: identifying the conditions in which they appeared; identifying the actions, interactions and consequences associated with them; and, finalizing their properties and dimensions. These major categories were then analysed to see how they relate to each other and the subcategories to examine if they contributed to a process.

The final stage of coding was selective coding, in which the data was refined to explain what is happening and determine the “grounded theory” (Strauss & Corbin, 1998). This process began by refining and integrating the categories to ensure they were named properly, and the codes and subcategories were properly organized. This aided in the next stage, which was to determine the central category that would best described what was happening in the data, as well as any variation (Strauss & Corbin, 1998). The third stage was to compose a storyline, which was comprised of descriptive sentences identifying the main issues and ideas of what comes through, was written to help establish what is happening in the data (Strauss & Corbin, 1998). In the final stage, the storyline was then compared to the raw data and diagrams to ensure that it describes most of the cases, and any variation was noted. This was also an opportunity to fill in any underdeveloped categories. These stages of coding have been described as discrete steps, but some steps occurred simultaneously as coding is an iterative process (Charmaz, 2014).

3.6 Survey Limitations

There were significant limitations associated with the first phase of data collection involving self-administered, web-based survey, which should be outlined prior to analysing and discussing the results. Research shows that survey response rates are declining over time due to their frequent use in research and increased concerns around privacy issues (Yu et al., 2017). This study attempted to boost the response rate through the use of an incentivization strategy, which did not work as intended. As discussed in the Methodology Chapter, survey participants were offered an opportunity to submit their email to be entered into a draw to win one of four \$25 gift cards to encourage participation and prevent a low response rate. Unfortunately, the incentivization strategy did not work and the survey had only 43 responses, which meant no statistically significant relationships were found and no conclusive statements could be made about the survey results. This was not the representative sample desired from this study.

This may also be due to human error. Survey flyers were hand delivered to residences within the study neighbourhoods and residences may have been missed due to inclement weather (there was a blizzard during the survey distribution), and the extensive area that had to be covered. The flyers were placed in mailboxes where accessible or tucked in door handles and storm doors. If residents did not check their mailboxes or use their front doors, they could have missed the flyers and been unaware of the study. The study did not have ethics approval to access apartment buildings and flyers were posted in front entrances to recruit potential survey participants. This could have resulted in those living in the apartment buildings being unaware of the opportunity to be involved in the study

The Pandemic could have also affected the survey response rate as potential survey participants were also dealing with stress and pressure as they began working from home during the lockdown period. Those who received the recruitment materials may have had other priorities associated with working from home or caring for family members and completing a survey may not have been top of

mind. Survey data collection was also limited by ethical considerations, which meant the study could only sample participants from the study neighbourhoods and could not specifically recruit residents who participated in the PB Pilot Project. Research fatigue could have also impacted survey participation and response rate. The Pilot Project implemented by the City of Kitchener was a process with multiple stages of engagement, which is different from the conventional participation with which residents would be familiar. There is potential that residents were fatigued by the end of the Pilot and chose not to participate in this study. The survey data was also limited as it measured what residents said they would do, which may not reflect their real actions, and not all the park improvements were completed when the survey was conducted.

These limitations have implications for the representativeness of the data and its strength in analysis. The samples collected were younger than the 2016 census tract data and are not representative of the communities in the study. A low response rate meant that no statistically significant relationships were found, and the analysis relied on frequencies. This means no conclusive statements can be made about the surveys and the results only point to the potential of PB to have positive influences on park access and citizen engagement. Despite these limitations and their implications, this study continued with analysis and discussion of the survey results as it was an opportunity for the student researcher to learn and developed skills in quantitative data analysis, as well as to try and address the research objectives of this study. The study limitations section of the Discussion Chapter suggests ways in which these limitations could be addressed in future research.

3.7 Measures of Rigour

Qualitative research collects context dependent data to understand social reality, and the process of analysing this data has been characterised as creative (Baxter & Eyles, 1997). These characteristics make it important for researchers to critically evaluate their process and show that their

study was rigorous so that the academic community will accept the findings. The four measures of rigour used to evaluate this study are: credibility; transferability; dependability; and, confirmability

3.7.1 Credibility

Credibility is the most important measure of rigour for qualitative research, and is defined as the degree to which a interpretation of an experience can be recognized by those who have had the experience and those who have not (Baxter & Eyles, 1997). This measure seeks to ensure that researchers' interpretations of participants' social reality can be understood by the study participants and the academic community (Baxter & Eyles, 1997). Sampling, interview practices, triangulation and analytical techniques are all aspects of the qualitative research process that can be examined to determine credibility. Purposeful sampling is frequently used by qualitative researchers as it allows respondents to speak freely, and credibility is not affected by a low response rate because recruitment in qualitative research continues until there is saturation (Baxter & Eyles, 1997). This study used purposeful and snowball sampling to recruit key informants. Power relations, ethnocentricity and interview biases can influence how study participants interact with investigators and the credibility of a study, which makes it important to be aware of these when conducting research (Baxter & Eyles, 1997). There is potential for the introduction of interview bias, but care was taken to ensure that participants were comfortable and understood their rights as a participant to prevent negative impacts due to power relations. Researchers can use source, method and investigator triangulation to corroborate their findings and establish a study's credibility (Baxter & Eyles, 1997). Both source and method triangulation were used in this study. Source triangulation uses quotations or findings from more than one source or interview, while method triangulation corroborates findings by using multiple methods. Analytical techniques, like member checking and peer debriefing can also be used by researchers to establish credibility (Baxter & Eyles, 1997). Interview participants were provided transcripts of their interviews as a form of member checking to confirm that their answers were captured accurately.

3.7.2 Transferability

Qualitative research and the constructs developed are often dependent upon the context and timing of the study, as well as the people involved (Baxter & Eyles, 1997). Researchers may focus on describing meanings and constructs in one context, but these findings could also apply to a larger group (Baxter & Eyles, 1997). The measure of transferability requires researchers to fully describe the study groups being examined, the analysis process and how the constructs were developed (Baxter & Eyles, 1997). Using multiple study sites can also be used to demonstrate transferability (Baxter & Eyles, 1997). In this study, the use of two study sites and clear descriptions of the analysis process are used to ensure the study is transferable. The two neighbourhood parks used in the City of Kitchener PB Pilot Project were used as two study sites to compare findings from the different communities. As noted in the introduction chapter, timing was an important part of this study as it allowed for residents' perceptions to be examined shortly after the PB Pilot Project and improvements were implemented. This will aid in the transferability of the study as it took place before neighbourhood change occurred. The maps and demographic table included in this chapter describe the characteristics of the neighbourhoods compared to the City of Kitchener and the Province of Ontario, as well as visually showing the urban context of the study sites. This chapter also included step-by-step descriptions of how the data was collected and analysed so this study could be transferred to other contexts. The appendices include the survey and interview scripts to help describe how data was collected.

3.7.3 Dependability

This measure of rigour seeks to established if the findings are consistent across space and time, as well the degree to which instability and change can be handled (Baxter & Eyles, 1997). In qualitative research, change can be inevitable and researchers focus on how change may be introduced by the research-design or the researchers themselves (Baxter & Eyles, 1997). In order to do this, researchers will examine how surveys, interviews and other qualitative methods are implemented to determine if

there is consistency in the raw data and the interpretations (Baxter & Eyles, 1997). Dependability in studies can be threatened by constructs that are poorly defined and can have multiple interpretations, as well as ending the data collection too soon (Baxter & Eyles, 1997).

There are five strategies for ensuring studies have dependability: low-inference descriptors; mechanically recorded data; multiple researchers; participant researchers; and peer examination. In this study, low-inference descriptors and mechanically recorded data are used to ensure dependability. Low-inference descriptors include field notes, audio recordings of interviews and narratives (Baxter & Eyles, 1997). The interviews were recording using a voice recorded and hand notes were taken by the student researcher during the interviews. These notes included points of interest that may help with analysis, ideas for questions and potential themes or codes emerging during the interviews. The interviews were mechanically recorded in transcripts and the grounded theory process of analysis was hand and digitally recorded. The survey data is stored in Qualtrics and SPSS files, and the statistical and content analysis were mechanically recorded.

3.7.4 Confirmability

This final measure of rigour focuses on the accountability of the investigator and their interpretations, as well as the principles of objectivity in research so that the findings are determined by the participants and not the biases, motivations or perspectives of the investigator (Baxter & Eyles, 1997). Researchers must account for their biases and how they might affect their interpretations of the data. To demonstrate accountability, qualitative researchers provide an audit trail that demonstrates how the raw data became the synthesized constructs, and this can be done by providing process notes and analysis materials (Baxter & Eyles, 1997). These materials will also help to establish credibility, transferability, and dependability. In this study, the analysis materials were mechanically recorded so that they could be evaluated for biases and misinterpretations, and interview participants were provided a copy of their transcript to confirm that their answers were captured accurately.

3.8 Dissemination of Results and Findings

3.8.1 Appreciation Letters

Key informants received an email of appreciation for their participation in this study. The email outlines how their contribution helped to ensure better understanding of how the PB process was implemented and the benefits the process, as well as contributing to knowledge of emerging methods in urban planning for the academic planning community. As public servants, they cannot accept incentives or reimbursement for their contribution. A note of appreciation was included at the end of the survey thanking participants for their time and input. The note outlined that their feedback was valuable and contributed to a better understanding of this participation process to the planning community. Survey participants could also enter themselves in a lottery for one of four Tim Horton's Gift Cards.

3.8.2 Sharing Results and Findings

Interview participants could indicate in their consent form if they would like to know the results of the study, and findings were emailed to them following completion and submission of the research. It was also noted in the email of appreciation that they could reach out to the student researcher should they be interested in the findings. Key informants often noted in their interview that they would like to know the findings of the study. Survey participants could indicate at the end of the survey if they would like to know the results by providing their emails and results were sent to them upon completion of the study. Participants were informed that their emails would not be connected with their answers.

3.9 Chapter Summary

The purpose of this research was to determine if involvement in the PB Process can positively influence an individual's perceived access to, and use of, their neighbourhood park, as well as the citizen engagement process. A mixed methods approach, using a quantitative web-based surveys and qualitative key informant interviews, was chosen to address the research purpose and objectives. My

theoretical position was constructivist and interpretivist, which states that social phenomena are influenced by social actors and it is important to understand the subjective meanings held by these social actors. An Explanatory and Deductive Approach was used for survey development, while an inductive approach was used to develop the key informant interviews. The City of Kitchener PB Pilot Project was used for a cross-sectional study neighbourhoods were those used in the Pilot Project.

The first stage of data collection was a self-administered, web-based survey distributed in the study neighbourhoods used in the PB Pilot Project. These surveys gathered data on the following: residents' perceptions of park access and their park use prior to and after the PB Pilot Project; their perceptions of the PB process; and, how their civic involvement might change after the PB Pilot Project. The survey flyers were distributed in two rounds of recruitment. The survey data was analysed using SPSS to conduct univariate and bivariate analysis. Key informant interviews, the second stage of data collection, were conducted to examine the impact of the PB process in the City of Kitchener from the perspective of those who implemented the Pilot Project. The interviews examined: why PB and the neighbourhood parks were chosen to be tested; how the Pilot Project was implemented; the level of participation from the community; and, the outcomes and future use of the neighbourhood parks. Participants were recruited from City Staff who implemented the Pilot Project through purposive and snowball sampling. Interviews were conducted in person, as well as over the phone and were recorded using a digital voice recorder. The interviews were analysed using grounded theory coding to develop theory through an iterative process. This chapter outlined the theoretical setting of this research, the study location, and how data was collected and analysed to provide context for the remaining chapters. The following chapter will discuss the results of the data.

Chapter 4: Results

This chapter presents the survey and key informant interview analysis, beginning with a description of the two phases of data collection and the demographics of participants. This chapter is organized in three sections, beginning with an outline of the PB Process in the City of Kitchener. This is followed by the quantitative and qualitative results as they pertain to the citizen engagement related outcomes and the park related outcomes. Quotes from the key informants, as well as charts and graphs are used to illustrate the themes and issues raised in the analysis.

4.1 Sample and Participants

4.1.1 Survey Sample

The self-administered, web-based surveys were used to establish participants: barriers and park use prior to and after the PB Pilot Project; their involvement in the PB process; their perceptions of this process for community engagement; and, the potential for increased civic engagement. Approximately 1900 survey flyers were distributed in the two study areas, and there were nine respondents who indicated they were from study Park A and 17 respondents indicated that they were from study Park B. Most survey participants from Park A were in the age categories 25 to 34 and 35 to 44, as seen in Table 3 below. These results were similar to Park B, where most survey participants were in the 25 to 34 age category. The survey was intended to gather a representative sample of the populations in the study areas, identified in section 3.3.2 of the Methods Chapter. The samples from the two study areas were younger than the population based on 2016 census tract data and are not representative of the communities. Academic literature reviewed in the second chapter of this thesis, identified that older individuals with higher income and educational attainment are more likely to participate in civic engagement and research opportunities, but these samples show that there was greater participation among younger residents.

Table 3 Age distribution of survey respondents compared to 2016 census data. (CHASS Data Center, 2017).

