

Assessing the Public Participation Process for Brownfield Revitalization Projects

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.

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Abstract

The public participation process is a vital and necessary part of planning that provides citizens with the opportunity to express their concerns and suggestions about projects that affect the overall well-being of their community. One contemporary planning issue is brownfield revitalization, which is the repurposing of former and abandoned industrial sites into residential, commercial or recreational sites. Brownfield revitalization is a timely and relevant matter in Ontario due to a) their locations, which are often within urban centres and are close to existing infrastructure, which reduces the need to develop on greenfield lands, and b) legislation, such as *Places to Grow* and various growth plans that require cities to meet intensification targets while preserving greenfield land, thus making brownfield revitalization an attractive option. In addition to their anticipated benefits, brownfield revitalization is a complex matter, as it involves environmental contamination, heritage preservation, investment and financing challenges, and undesirable surroundings. For these reasons, it is an engaging and controversial focus in public participation.

There is strong evidence in the literature that brownfield revitalization consultations often address the unique environmental, historical and demographic issues that are associated with these sites. Some strategies employed at the consultation sessions include informal meetings, consultations with experts in the sector, and legal agreements between community groups and developers to ensure projects are beneficial to the community. The intent of this thesis is to discover if the public participation sessions for brownfield projects in Ontario differ from participation sessions involving other planning projects. This research includes reviewing engagement, communication and retention strategies, and any exist specific policies or guidelines that are used when planning for the public participation process.

Five site-specific and two municipal case studies were selected as a focus in this thesis. All case studies are affiliated with brownfield revitalization projects throughout Ontario. Data collection for this thesis involved: 16 semi-structured interviews with 13 individuals which included planners, public consultation facilitators or representatives of community groups who either organized or participated in public participation sessions involving brownfield sites, and content analysis of transcribed consultation sessions, survey responses, anecdotal information from participants, and document or media analysis. The data was then coded, and relevant themes were selected in order to answer the research questions.

The overall findings in this thesis revealed that there are few differences between public participation process for projects involving brownfield revitalization sites and other planning projects. The most common strategies that were used in the participation sessions in these case studies (such as targeted invitations to special interest groups, the usage of social media, and liaisons with community “champions”) are also common in standard public participation processes. Policies and legislation offer guidelines for conducting efficient participation sessions, and addressing issues such as financing and environmental concerns, but do not advise how to present this information or engage people. Issues that commonly arose in the literature, such as contamination concerns and demographic differences, did not appear to have the same presence in the Ontario subtext.

Recommendations for this thesis include identifying the key stakeholders in each brownfield revitalization project, and establishing trust between citizens that live near brownfield revitalization sites and planners. The use of community benefit agreements can also create an efficient and equitable participation process. These recommendations are useful as brownfield revitalization is a common and beneficial strategy for achieving sustainability in Ontario and enhancing the societal, environmental and financial vitality of a community.

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Introduction

The “planner as a facilitator” is a relatively recent concept in the field of urban and regional planning. Social movements of the 1960s and extensive resistance to public housing projects in urban centres throughout North America influenced the integration of human rights with environmental issues, thus emphasizing the importance of considering the public’s concerns and insights with regard to planning projects (Shiple & Utz, 2012). Citizen involvement at participation sessions and stakeholder meetings is now a standard process for planners in order to receive public concerns and suggestions prior to development projects.

Public participation is valuable and necessary in planning because citizens can provide unique perspectives and concerns about natural areas, neighbourhood dynamics or public spaces of which non-residents, such as professional planners or elected officials, may be unaware. Citizen participation in planning became prevalent in the mid-twentieth century, primarily as a response to the social movements and interest in human rights during the post-war era (Grant, 1994). While experiencing a period of urban renewal, elected officials in many major North American cities devised plans to eradicate many historically and culturally significant urban areas and displace thousands of residents. Outrage over public housing projects that would replace these unique neighbourhoods in metropolitan areas resulted in protests, demonstrations and public rallies that allowed citizens to voice their concerns and displeasure. While methods of voicing concern and opinions have evolved to meet contemporary lifestyles, planners still encounter similar issues pertaining to culturally and environmentally sensitive topics. Public participation now includes online polls and opinion surveys, to ensure that all citizens have equal access to providing input and opinion regarding planning projects.

Public participation has recently been linked to the concept of “environmental justice,” which ensures all citizens have the appropriate means to address environmental problems that affect their

livelihoods (Schlosberg, 2007). This is especially crucial in areas where residents are at high risk of contacting illness or disease from environmental hazards that may be present in soil, groundwater or air.

In Ontario, sources of environmental concern include sites that may contain toxic and chemical contamination, including former landfills, factories or industrial structures. These areas are classified as brownfields, where decades of manufacturing have resulted in chemicals and toxins embedded in soil and water, which poses risks for the public within the vicinity; however, there is great potential in revitalizing these areas to become commercial, residential and recreational centres. Chakrapani & Hernandez (2010) refer to brownfield revitalization as a “triple bottom line” approach, because these sites should be measured for success in terms of their environmental, societal and economic benefits. One of the largest challenges associated with this approach, in addition to securing financing and creating remediation strategies, is gathering support from the general public to convert underutilized land into a site that fosters community and economic growth, thus gaining acceptance for brownfield revitalization as a long-term benefits project.

1.1 Research Questions

Given the distinctive circumstances surrounding brownfield sites and the growing importance of public participation in planning, the research question that this thesis will explore is: *are there unique aspects in the public participation process for brownfield sites as opposed to other planning projects?* The sub questions that this thesis will explore include:

- (a) do engagement, communication and retention strategies differ for public participation in this context?;
- (b) do municipalities include specific protocols for engaging the public during brownfield revitalization projects?; and

- (c) how can facilitators, community groups and staff at the municipal level collaborate to address specific brownfield issues?

1.2 Rationale for including brownfield sites

Brownfield sites are a symbol of Ontario's industrial heritage that currently represents opportunities for sustainable and economic development. In the 19th and early 20th centuries, industrial areas within Ontario's cities and towns embodied economic vitality and employment possibilities, as immigrants from within and outside Canada migrated to industrial centres in search of work (Marshall & Smith, 1978). Some examples of municipalities that include significant brownfield sites are Kingston, Hamilton, Toronto and Brantford. Manufacturing activities continued for decades on industrial lands, thus causing the dispersion of toxic materials and hazardous wastes in adjacent land and water (Ministry of Municipal Affairs and Housing, 2007). The gradual decline of the manufacturing sector, in addition to industry migrating from the urban core to the suburbs in the 1970s, resulted in cities rife with abandoned factories, industrial sites, landfills and harbours (De Sousa, 2002).

The evidence of Ontario's manufacturing legacy is ubiquitous, particularly in the southwestern region. The Ministry of Municipal Affairs and Housing (2007) estimates that 40 percent of Canada's brownfield sites are located in Ontario. Brownfield revitalization presents opportunities for community and economic development that parallel the progressive history of these industrial sites.

Redeveloping these contaminated lands is a vital and timely political issue in many parts of the province. Many municipal and regional growth plans, as influenced by the 2005 *Places to Grow Act*, encourage achieving intensification targets by redeveloping existing brownfield lands as opposed to greenfields (land that has never been developed) (Ministry of Infrastructure, 2006). Following the

passage of the Greater Golden Horseshoe's *Greenbelt Act* in 2005, the Ontario government implemented a number of measures that would ensure more streamlined risk assessment procedures and stronger contaminant features. In addition to the environmental benefits such as eradicating harmful toxins from the soil and water, there are numerous economic and developmental benefits to brownfield revitalization: the sites are often located near existing infrastructure, which reduces the need to develop on the urban fringe and greenfield lands; and this process supports local economies by intensifying and revitalizing communities (Ministry of Municipal Affairs and Housing, 2007). Some of the largest and most successful brownfield redevelopment projects in North America have taken place or are underway in Ontario; for example, the revitalization of Toronto's waterfront has secured funding from three levels of government and the private sector in the sum of nearly \$1.5 billion to add cultural amenities, greenspace, employment and commercial space to a derelict formerly industrial harbourfront (WATERFRONToronto, n.d.). The process is also evident in Kitchener, where the city's formerly vacant manufacturing buildings are being repurposed to accommodate the growth in its information technology sector; factories and industrial sites are converted into lofts, office space for high tech firms, and commercial space for a revitalized downtown core. Many redevelopment projects are financed by regional or municipal incentive programs, which indicates municipalities' increasing realization of the urban and economic benefits associated with brownfield revitalization.

1.3 Rationale for reviewing the public participation process

While much of the literature often discusses the environmental benefits and hazards of brownfield revitalization, this process is also associated with exploring the interaction, well-being and safety of residents in environmentally sensitive areas (Rowan & Fridgen, 2005). A significant amount of American literature suggests that populations located near brownfield sites have conflicting visions for the revitalized lands, which may depend on their cultural affiliation, economic status, and

environmental interests. Several sources also note that the public participation process in these circumstances is often unique because residents may experience linguistic and cultural barriers, lack resources to effectively participate in the stakeholder engagement process, or may require non-traditional methods of community engagement to express their opinions to officials and planners (Lee & Mohai, 2011). In the Canadian context, it is less clear if these factors influence the public participation process, but the literature that describes effective consultation for brownfield projects includes many applicable points that can facilitate interactive communication between planners, consultants and knowledgeable citizens (Masuda et al, 2008).

The public participation process regarding brownfield sites is important because it has become what Swerhun (2012) refers to as a “closed- or open-door issue.” She states that generally, the public is enticed by the idea of participation because they believe they have an opportunity to influence decisions, when in reality, there are limits to the public’s influence on policies and projects. These are referred to as open-door (ones that the public can participate in and provide opinions) and closed-door (ones that are beyond the mandate of the participation process) issues (Swerhun, 2012). The introduction of various growth plans in the mid-2000s has categorized brownfield revitalization as a closed-door issue, meaning this process will occur regardless of public influence. However, with proper knowledge and an efficient and accessible process, the public can offer suggestions as to where and in what forms revitalization can take place, which is an open-door issue.

North American society has changed significantly since the first occurrence of Jane Jacobs’ grassroots movements: the population is aging and is more ethnically diverse; environmental health risks are more widely known; cities and suburbs now seek sustainable and creative ways to accommodate an increasing population; and there are many more methods of communication and information-sharing (Masuda et al, 2008; Abercrombie & Chacko, 2012). It is for these reasons that traditional public meeting strategies will not suffice, and general assumptions about communities’

needs should be avoided. Exploring the public participation process among brownfield sites will provide municipal planners with greater options to maximize input and engagement.

1.4 Purpose Statement and Scope

The purpose of this research is to discover if municipalities or planners use a specific approach to public consultation for brownfield revitalization projects. There are several reasons why researching the issue of public engagement near brownfield sites is important in the current political and social context. Firstly, provincial legislation, such as the 2005 *Places to Grow Act*, identifies growth plan areas within Ontario as centres for economic prosperity and growth, in which “intensification” can achieve the proposed targets in various growth plans for regions throughout the province (Ministry of Municipal Affairs and Housing, 2005). The provincial government estimates that by 2015, at least 40 percent of all new development should occur within existing urban and suburban areas; thus, as these are common locations for brownfields, revitalization is an efficient method of achieving intensification in cities (Government of Ontario, 2005; Hayek et al, 2010). Revitalization of brownfield lands will be necessary to meet the provincial targets; thus, it is important to examine the most effective manner in communicating this issue to the public.

Secondly, governments and people in authoritative positions share information in a manner that greatly favours the general public. Swerhun (2012) notes that with the ubiquity of technology, information sharing is more prevalent, and greater access to government policies and initiatives means people can easily contact and question authority. Brownfield revitalization is not exempt from this democratic shift; official plans and community improvement plans that explain the revitalization of unused spaces are available for public comment. Discovering which methods are used to communicate issues in brownfield revitalization to the public may provide insight for effective consultation strategies pertaining to this topic.

There is also evidence to suggest that grassroots and citizens' groups play a significant role in the development and implementation of policy, which pertains to the third research sub question in this thesis. Whitelaw et al (2008) identify *domains* as social spaces that are defined by the individuals and community that share them, and are influenced by the number of people that live nearby and their interactions with each other. When issues such as sensitive ecological lands or hazardous materials influence the domain, grassroots and community movements can play a large role in creating relevant policies and regulations. Seeing that brownfield lands are often associated with these issues of critical concern, the results from this study can provide suggestions for ensuring that the public participation process allows those living nearby to effectively communicate with elected officials and planners.

One question that may arise when considering this issue is the reasons why the public participation process for brownfield projects may exhibit differences, and would warrant such a study. Firstly, one can refer to the individuals and circumstances that surround this issue. Brownfield projects may require the guidance and insight from a variety of professionals, such as archeologists and heritage planners, due to the unique sensitivities surrounding century-old sites and buildings. Also, like many planning projects, brownfield revitalization can involve controversy due to the unique circumstances that are associated with the sites; some of the most common topics involving this process are decontamination of surrounding lands, which is necessary but costly, and the challenges associated with finding investors to fund revitalization projects. Residents may feel overwhelmed or unfamiliar with the technical or financial aspects of revitalization, but have a strong interest in ensuring the project is socially and economically beneficial for their communities. For these reasons, it is essential to understand how the public receives information about this topic and the manner in which they can justly participate in brownfield projects' progress.

This study may also provide recommendations for municipalities in creating more progressive processes for involving the public in brownfield revitalization. Within Ontario,

overarching legislation such as the *Planning Act* and the *Environmental Assessment Act* explicitly state that public consultation is to be a fundamental part of municipal planning and development; however, few municipalities address this concept as it pertains to brownfield revitalization. Although it can be argued that brownfield revitalization may not require a separate process for participation, there are specific financial, legislative, environmental and sustainability issues that affect this topic that facilitators and municipal staff must communicate to the public.

1.5 Organization of Thesis

This thesis consists of six chapters and five appendices. Chapter Two consists of a literature review which assesses brownfield revitalization in a political and environmental context; the historical and theoretical context of the public engagement process; and case study research from public participation projects that have included brownfield revitalization as they relate to the research question and sub questions.

The definitions and theories in the existing literature influences the choice of participants, case study locations and methods of data collection that I will undertake as the primary researcher. This information appears in Chapter Three, which is the methodology section of this thesis, and includes a review of and rationale for the methods used in this study, as well as examples of coding techniques using actual collected data.

Chapter Four provides an overview of the history and current status of revitalization projects that are used as the case studies in this thesis. Each of the interview participants in this thesis is associated with at least one of the case studies presented in this chapter.

Chapter Five presents findings from the data collected during research, which includes direct quotes from interview participants and data from additional primary sources. This chapter also

includes an analysis of the data and discussion of these results, as organized by the research sub questions.

Chapter Six includes recommendations for planners and policymakers, opportunities for future research and concluding remarks on this topic.

Appendices containing relevant materials pertaining to participant recruitment, supplementary documentation and the University of Waterloo's ethics approval process appear at the end of this thesis. All secondary sources of information in the form of peer-reviewed articles, books, reports, legislative acts, media releases and website material are included in the bibliography.

Literature Review

There exists a multitude of research pertaining to the subjects of public participation and brownfield revitalization. Many of these studies have served as the foundation for this thesis and the construction of the research question and sub questions. The literature analyzed in this section is related to the research question and sub questions presented in Section 1.1.

The majority of this literature is sourced from journal articles, particularly regarding research involving specialized populations, with a smaller percentage from books, particularly about community participation. A great deal of the research about brownfield revitalization policy is derived from government documents and official plans. A concerted effort has been made to examine North American sources of literature, and whenever possible, in a Canadian context.

This review is divided into four sections: background information and historical context on brownfields in Ontario; community participation methods and benefits; public participation as it applies exclusively to brownfield revitalization projects; and the limitations to the existing literature. Each of the first three sections will also include a review of the relevant policy and legislation in a provincial context. The material analyzed in this section will also form justifications for participant and site selection, which will be addressed in Chapter Three.

2.1 General Brownfield Information

The literature examined in this section will provide insight into the reason brownfields have been chosen as a research topic for this thesis by considering their economic, environmental and social benefits, as well as how revitalization is supported in a political context.

Seeing that brownfield revitalization has gained significant popularity in the past few decades, literature on this topic is still developing, as academics and professionals discover the multi-faceted aspects of this process. As most literature regarding brownfields focuses on the technical and

scientific matters of site remediation, articles discussing its policy process, environmental benefits and obstacles will also be reviewed in this section (De Sousa, 2000).

In order to understand why brownfields are an area of focus in this thesis, a definition of the term should first be established based on that which exists in the literature. The definition of a brownfield can differ depending on the jurisdiction in which it is located; in the United Kingdom, a brownfield is defined as any land that has been previously developed (Adams et al, 2009). The North American definition of a brownfield includes the possibility of contamination due to previous industrial uses, thus generally categorizing brownfields as 19th or early 20th century manufacturing sites. The United States Environmental Protection Agency has defined brownfields as “abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination” (Alker et al, 2000, p. 52). For the purposes of this study, as all sites reviewed must comply with the provincial definition, a brownfield will be defined as that which is found in the Government of Ontario’s *Provincial Policy Statement* as:

“undeveloped or previously developed properties that may be contaminated. They are usually, but not exclusively, former industrial or commercial properties that may be underutilized, derelict or vacant.” (Ministry of Municipal Affairs and Housing, 2005, p. 29).

Brownfields are a study site for this thesis due to their historical significance in Ontario’s manufacturing history, and their important role in achieving provincial planning policy goals. Abandoned industrial sites are prevalent throughout the province, particularly in Southern Ontario, where the manufacturing sector stimulated economic and population growth in Windsor, St. Catharines, Kitchener, Oshawa and Peterborough (White, 1996). Bloomfield et al (1986) state that by 1871, some of the largest establishments by value of production in the province were the Gooderham & Worts distillery in Toronto, Welland flour mills in Welland and McCormick confectionary

manufacturers in London; all of these industrial buildings presently exist as commercial, residential, cultural and historical sites (see Figure 1).



Figure 1: Examples of formerly industrial brownfield sites in Ontario

(From L to R: the Gooderham & Worts distillery, the Welland flour mills, and the McCormick confectionery factory. Sources: www.thedistillerydistrict.com/images/photogallery/4.zip, www.niagaragreenbelt.com/listings/69-mills/666-welland-mills.html, www.londondailyphoto1.blogspot.com.)

While the mining, logging and railway development sectors heavily supported Northern Ontario's economy, the legacy of the province's manufacturing sector in the form of brownfields has been more identifiable in its southern and eastern regions, and thus most of the sites in this study are located in these areas.