Age Category	Park A Sample	Park A 2016 Census	Park B Sample	Park B 2016 Census	Kitchener 2016 Census
Total	8 100%	4745 100%	22 100%	9080 100%	188080 100%
18-24	0 0%	815 17.2%	0 0%	1315 14.5%	29490 15.7%
25-34	3 37.5 %	865 18.2%	4 18.2%	1380 15.2%	36530 19.4%
35-44	3 37.5%	710 15%	6 27.3%	1610 17.7%	31940 17%
45-54	1 12.5%	780 16.4%	1 4.5%	1720 19%	33205 17.6%
55-64	0 0%	835 17.6%	0 0%	1565 17.2%	28790 15.3%
65-74	1 12.5%	560 11.8%	2 9%	890 9.8%	18240 9.7%
75-84	0 0%	180 3.8%	9 41%	600 6.6%	9885 5.3%

Participants were also asked how long they had lived in their current homes in order to determine if respondents were relatively new to the neighbourhoods or had lived there for a longer time and would have seen neighbourhood change occur. Table 4 shows the distribution of time of residency with most participants (61 per cent) having lived in their home for ten or less years. The one to four years category was the most frequently selected by those who answered the question at both study parks, and this category represented 47 per cent of the distribution. These results indicate that many of the participants would have lived in their current home when the PB Pilot Project took place,

and those who had lived in their home for a greater amount of time would have seen neighbourhood change and the needs of the community change.

Table 4 Distribution of time of residency in study areas.

Years in current home	Park A Sample		Park B Sample	
	# n=8	% of Total	# n=13	% of Total
1-4	5	62.5	4	30.8
5-9	1	12.5	4	30.8
10-14	0	0	3	23.1
15-19	1	12.5	0	0
20+	1	12.5	2	15.4

Participants were also asked to identify which study park was their neighbourhood park to compare survey participation between the two, as well as compare the outcomes at the study parks. This allowed for comparison between of the outcomes of the PB process, in terms of park access, park use, citizen engagement, and the urban context of the study parks. There were nine participants (35 per cent) that indicated they were from the Park A study area and 17 participants (65 per cent) from the Park B study area. These results represent answers from 26 survey participants that indicated from which study area they were.

4.1.2 Key Informants

Key informant interviews were conducted with six members of City of Kitchener Staff, from the Parks and Cemeteries, Financial Planning, Neighbourhood Development, and Corporate Communications departments who were involved with the implementation of the PB Pilot Project for parks improvements and with varying levels of authority over department management. Interviews were halted in mid-March due to the COVID-19 Pandemic and government restrictions on gatherings and the introduction of social distancing requirements. The purpose of these interviews was to understand the justification for the use of PB and its potential for empowering residents and encouraging civic engagement, as well as addressing poor perceptions of park access and increasing park use from the perspective of those who implemented the Pilot.

4.2 The PB Process in the City of Kitchener

4.2.1 Cycle for Changing Citizen Engagement

The key informant interviews identified that the City of Kitchener has been in the process of reviewing and improving the ways in which they conduct citizen engagement, and piloting the PB Process presented an opportunity to test a new process for citizen engagement that gave residents more influence on decision-making. As key informant three noted:

We had been through the Love My Hood Program and increasingly looking at how to empower communities, and PB was the next evolution in looking at what that empowerment might look like.

This process of change was characterized as a journey, which the interviews revealed occurs as a cycle, and PB represented one time through this cycle and could contribute to future initiatives in the City to improve engagement opportunities. The central code of the interview analysis and the name of the cycle, seen below in Figure 4, is Changing Citizen Engagement (CCE), which refers to how the City was changing its overall approach to engaging citizens and how this engagement so it positively influences

perceptions of access and use of public parks to ensure all residents can benefit from these public services.

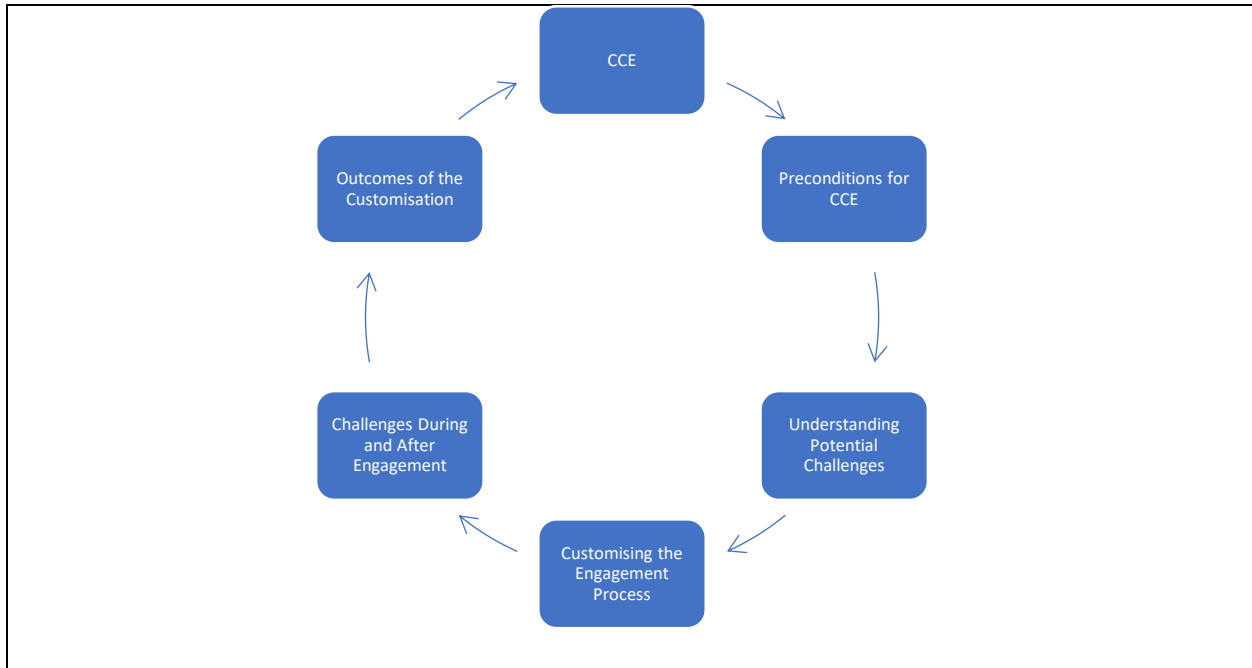


Figure 4 Cycle of Changing Citizen Engagement (CCE).

The cycle of CCE begins with having a set of preconditions in place and understanding the potential challenges that could arise when experimenting with a new tool or method for engagement. Once these are established, the engagement process can be customised in terms of the process, outreach, and the power in decision-making. These customisations are based on the new tool or method being used and the community being served. After the customisations and the new process is in place, there are new challenges that are encountered or challenges that were previously identified but could not be entirely mitigated with the customisations. These customisations also result in outcomes that demonstrate the effectiveness of the tool or method. These outcomes include those that benefit: the individuals involved; the community and the corporation; empowerment of residents; and, park related outcomes.

4.2.2 Stages of the Cycle

The stages of the cycle represented the five categories developed in the interview analysis and Table 5, seen below, outlines these categories and the subcategories within them. The first stage in the cycle is having the right preconditions in place to support a change initiative for citizen engagement. There must be some form of traditional engagement in place to change and improve upon, as well as community interest in participating in the process of experimenting with a new tool or method. Corporate setup refers to having a corporate policy and framework in place that supports changing citizen engagement, and it is also important to have political will from Council and Staff that would allow for financing the initiative and implementation. Key informant one noted that “a lot of it had to do with political will, there were champions on council that were very interested”. It is also important to have the right kind of project for which to use the new tool or method that would encourage the public to participate. Participants characterised park space as: tangible; relatable; people feel that they have a stake and the ability to make decisions about them; people are passionate about parks; they are low risk; and, the study parks had ageing infrastructure. These characterisations meant that park space was appropriate for experimenting with the PB Process, as key informant five noted that “residents could see the immediate impact of their choices in the form of park amenities”.

Table 5 Categories and Subcategories of the CCE Cycle.

Preconditions for CCE	Understanding Potential Challenges	Customising the Engagement Process	Challenges During and After Engagement	Outcomes of the Customisations
<ul style="list-style-type: none"> - Political Will - Corporate Setup - Financing - Community Interest - Experimenting - Traditional Engagement - The right Project: Characterising Park Space 	<ul style="list-style-type: none"> - Various Perspectives - Barriers within the Community - Differences in Urban Context - Constraints 	<ul style="list-style-type: none"> - Customisation for the Process - Customisation for Outreach - Customisation for Power in Decision-making 	<ul style="list-style-type: none"> - Constraints - Process Related Challenges - Individual and Community Barriers 	<ul style="list-style-type: none"> - Individual Benefits - Community and Corporate Benefits - Park Related Outcomes - Empowerment

The next stage in the cycle is understanding the potential challenges that could arise so they might be mitigated. These challenges range from the individual level to the community level, as well as tangible and intangible challenges. It was important to consider that there were various perspectives involved from the communities and the corporation, as well as different levels of expert knowledge as the community was “experts in community uses of spaces” and the City Staff was “experts in park planning”. There were also barriers in the community to be considered as they could have discouraged residents from participating, including: community barriers, cultural barriers, past experiences, and government distrust. The City was also interested in investigating how differences in urban context influenced the amenities voted upon by residents, so they chose a park in a suburban neighbourhood and one in an urban neighbourhood, but this could also introduce challenges as the demographics in these neighbourhoods were different. There were also time and financial constraints to consider, which is why parks were chosen because a parks project is

slightly smaller in scale and delivered over a shorter timeline, so it is much easier for [City Staff] to engage with the community and work through all the phases of engagement, design, and implementation.

Once the preconditions are in place and the potential challenges considered, the engagement process could be customised based on the method being experimented with and to address the potential challenges. PB allowed for the process of engagement, outreach, and power of decision-making to be customised. The customisations for process provided residents more options and freer discussion for the potential improvements for the park space, as well as introducing academic rigour to public engagement by working with the University of Waterloo. Customising outreach allowed the City to connect with more people to encourage involvement, as well as address some of the barriers and government distrust that might have discouraged involvement. These customisations included: using community gatekeepers to spread information about the Pilot Project; varying communication tactics; responding to community needs; and, providing opportunities for online participation. The power of

decision-making was entrusted to residents so they had the right to decide how their neighbourhood parks should be improved by working in partnership with City Staff. The PB Pilot Project gave residents greater autonomy and influence over decision-making.

The challenges encountered when engaging the public were due to: constraints on the process; the process itself; and, individual and community-based challenges. Some of these overlap with the potential challenges to understand before the customisations were put into place. The challenges related to the process included that it was long and complex, as well as being more resource intensive than expected due to the “high standard of care” taken in this project. The PB Process was longer and key informant three noted it was difficult “to keep the community engaged through the process”. There was a mixed response to the resource intensive nature of this participation method. Differences in the community and corporate perspective, as well as the different expert knowledges led to misunderstanding of communications. City Staff had displayed pictures that they understood as examples of what certain amenities could look like, but the community perspective interpreted these pictures as what the improvements in their parks would look like. This led to another process related challenge associated with closing the loop fully, which was noted as a “weakness in the way we [City Staff] implemented the bundles”. These miscommunications were noted by survey participants in the open-ended questions, and they led to some disappointment in the final design of park amenities as one participant said “the natural play area was not what had been expected”. There were also issues with efficiency and streamlining of the process as there were different corporate departments involved in implementing the Pilot Project. The individual and community barriers previously identified persisted during engagement, as it was noted that the Pilot Project “touched on some deep and local divides”.

The last stage of the cycle is the outcomes, which are the benefits and learning opportunities that came from customisation and experimenting with a new tool for engagement. These benefits range from those that are tangible and intangible, and whom they benefit. Individuals who participated

in the Pilot had the opportunity to build their political skills, shape their environment and have a positive experience engaging with the City. There was also the potential for individuals to have been empowered through this engagement process, and outcomes that benefit both the communities and City, some of these include: an expanded audience; relationship building; community building; thinking of the common good; reducing barriers; increasing involvement; and, giving voice. Some of the park related outcomes of the Pilot Project were increased park use, improved perceived accessibility, exposing different expectations, and giving residents ownership over the park and the process for planning their public space. The interview analysis identified that there were dimensional aspects to these benefits, and not all those involved may feel that they benefited or were empowered. Individual's choice in the final vote and the different experiences at each of the study parks could influence how empowered and benefited they felt. Interview participants noted that because the residents are not accountable for the park spaces and did not have full autonomy in the process, they may not have felt empowered. The following sections of this chapter will expand on how these outcomes answer the research questions and address the overall research purpose.

4.3 Citizen Engagement Related Outcomes

4.3.1 Increased Engagement and Expanded Audience

This study sought to assess the PB process in terms of its impacts on the citizen engagement. The increased outreach efforts helped the City to connect with a greater number of people in the communities, as well as use links within the communities to overcome some of the barriers and mistrust that may have discouraged participation. Key informants felt that these efforts led to an expanded audience, in terms of numbers and demographics, that was engaged in the process. Key informant two said that “generally, there was a sense there was a stronger turnout in participation than we would experience in a conventional engagement”. This view was shared by key informant six, who thought “there was an overall sense that more people got involved because we did that deeper level of

engagement”. The increased efforts also helped to expand the audience in terms of moving beyond the typical people who attend civic participation opportunities, and key informant six said they:

saw different types of folks come out, who in the past may not have come out to things. It tends to be for City things the same sort of folks, which is fine, but there are huge swaths of the population that [the City is] not reaching.

One of the aspects of the increased outreach was to use varying communication tactics to share information on the Pilot Project and to encourage participation. Key informant one said that:

one of the key outcomes was recognizing that our tactics when we engage the community need to take into account how the community wants to participate, how do we communicate with them and how do they want to be involved in decision-making.

Making these customisations was identified by key informant one as a “key learning opportunity of this Pilot Project”. Through the provision of “one-on-one customisable knock on your door” opportunities, “door hangers for communication for notifying people of upcoming PICS” and opportunities for online participation through the Engaged Kitchener platform, City Staff were able to account for how the community wants to be involved. Key informant six noted that these outreach methods were “very time intensive and not something we typically do. From what I understand, it was critical to the success”.