Brownfield revitalization is generally valued for its ability to transform derelict and under-used formerly industrial sites into areas that foster economic development and community building without impeding on greenfields or farmland. De Sousa (2011) summarizes the complete benefits of revitalization by stating that the process allows for environmental remediation, transforms socially and economically neglected areas into desirable spaces, and occupies less space than greenfield developments. The revitalization process is a recent planning issue that follows the migration of industry and residents to the suburbs and surrounding greenfield areas in the 1960s and 1970s (De Sousa, 2002). The decades that followed this urban shift were crucial in determining the importance that revitalization would play in the future landscapes of cities in North America. In Toronto, there

were over 600,000 square metres of brownfield space redeveloped by the 1990s (De Sousa, 2002). This indicates the interest in this process and sets a precedent for redevelopment in future decades. Recent polls have also proven that brownfield revitalization is gaining support from the public, as communities recognize the benefits that redeveloped sites have on their neighbourhood vitality. Although Hayek et al (2010) note that the public may lack a general understanding of the scope and cost of the revitalization process, there is strong support when brownfields are turned into spaces where community members can congregate and use natural amenities, such as parks and greenspaces (De Sousa, 2011). De Sousa (2011) also includes strong arguments for the economic benefits in urban areas, which bring jobs, investments and increased taxes to many downtown cores, which have suffered financially in past decades. While case studies in this thesis focus on the community's role in project creation, it is important to note the social benefits that accompany brownfield revitalization. In Johnson, Glover and Stewart's (2009) study of Kitchener's McLennan Park, a former brownfield site, it is noted that some areas may have an existing sense of community that should not be ignored, and should be incorporated into revitalization. The authors also state that some residents worry that revitalization efforts will create a new dynamic in which residents are unable to connect with the previous landscape.

Based on the literature that acknowledges brownfields sites for their transformation into livable and vibrant places, one may think that this process would be easily emulated in several more cities as a method of achieving sustainability and intensification in urban areas. There are many obstacles, however, that communities face when attempting to transform a derelict area into one that produces economic, social and environmental benefits.

The largest risk to revitalization is the liability associated with cleaning contaminated areas. Considering the industrial history of these sites, brownfield lands are laden with chemicals and toxins, and require a complex environmental remediation process (De Sousa, 2000). Due to the serious

danger that latent chemicals pose to human health and safety, Antonowicz (2011) notes that liability deters investors and financiers from supporting various revitalization projects, resulting in numerous idle brownfield sites. This concern is echoed in literature from several American and Canadian sources, indicating that the problem of contamination and risk is common throughout the continent (Howland, 2004).

Another obstacle to brownfield revitalization is the lack of assistance from the federal government for resources and funding. Adams et al (2009) find that federal and centralized governments in Great Britain, and to a lesser extent in the United States, provide more financial assistance and play a greater role in overseeing the revitalization of brownfields compared to their Canadian equivalents. The overall structure and involvement of the key players in revitalization are highly indicative of the difficulty and fragmentation of the process in Ontario: the provincial and municipal governments assume an administrative role while the private sector is generally responsible for cleanup and liability, which do not constitute shared risk. Finally, greenfield development is an attractive alternative to brownfield redevelopment, as developers can purchase cheaper land in suburban areas and avoid expensive environmental rehabilitation programs and projects, plus the risk of added liability in residential areas (De Sousa, 2000). There is also a lack of a complete inventory of brownfield sites in Ontario, which makes retrieving information about the process difficult.

2.1.1 Policy Review

In Ontario, the Ministry of Municipal Affairs and Housing oversees policy development and administration for brownfield revitalization within the province. Stakeholders such as developers, investors, building owners and municipalities have recognized the benefits of revitalization and have access to various programs and financial incentives designed to encourage this process. The province has ensured that guidelines and policies regarding brownfield revitalization are explicitly revealed in several frameworks and legislative documents as references for the aforementioned stakeholders.

Supporting brownfield revitalization also achieves political goals outlined in the *Places to Grow Act* of 2005; the Act designates certain regions of the province as growth plan areas and provides support for regional development in a strategic and coordinated manner (Ministry of Infrastructure, 2005). Under Section 6d of the Act, officials are asked to consider policies, goals and criteria within a growth plan that could affect a number of factors. Several of these factors are affiliated with brownfield revitalization, and include:

- (i) intensification and density;
- (ii) land supply for residential, employment, and other uses;
- (viii) infrastructure development and the location of infrastructure and institutions;
- (xiii) affordable housing, and
- (xiv) community design (Ministry of Infrastructure, 2005).

Thus, municipalities wishing to follow the principles of sustainable and strategic growth may use brownfield revitalization as a solution.

Given the diversity throughout the province with regard to natural resources, demographics and economic development, each municipality within Ontario has varying land use policies within their official plans. For example, under Section 3.4 entitled “The Natural Environment” of the *City of Toronto’s Official Plan*, Policy 22 requests that redevelopment of large industrial or brownfield sites receive special attention with regard to environmental cleanup (City of Toronto, 2010). Regions of the province have also adopted individual growth plans that include policies that support brownfield redevelopment. In the 2006 *Growth Plan for the Greater Golden Horseshoe*, brownfield sites are specifically mentioned as places that should be revitalized to achieve higher intensification within urban growth centres (Ministry of Infrastructure, 2006). The 2011 *Growth Plan for Northern Ontario* also emphasizes the revitalization of brownfield sites to achieve intensification; however, this differs slightly from its Golden Horseshoe counterpart, as brownfields are included in “strategic core areas,”

which may include medium or high density buildings, and are future development sites of health, education and research centres to encourage growth in northern regions (Ministry of Infrastructure & Ministry of Northern Development, Mines and Forestry, 2011).

The provincial government has recognized the barriers to brownfield redevelopment, and has instated policies that provide assistance and guidance to municipalities. In 2001, the province passed the *Brownfields Statute Law Amendment Act*, which removed barriers to financing and regulatory liability, thus encouraging higher environmental standards and greater investment of brownfield revitalization sites (Ministry of Municipal Affairs and Housing, 2008). In conjunction with the passage of the *Places to Grow Act*, the Ministry of Municipal Affairs and Housing also released the *Provincial Policy Statement* of 2005. The Statement recognizes the significance of unused and abandoned industrial lands as opportunities for growth within the province, as it states in Section 1.1.3.3 that planning authorities should recognize areas for intensification by surveying existing building stock or areas, with an emphasis on brownfield sites (Ministry of Municipal Affairs and Housing, 2005). It is also notable that Section 1.7 titled “Long-Term Economic Prosperity” also recognizes brownfield revitalization as a tool in fostering economic growth within the province, where these sites exist.

The province has also established detailed guidelines for landowners that have purchased property on a brownfield site with the intention of redeveloping it. Ontario Regulation 153/04 is the current provincial legislation that states the requirements that property owners must meet to file a Record of Site Condition, which assesses the environmental condition of a property at a given time, and offers protection from environmental cleanup orders (see Figure 2). It is imperative that individuals wishing to redevelop brownfields into liveable centres contact the Ministry of the Environment to ensure that all natural resources surrounding the site do not contain hazardous materials that could potentially harm the health of humans or wildlife that frequent the area.

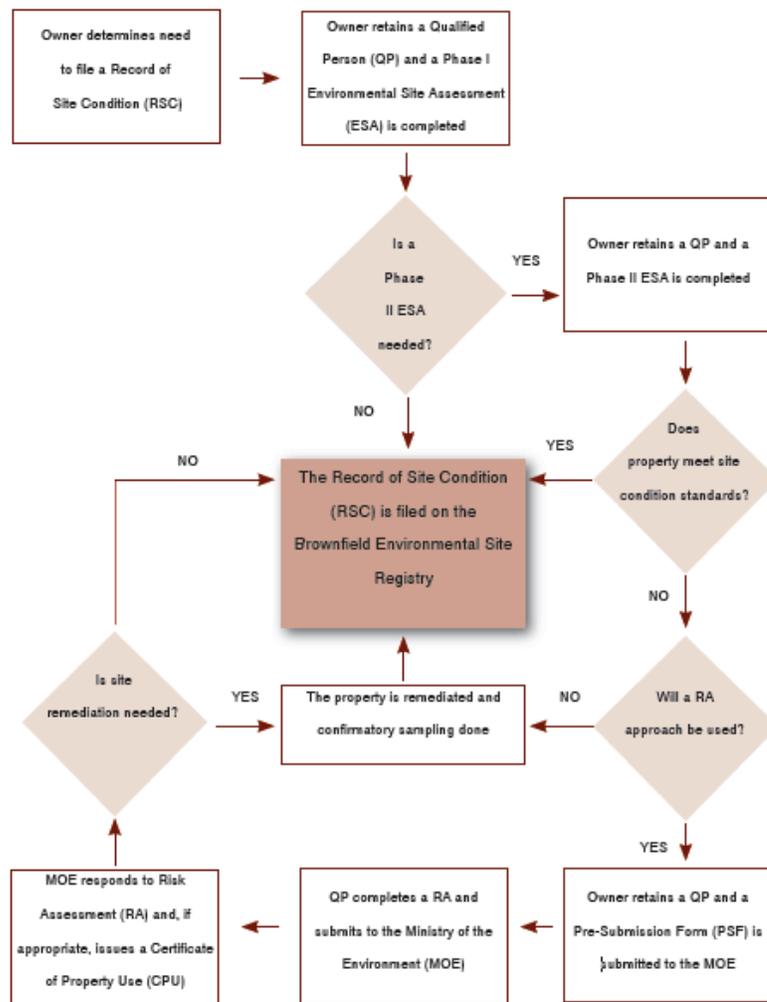


Figure 2: Process of filing a Record of Site Condition

(Source: Ministry of Municipal Affairs and Housing, 2007)

In order to file a Record of Site Condition, a qualified person (an expert who meets the requirements in regulation 153/04) should assess the property, which should meet the soil, groundwater and sediment standards appropriate for redevelopment (Ministry of Municipal Affairs and Housing, 2007). Environmental site assessments and risk assessments are also necessary for obtaining a Record of Site Condition, as noted in Part XV.1 of the *Environmental Protection Act*. Failure to successfully meet the standards could significantly hinder a developer's chances of funding

and completing the project. Various financial assistance plans, such as the Ministry of Finance's Brownfield Financial Tax Incentive Program, and the *Ontario Heritage Act's* Heritage Property Tax Relief Measure for Properties, are indications that the provincial government recognizes and contributes to revitalization (Ministry of Municipal Affairs and Housing, 2007). Funding that is dedicated to the revitalization of these spaces results in the preservation of heritage structures, ecologically sensitive areas, and renewed areas that promote usage of infrastructure and greenspace (Ministry of Municipal Affairs and Housing, 2007; Hayek et al, 2010).

2.2 Public Participation

There is an extremely broad spectrum of information on public participation in planning. Many academics and authors acknowledge the importance of including citizens' concerns, visions and knowledge of their surrounding neighbourhoods during planning projects. The literature reviewed in this section will support the research question by answering: why is the public participation process significant, and how can planners ensure citizens have multiple opportunities to participate?

In order to understand the concept of public participation, it is helpful to review the various definitions of the phrase. According to Shipley and Utz (2012), the Bureau of Municipal Investigation has claimed that citizen participation is "a series of meetings held at agreed times in which the nature of a problem, the development of solutions and the plan for implementation can be debated and assented to by stakeholders" (pg. 3). This definition appears to be general and universal, compared to other literature that recognizes citizens may express their opinions in other arenas using various methods of discussion. However, it focuses strongly on the procedures involved in public participation sessions, and less on the components of an effective participation session. Shipley and Utz (2012) refer to Tuler and Webler's (1999) list as an example of the crucial common elements for effective consultation, which are presented below (p. 3):

1. Access to the process
2. Power to influence process and outcomes
3. Access to information
4. Structural characteristics to promote interactions
5. Facilitation of constructive personal behaviours
6. Improving social conditions for future processes
7. Adequate analysis

It may be argued that an effective consultation process that considers the participation of a diverse group of individuals will incorporate many of the elements listed above. A more detailed description of each element and their significance to the case studies examined in this thesis will appear in the concluding chapter.

Arnstein's (1969) definition in particular evokes the spirit of social change and empowerment that was prevalent during the 1960s, in which she states that citizen participation is "the redistribution of power that enables the 'have not' citizens, presently excluded from the political and economic processes, to be deliberately included in the future" (pg. 216). Arnstein's definition is echoed and shared with many others and will be discussed further in this section.

Many academics have acknowledged that public participation should be accessible to all citizens regardless of race, ethnicity, socio-economic status or religion, which indicates a democratic society (Burke, 2007; Grant, 1994). Adams (2004) praises public meetings as an important component in the democratic process, as they enhance the responsibility and accountability of the local government. Shipley and Utz (2012) mention that public participation is now also embedded in international professional associations and protocols, citing the Canadian Institute of Planners and the American Institute of Certified Planners as two such examples. Furthermore, many authors describe instances where citizens have positively influenced projects and initiatives within their neighbourhoods due to the public participation process (Susskind, 1981; Grant, 1994).

Citizen participation became popular in the 1960s as a response to the urban renewal housing projects that threatened to destroy ethnic neighbourhoods in many North American cities (Shiple and Utz, 2012). While writer Jane Jacobs certainly popularized the idea of citizen involvement and proved that residents could defeat powerful municipal figures, other players also became notable advocates for community participation. Arnstein famously compared citizen participation to eating spinach in her 1969 article, “A Ladder of Citizen Participation,” arguing that no one is against it in principle because it is beneficial, but it is still avoided when possible. She is most recognized, however, for creating the “ladder of citizen participation,” which is a visualization of the extent of citizen participation with each rung representing a level of involvement, as seen in Figure 3 (Arnstein, 1969). The levels range from manipulation on the bottom, where decision makers force their ideas on citizens and allow minimal feedback, to citizen control on the top, where citizens obtain a majority of the decision-making seats.

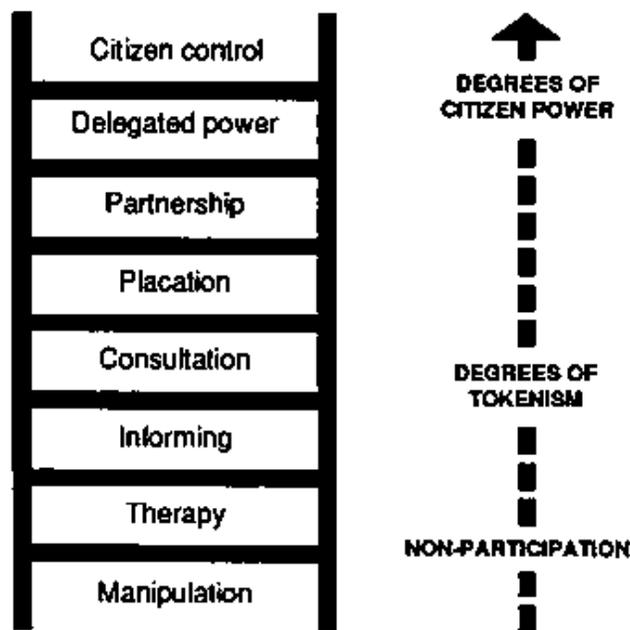


Figure 3: Arnstein's ladder of citizen participation

(Source: Arnstein, 1969)

Numerous academics and professionals have praised and cited Arnstein's theory as groundbreaking and pivotal, but it has been recently reviewed in order to determine its efficiency in contemporary planning circumstances (Roberts, 2004). A similar theme has been identified in literature pertaining to finding an effective method of conducting citizen participation sessions, which is that of fairness, equality and compassion from local officials towards citizens of society. Fisher and Ury (1981) emphasize the concept of "principled negotiation," in which the local official or planner utilizes an open-minded approach to communicating with citizens, which results in a fair, empathetic and flexible process. Friedmann's (1973) most famous contribution to research on citizen participation involves that of transactive planning, where consultations and meetings are personal, and dialogue is "person-centered." He compares the relationship between the planner and the citizen to that of a teacher and student, and stresses that the student must be allowed to speak while the teacher sits back and listens actively. Lane (2005) praises Friedmann's theory because it emphasizes mutual learning and focuses on institutional development. The concepts of fairness and competence are discussed in Webler and Tuler (2000) as important components in ensuring citizens are treated fairly by officials and given proper and correct information to make informed decisions about planning projects or societal improvements.

Overall, much of the literature focuses on the guidelines and rules that local officials and planners must follow in order to conduct a successful participation process; however, citizens can take action as well to increase their chances of forming strong bonds between elected officials and society. Adams (2004) notes that while attending meetings are the most effective way to demonstrate interest in participation, contacting elected officials to discuss various concerns will guarantee a phone call or swift response.

Despite the positive attributes and praises that public participation has earned, there are still many areas where this experience may be improved so that all citizens can be involved in this process. Many academics have noted the irony in public participation, where citizens demand and value the opportunity to express opinions and concerns in a public setting, but participation remains low and is widely disliked by planning officials (Grant, 1994; Susskind, 1981; Yang, 2005). This sentiment may be related to the general distrust and contempt for government that exists in contemporary society. Grant (1994) briefly sympathizes with uninvolved citizens by stating that democracy may appear frivolous when there are obvious holes in the Canadian political system, such as failure to impeach an elected representative and politicians are overwhelmingly upper-middle class, white men. Yang (2005) also attributes the inability to participate in public meetings to tension and distrust between all levels of government and the general public. Creighton (1981) acknowledges that planners understand their efforts are increasingly irrelevant, citing that public officials may view meetings as time consuming, expensive, complicated and emotionally draining.

This statement is generally true for many citizens throughout North America, and even within the continent there are notable differences among residents and participation styles. Grant (1994) observes significantly active citizen participation in rural New England town halls, while efforts to emulate the same style of involvement in Halifax have failed. Silverman (2006) studied citizen participation methods in the cities of Niagara Falls in Ontario and New York and concluded that in Canada, participation was more likely to evolve from grassroots organizations and direct contact from elected officials, while in the United States, participation was more likely to occur within the context of annual meetings or referendums. Regardless of the specific region, participation in North America remains noticeably lower compared to that in Western Europe. Susskind (1981) notes that neighbourhood changes in Western European countries have come about from citizens “co-

producing” changes in their society with local officials and generally taking on a more equitable role as informed and active citizens.

One issue that has recently gained attention in literature pertaining to citizen participation is that of equality and assurance that members of society who may be considered marginalized are given equal opportunities to participate in the decision making process. One relevant mention of this subject is evident in Davidoff (1965), where he introduces the concept of “advocacy planning.” In this theory, planners or local officials act as advocates for a specific cause or group, which is often marginalized or affiliated with a disadvantaged group within society. In order to achieve this, Davidoff argues that values should be intrinsic in planning and all parties should be open to alternatives. Given the historical context, Davidoff is to be commended for his ability to write about experiences that seemed unattainable in his time.

It has been stated earlier that Arnstein’s 1969 article, which succeeded Davidoff’s, was an introduction to the criteria for public participation in the following decades. The greatest flaw in Arnstein’s theory is that it cannot be universally applicable to all societies, as the composition of a population is highly varied and is associated with unique concerns and priorities. By recognizing this weakness, Choguill (1996) composed an updated ladder of public participation that she argues is more realistic for marginalized and disadvantaged communities. There are several differences between Arnstein and Choguill’s ladders. Firstly, Choguill refers to the citizen participation process as the community participation process, because it “considers individuals as members and representatives of a fully organized community” (p. 435).

Secondly, Choguill recognizes that members of a disadvantaged society cannot approach various problems the same way a society in a developed nation would; therefore, it is important to

know the political context of the country before organizing or planning community participation meetings.