One of the most important communication tactics, which was also a customisation to the outreach process, was to use community gatekeepers to connect with residents. This included the community partners, leaders and liaison officers, as well as the community facilities used to host public meetings, as academic literature notes that these are spaces in which people feel comfortable. These gatekeepers were important assets as they were “aware of how the community focuses and who the main players are and how to work with the community to gain the best collaboration and best engagement”. City Staff worked with the community gatekeepers to “get the information out” by providing them with informational material that they could use to raise awareness about the Pilot Project and PB, which helped to give it:

more legitimacy in the eyes of potential participants to hear somebody who they already respected say that this was an important process and that they were encouraged to participate in it.

Key informant two noted that the community gatekeepers were particularly important for sharing information in the Park A community “because of language barriers and lower levels of engagement and trust in government”. The use of community gatekeepers and community centers helped to ensure residents “[understand] what the process was about and [the gatekeepers] were able to encourage their residents to come out and be part of the process”. These increased efforts and the expanded audience helped in relationship building in the communities between the City, the communities, and the community gatekeepers.

Survey participants were asked how often they were involved in community engagement activities prior to the PB Pilot Project. Table 6, seen below, shows the frequency of each category of participation by study park. “Sometimes” was the most frequently selected category of participation overall at 29 per cent. The table shows that there was greater variation in answers from the Park B sample, which was 16 participants, and they were more involved in the past than the Park A sample. At Park A, the most frequent answer by the sample was “never” at 38 per cent. Participants were asked why they chose to participate in the PB process, and proximity and advocacy were identified as connections to the park that encouraged participation. Three participants said that the park’s proximity to their house and the park being part of their neighbourhood were their reasons behind participating. There were two participants that said they “wanted to help advocate for a satisfactory change to the park” and “make it as useful and engaging as possible”. The survey also asked why participants chose not to be involved if they said that they did not participate. Some participants indicated that they had no connection to the park as they had recently moved to the neighbourhood or they did not feel that the park was part of their neighbourhood, which reflects the local divides noted by the key informants.

Participants being unaware of the opportunity or having time constraints, which was a challenge that City also had to consider, were also noted as barriers to participation.

Table 6 Participation in civic engagement activities prior to the PB Pilot Project by category and study park.

Participation	Total		Park A		Park B	
	# n=24	%	# n=8	%	# n=16	%
Always	4	16.7	0	0	4	25
Most of the time	5	20.8	2	25	3	18.7
About half of the time	2	8.3	1	12.5	1	6.3
Sometimes	6	25	2	25	4	25
Never	7	29.2	3	37.5	4	25

These increased efforts were noted as being resource intensive, which was a contributing factor to PB losing the political will required for its continued use. Key informant four noted that the PB process “took a lot longer than our traditional process”, and key informant six similarly said “that [the] deeper level of door-to-door took a lot of time and money when you think of staff time and money”. There were mixed views among the key informants on whether the extra resources and expenses were worthwhile. Key informant four said they were not “entirely convinced it was worth all the money and effort that went into it” because the money spent could have been used to make improvements to more than two parks. In comparison, key informant six argued that this was an opportunity to invest in “pockets of the population that don’t feel engaged and don’t trust the government”. Key informant six also argued that the increased efforts and customisations to reach out to residents were “critical to the success” of the PB Pilot Project and that these efforts were worthwhile.

4.4.2 Potential for Empowerment

Key informant four said that “people involved would have absolutely felt empowered by the process”, and key informant one thought that “it definitely empowered residents and went a long way in giving the people the right to decide for themselves what installations went into their park”. Residents “got to vote for and pick exactly the elements that would go into their park” rather than the “City telling [residents] what is going in [their] neighbourhood park”, and key informant four thought that this should help those involved feel empowered. The residents involved would have seen how their input had a direct impact on their environment and see their community’s vision implemented, which should contribute to feelings of empowerment.

The PB process allowed City Staff to customise the power of decision-making, these customisations included: giving residents the right to decide what happens in their community spaces; autonomy and influence over decision-making; working in partnership with the City; and, the City entrusted residents with decision-making for their park spaces. Residents had the “right to decide for themselves what installations went into their park”, as they are the experts in community park use, while working in partnership with the City and Landscape Architects who are experts in park planning and design. Key informant six noted that “PB is about entrusting” and this process entrusted residents with the right to decide what amenities and improvements were needed in their public space. PB was chosen because the City was interested in examining the outcomes of giving “more autonomy to communities to provide direction and feedback and input into particular projects”. The PB process gave residents influence over the process of decision-making as they voted for and chose the park improvements, but they also had autonomy as they developed the ideas and amenities that they felt were needed in their public space, which were bundled and designed in partnership with the City. Key informant two noted that not all participant got what they wanted in terms of the new park amenities and some participants were vocal about this, but thought “there is a silent majority, that perhaps in

both cases, were very pleased that they could exert that much influence over the process". This greater influence and autonomy over the decision-making process provided for by PB "gave [residents] even more level of empowerment over the process and choosing specific elements that they were going to see and use". Key informant five went on to say that:

being involved from beginning to end, even though it is intensive and onerous to attend all those engagement sessions, it's great because they are able to speak about what they really want and they are the end users of that space, so it should be designed and built around the people who are going to be using it on a day to day basis.

The key informants discussed aspects of the Pilot Project that may impact its ability to empower and benefit all involved. Key informant three did not think that residents would truly be empowered through this process because they are not accountable for the implementation of the improvements and the long-term maintenance and monitoring of the parks. They said that:

If we had genuinely done participatory budgets, and sat down at the outset to have the conversation about timeline, scope and budget and we were all on the same page, and we had handed over the keys of the kingdom saying here is 250 000 dollars or 300 000 dollars, whatever it takes to build that park, and you as a community are genuinely going to build this park and we will do the bundling in a transparent fashion with you and every dime that is spent, you will have control over. I think at that point we would really empower a community.

This relationship was characterized as "empowerment only becomes truly empowering when the accountability is also there". The key informant then discussed that in some cases it is "not possible to expect the community to have the accountability the municipality does" because of neighbourhood change, and because the City is "always there", so it makes sense for them to be accountable for these spaces which have "successive cycles of that twenty year timeline".

Municipal attempts to enhance citizen empowerment could also be influenced by an individual's experiences in the Pilot and the challenges encountered when implementing the chosen park improvements. Key informant four noted that there was the potential for a resident to "feel disenfranchised by that or not empowered if their choice didn't get picked", but it was further noted that it is "not the City's fault that [they] felt strongly about an option that [their] neighbours didn't think

was the best option". When work to implement the new amenities and improvements began at Park B, key informant three noted that residents:

realised that what was in their mind from what they had picked in the green bundle to what was actually being delivered on the ground, I think people perceived something different from what they had actually picked.

This issue was characterised as "not closing the loop as firmly as we perhaps should have done" with regards to the final park design and this could influence if, and how much, residents felt empowered. It was suggested that due to the complexities at Park A they were "probably by default doing a better job of closing the loop in design" and these residents might have felt more empowered, but the opposite could also be true.

4.4.3 Residents' Perceptions of the PB Process

Survey participants were asked if they thought this form of participation was effective for community engagement and if they enjoyed participating in this decision-making process, to explore residents' perceptions of the PB process. Table 7, seen below, shows the results for effectiveness and enjoyment for each study park. The most frequently selected category of effectiveness for both study parks was "moderately effective" at 38 per cent, followed by "very effective" at 29 per cent. When comparing the two study parks, the sample from Park A selected "moderately effective" and "not at all effective" the most, and "moderately effective" was the most selected by participants in the Park B sample.

The majority of the 23 participants who provided answers on enjoyment of the PB process indicated that they "might or might not" have enjoyed it, but 52 per cent indicated that they enjoyed the PB process. At Park A, 50 per cent of the eight participants said that they "definitely yes" enjoyed it, while 47 per cent of the 15 participants at Park B said that "might or might not" have enjoyed the process. At the end of the survey, participants were asked if there was anything else that they would

like to say about their park or the PB process and three participants gave comments about the effectiveness of this participation process. They said that they enjoyed the process as it engaged residents in a productive and transparent way to get community feedback. The chi-square method was used to compare involvement in the PB Pilot Project and enjoyment of the process, as well as if they thought it was an effective method for community engagement. In both cases, the relationship was not statistically significant as the p value was greater than 0.05.

Table 7 Effectiveness and enjoyment of the PB Process by category and study park.

Effectiveness of PB	Total		Park A		Park B	
	#	%	#	%	#	%
Extremely Effective	1	4.2	1	12.5	0	0
Very Effective	7	29.3	2	25	5	31.3
Moderately Effective	9	37.5	2	25	7	43.8
Slightly Effective	2	8.3	1	12.5	1	6.3
Not at all effective	5	20.8	2	25	3	18.8
Total	24	100	8	100	16	100
Enjoyment of PB	Total		Park A		Park B	
	#	%	#	%	#	%
Definitely Yes	6	26.1	4	50	2	13.3
Probably Yes	6	26.1	1	12.5	5	33.3
Might or Might Not	9	39.1	2	25	7	46.7
Probably Not	2	8.7	1	12.5	1	6.7
Definitely Not	0	0	0	0	0	0
Total	23	100	8	100	15	100

4.4.4 Encouraging Future Civic Engagement

Key informant four thought that:

[PB] could spur on interest in that space, especially if [residents] see that the vote is what was implemented, that there is a benefit in getting involved in processes like this and other work that the City does.

They went on to say that this would contribute to “interest in participating in things, especially at the City level”. This process could have also helped to improve perceptions of access to the City itself, which would have encouraged participants to become more civically involved in the future. Key informant three said that they were:

hoping that the perceived access to the City had improved and that successive reiteration of genuine engagement efforts with community will build an enhanced relationship with the community and their local governance in a much more positive way.

Key informants noted that the process helped to build relationships with the community and reduce barriers, government distrust and negative perceptions of the City that would have discourage participation in the past. The PB process allowed staff to make “some really good relationships with which to move forward” that “will be very positive for both sides”. Key informant three spoke specifically about a relationship between themselves and the representative of the one of the neighbourhood associations. The participant felt that this relationship:

is strong because now [the neighbourhood association representative] feels comfortable talking to me, comfortable holding me accountable for what the City should and shouldn't be doing and is also prepared to listen and together we could build great things in that community, due to the relationships built by PB.

They further noted that the relationships fostered through the PB Pilot Project are a:

real value and lesson learned from this, the connection of a capital enhancement being worked through a contact on the ground, utilizing the neighbourhood liaison to be a gatekeeper into the community.

Survey participants were asked how likely they were to participate in future community engagement activities, and Table 8, seen below, shows the frequency of answers. The most frequent category selected by the sample was “about the same” at 46 per cent, which was followed by “much more” at 29 per cent. “Much more” was the most selected by the sample from Park A, and “about the same” was the most selected by the participants from Park B. One survey participant noted that they would be interested in receiving information on proposed improvements to their neighbourhood, indicating increased interest in being involved in their community and change being generated by the PB process. A chi-square analysis was conducted comparing involvement in the PB Pilot Project and future community engagement, but the relationship was not statistically significant, as the p value was greater than 0.05 and there was no distinguishable relationship in the graphic representations.

Table 8 Civic participation after the PB Pilot Project by category and study park.

Future Participation	Total		Park A		Park B	
	# n=24	%	# n=8	%	# n=16	%
Much More	7	29.2	3	37.5	4	25
Moderately More	4	16.7	2	25	2	12.5
Slightly More	2	8.3	1	12.5	1	6.3
About the Same	11	45.8	2	25	9	56.2
Slightly Less	0	0	0	0	0	0
Moderately Less	0	0	0	0	0	0
Much Less	0	0	0	0	0	0

4.4 Park Access and Use Outcomes

4.4.1 Influencing Perceptions of Park Access

Key informants thought that individuals perceived access to the study parks would improve having been involved in the PB process. Key informant three said that “perceived access to parks and shaping peoples’ environment is something that has been enhanced through PB”. This participation method gave residents a chance to shape their environment and gave them voice in planning their public spaces. Key informant six noted that this result was “common sense”, because

if you involve someone in anything, they are going to feel better about it. No one wants to be excluded and feel that they don’t have a voice, giving that voice, of course it would benefit and improve those things.

The aspect of giving voice in the planning process also resulted in the park space reflecting individual needs and the needs of the community. This relationship between giving voice and improving perceptions of access was characterised by key informant six as,

when you involve people in something and they see themselves in it and they feel that they have had a say and they can go to the park and see their comments and idea there, I think it increases the sense of ownership and pride, buy in, and participation. Versus, dropping a shiny beautiful sculpture that no one asked for and no one wants, it is probably going to be vandalized and you probably aren’t going to have good solid community park space around that.

These are the perceptions of those who implemented the PB process, and the actions are seen in the survey results.

The survey asked participants to record their barriers to park use prior to the PB Pilot Project and if those barriers have been reduced to measure change in perceived accessibility. Barriers were used as a measure of perceived accessibility to reduce jargon in the survey that might have created confusion. Table 9, seen below, shows the number of times a barrier was selected by survey respondents. There were 30 survey participants that indicated their barriers to park use and a total of 43 barriers were selected. Geographic proximity had the highest frequency and 15 participants indicated that this barrier prevented them from using the park as often as they would have liked. Both

maintenance and the presences of dirt had smaller frequencies, but both of these factors were identified in the academic literature as having an influence on perceived access (Knapp et al., 2019). The most frequent barrier selected by participants from the Park A study area was geographic proximity, while other barriers not included in the survey was the most frequently selected by participants from the Park B study area. Participants from the Park B study area indicated twice as many barriers (67 per cent) to park use, compared to those from the Park A study area (33 per cent).

Table 9 Barriers to park use prior to the PB Pilot Project.

Barrier	Park A		Park B		Total	
	#	%	#	%	#	%
Geographic Proximity	7	58.3	5	20.8	12	33.3
Other Park Users	1	8.3	1	4.2	2	5.6
Ease of Physically Accessing the Park	0	0	2	8.3	2	5.6
Availability of Ramps and other Accessibility Features	0	0	0	0	0	0
Presences of Stairs	0	0	0	0	0	0
Presence of Dirt	1	8.3	2	8.3	3	8.3
Noise	0	0	0	0	0	0
Maintenance of the Park	0	0	2	8.3	2	5.6
Clear Walkways	0	0	3	12.5	3	8.3
Amenities Available	1	8.3	3	12.5	4	11.1
Other	2	16.7	6	25	8	22.2
Total	12	100	24	100	36	100

Survey Participants were asked if the barriers they had previously identified were reduced after the PB Pilot Project and the improvements implemented. Figure 5 and Table 10, seen below, show the frequency of the categories by study park area for the 21 participants who provided answers. The “might or might not” category had the highest frequency, representing 29 per cent of those who answered. The combined total of the yes answers was 38 per cent, while the combined total for no answers was 33 per cent. One survey participant said in the content analysis said that they felt more connected to the park outcomes. When comparing the two study parks, more participants from the Park B study area indicated that their barriers would be reduced, but this difference was small. Two participants said that they anticipated using and were looking forward to the improved accessibility. One participant said that they would use the improved park access, and another said they would use improved accessibility. It was unclear if this meant that they anticipated using the improved accessibility features or if there was improved access.

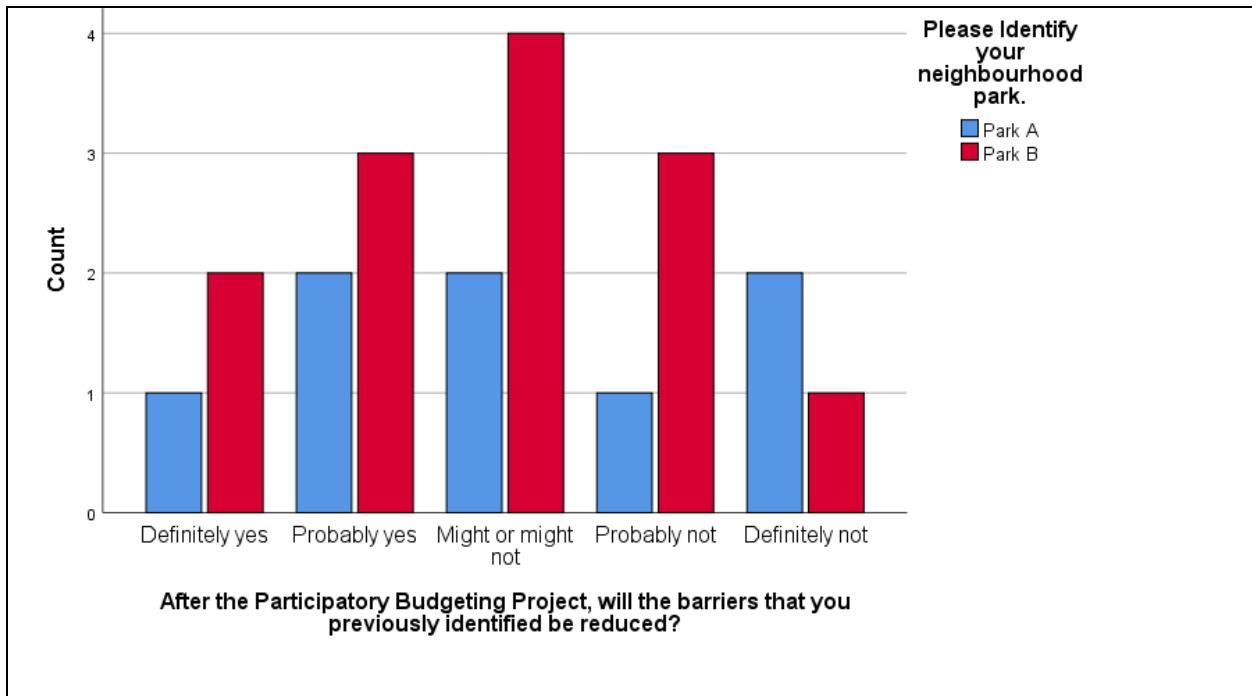


Figure 5 Reduction of barriers by category for Park A and B.

Table 10 Reduction of barriers by category and study park.

Barrier Reduction	Total		Park A		Park B	
	# n=21	%	# n=8	%	# n=13	%
Definitely Yes	3	14.3	1	12.5	2	15.4
Probably Yes	5	23.8	2	25	3	23
Might or Might Not	6	28.6	2	25	4	30.8
Probably Not	4	19	1	12.5	3	23
Definitely Not	3	14.3	2	25	1	7.7

There was no statistically significant relationship between involvement in the PB process and reduction of barriers based on the chi-square test, as the crosstabulation determined that $(\chi^2(4))=2.788$, $p=0.594$. Therefore, we accept the null hypothesis as the p value was greater the 0.05. But the bar chart in Figure 6 shows that the majority of those who participate in the PB Pilot Project indicated that their barriers would “definitely yes”, “probably yes” or “might” be reduced.

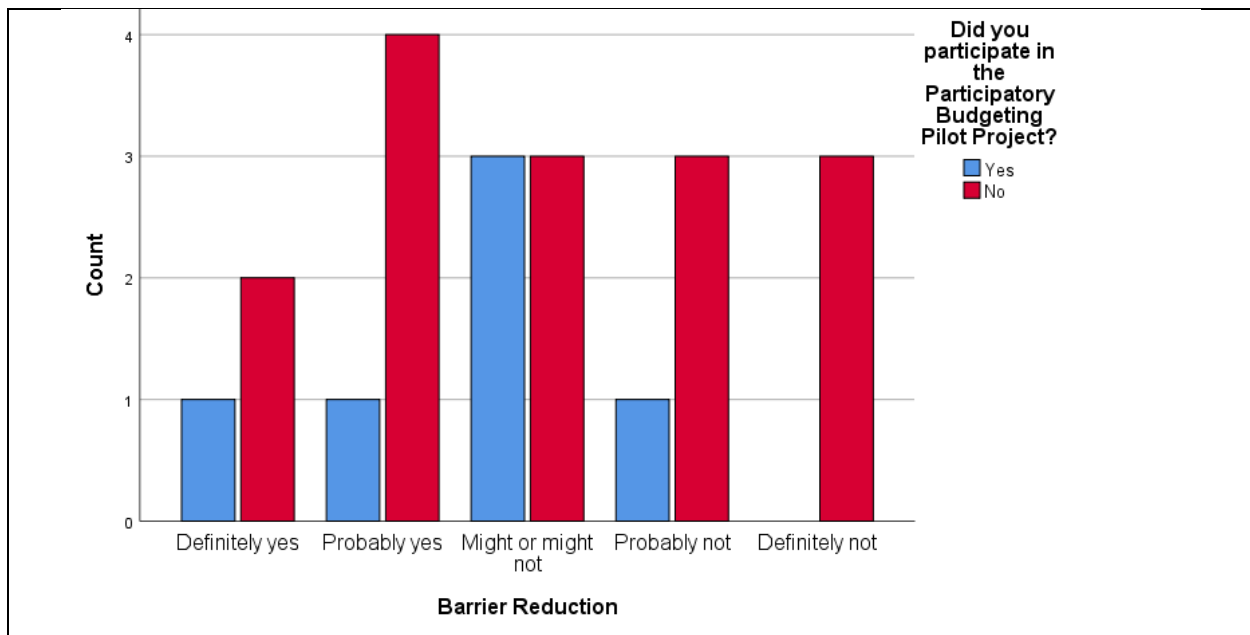


Figure 6 Crosstabulation between reduced barriers and involvement in the PB Pilot Project.

The key informants identified that this process “provides a better sense of ownership over the space and the elements/amenities chosen for the space”. Key informant five noted that “[PB] gets people really engaged and a sense of ownership over the process and their public land that they are users of”. This participation method gave the public ownership over the process of decision-making, as well as the park space as they had a direct say in the design and amenities that would improve the space. The residents were given a voice in shaping their environment to:

speak about what they really want as they are the end users of they space, so it should be designed and built around the people who are going to be using it on a day to day basis.

Key informant five noted that at Park B “The enhancements have made it a far more welcoming environment”, which is a result of residents having the voice to shape their environment.

4.4.2 Potential Changes in Park Use

The interview analysis revealed that those who implemented this participation method in the City of Kitchener thought that it could help to increase park use. Key informant three felt that park use would “instantaneously increase, they are going to be new, more welcoming spaces and regardless of how you get to that point, we see usage increase”. This increase in park use was thought to be particularly impactful in the “short term because people that voted for it are there and are using the park”. Key informants were unsure if this increase in usage would be sustained in the long-term as neighbourhood change occurs and the needs of the community change, as well as the unique nature of some of the amenities which “could be a drawing point to different types of people” or it could be viewed as “negative because someone just wanted a playground”. Key informant four was:

curious to see five or ten years from now, would people still have the same sort of positive outlook on the park, especially if there are elements in their park that aren’t seen in many other parks, which is the outcome of [PB] – they didn’t get the same sorts of things because they asked for something different.

These are perceptions of those who implemented the PB process, which are confirmed by the actions in the survey results.

Survey participants were asked how often they visited their neighbourhood park on a weekly and monthly basis prior to the PB Pilot Project to examine the influence of PB on park use. Table 11, seen below, demonstrates that 50 per cent of participants visited their neighbourhood park less than once a month. Weekly use of the study parks represented 30 per cent of the distribution. The table shows that of these 30 participants who provided answers, there was more frequent use of Park B than Park A prior to the PB Pilot Project.

Table 11 Park use prior to PB Pilot Project by category and study park.

Park Use	Total		Park A		Park B	
	# n=27	%	# n=8	%	# n=19	%
Less than once a month	13	48.1	6	75	7	36.8
Once a month	5	18.5	0	0	5	26.3
Twice a month	1	3.7	0	0	1	5.3
Once weekly	0	0	0	0	0	0
Twice weekly	3	11.1	2	25	1	5.3
Three times weekly	3	11.1	0	0	3	15.8
Daily	2	7.4	0	0	2	10.5

Participants were asked to indicate what activities they engaged in while using the park space and Table 12, seen below, demonstrates the frequencies of each activity. The most frequent park activities were family physical activity and recreation, and personal physical activity at both study parks. Visiting with friends and community events had the lowest frequencies of the activities. These results aligned with the content analysis of the open-ended question asking participants to specify what activities they engaged in while using the park. The analysis showed that active uses, which centered

around physical activity and use of amenities in the park, appeared 17 times in participants answers and passive uses, which were not focused on physical activity and may not have required use of the amenities, appeared eight times. Some of the active uses included: walking, dog walking, using the play equipment, use of the tennis courts, skating, sledding and nature walks and berry picking. The passive park uses included reading, socializing, and watching grandchildren play. An interesting response provided was that one participant indicated that they used the park for a birthday party.

Table 12 Park activities prior to PB Pilot Project by category and study park.

Park B	Total		Park A		Park B	
	#	%	#	%	#	%
Family Physical Activity and Recreation	10	22.7	4	40	6	17.7
Personal Physical Activity	9	21	2	20	7	20.6
Route to work, school, friends or community amenities	8	18	2	20	6	17.6
Dog Walking	6	13.6	2	20	4	11.8
Relaxation	5	11.4	0	0	5	14.7
Visiting with Friends	4	9	0	0	4	11.8
Other	2	4.5	0	0	2	5.8
Community Events or Activities	0	0	0	0	0	0
Total	44	100	10	100	34	100

Survey participants were asked if they felt they would use their neighbourhood park more after the improvements were made. Table 13, seen below, shows the frequency for the categories measuring anticipated change in park use for each study park. The most frequent category selected by the Park B sample was “about the same” at 39 per cent, and 54 per cent indicated that their park use would

increase. At Park A, 50 per cent of the participants indicated that they would use the park “moderately more”, and 63 per cent indicated that their park use would increase.

Table 13 Anticipate change in park use after the PB Pilot Project by category and study park.

Anticipate Change in Park Use	Total		Park A		Park B	
	# n=21	%	# n=8	%	# n=13	#
Much More	3	14.3	0	0	3	23.1
Moderately More	6	28.6	4	50	2	15.4
Slightly More	3	14.3	1	12.5	2	15.4
About the Same	7	33.3	2	25	5	38.5
Slightly Less	2	9.5	1	12.5	1	7.7
Moderately Less	0	0	0	0	0	0
Much Less	0	0	0	0	0	0

The PB Process allowed for different expectations to be exposed, which is tied to the differences in urban context. Members of the public were brainstorming and building ideas that were different from what the landscape architects and City Staff would have considered in their park design. Key informant four said that despite the resource intensive nature of this process,

it definitely had benefits to it, as the outcomes reflect what the community wants. In each case, the bundle that they chose was not what staff proposed, it was something that was generated by the community input. That says to me, those communities have different expectations from what [the City of Kitchener] does and that could be a benefit to the community, at least in the short term.

An example of this is an outdoor BBQ/fire pit that was proposed and now the City has a

corporate spec and technical drawings on how to build that. If another group comes forward wanting that, we [the City of Kitchener] have something tangible that could be replicated.