Figure 4: Choguill's ladder of community participation for underdeveloped nations

(Source: Choguill, 1996)

Choguill's ladder of community participation, as seen in Figure 4, is based on the observation that governments in the developing world may not be able to provide citizens with their requested services. Thus, if a government were to neglect their needs, the community must assemble as one that is self-sufficient and self-managing. This message may also be applied to public participation among populations that are located in potentially environmentally or economically harmful areas.

In a contemporary context, public participation is now significant because the methods and frequency of information sharing has changed drastically since the mid-twentieth century. The power to make decisions was historically determined by an individual who had the greatest access to information. Presently, the public has access to a multitude of information through social and online media; thus, they are better equipped with resources that will assist in formulating opinions about planning and development projects (Swerhun, 2012).

2.2.1 Policy Review

Public participation is widely acknowledged in several legislative pieces as a necessary and vital part of the planning and environmental assessment process. Guidelines exist at both the federal and provincial levels, but for the purposes of this study, the provincial legislation will be explored. The provincial *Environmental Assessment Act* (EAA) states, in Part II, Section 3, that the proponent (owner or person managing or overseeing and undertaking) must describe the proposed changes in addition to the public consultation schedule and location, and should be followed by the results of the consultations (Government of Ontario, 1990). This ensures that developers, municipalities or landowners relay important information to the public in order for people to provide informed and accurate input regarding proposed activities. The EAA does, however, give discretionary ability to the Minister of the Environment to delegate responsibility to ministry officials and bureaucrats, which lessens the importance of the elected officials and the public to contribute to the environmental assessment stage. One example of this is under Section 31(2) of the EAA, which allows the Minister to “delegate to an employee or class of employees in the Ministry any power conferred or duly imposed on the Minister under this Act and may impose limitations, conditions and requirements on the delegation” (Government of Ontario, 1990).

The Ontario *Environmental Bill of Rights* (EBR) is another legislative document that outlines the requirements that the Minister of the Environment must meet before the provincial government makes decisions on environmentally sensitive proposals for policies, Acts and regulations (Government of Ontario, 2009). The EBR contains details about the establishment and purpose of the environmental registry (Sections 5.1 and 6.1), contents of the environmental statement of values (Sections 7 and 8.3), and the timeframe for which the Ministry must allow public input before finalizing the environmental statement of values (Section 8.6). The EBR has generally been praised

by stakeholders for its clarity and transparency with regard to allowing public participation (McClenaghan & Lindgren, 2010). This is achieved through the Environmental Bill of Rights registry, which can be accessed online and is intended to provide notice to the public about environmentally significant decisions in an accessible manner (Canadian Environmental Law Association & Environmental Health Institute of Canada, 2012).

2.3 Community participation in brownfield revitalization projects

The previous two sections of the literature review have discussed the economic and environmental reasons for brownfield revitalization, and the importance of public participation in the planning process. This section will assess and summarize the key themes that appear in the literature relating to public participation as it relates specifically to brownfield projects. It will also answer the two research sub questions, which ask what engagement, communication and retention strategies have been previously used, and how community groups can collaborate with facilitators and municipalities. The policy review will address another research question, which is if municipalities have specific protocols for involving the public in brownfield revitalization projects.

The literature that pertains to this specific topic is fairly recent, as a large portion of it has been published in the 2000s. It generally explains how to effectively organize and run a public participation session while addressing the unique issues that are associated with brownfield revitalization. Several sources also describe the various demographics that are found near brownfield sites, and the challenges these individuals may experience when participating in the process. Most of the literature is American, as the United States has invested a significant amount of resources in a federal cleanup strategy of hazardous sites called “Superfund,” which grants local and grassroots groups the right to comment on the proposed cleanup plans (Wernstedt & Hersh, 1998). The literature reviewed in this section will provide justifications for including this topic in this thesis, and contribute

to the overall recommendations for running an effective public participation session for brownfield revitalization.

Overall, the literature reveals that there are few significant differences between a public participation session for brownfields and non-brownfield sites; nevertheless, many sources identify some distinctive issues that arise in participation sessions when discussing this topic. Bartsch & Wells (2003) state that there are complex legal and financial concerns related to remediation, in addition to complex historical aspects, where the site may represent the loss of economic vitality in a city. In addition to spurring economic development, environmental risk is often mentioned as a common concern that is prevalent during public participation sessions for brownfields (Wernstedt & Hersh, 1998; Fontaine, 2008; Rowan & Fridgen, 2005). Fontaine (2008) notes that often, technical language or chemical nomenclature associated with the remediation process can either confuse or frighten the public, so planners and facilitators must consider how to appropriately present these messages to attendees. Gallagher & Jackson (2008) and Greenberg & Lewis (2000) state that several brownfields' locations in economically depressed or blighted areas have a considerable effect on the structure and demographic composition of the public participation processes. For these reasons, it is important that the public participation process incorporates certain strategies that address these differences.

A significant amount of literature on this subject discusses how demographic patterns near brownfield sites influence public participation strategies. Many sources consist of American data and case studies; however, some points may be relevant to the Canadian or Ontario experience. American studies reveal that there is a strong correlation between housing patterns of racial minorities or people of lower socio-economic status and locally unwanted land uses, which include brownfield sites (Been, 1994; Buchanan, 2010; Gallagher & Jackson, 2008; Pastor et al, 2001). This pattern is consistent regardless of region or metropolitan area, as Buchanan's (2010) study of abandoned areas

in Philadelphia, Gallagher and Jackson's (2008) study of neighbourhoods in the American South, and Jenning's (2004) study of a community in Roxbury, Massachusetts all exhibit stories of struggle within minority populations near brownfield sites.

In addition to offering explanations of why minorities and low-income residents are concentrated in brownfield sites, several sources also explain why these groups tend to settle in a stagnant cycle. Generally, populations that lack political and economic clout are less likely to protest and demand rehabilitation of sites, despite concern for environmental pollutants and safety hazards (Gallagher & Jackson, 2008; Pastor et al, 2001). Bullard (1990) refers to this as the "path of least resistance," where contaminated sites have been disproportionately located in minority neighbourhoods. Other reasons why minorities or low-income residents may experience difficulties in participating in public information sessions include working multiple jobs, a general distrust for authority, and the inability to speak or read English (Gallagher & Jackson, 2008). Several sources, especially the ones reviewed in the following section of the literature review, state that these reasons are common and unfortunately restrict certain demographics from effectively participating in community issues. A notable solution that Buchanan (2010) presents in her article is to create a community benefit agreement between the local developer and a coalition of community or grassroots groups, non-profit organizations, or labour unions, which is described as "an enforceable contract that provide[s] a transparent and effective mechanism for addressing public concerns about economic development projects and allow[s] community groups to have a voice in shaping development efforts" (p. 8). In her case study of racial and ethnic minority residents involved in the brownfield revitalization process in Philadelphia, it was shown that community benefit agreements are useful methods of ensuring developers and planners incorporate the needs of the community in the project plans, and encourages active involvement among residents.

Despite reasons for not rallying against industry or lobbying governments to clean up brownfield sites, several studies show that residents are aware of blight in their communities and wish to rehabilitate the area. Lee (2012) notes that many residents prefer local businesses, affordable housing and safe neighbourhood parks as priority for revitalization of brownfield sites.

In nearly every source reviewed pertaining to demographics near brownfield sites, each of the authors classifies the involvement of disadvantaged or special interest groups as an issue of “environmental justice.” Davies (1999) defines environmental justice as a movement that “create[s] equal access to environmental resources and equal protection from ecological hazards for all communities” (p. 287). The disproportion of minority residents near brownfield sites is not a new concept, as Gute (2006) reveals that poorer residents in 19th century London lived near the heavily-polluted River Thames, while the upper-classes lived away from the odours and toxins of the river. One of the first reports of disparity near brownfield sites was written by the United Church of Christ Commission for Racial Justice (1987), which stated that race was the greatest factor in determining settlement patterns near brownfields and contaminated sites. Several sources reference this report as a defining source that brought attention to the connection between urban decay and injustice (Haluza-Delay, 2007; Buchanan; Howland, 2007; Pastor et al, 2001). However, environmental justice gained popularity during the civil rights and environmental movements of the 1960s and 1970s. The concept of environmental justice is strongly linked to brownfield redevelopment, but does not earn the same recognition as the technical and political aspects of revitalizing contaminated spaces.

When considering the Canadian context, there are few sources that provide the same detail and information as American literature on the topic of brownfields and special interest populations. Haluza-Delay (2007) and Teelucksingh (2007) hypothesize that the reason for this discrepancy is that racial patterns and history are generally different in Canadian urban centres than those in their

American counterparts. Teelucksingh (2007) also reviews the patterns of residence among lower-income residents and ethnic minorities in Scarborough, Ontario. This is one of the few Canadian case studies that provide sufficient detail regarding this issue. Her results reveal a pattern that is common in other literature, in that low-income neighbourhoods are often located near contaminated sites.

Fontaine's (2008) report encompasses several relevant suggestions for an effective participation session for brownfield revitalization projects that are also present in other academic sources. There are three relevant themes, which are supported by other concepts in the literature, and are as follows:

2.3.1 Establishing a Project Narrative

Fontaine (2008) states that it is important to remember that brownfield sites represent the history of a place that may be embedded in the local culture or economy; thus, the revitalization of the site will likely represent reclaimed opportunities and a need to reintroduce economic prosperity to a region. The project narrative provides the site's complete background information, frames the overall issue, and explains to the public why the site should be revitalized (Fontaine, 2008). In this preliminary stage of consultation, it is important to remember that contamination issues may be introduced, and that certain terms may intimidate or confuse residents who are concerned with community safety. Laurian (2003) notes that the public may often become involved when there is a perception of risk of environmental harm. In this instance, Bibeault et al (2001) suggest describing and explaining the hazards of common uses of chemicals by using informative diagrams. This is anticipated to minimize environmental risks and provide clarity for residents living near these sites, and create a more efficient process, as individuals who know more about the site can contribute more to a project than those who are unaware and uneducated (Bartsch & Wells, 2003; Laurian, 2003).