This demonstrates the benefit that this process has for both the communities involved, as well as the City. As previously discussed, study parks from a suburban and an urban context were specifically chosen by City Staff to determine if the residents in these areas had different preferences in the amenities and improvements for their public parks. The results of the idea generation and voting revealed that there were differences in preferences and amenities between the two study parks. The residents of the Park A community, which is a suburban neighbourhood, were identified by key informant one as “a high use population, so there was a lot of active uses that were prioritized”. In comparison, at the urban Park B,

elements that were more highly ranked were elements that have a more natural element to them – natural plantings and a natural playground – like they were trying to invite nature into the urban environment to achieve a more tranquil environment.

Survey Participants were asked what they anticipated using the park for after the improvements were made to examine how park activities might change after the PB process. Table 14 shows the frequency of activities after the PB process and participants were asked to select all that apply. Personal physical activity was the most frequent activity selected at both study parks at 22 per cent by the 20 participants. Personal physical activity, visiting with friends and community events of activities increased. The most significant increase was in community events and activities at both study parks.

Table 14 Park activities after the PB Pilot Project by category and study park.

Activity	Total		Park A		Park B		Change
	#	%	#	%	#	%	%
Personal Physical Activity	12	22.2	5	31.3	7	18.4	1.2
Family Physical Activity and Recreation	8	14.8	3	18.8	5	13.2	-7.9
Community Events or Activities	8	14.8	3	18.8	5	13.2	14.8
Route to work, school, friends or community amenities	7	13	2	12.5	5	13.2	-5
Dog Walking	7	13	3	18.8	4	10.5	-0.6
Relaxation	6	11.1	0	0	6	15.8	-0.3
Visiting with Friends	6	11.1	0	0	6	15.8	2.1
Other	0	0	0	0	0	0	0
Total	54	100	16	100	38	100	

There is also the potential for future community building opportunities as the community has a space over which they have ownership and it reflects their needs. As key informant five said,

I think that sense of ownership can only be built on and I would hope that it would stem community members to get together and if there is programming that they would like to see in the park, it might snowball into something and a grassroots group like ‘The Friends of [Park A]’ or those types of community groups...I think it would be amazing if this became a catalyst for those sorts of groups.

When discussing other examples of community groups centered around park space, key informant five said that “all these programming things snowballed from involvement in the community”. This community building could also contribute to reducing barriers. It was noted by key informant three that there were “deep and local divides” in the Park A community, and the Park “is on the wrong side of the

divide". They went on to discuss the informal soccer pitches the City is implementing, which had not been a part of the community discussion, but there is potential that this amenity could reduce barriers. Key informant three hoped that this will encourage youth to "cross over" the divide to use the park because "the young people of today are the future of tomorrow and so, if they get more comfortable crossing that line, then hopefully the next generation don't think there is a line". Analysis of the survey data showed the residents anticipated using the park spaces more for community events and activities as they now have ownership over the space and the parks reflect their needs.

Scatterplots and chi-square crosstabulation were used to determine if there was a relationship between involvement in the PB Pilot Project and increased use of the study parks. There was no statistically significant relationship between increased use of Park A or B and involvement in the PB Pilot Project. In both cases, the p value was greater 0.05 where the confidence interval was 95 per cent and the null hypothesis is accepted. The relationship might be statistically insignificant, but the bar chart, seen below in Figure 7, shows that those who did participant in the Pilot indicated that they would use the park moderately more, while there was greater variation in the answers provided by those who did not participate in the process.

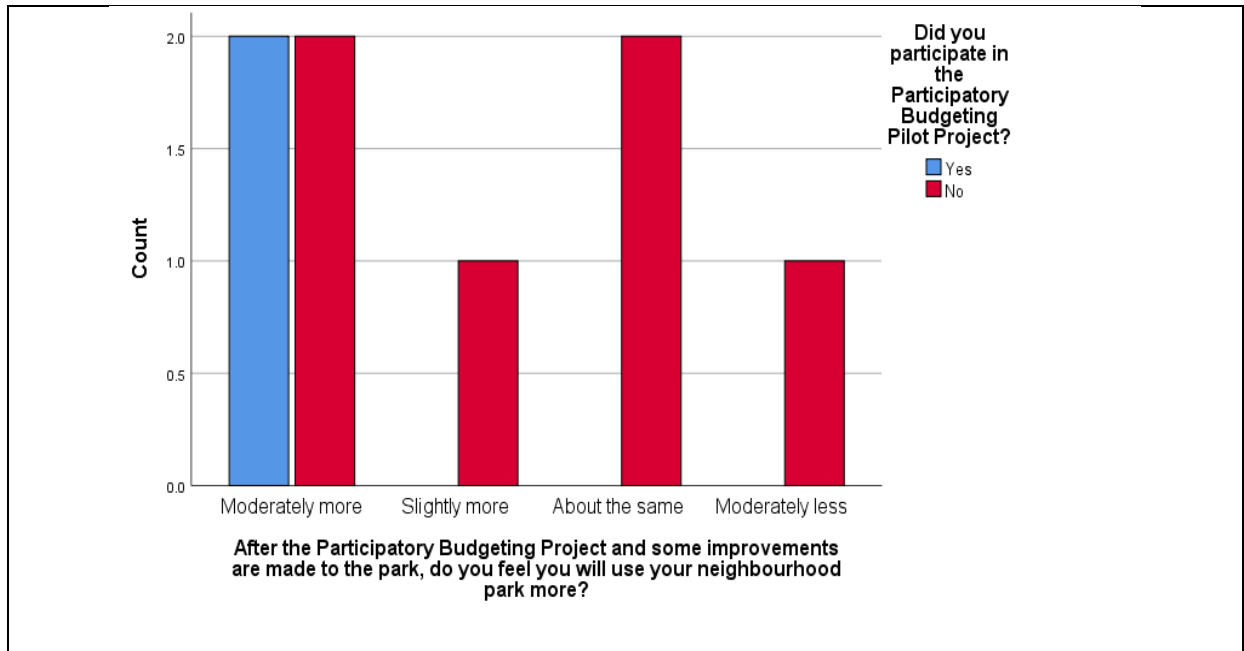


Figure 7 Crosstabulation between involvement in the PB Pilot Project and increased use of Park A.

4.5 Chapter Summary

This chapter presented the analysis of the survey and interview data. The key informants felt that the PB Process could help to increase park use, particularly in the short term, and help to improve perceptions of access to the study parks. This participation method gave the public ownership over the process and the decision-making through autonomy and influence, as well as over the park space as they had a direct say in the design and amenities that would improve the space. PB allowed for different expectations for the park spaces to be exposed, which allowed the communities to ensure the spaces reflect their needs. Survey results for both Park A and B showed that more than half of residents would use their park more after the improvements are implemented, and a third of respondents indicated that their barriers to park use would be reduced. Bivariate analysis comparing participation in the PB process with increased use, reduction of barriers and thoughts on the effectiveness and enjoyment of the process were statistically insignificant. Despite this, bar charts accompanying the bivariate analysis showed that those who stated they were involved in the PB process also indicated that their park use would increase.

Key informants thought there was a stronger turnout for the PB process compared to conventional methods, and the majority of survey participants (54 per cent) said that they were “never” or only “sometimes” involved in community engagement opportunities prior to the Pilot Project. The customisations for outreach helped the City to connect with a greater number of people in the communities, as well as use links within the community to overcome some of the barriers and mistrust that may discourage participation. These efforts were resource intensive, but led to an expanded audience, in terms of numbers and demographics, that was engaged in the process and can contribute to relationship building in the communities, as well as more meaningful and representative planning. Key informants also thought that this process and the extra efforts that went into working with communities should improve perceptions of access to the City. Survey analysis showed the 52 per cent of participants indicated that their civic involvement would increase in the future. There was the possibility for variation and dimensions to these benefits, as identified by the key informants, that depend on a persons’ past experiences, experience within the process, design of the process and the park outcomes. This was reflected in the open-ended answers provided by survey participants, as some participants expressed that challenges in the process left them feeling disappointed in the outcomes, while others said they enjoyed the process and feel more connected to the parks. The following chapter provides a discussion of the key findings and how they address the research purpose and objectives, as well as the limitations of the study.

Chapter 5: Discussion

This chapter is organized into five sections, beginning with a discussion of findings from the quantitative and qualitative analysis in Chapter 4, as well as how these findings align with the academic literature reviewed in Chapter 2. This is then followed by a discussion of the extraneous findings, this study's limitations, and opportunities for future research.

5.1 Key Findings on Implementing PB

The stages of the cycle represent the five categories developed in the interview analysis and Table 14, seen below, outlines these categories and the subcategories within them. The preconditions and the process of understanding the potential challenges were important for having the support to implement PB and understanding the communities involved in the Pilot. These first two stages allowed the City to put in place the customisations for the engagement process using PB and community outreach to account for the communities being served. These customisations were key contributors to improving perceptions of access and increasing use of the parks, as well as empowering residents and expanding the audience of those involved. There were challenges when implementing the PB process and the park improvements chosen by residents, which resulted in PB losing the political support that would have encouraged its continued use. Despite this, PB could influence future participation and parks planning initiatives in the City of Kitchener. The outcomes of the customisations and challenges encountered during engagement led to learning opportunities that City Staff can use when engaging residents in the future and implementing new initiatives or methods for public engagement.

This is similar to the virtuous cycle which can occur in the development of social capital and democratic capacity identified in the literature review. Individuals who have opportunities to build social capital and democratic capacity are more likely to participate, which will help to develop these further and spill over to others in their community (Thijssen & Van Dooren, 2016). In this study, the

Cycle of CCE allowed City Staff to build their capacity in terms of skills and knowledge on how to better engage communities, which could positively influence future engagement initiatives and the residents involved.

This cycle and its outcomes also connect with the planning theories identified in the literature review. Both Transactive Planning and Communicative Planning Theory, advocate for the importance of mutual learning that can occur between planners and stakeholders (Innes, 1992). This cyclical process of implementation highlights the role of mutual learning during the planning process, as well as its role in planning outcomes and contributing to future planning initiatives. The customisations for process allowed for freer discussion in decision-making, which created opportunities for dialogue that contributed to mutual learning outcomes that can contribute to future work in the City of Kitchener. CPT also identified that using deliberative methods can help to build social capital and create service outcomes that reflect the needs of those being served (Sager, 2018). The understanding of potential challenges and customisations. the second and third stage of this cycle, could have contributed to building social capital and creating service outcomes the reflect the needs of those being served.

The second stage of this cycle sought to understand the communities involved in the PB Pilot and how to address potential challenges that might arise through customising the outreach process in stage three, which allowed for more inclusive outreach and planning processes. Both Critical Pragmatism and Collaborative Planning acknowledge that the public is diverse and includes different types of knowledge, which are accounted for in this cycle (Forester, 2013). This also aligns with Advocacy Planning and giving all those affected by a planning issues the opportunity to be involved and be heard. The customisations also heled to give voice to the diverse public and helped in identify their perceptions of the park space, which are both key outcomes of Collaborative Planning and CPT (Healey, 1998; Sager, 2018). Critical Pragmatism advocates for a focus on both the planning process and its outcomes, and this cycle is reflective of this focus (Forester, 2013). The first four stages of the cycle

represent the planning process and how communication can be restructured to create outcomes, the fifth stage, that help to address inequities and allow for learning opportunities. Critical Pragmatism also considers power relations and structures in the planning process, which were changed in this cycle and the power of decision-making was entrusted to residents (Forester, 2013).

5.2 Key Findings on Park Access and Park Use

5.2.1 Addressing Perceptions of Access and Park Use

The aim of this study was to assess the impact of the PB process on perceived park access and park use. With respect to research objective two, the integration of survey and interview results determined that the PB process has the potential to improve perceptions of access to public parks and to address the disconnect between real and perceived access, as well as increase park use in the short term. The key informants thought that the PB process would help to improve perceptions of access to the study parks because residents were entrusted with the right to decide what amenities and improvements would be made to their public spaces. They felt that this autonomy and influence would give residents ownership over the decision-making process and the new parks spaces, which could help to positively influence residents' perceptions of access. The most frequently selected category of barrier reduction by survey respondents was "might or might not", but the results showed that 38 per cent of participants at both study parks said their barriers would be reduced.

Survey participants predicted that they would use the parks more, particularly for personal and family physical activity, and community events or activities. Key informants were unsure if the predicted increase in park use would be sustained in the long term, as neighbourhood change occurs and the unique amenities and improvements may no longer serve the needs of the community. This process also gave residents the voice to shape their environment so that it reflects the needs of the community, and having this voice revealed that the residents had different expectations about what amenities were

needed in the park spaces. Having a voice to ensure the parks reflect individual and community needs means the park spaces are more likely to be useful to the community, which will contribute to improved perceptions of access and encourage increased use.

These findings on perceptions of park access and use, align with the academic literature on the use of PB for the planning of public spaces. Researchers in Poland found that PB gave residents the chance to share their needs as a community with local government and have their needs reflected in the final design of a public space (Bernaciak et al., 2018). When residents can see themselves in a public space, they are more likely to use it and have better perceptions of access (Bernaciak et al., 2018). Researchers examining the use of PB in Chicago, Illinois, found that it helped to increase inclusion in the planning process and it revealed that resident's priorities and expectations were different from those identified by conventional participation methods (Stewart et al., 2014).

The survey analysis determined that geographic proximity was the most frequently selected barrier to park use by survey respondents, but they also indicated that the amenities available, the presence of dirt and poor park maintenance were barriers to park use. This aligns with findings in the academic literature on perceived park access. Research from New Orleans and Kansas City, identified disorder and poor maintenance of parks as factors that can influence both perceived safety and access to public parks (Groshong et al., 2018; Knapp et al., 2019). Key informants thought that the PB process could encourage community building efforts and hoped that the improved park spaces, which the residents helped to plan, would bring the communities together. The survey respondents anticipated using the parks more for community events and activities, which suggests that community building could occur in the study neighbourhoods. This aligns with research from Sweden on PB and parks planning, which found that PB can contribute to an enhanced community (Demediuk et al., 2012).

5.2.2 Implications for Planning Practice and Scholarship

This study contributes to filling the gap in the academic literature by identifying PB as a participation method that could be used to address the disconnect between real and perceived access, as well as providing more research on the use and outcomes of PB as an engagement method in the Canadian context. PB could be used by planners as way to address the disconnect, if one exists, and improve perceptions of access to a public park, as well as being a tool for parks planning in general that could make these spaces more useful to the communities they serve and encourage more frequent use. Thinking back to the example from Jane Jacobs' *The Death and Life of Great American Cities* (1961), the community had not been involved in the planning process and the park was provided for the sake of providing green space. This contributed to the poor perceptions of access and residents did not feel encouraged to use the park. In situations like this, planners could use the PB process so that the community is more directly involved in the planning of the space so that it reflects their needs as a community, and makes it a useful and inviting space that they will want to use.

The literature review on real and perceived differences in park access also identified that neighbourhood characteristics like income, age, gender and ethnicity can influence distribution and access to public green space (Wolch et al., 2014). The studies reviewed, found that those from low-income and ethnic minorities have poorer physical access to park space and when park space is accessible, those spaces are smaller and of poorer quality compared to those in high-income, ethnic majority neighbourhoods (Boone et al., 2009; Gordon-larsen et al., 2006; Wolch et al., 2014). These differences in access result in lower levels of activity and higher rates of being over-weight and obese (Gordon-larsen et al., 2006). The use of PB in the planning process provides an opportunity to not only address these differences in access and health outcomes, but also to better plan for the vulnerable population who live in the communities. When you plan for the vulnerable populations, you plan for everyone. For example, if you work to ensure park space and amenities are accessible for the differently

abled, accessibility is then improved for everyone who uses the park. The same could be said for improving perceptions of safety and access for minority groups in communities. Improving perceptions of park safety and access for vulnerable and minority groups will help to improve these perceptions for all members of the community.

5.3 Key Findings on Citizen Engagement

5.3.1 Addressing Citizen Engagement

This study also sought to examine how the PB process influenced citizen engagement. Regarding research objective three, this study found that PB could help to increase participation, empower residents, and encourage future civic engagement. The key informants felt that there was an expanded audience, in terms of the numbers and demographics, which was involved in the PB Pilot Project. They noted a stronger turnout and that the people involved were those who may not have participated in the past. The increased efforts that the City put into place and the use of community gatekeepers were identified as key to the success of the PB Pilot Project, as well as expanding and increasing participation. The survey results found that 54 per cent of respondents participated “sometimes” or “never” prior to the Pilot, which suggests that there was an expanded audience that participated in the PB Pilot Project. These findings align with those from a study on the City of New York’s use of PB for infrastructure improvements, which determined that PB could help to expand the audience of those involved. The researchers found that those who participated had not been involved in previous engagement opportunities in their neighbourhood, and PB was effective for engaging the youth and immigrant communities (Su, 2012).

This study determined that community gatekeepers, which included community centers and those who work within them, are important assets in encouraging participation and reducing the barriers that prevent people from becoming involved. Research from the United States also identified

the important role of community gatekeepers, and found that immigrant communities are more comfortable and willing to participate when these opportunities are hosted in community-based and neutral spaces (Kim et al., 2018).

Regarding the first research objective, the survey results found that 71 per cent of survey participants thought the PB process was “very effective” or “moderately effective”, while 52 per cent said that they enjoyed participating in this decision-making process. Enjoyment of the PB process may not indicate success of the Pilot, but it demonstrates how the public positively perceived this method for decision-making. The term effective is subjective and could have been interpreted differently by the survey respondents. When asked if they had any thoughts or comments on the PB process, the survey participants said they enjoyed this process and thought it was a productive and transparent way to gather community input. The terms productive and transparent could be ways that survey participants interpreted and describe the effectiveness of the process. Key informants thought that this process would help the residents involved to feel empowered. The residents involved in this process were given autonomy and influence in decision-making, the voice to shape their environment, and to see the direct impact of their involvement. These results from survey participants and key informants suggest that the PB process helped to empower those involved.

The key informants noted that not all members of the public may feel as empowered as others because of how they voted, their perceptions of the process and challenges when implementing the improvements at the study parks. These challenges included the unstable ground at Park A that meant not all the improvements could be implemented in the park space, and different expectations for the final design of new park amenities at Park B. The impact of the challenges on empowerment was reflected in the survey results, as some participants noted disappointment with the final design of some amenities. One key informant said that they were not sure if participants would be empowered because they are not accountable for the maintenance and monitoring of the park. This aspect of accountability

and empowerment raises questions about what is and is not PB, and does a focus solely on decision-making make a project PB? The literature review identifies that a PB project does not have to include residents being accountable for implementation to fit the criteria established by Global Civic Engagement, nor does the Proximity Democracy typology include resident implementation (Global Civic Engagement, 2013). Examples of PB processes in the literature review that included resident implementation, were bottom-up, community driven initiatives that aligned with the Community Development typology.

In this case, a focus on decision-making was appropriate for the type of PB project and the service outcomes to be implemented in the City of Kitchener. The literature identified that there is decreasing participation due to challenges in the planning process, as well as individual and neighbourhood characteristics that influence participation and the development of social capital. A focus on decision-making, which is the main feature of the Proximity Democracy typology, allowed the City of Kitchener to take steps to improve their communication with the residents in the study neighbourhoods and potentially improve civic participation. The final outcomes of the Pilot Project were new amenities and other park improvements, which, as key informants noted, would be difficult for the public to implement. The examples of residents implementing PB outcomes identified in the literature review were smaller scale and included community clean-ups and policing, which are more practical for residents to implement (Fagotto & Fung, 2006). In this context, City Staff have the expert knowledge required and greater capacity to implement these updates to municipal services so that they are durable and accessible.

The results demonstrated that the PB process had the potential to encourage civic engagement in the future. Key informants said that the residents will be able to see the impact of their involvement on their local environment and they had the opportunity to build social capital and democratic capacity, which may encourage them to become more involved in the future. One key informant thought that the

PB Pilot Project would help to improve perceived access to the City and it allowed them to build relationships in the communities, both of which could help to encourage residents to become more involved in municipal engagement opportunities. Results of the surveys found that 52 per cent of participants indicated that their civic participation would increase. These findings of this study align with those from the New York PB study. The study found that civic engagement would increase, as the majority of participants said that they were more likely to work with others in the neighbourhood and join community groups (Su, 2012). The relationship building identified by key informants and its potential for encouraging increased civic engagement, found in the survey data, could suggest that the PB process helps to build social capital and democratic capacity, which could encourage residents to become more involved.

This study has also demonstrated the interconnected nature of accessible park space and civic participation. The literature review highlighted the role that neighbourhood characteristics play in encouraging civic engagement, as well as the development of social capital and democratic capacity that give residents the skills to become civically involved (Dekker, 2007; Ryu et al., 2018; Thijssen & Van Dooren, 2016). Access to public parks, and positive perceptions of these public spaces, provides opportunities for interpersonal interactions that help individuals develop their social capital and democratic capacity (Thijssen & Van Dooren, 2016; Zhu, 2015). The development of these will encourage individuals to become involved in civic engagement opportunities in their communities, and this will help to further develop these skills through the virtuous cycle (Fagotto & Fung, 2006; Thijssen & Van Dooren, 2016).

The PB Process in the City of Kitchener was found to potentially reduce barriers to park use, as well as increase park use and civic engagement in the future. This demonstrates that the PB process has the potential to nurture and encourage citizens to become more active through the creation of healthy and accessible community park spaces. Participating in the PB process also allowed residents to build

their social capital and democratic capacity through their interactions with City Staff and community members, which they can use to become more involved either through community building around the improved park space or civic participation opportunities. This begins the virtuous cycle in the study neighbourhoods where residents will continually build more social capital and democratic capacity, which will then spill over to other residents in the neighbourhoods encouraging them to become active in their community

5.3.2 Implications for Planning Practice and Scholarship

This study has identified that PB could be a tool for engagement that can address the challenges of decreasing and non-representative participation that were identified in the literature review. In this study, PB helped to expand the audience of those involved so that there was a greater amount of public involvement and this audience was more representative. PB helped the public to see how their involvement influenced the planning outcomes as they made the decisions on what improvements would be implemented. This could make them feel empowered and see the impact of their involvement. The PB process could have also helped residents to develop their social capital and democratic capacity, which could create well informed, knowledgeable, and active citizens. These positive outcomes of the PB process could help to encourage those who participated to become more civically involved in the future so that there continues to be larger, more representative involvement in planning participation opportunities. The literature review also discussed the tokenistic nature of traditional methods and the Ladder of Citizen Engagement developed by Sherry Arnstein. This study identified that the use of PB in the City of Kitchener helped to move citizens up the ladder towards the Partnership and Delegated Power rungs, so that engagement was less tokenistic (Arnstein, 2019).

The PB process and accompanying increased outreach efforts may be more resource intensive than conventional methods of community engagement, but, as argued by a key informant, using this process and increasing outreach was an opportunity to invest in those who do not feel empowered or

engaged. Planners in Ontario have the responsibility to serve and uphold the broad public interest, and if planning outcomes only reflect the needs of a small group, who may have more resources to have their voices heard, the broader public interest may not be served. The increased outreach and PB might be more resource intensive, but it is important to ensure that planning outcomes reflect the broad public interest and that the public feels empowered and engaged in the planning process. Using new methods for participation and making extra efforts to connect with all residents, including vulnerable members of the community who may not have the same social capital and democratic capacity to participate as others, allows planners to lead inclusive participation opportunities and produce outcomes that reflect the broad public interest and serve a wider cross-section of the community.

5.4 Unexpected Findings

5.4.1 Characterisation of Park Space

The characterisation of park space was also an extraneous finding of this study. The interview analysis revealed that there are certain characteristics of park space that lent themselves to testing a new engagement method and make them important parts of the urban landscape that bring communities together. Parks were characterised as: tangible; relatable; people feel that they have a stake and the ability to make decisions about them; people are passionate about parks; they are relatively low risk; and, the study parks had ageing infrastructure. The relatable, passionate and stake and ability characteristics encouraged people to be involved in the Pilot Project and the tangible characteristic meant the those who participated could see the impact of their input. These characteristics distinguished a park planning project from other projects that might be focused on policy or long-range planning, which may be harder for members of the public to relate to and see the impact of their involvement.

5.5 Study Limitations

While this study makes important contributions to understanding the potential benefits of the PB process and offers recommendations for future research and practice, there were some limitations that need to be considered. First, the participation sample was limited due to the COVID-19 Pandemic and the government restrictions on gatherings and social distancing, as well as the University of Waterloo's Office of Research halting all in-person research. These restrictions were intended to limit the spread of the virus and in-person interviews were halted in response to these efforts. Continuing interviews over the phone or using virtual technologies was considered, but the researchers chose not to proceed with this to respect the time of City Staff as they adjusted their work schedules to work from home and they may have been involved in preparing emergency plans. Extending the study to include more key informant interviews with City Staff would help to further understand their perspective, but it would also be helpful to interview the community gatekeepers used in the outreach. This would aid in understanding how they worked with the community to help reduce barriers to participation, as well as their perspective of the PB process and its effects on the communities.

Second, the survey sample was very limited. As discussed in the limitations section of the methods chapter, there were only 43 survey responses and the incentivization strategy did not work as intended. This also resulted in a non-representative sample and no statistically significant relationships were found in the data. Human error, ethical considerations, research fatigue and the COVID-19 Pandemic were identified as potential contributing factors to the low response rate. The results of this study also highlighted the importance of using community gatekeepers to access and encourage participation from residents, which could have affected the survey recruitment. In this study, the second round of survey recruitment used the neighbourhood associations to distribute the survey flyer to their email lists. These communities may be more accustomed or comfortable learning about

participation opportunities through community gatekeepers and using these resources could have encouraged a higher response rate.

Further data collection, especially with members of the public would help to gain a better understanding of how the PB process influences perceptions of access and use of public parks, as well as increasing participation and future civic engagement. Extending the study to include focus groups with members of the public may be more effective than a survey and would allow researchers to go more in-depth with participants on how PB influenced park perceptions and use, as well as the engagement process. The survey analysis found that 71 per cent of participants said the process was very or moderately effective, and 52 per cent said that they enjoyed the process. A few participants provided comments on why they enjoyed the process or thought it was effective, but focus groups asking more in-depth question on why they felt that way would help to gain further understanding of the PB process in the Canadian context. Using social media tools, advertising in community centers, and working with community gatekeepers may be effective for recruitment in future research. If incentives are offered to survey or focus group participants in future research within these communities, allowing participants to choose a store or business may help to encourage participation.

The final limitation relates to the research design of this study. This study was cross-sectional and examined one point in time, and only assess perceptions of access and potential changes in park use. A longitudinal study design would allow for a comprehensive assessment of how access and use have changed, as well as the implementation of the park improvements. Future research should examine the use of the study parks among residents who took part in the PB Pilot Project, as this study also included participants who had not taken part. This Pilot Project and the challenges encountered when implementing the park improvements, suggest an opportunity for further research on how real and perceived access are impacted by these challenges and how local government can respond.