2.3.2 Electing a Credible Champion

Fontaine (2008) stresses the importance of electing a “champion” as a spokesperson for the revitalization, which is described as someone who “needs to have the trust of the community, be able to communicate at the community level, and have strong ties to both the public and private sector” (p. 235). In this case, the champion plays many possible roles: educator, facilitator, negotiator and advocate. The champion may either be an individual, or an organization that is well aware of the issues surrounding the site and has long advocated for change. This also includes special interest groups, such as environmental non-government organizations, grassroots groups and individuals of lower socio-economic status. These groups have traditionally been instrumental in influencing policy and setting agendas in Canada, as Whitelaw et al (2008) and Masuda et al (2008) recognize their efforts in establishing conservation and land use planning policies in Ontario and Alberta, respectively. It should be noted that in some pieces of literature, such as Rydin & Pennington’s (2000) article, special interest issues are presented as those in which a small but vocal minority imposes changes and costs on the larger public. In planning circumstances, it is crucial that policy-makers identify the needs of special interest groups, as Rydin & Pennington (2000) state that involving all parties in the early stages of the participation process will avoid conflict later, and may reveal key pieces of information that are necessary to the policy making process. Solitaire (2005) identifies the key players who make decisions and represent the “majority” as the “effectors,” which includes local politicians and the private sector. As a result, others on the opposite side of the spectrum are the “affected,” and may experience or require a different participation process than the standard one as reviewed in the previous chapter.

In situations where a non-majority or special interest group is involved, the need for “collaborative planning” arises among the effectors and the affected. Whitelaw et al (2008) define this

as an interactive partnership between the government, interest groups, major community sectors and the general public. The literature regarding this process generally refers to a group of diverse individuals who have varying ideals, goals, and interests, but are focused on one central issue that is relevant to the topic of brownfield revitalization. There are two notable objectives that should arise from a collaborative planning process: firstly, participants should seek reciprocity in creating new opportunities for co-operation among each other; and secondly, the sharing of information is crucial to a successful session (Booher & Innes, 2012; Margerum, 2002). Laurian (2003) also recognizes the importance of these networks in creating efficient participation processes, as informal relationships with many members of a community provide a wider range of information.

Establishing trust among a population is also an important role for a champion and can determine the extent to which people participated in engagement sessions. If the community or special interest group felt that the effectors or planners were part of the community, and fully understood the severity of their issue, residents were more likely to contribute and participate in the public engagement process (Solitaire, 2005). Trust is achieved between the facilitator and other participants when all parties fully understand each other's motives. Eiser et al (2007) find that trust among participants and key players in brownfield revitalization projects is associated with openness and motives, rather than extensive knowledge of the issue. Booher & Innes (2002) suggest that in order to achieve full understanding, participants should engage in dialogue on which they can agree, rather than use different languages and frames of reference. In this instance, the role of the champion becomes crucial to frame discussions and guide sessions using appropriate language.

2.3.3 Realistic Timeframe

Fontaine's final point for a successful participation strategy is to keep the process within a timeframe of two years (2008). As noted in several sources, including Gallagher & Jackson (2008),

there are many reasons why the public does not always participate in sessions, such as time constraints or family commitments; thus, one method of holding public interest in a project is to separate the process into sections. Retention ensures that participants will engage with others and continue to offer feedback throughout the planning process. Rydin & Pennington (2000) note that repeated interaction among small groups allow people to monitor one another, which may prevent non-cooperative behaviour. Margerum (2002) demonstrates the need to retain participants in collaborative planning by stating that this process requires a longer time frame to achieve the desired results, and also requires several meetings to gain trust and build meaningful networks among participants.

Constant updates regarding the status of the project and policy related news is essential to maintain the public's interest in brownfield project planning. Laurian (2003) states that information about the sessions and meeting issues is best circulated through mass media. Seeing that Laurian's article was written ten years prior to this study, before the extensive usage of social media to communicate, it is important to understand how this phenomenon plays a role in garnering attention about brownfield projects. Barrie (2009) reveals how the rise of social media has indicated that the public relies on the informal networks, that Laurian (2003) discusses, to receive purposeful information. In a more local example, Irvine (2012) explains how the public can become engaged and educated about brownfield issues, economic importance and methods of participation regarding the Evergreen Brick Works (a former brick factory in Toronto, revitalized into a farmers' market and community gathering space) through their website and other means of social media.

With the exception of Section 2.3.1., the literature reveals that the tactics suggested for the public participation process in brownfield revitalization planning are not different from other types of

participation sessions. This is a pattern that will reappear in Chapter Five, as interview participants for this thesis provide their experiences with this question.

2.3.4 Policy Review

There is the least amount of policy regarding protocols relating to the engagement process for brownfield revitalization projects, presumably because many municipalities do not have substantial brownfields for redevelopment or have not identified variables that would justify specific protocols for this issue. However, there are certain policies that apply to individuals who are concerned with brownfield revitalization projects and would like to become involved in the engagement process (as seen in Figure 5).

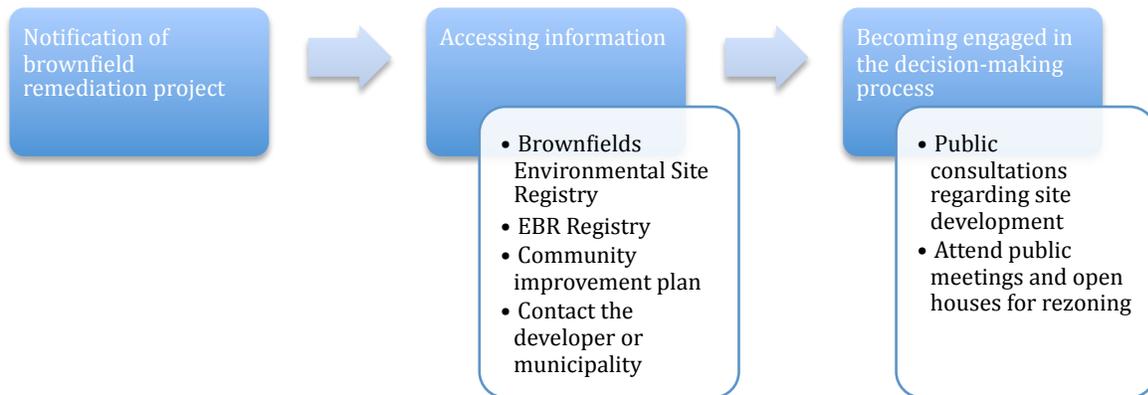


Figure 5: Process for public engagement in the decision-making process for brownfield revitalization projects

(created using data from the Canadian Environmental Law Association and Environmental Health Institute of Canada, 2012)

From a provincial perspective, the Ministry of the Environment created the Brownfields Environmental Site Registry (BESR) in 2004 to allow the public to search for Records of Site Conditions. The BESR complies with an important goal that is stated under Part XV.1 in the *Environmental Protection Act*, which is located in the following section: 168.3(2) indicates that the registry will facilitate public access to information contained in the Records of Site Condition (Ministry of the Environment, 1990). Although this forum does allow for the public to view the potentially contaminated sites that are scheduled for redevelopment within the province, filing a Record of Site Condition on the BESR is voluntary, and the site does not allow for public questions and comments in the same manner as the Environmental Registry.

With regard to specific protocol from individual municipalities, there are few that mention how engagement concerning a brownfield project should take place. For example, Halton Region includes under Section 2.3 within its *Draft Protocol for Reviewing Development Applications with Respect to Contaminated or Potentially Contaminated Sites* that the Region may, during a site assessment or remediation process on contaminated ground, “require the proponent to conduct a formal public consultation, or request that the proponent completes public consultation” (Halton Region, 2012, p. 6). This ensures that the public is provided the opportunity to comment on the proposed development during crucial stages of environmental examination. The Canadian Institute of Environmental Law and Policy note the lack of public engagement processes specific to brownfield revitalization in their guide to brownfield redevelopment, and is one of the many limitations associated with this thesis.

Community improvement plans are a common part of brownfield revitalization, seeing that these are plans that address the redesign, reconstruction, and redevelopment of a specific project area with the goal of improving the surrounding environment for community. Section 28 of the *Planning Act* outlines specifically the terms, conditions, provisions and financing options involved when

municipalities identify improvement areas within their communities and draft plans to revitalize and rejuvenate an area. Several other planning documents, such as the *Brownfields Statute Law Amendment Act* of 2001, further promote the use of financing tools to revitalize and encourage brownfield redevelopment. The reason that community improvement plans are relative to public participation in brownfield planning is that it is an encompassing process that involves several forms of input: Section 28 (5.1) identifies the important role that Ministers must play in consulting with municipalities when reviewing their plans, and Section 26.5 states that the municipal council must give consideration to all input provided by the public in writing and at public meetings. As it is reviewed in further sections, collaboration between the public and all levels of government is critical to ensuring success in revitalization projects.

2.4 Conclusion and Limitations

The largest and most significant limitation in selecting appropriate research for this review is the lack of Canadian sources regarding brownfield revitalization. With respect to brownfield revitalization, the most prevalent sources were American, and to a lesser extent, British. This posed a limitation because, although the countries' governmental structures are similar, there exist fundamental differences with regard to how each government approaches the topic of brownfield revitalization; thus, recommendations that were suitable for American jurisdictions in rehabilitating abandoned sites would not necessarily be applicable in the Canadian context.

There also exists a lack of a "brownfield database" in Canada and especially Ontario, which would prove useful in selecting sites for this thesis. It is plausible that existing policy initiatives and heightened environmental awareness will facilitate research toward brownfield redevelopment and a greater scope of literature will be available in the distant future.

The literature regarding participation by special interest populations were mainly American sources, as the country has had a longer and more polarizing racial history than Canada, especially in

urban areas. The demographics, racial segregation and “fight or flight” circumstances surrounding American brownfield sites have differed from the Canadian context, and thus results cannot be applicable to all case studies. In this instance, Canadian researchers would benefit from reviewing existing immigration patterns and applying results to urban multicultural centres.

A final limitation in the literature was that many of the studies regarding minority participation in survey research are from health-based research, rather than the social sciences. An explanation for this may be that medical data, which is commonly quantitative, may be easier to collect and assess than qualitative data.

Despite the various limitations that were encountered during this thesis, the literature review provided an extensive summary of the history, processes and importance of brownfield revitalization and public participation in a contemporary context. All of the information that has been presented in this chapter relates to one of the research questions and sub questions posed in Chapter One. This research has also served as a template for participant selection, data analysis and final recommendations, which is discussed in the subsequent chapters.

Methodology

The purpose of this study is to learn if the public participation process for brownfield projects is unique when compared to other planning processes, with the ultimate objective being to recommend a set of public participation guidelines for Ontario municipalities in addressing this topic. This section will explain, in detail, the justifications for selecting particular methods of data collection, participant selection and data analysis in this thesis.

As demonstrated in the literature review, there are few Canadian studies that explore the experience of public participation in the planning process for brownfield revitalization. Theories and hypotheses relating to this topic have been derived mainly from American sources. The American industrial experience is roughly similar to that in Ontario; however, demographic characteristics due to racial and economic differences exist between both countries. As a result, this thesis will focus less on the inclusion of ethnic and racial minorities in the participation process, as is prevalent in American data, and more on the range of individuals who have an interest in environmental and social issues near brownfield sites.

3.1 Study Paradigm

This thesis will follow a qualitative approach to discover the public participation strategies that are necessary when attracting and retaining residents near brownfield revitalization sites. The reason for this approach is that the nature of this study aligns with Cresswell's (2009) description of qualitative research as using data collected in the participants' settings; analysis building from particular details to larger general themes; and the researcher assuming the role as an interpreter of data. The study also takes on a social constructivist worldview, in which the individuals involved in the study seek understanding of the world around them, and thus construct a meaning of their own situation (Cresswell, 2009). In this instance, I spoke to the interview participants about their

experiences regarding the planning process near brownfield sites (a general issue), and participants shared their views, which are shaped by their values, perspectives and preferences (constructivism). A large part of social constructivism also examines how a researcher's background and personal experiences can shape a participant's answers. This was evident when some of the participants remarked that my questions were structured to assume that differences between the participation sessions for brownfields existed. This was based on the literature that I had reviewed that stated clear differences between both processes. Upon reviewing the questions with my advisor, a secondary set was devised that asked clearly "are there differences?" rather than "what are the differences?" and follow-up interviews were performed.

Naturalistic inquiry is used as a strategy in collecting research and analyzing data. Bowen (2008) describes naturalistic inquiry as "research in natural settings (rather than in laboratories), qualitative methods, purposive sampling... a grounded theory approach, a case study reporting mode...and special criteria of trustworthiness" (p. 138). In each instance, the participants were interviewed in person or by phone in their homes or offices. All of the scenarios and conversations recorded in this thesis are realistic and have unfolded naturally without the interference or manipulation of outside sources.

Case study research is the strategy that will be undertaken as the direction for this thesis. Stake (1995) defines a case study as "the study of the particularity and complexity of a single issue," in which cases are bound by time and activity, and data is collected through a variety of procedures (p. xi). As the research question seeks to answer if and why differences in the public participation sessions for brownfield sites exist, the study is explanatory and is likely to use case studies to investigate points (Yin, 2009). Case studies generally assess current issues, such as brownfield revitalization and political legislation, and use a variety of sources for evidence to gather information.

Given the unique sites that this thesis examines, I gathered background and primary information about each location in a succinct manner. I anticipated correctly that interviews with several figures throughout communities in Ontario would be difficult to arrange due to financial and time constraints; therefore, by using case studies I was able to use a variety of methods to extract information (Cresswell, 2009). Yin (2009) describes various “sources of evidence” that are complementary and can provide important information in answering the research question. The following sources of evidence were used in this thesis to provide a database of information:

- a) Interviews with key informants – these comprise the majority of data for this thesis.
- b) Documentation – meeting minutes from community participation sessions, memorandums, webcasts of information sessions (all which have been coded). The majority of these are available online and thus were not subject to ethics approval.
- c) Media – online articles from reputable news sources providing accounts of public meetings regarding the brownfield site, which included quotes from participants.

With the exception of interviews, all other data collected for this study is considered “secondary,” as I did not personally collect or transcribe it, although it remains a valid source for information in this thesis. For example, Schensul et al (1999) refer to secondary data as “raw,” as it is data available to the public in its uninterpreted and unanalyzed forms. Secondary data may provide the same results as primary data, although Strauss & Corbin (1998) note there are a few differences which make using this data slightly more problematic: firstly, the researcher is less familiar with the material compared to primary data, and secondly, it is time consuming to sort through interviews, videos or transcripts to find the appropriate concepts. With respect to the first point, I found that it was difficult to decipher the tone or sentiment among participants at public consultation sessions, which may affect the coding process. As the names or contact information of the participants were not

available, I could not ask these individuals if I had interpreted the data correctly. I found this a more significant impediment than Strauss & Corbin’s (1998) suggestion that the process for finding concepts among secondary data was time consuming, as transcribing primary data proved to be a meticulous process (see section 3.5.1). The reason for using secondary data in this thesis is to provide further information about the topic that cannot be derived from primary interviews.

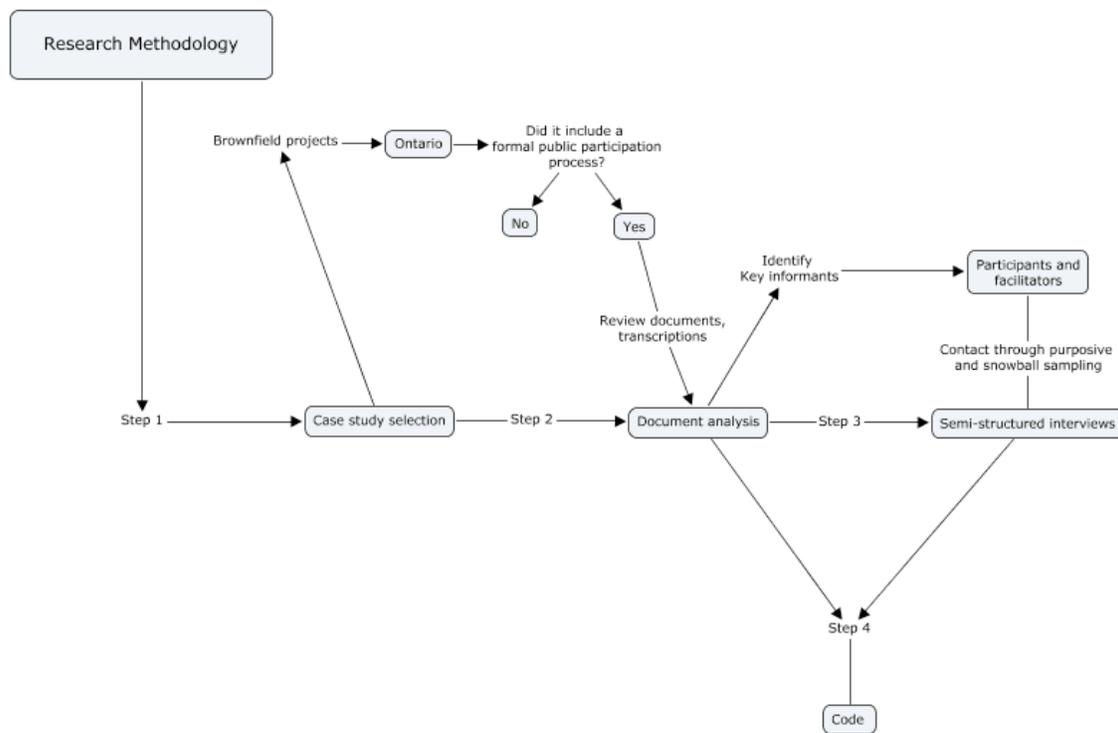


Figure 6: Concept map of research methodology

There are numerous advantages and disadvantages associated with each of the data collection methods applied to this research, as seen in the table below. Seeing that no single method is guaranteed to provide a complete set of answers, each method complements the other and fills in “gaps” that may exist when considering all options.

Type of Data Collection	Description	Advantages	Limitations
Semi-structured interviews with key informants	Telephone or in person conversations with individuals identified as knowledgeable persons relating to public participation in a brownfield project. Includes representatives from community groups, facilitators, and municipal staff working in brownfields redevelopment	Allows the researcher to collect information about subjects that may not be available through existing print. Also allows the study participants to elaborate on their answers, and provide clarifications instantly when needed.	Contains a considerable amount of bias from the perspective of the study participant. Sample size is very small and may not be wholly representative of the case study.
Documentation from various sources	The researcher analyzes existing meeting minutes, webcasts, narrative summaries and surveys from previous public participation sessions concerning brownfield projects	With the exception of transcribing webcasts, the data does not need to be transcribed and can easily be coded by the researcher in a timeframe that is convenient.	The researcher is unable to perform follow up interviews if some concepts or statements are unclear. Also, key informants may no longer be associated with projects and are unable for further comment.