5.6 Researcher Reflections

The Global COVID-19 Pandemic introduced new and unforeseen challenges to the research process. In mid-March, the provincial and federal governments placed limits on gatherings and physical distancing, and eventually put into place a lockdown to limit spread of the disease. The University of Waterloo closed campus, and the Office of Research Ethics halted all in-person research to help protect the campus community and contribute to efforts in limiting the spread of the disease. These efforts meant that I had to: prioritize recruitment efforts and online recruitment methods; seek out online textbooks and resources; create a schedule and work space that limited distraction; and, rely on friends and colleagues in the School of Planning for support and advice.

Due to the restrictions on physical distancing and in-person research, key informant interviews were halted, and I unable to conduct survey recruitment in person. As noted in the limitations section, I did consider the option of conducting more interviews over the phone or using virtual methods, but after lengthy discussion with my supervisor, Dr. Jennifer Dean, we decided not to continue the interview process. We felt interview requests were not a fair ask of key informants' time, and there were also logistical issues associated with amending my ethics application to include the use of virtual methods. The six key informant interviews had produced a wealth of data, which further justified discontinuing interviews and highlighted the need to prioritize survey recruitment.

At the beginning of the lockdown there were approximately 33 survey responses and it was important to put efforts towards survey recruitment, but this could not include in-person methods. Prior to the lockdown, we had considered amending my ethics application to include recruiting in community centers, but this was no longer an available option. We decided that it was important to increase online recruitment through the neighbourhood associations that were active in the study areas. This highlighted the important role of collaborative community research and working with community gatekeepers, especially when in-person recruitment cannot be conducted. The neighbourhood

associations were able to distribute the survey to their email lists and promote the survey on their social media accounts. We had hoped that the lockdown would have encouraged participation, as residents were home and had more time to complete a survey. There was an increased in responses, but it was not as significant as hoped.

The closure of campus meant that I could not access the library, computer programs and other services (i.e., Writing Support Center) that would have aided in the data analysis and writing stages of this thesis. The data analysis process was an opportunity to for me to learn new skills in both quantitative and qualitative methods, which became more difficult when campus was closed, and I could not meet with my supervisor in-person. Fortunately, I had obtained a few textbooks from the library and my supervisor prior to the lockdown and I had to rely on these resources to guide me through the data analysis process. Textbooks dedicated to a method of analysis, like Strauss and Corbin's *Basics of Qualitative Research* and Charmaz's *Constructing Grounded Theory*, provided detailed descriptions of the steps in the analysis process and examples that were extremely helpful. I also called upon online resources, like the Open University, IBM, and other educational institutions, that provided tutorials and tips for conducting quantitative data analysis.

Working from home also presented new challenges, as it was sometimes hard to separate a living space from a workspace. It was important to establish a schedule and workspace that limited distraction, but also arrange time to connect virtually with colleagues in the School of Planning. A group of my fellow grad students and myself would meet online three mornings a week to work together. These meetings were beneficial for two reasons. First, they were a dedicated time to work on our own theses and share our work with others, which allowed us to gain advice and feedback from people going through a similar process. Second, the lockdown and closure of campus was isolating, and these meetings were a chance to connect and interact with people when you would otherwise be alone.

5.7 Future Research Opportunities

The results of this study suggest opportunities for further research examining the PB process and other methods for engaging the public in the planning process. Results from the key informant interviews suggest potential for increased park use after the improvements are implemented, but the key informants were unsure if the increased park use would be sustained in the long term as neighbourhood change occurs and the needs of the community change. The survey results showed that there would be a moderate increase in park use among residents of the study neighbourhoods. This presents an opportunity to further research PB in the study neighbourhoods to understand if increased use and improved perceptions of access can be sustained in the long-term. Based on the limitations identified in section 5.4 of this chapter, the low response rate to the web-based survey presents an opportunity to further research the perspective of residents in the study neighbourhoods. Extending the research in the future to include focus groups with members of the public would allow for a more in-depth assessment of the outcomes of the PB Pilot Project. This could allow for research to identify: why residents enjoyed the PB process and what aspects they thought were effective; how it changed their perceived access and park use; and, how it might influence their civic engagement.

There are other cities in Ontario where PB has been used in the decision-making process, including: Toronto, by the TCHC; Hamilton, to vote on projects to receive funding from the City's capital budget; and, Guelph, by the Neighbourhood Support Coalition for the allocation of public and private funds (Fuji & Simon, 2009; Kearney, 2015; Schugurensky, 2009). Participants in this study felt that the characteristics of parks space made them an ideal project for piloting PB, as the residents in the study neighbourhoods would relate to the spaces and their tangible nature would allow residents to see the impact of their involvement. This suggests an opportunity for further research on what kinds of projects are best suited to PB in the Canadian context and how to implement them. The City of Kitchener's Love My Hood Program was noted by interview participants as another City initiative that entrusts residents

with decision making and was compared to the PB process. In this program, the City provides support for resident led projects in neighbourhoods, and it could be examined to understand how it impacts residents' feelings of empowerment and perceptions of access to the City.

Given PB is an emerging engagement method in North America, there is a need to evaluate PB processes and their implementation. This suggests an opportunity to examine the different ways in which PB has been implemented and how it compares to PB in Porto Alegre, where it was developed. It was noted by a key informant that the Pilot may not empower residents because they were not accountable for the implementation, maintenance and monitoring of the park space. Comparing the Kitchener PB Pilot Project with others in Canada and Porto Alegre, would allow researchers to further examine what qualifies as a PB project, and does it have to include accountability for implementation and maintenance to empower those involved.

5.8 Chapter Summary

The results in Chapter 4, discussed at the beginning of this chapter, demonstrate that the PB process could be used to help improve perceptions of access to public parks and increase use in the short term. The interview participants identified that this process gave residents ownership over the decision-making process by giving them autonomy and influence, which would also give them ownership over the improved park spaces. Survey analysis showed that there would be increased park use at both study parks and barriers would be reduced for some participants, but the relationships between involvement in the PB process, increased use and reduced barriers were statistically insignificant. These findings aligned with studies outlined in the literature review which examined perceptions of access and the influence of the PB process in planning public spaces.

The results also showed that the PB process can be effective for expanding the audience of those involved, empowering residents, and encouraging future civic engagement. Key informants noted

a stronger turnout compared to conventional engagement methods and those involved, may not have been in the past. The increased outreach efforts and customisations, though more resource intensive, were an important part of reducing barriers to participation. They also noted that giving residents autonomy and influence in the decision-making process and the tangible nature of park space, which allowed residents to see the influence of their involvement, should help to empower residents and encourage them to participate in future engagement opportunities. These results were supported by survey participants, more than half of whom said that they enjoyed this decision-making process and thought it was effective. Survey participants also said this process was a productive and transparent way to involve the public in the planning process.

The research purpose and objectives for this study were to assess the PB process to determine if it can positively influence an individual's perceived park access and use of their neighbourhood park, as well as examine its influence on citizen engagement. Despite study limitations, the data collected was able to address the research purpose and objectives. This study fills the gap in the academic literature on how to address the disconnect between real and perceived access to public parks, and suggests that PB could be used by planners in the parks planning process to promote positive perceptions of access and increased use of public parks. The findings also suggest that PB could be used in planning practice to address the challenges faced by planners and the public in the engagement process through the development of social capital and democratic capacity. PB can help to increase participation in terms of numbers and demographics so that the planning process and its outcomes are more inclusive, as well as empower residents and encourage them to become more involved in participation opportunities in their communities and City. The last chapter will provide concluding comments on the City of Kitchener PB Pilot Project, and recommendations for the future use of PB.

Chapter 6: Conclusions and Recommendations

In Chapter 1, the purpose of this study was outlined as an attempt to assess the PB Pilot Project in the City of Kitchener by examining its impact on perceived park access and use of neighbourhood parks, as well as the citizen engagement process. This chapter provides policy recommendations related to the use of PB as a tool for public engagement and how it might be useful in improving perceptions of park access and use. The chapter concludes with a brief summary of the PB Pilot Project experience in the City of Kitchener and the future value of encouraging its use.

6.1 Policy and Practice Recommendations

This study intended to not only assess the use of PB in the planning process and its effectiveness in achieving beneficial outcomes, but also to assess how it may be better used to improve the planning process and outcomes for communities. The following discussion provides recommendations for the practical use of PB in operational planning process and possible incorporation in municipal policy requirements.

6.1.1 Access and Use of Neighbourhood Parks

The literature review identified the disconnect that can sometimes occur between real and perceived access to public parks, which can result in poorer health outcomes for low-income and ethnic minority groups (Beyer et al., 2014; Gordon-larsen et al., 2006; Wang, Brown, Liu, et al., 2015). This is caused by poor perceptions of park access and perceived barriers that prevent people from accessing parks, and these perceptions can have a greater influence on park access and use than physical accessibility (Wang, Brown, Liu, et al., 2015). It is important to address the disconnect by improving perceptions of access and limiting the barriers to park use, to ensure that all residents can benefit from these public services. The parks planning process should use PB to help identify and limit the barriers to park use, which in turn, will help to close the gap between real and perceived access.

The PB process and other participation methods, that allow for dialogue and partnership between residents and planners, would be desirable in planning practice to help identify and reduce barriers to park use. The effect of this would be to allow residents to voice their concerns and desires and also offer their expert knowledge on park use so as to bring greater awareness to the barriers which prevent them from accessing park spaces. By having residents work with planning staff, who are experts in parks planning and design, it may be possible to find potential planning and policy interventions to address these barriers and have outcomes which are more favourable to the residents. The identification and limitation of barriers through the PB process will also help to close the gap between real and perceived access. Having a voice in the planning process to identify barriers, will also help residents to ensure that their individual and community needs are reflected in the park space, which further supports the recommendation for greater use of PB in the parks planning process. The academic literature identified that when residents have their needs reflected and implemented in community spaces, they are more likely to identify with the space and its usefulness will increase (Bernaciak et al., 2018). This will effectively help to close the gap between real and perceived access to public parks, as well as ensure that, once developed, parks have features and amenities that will serve more people in the community.

6.1.2 Community Engagement

There has been a general decrease in public participation in many domains of society, and this presents a particular challenge for planners around the World (Yu et al., 2017). This decrease is found particularly among vulnerable populations, including women, young people, immigrant communities and low-income individuals (Johnson, 1984). This can be problematic for planning because it can create non-inclusive participation practices, which can result in non-representative planning outcomes. Research has attributed individual and neighbourhood characteristics, as well as challenges and barriers in the planning process as contributing factors to this decrease in public participation (Dekker, 2007;

Thijssen & Van Dooren, 2016). Increased outreach efforts and the use of PB should be implemented in the planning process to help increase public engagement. These increased outreach efforts and ensuring these methods reflect the needs of the communities being served, should be given greater consideration for incorporation into planning practice and policy documents (e.g., official plans and park strategic plans) so as to help expand and increase public participation. Using multiple means of communication, both in-person and online, as well as providing opportunities for online participation should also be considered as ways to increase and expand participation. It would also be effective to use community gatekeeper in outreach efforts, as they are aware of the best ways to communicate information to residents and how their particular barriers to participation might be reduced. The use of neutral, community spaces for public participation opportunities is also encouraged, as these are spaces in which residents will feel more comfortable and willing to participate (Kim et al., 2018).

Expanding the use of PB in the planning process to increase future public engagement is recommended for two primary reasons. First, it will help residents to see that their input has had an effective role in decision-making and similarly, has had an impact on the physical outcomes reflected in local environment. The literature review identified that residents often feel that major decisions have been made prior to their involvement, which results in perceptions that their input has little influence and they are discouraged from participating in the future (Smørðal et al., 2016). Using the PB process will help to address this, as the public are involved throughout the planning process and their input has significant influence, because their vote decides the outcomes. This will help encourage residents to have greater future involvement. The second way in which PB can help increase public engagement, is through the creation of accessible public spaces and the provision of participation opportunities that allow individuals' to develop their social capital and democratic capacity (Dekker, 2007; Fagotto & Fung, 2006; Thijssen & Van Dooren, 2016). This also enables residents to become more knowledgeable and active in the planning process.

Challenges in the planning process that contribute to decreasing participation rates also impact the ability of the planning process to empower those involved. Increased use of the PB process in planning is recommended in order to empower residents involved and move public participation up the Ladder of Citizen Engagement. Traditional methods of engagement have often been criticized as being tokenistic, as there is no guarantee that the public's views will be incorporated into decision, and as a result, they are placated rather than empowered (Arnstein, 2019). The PB process gives residents more autonomy and influence in the decision-making process and moves engagement practices up the Ladder of Citizen Engagement towards the Degrees of Citizen Power portion of the ladder (Arnstein, 2019). This allows residents to shape their environment and will also help to empower them and improve their perceptions of access to participation opportunities. Key informants in this study noted that the challenges when implementing the park improvements may affect how empowered residents feel, and this was reflected in the survey responses, as some participants expressed disappointment with some of the final amenity designs. This can be avoided in the future through increased coordination among the various departments involved, and "closing the loop fully" by having residents confirm final designs and plans.

6.1.3 Collaborative Community Research

The literature on survey participation and incentivization noted decreasing response rates in research surveys due to their frequent use and privacy concerns (Yu et al., 2017). This was confirmed by the low response rate to this study's survey, as 1900 flyers were distributed and there were 43 responses returned. As highlighted in the previous section, the use of community gatekeepers in recruitment for planning participation opportunities can be of greater assistance to increase and expand the level of public participation. These community gatekeepers are assets that should also be used in research recruitment. This will help to increase the response rate, as well as ensure potential participants understand the study's purpose, the benefits of involvement, and contributions to both

practice and scholarship. Collaboration between municipal government and local educational institutions, referred to as “town and gown committees”, is also recommended as a way help to increase participation in research, as well as connect student researchers with municipal staff working on related projects, thereby resulting in mutual benefit. This study benefitted greatly from collaboration with City Staff involved in the project by creating key messages to include in the survey recruitment materials in order to prevent confusion, as well as recruiting and gathering data from key informants at the City.

6.2 Thesis Summary and Conclusions

This study sought to assess the PB Pilot Project in the City of Kitchener to examine its impact on perceived park access and use of neighbourhood parks, as well as assessing the citizen engagement process. Despite the challenges encountered by the City of Kitchener when implementing the final decisions of the Pilot Project, both the key informants and survey participants identified positive outcomes from PB for the park spaces and citizen engagement. It was recognized that PB can contribute to increased use of public parks, particularly in the short term, and help to improve perceptions of park access to ensure that more residents can benefit from these public services. This participation method gave residents the voice and opportunity to shape their physical environment and express their community’s needs and desires through a process that gave them greater autonomy and influence over decision-making. Using PB for parks planning in the City of Kitchener has resulted in park spaces over which the communities have ownership, and this could contribute to increased use and improved perceptions of access, as well as a space where the residents can come together and build a stronger community.

The findings of this research were similar to those of other studies examining the implementation of the PB process in North American cities. This participation method expanded the audience, in terms of numbers and demographics, as well as empowered residents and could encourage

them to become more civically engaged in the future through the development of social capital and democratic capacity. Residents were encouraged to think of the common good so that their public space would reflect their individual needs and the needs of their community, and these spaces are useful for a greater number of residents. The challenges encountered in the process, as well as competition for municipal dollars to fund with other important urban needs, resulted in PB losing the political will that would have encouraged its further use. Despite this, the PB Pilot Project and its successful outcomes will continue to have an influence on community planning in the City of Kitchener, whether it be used for parks or other planning projects. The learning opportunities and successful aspects of the Project could be used in future initiatives to create equitable park space and participation opportunities in the City of Kitchener. Further, the experiences and lessons learned by the City of Kitchener are transferrable to other municipalities and the research contained in this thesis is available for others to learn from and use to encourage and incorporate Participatory Budgeting as a valuable future public participation practice.

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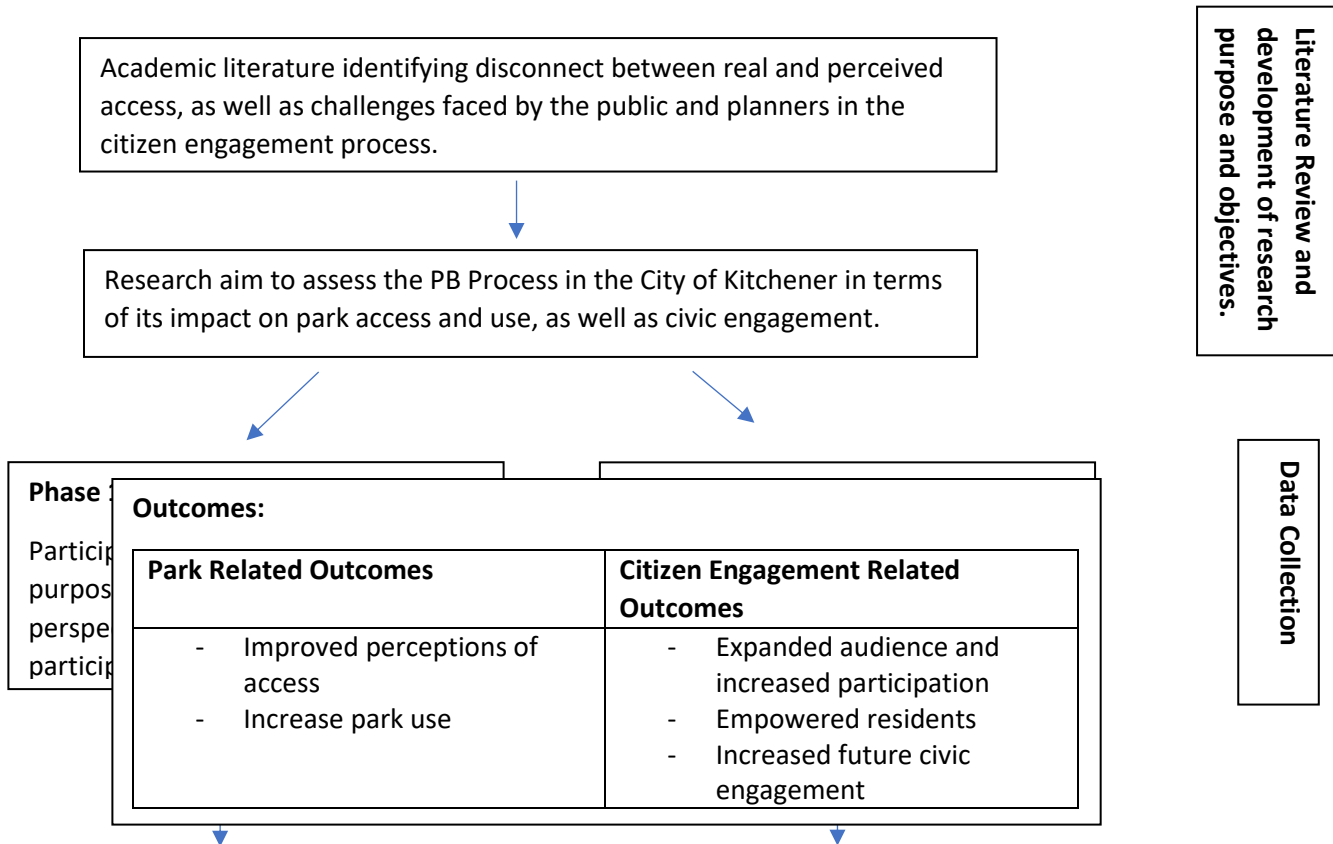
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Appendices

Appendix A: Flow Diagram of Research Process



Quantitative Analysis:

- **Statistical analysis** of close-ended survey questions using SPSS.
- **Content analysis** of open-ended questions.



Qualitative Analysis

- **Grounded theory coding** to analysis interview transcripts.



Data Analysis

Results

Appendix B: List of Survey Questions

Park Use Before Participatory Budgeting Pilot Project

1. How often did you visit your neighbourhood park, either Park A or Park B, prior to the Participatory Budgeting Pilot Project?
 - a. Less than once a month
 - b. Once a month
 - c. Twice a month
 - d. Once weekly
 - e. Twice weekly
 - f. Three times a week
 - g. Daily
2. Before the Participatory Budgeting Project, for what purposes did you use the park? Please select all that apply.
 - a. Personal physical activity
 - b. Family physical activity and recreation
 - c. Relaxation
 - d. Visiting with friends
 - e. Route to work, school, friends or community activities
 - f. Community events and activities
 - g. Dog walking
 - h. Other
3. Before the Participatory Budgeting Project, in what activities did you participate while in the park? (i.e., reading, using play equipment)
4. Before the Participatory Budgeting Project, what were the barriers preventing you from using the park as often as you would have liked? Please select all that apply.
 - a. Geographic proximity
 - b. Other park users
 - c. Ease of physically accessing the park
 - d. Availability of ramps or other accessibility features
 - e. Dirt
 - f. Noise
 - g. Maintenance of park
 - h. Clear walkways
 - i. Amenities available
 - j. Other

Role in the Participatory Budgeting Pilot Project

5. Did you participate in the Participatory Budgeting Pilot Project?
 - a. Yes
 - b. No

6. How were you involved in Participatory Budgeting Pilot Project? Please select all that apply.
 - a. I attended an open house
 - b. I completed surveys
 - c. I participated in idea generation sessions
 - d. I participated in voting
7. If you participated in the voting, in which voting rounds did you vote? Please select all the apply.
 - a. Voting Round 1
 - b. Voting Round 2
 - c. Voting Round 3
8. Why did you choose to participate?
9. Why did you choose not to participate?
10. Were you surprised by the costs of the improvements?
 - a. Yes
 - b. Maybe
 - c. No
11. Do you think this form of participation was effective for community engagement?
 - a. Extremely Effective
 - b. Very Effective
 - c. Moderately Effective
 - d. Slightly Effective
 - e. Not at all effective
12. Did you enjoy being a part of this decision-making process?
 - a. Definitely Yes
 - b. Probably Yes
 - c. Might or might not
 - d. Probably Not
 - e. Definitely Not
13. Prior to this project, how often were you involved in community engagement activities?
 - a. Always
 - b. Most of the Time
 - c. About half the time
 - d. Sometimes
 - e. Never
14. After this project, how likely are you to participation in future community engagement activities?
 - a. Much more
 - b. Moderately more
 - c. Slightly more
 - d. About the same
 - e. Slightly less
 - f. Much less

Future Park Use

15. Please identify your neighbourhood park. (park names were listed in survey)

- a. Park A
- b. Park B

Park A Questions

- 16.** After the Participatory Budgeting Pilot Project, which improvements do you anticipate using?
- 17.** After the Participatory Budgeting Project, do you feel you will use your neighbourhood park more after the improvements are made?
- a. Much More
 - b. Moderately More
 - c. Slightly More
 - d. About the same
 - e. Slightly less
 - f. Moderately less
 - g. Much less
- 18.** After the Participatory Budgeting Pilot Project, do you feel you are more likely to use the community center once improvements are completed?
- a. Much more
 - b. Moderately more
 - c. Slightly more
 - d. About the same
 - e. Slightly less
 - f. Moderately less
 - g. Much less

Park B Questions

- 19.** After the Participatory Budgeting Pilot Project, which improvements do you anticipate using?
- 20.** After the Participatory Budgeting Project, do you feel you will use your neighbourhood park more after the improvements are made?
- a. Much More
 - b. Moderately More
 - c. Slightly More
 - d. About the same
 - e. Slightly less
 - f. Moderately less
 - g. Much less

All survey participants

- 21.** After the Participatory Budgeting Pilot Project, will the barriers that you previously identified be reduced?
- a. Definitely yes
 - b. Probably yes
 - c. Might or might not
 - d. Probably not
 - e. Definitely not

- 22.** When the improvements are made, what do you anticipate using the park for? Please select all the apply.
- a. Personal physical activity
 - b. Family physical activity and recreation
 - c. Relaxation
 - d. Visiting with friends
 - e. Route to work, school, friends or community activities
 - f. Community events and activities
 - g. Dog walking
 - h. Other
- 23.** Will you stop using the park after the improvements are made?
- a. Definitely yes
 - b. Probably yes
 - c. Probably not
 - d. Definitely not

Concluding Questions

- 24.** How long have you lived in our current home?
- a. 1 to 4 years
 - b. 5 to 9 years
 - c. 10 to 14 years
 - d. 15 to 19 years
 - e. 20 or more years
- 25.** What is your age?
- a. 18-24
 - b. 25-34
 - c. 35-44
 - d. 45-54
 - e. 55-64
 - f. 65-74
 - g. 75-84
 - h. 85 or older
- 26.** Is there anything else you would like to tell us about your park or the Participatory Budgeting Pilot Project?

Invitation to Participate

Researchers from the University of Waterloo are seeking adults to participate in a study regarding: **Participatory Budgeting and Access to Neighbourhood Parks**



If you would like to participate, please follow the link below for more information and the survey:

<http://bit.ly/2Ur8Laq>

Participants will be entered in a draw to win 1 of 4 - \$25 Tim Hortons Gift Cards

This research is not affiliated with the City of Kitchener and is not an extension of any previous or current Participatory Budgeting engagement by the City of Kitchener.

This study has been reviewed by, and received ethics clearance through a University of Waterloo Research Ethics Committee



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Appendix D: Content Analysis Recording Sheet

Code #: Code Name xx/xx/2020

Content Analysis: Open Ended Survey Questions

Code Name:

Code Number:

Survey Question:

Code Description:

Tally	
Notes and Context	

Appendix E: Interview Script

Interview Questions Script

Intro Questions

- For whom do you work, and what is your job?
- What was your role in the PB Pilot Project?

Why Participatory Budgeting?

- Why was the City of Kitchener interested in testing the PB Process?
 - o Was it to experiment with having the community make decisions on the planning of their space?
 - o Was it the benefits that are associated with the process?
 - Empowerment and encouraging further civic engagement
- Why were park improvements chosen for the test project?
 - o Smaller financial commitment
 - o Lower stakes project
 - o Parks are the kind of space that people have connections to and may want to have a role in planning this space
- Why were these two neighbourhoods chosen?
 - o Due for park improvements?
 - o Different demographic compositions? (financial and ethnicity)
 - o Neighbourhoods that are underrepresented in past participation opportunities? Testing if a different method is more likely to get them involved?

Implementation

- How was the neighbourhood informed that the Pilot Project would take place?
- How was the PB Process implemented?
 - o Two round voting system
 - o Community and public meetings/info sessions
- How were results communicated to the neighbourhoods?

Participation

- What was the initial response to the Pilot Project?
 - o Were people expressing interest or concern prior to voting and info sessions taking place?
- Did you get a sense of whether people were comfortable participating in this type of process?
- Which voting round received the highest response rate?
- Were you surprised at all by the number of people or type of people who participated in either neighbourhood, or was it what you expected?
 - o If you were surprised by the number or type of people who participated, what do you think caused this?

Outcomes and Future Use

- Do you think this process can be used again in Kitchener or the Region of Waterloo?
 - o Would similar/smaller stakes projects work best?
 - o Could larger projects be implemented using the PB Process?
- Do you think this process empowered, or benefitted those involved?
 - o Do you think they will be more involved in other civic participation opportunities?
 - o Could any of these people become community leaders?
- Do you think that the community whose park could not receive all of the voted upon improvements, still benefit?
- Will the use of this process increase the use of the parks? Improve perceived access to the parks?