Table 1: Advantages and Limitations of Data Collection Methods

3.2 Criteria for Site Selection

The sites and municipalities chosen as case studies for this thesis are based on a number of criteria that provide the optimal results for this research question. Many of these criteria are taken from similar studies in the literature review that serve as guides to testing the theoretical validity of this thesis. Both site specific and municipal case studies are explored throughout this thesis because the interview participants associated with these two types of studies provide varying perspectives and insights for the public participation sessions. Interview participants that were linked to site specific case studies consisted mainly of community group activists, members of citizens’ associations and facilitators who either organized or attended the public participation sessions and could offer insight

regarding the effectiveness of engagement and communication techniques, and their relationships with elected officials throughout the participation process. Interview participants that were affiliated with municipal case studies tended to be planners or engineers who could offer their opinions of the public participation process from a policy-making and governance perspective. The variety of participants and resources consulted proved to be beneficial in achieving a balanced account of the public participation sessions for brownfield projects.

The three main criteria for selecting certain sites and municipalities are listed below.

1. Adherence to the Ministry of Municipal Affairs and Housing's definition of "brownfield"

All of the sites explored throughout this thesis are located on "brownfield" lands, in that they are or were abandoned, underutilized or idle locations where past industrial or commercial uses once took place. This definition is based on the Ministry of Municipal Affairs and Housing's definition as discussed in the literature review. The sites include former landfills, manufacturing sites, railway lands, port lands, and lumber yards. At each of these sites, evidence of contamination was found and, at one point, posed a risk to human or environmental health.

The two municipal case studies selected in this thesis were selected because they had either received recognition for their progressive policies toward brownfield revitalization, or public participation strategies for environmental initiatives.

2. Involved a lengthy public participation process, which included members of the municipality, the general public and representatives from community groups

Many of the brownfield revitalization projects that were initially considered for this study did not involve a public participation process for a variety of the following reasons: the project was too small, lack of resources from the municipality, certain stakeholders were unwilling to discuss the

project, or there was simply no controversy surrounding the site that warranted an extensive feedback process. The sites that were selected for data in this thesis were either controversial due to environmental or financial reasons, thus the municipality was obligated to hold a public participation session. Criteria for site selection included a public input process that spanned over several months and attracted the same key informants to ensure consistency in the interview answers.

3. Located within the province of Ontario

The sites chosen in this thesis are located within the province of Ontario. The focus is provincial, as opposed to national or municipal, for two main reasons. Firstly, as referenced by White (1996) and Bloomfield et al (1986), Ontario in the nineteenth century was home to several large manufacturing and industrial sites, many of which have since remained in large and mid-size cities, such as London, Hamilton, Toronto and Kingston. Seeing that 40 percent of all Canadian brownfield sites are located within Ontario, there are several locations to choose from that are expected to provide appropriate results for this study (Ministry of Municipal Affairs and Housing, 2007). The five sites in this thesis are located in the Northern, Eastern, Golden Horseshoe and Southwestern regions of Ontario in order to obtain a diverse range of industrial histories, geographic elements, economies and regional policies (see figure below).



Figure 7: Locations of case study sites within Ontario regions

(Source: <http://ontariolearn.com/facultyteachingresources/index-5.html>)

Secondly, legislation such as the *Places to Grow Act* has spurred a significant amount of intensification within cities, which includes brownfield revitalization to transform these sites into places of work, residence and recreation. As Ontario’s population increases, it has now become necessary to study the impacts of revitalization on the former industrial landscape.

Brownfield Revitalization Project	Municipality (and neighbourhood)	Former Use	Current Use	Data Extraction Method
Redevelopment of the North Bay Rail lands	North Bay	Rail lands	Parkland featuring gardens, parks, trails, and pergola	Interviews with community group members
Wabash Community Centre and Park	Toronto (Parkdale)	Linseed oil factory	Community centre and “town square”	Interview with community group member
Port Lands Redevelopment	Toronto (Port Lands)	Shipping yards	Residential, commercial and institutional lands, with future plans for parkland	Interviews with community groups, facilitators, analysis of meeting reports and video

McLennan Park Redevelopment	Kitchener	Landfill	Public park featuring courts, picnic facilities, and splash pad	Analysis of public meeting surveys and reports
LeBreton Flats Redevelopment	Ottawa	Lumber mill and waste disposal site	Mixed-use community development	Interview with community group member, analysis of meeting transcripts

Table 2: List of study sites used to obtain data

3.3 Participant Selection

There are two methods that have been used as participant selection in this thesis, which are purposive and chain referral, or “snowball,” sampling. Each method is appropriate for participant recruitment under circumstances that are specific to this study. An explanation of and justification for the methods used is provided in this section. Due to time and resource limitations, it is impossible to interview and obtain data from all possible participants, although that would yield highly accurate results. Instead, participants have been selected from a “sampling frame,” which Schensul et al (1999) describe as a list of potential members or units from which a sample is drawn.

3.3.1 Purposive Sampling

Most of the interview participants in this study were contacted using the purposive sampling method. Guarte & Barrios (1996) define purposive sampling as selecting individuals from the population “believed to yield samples that will give the best estimate of the population parameter of interest” (p. 278). Thus, this method of sampling requires extensive research into the backgrounds and experiences of certain individuals from case studies, as the researcher selects people who can provide maximum data as it pertains to the research questions. After selecting the five case studies for this thesis, I read notes, news articles, transcripts and documents relating to any public participation processes throughout the project and noted certain individuals whose names frequently appeared as

contributors or active participants in the process. These individuals were often representatives of community-based organizations, advocacy groups, residents' associations and naturalists groups. Several prominent researchers refer to these individuals as "informants," who are knowledgeable insiders that can provide valuable information about the public participation process (Lindlof & Taylor, 2002; Schensul & Schensul, 1999; Bowen, 2008). This process is referred to in the concept map in Figure 6 of this chapter.

The reason for speaking to appointed representatives or contact persons from these groups is that it is more efficient and resourceful than interviewing numerous individuals within the community. Teddlie and Yu (2007) recognize that purposive sampling is effective for achieving representation when a researcher requires a sample that represents a significantly broader group. The most efficient method of collecting qualitative data is by interviewing representatives from advisory groups and cultural organizations, as they may summarize the community's visions, sentiments and goals in a succinct manner.

Once the appropriate informants for this study were selected, I located their contact information on their affiliated organization's websites, or by contacting people at the organization or association and requesting the necessary information. This differs from chain referral sampling (which will be discussed in the following section), because the first contact is not an interview participant and did not recommend the targeted individual. I then revised the participant recruitment letter (which is included in Appendix A) to comply with the specific details of the individuals' case studies, explained the nature and benefits of participating in the study and e-mailed the letter as an invitation to engage in an interview. Each of the participants that I contacted was eager and enthusiastic to participate in my study, which resulted in candid and informative interviews.

I made a concerted effort to locate individuals from organizations throughout the province (Northern, Eastern, Greater Toronto Area, and Southwestern regions) who were concerned with a

variety of issues: affordable housing, First Nations rights, ethnically diverse neighbourhoods, environmental protection and economically disadvantaged areas due to the collapse of the manufacturing sector. Despite best efforts in recruiting, not all participants met this criteria, and reasons for this will be further discussed in the limitations section.

The same tactics were used to recruit planners and facilitators to represent the selected case studies. They were able to provide insight into the strategies and tactics employed when managing public engagement sessions for brownfield projects. External consultants were also contacted to contribute to the study, as they could provide a neutral and unbiased review of the process, and often had experience working on several brownfield projects. These individuals were selected and contacted in the same manner as the other study participants, although it was more difficult to contact these individuals because many of the names mentioned in online documents or associated with the projects no longer held these positions, whereas many of the community group representatives had been affiliated with their groups for approximately a decade. Therefore, the ratio of planners, facilitators and engineers compared to other informants is significantly lower. I tried to accommodate for the lack of this information by using data from any available online documentation.

3.3.2 Chain Referral Sampling

Gaining opportunities to speak with knowledgeable individuals sometimes required recommendations from original survey participants, as their contact information or credentials were not always readily available. I was fortunate in that many individuals who regularly meet at stakeholder engagement sessions often formulate networks and share resources, which permitted entry into these networks by speaking to these people. These individuals are referred to as “index respondents,” and are used to identify others that can contribute to the study; this process is called chain referral selection or “snowball” sampling, in which participants identify others that share

similar characteristics that pertain to the study's focus (Schensul et al, 1999). Snowball sampling is effective when the researcher assumes that basic "linkages" or "bonds" exist within a particular group that can be further explored (Faugier & Sargeant, 1997). Several studies surrounding sensitive or controversial issues, such as HIV/AIDS, race and poverty, have been advanced due to the constant referrals that the community has provided to researchers in these fields; thus, snowball sampling has proven effective when dealing with individuals and subjects of a sensitive or controversial nature.

The advantages of snowball sampling render it relevant for this thesis for two important reasons. Firstly, snowball sampling can reach "hidden" individuals who are difficult to identify but can provide relevant information. As many of the interview participants volunteer their time at organizations, their contact information was not readily available online but was provided by colleagues and friends. Atkinson and Flint (2001) strongly recommend snowball sampling to interview people who can provide sensitive or controversial data. In this instance, referrals from individuals within a network can assist the interviewer in building trust with the participants prior to the study. When associating with a largely heterogeneous mix of individuals, preliminary referrals are helpful in accomplishing fieldwork. One of my research participants corresponded with his recommended referrals to inform them of my research and my intention to speak to them. His efforts were extremely helpful, as it indicated to the potential interview participants that I was a trustworthy source who would keep their responses confidential and act as a professional throughout the interview process.

Secondly, snowball sampling can be treated as a "secondary" methodology to complement purposive sampling. Atkinson and Flint (2001) describe how traditional methods, such as questionnaires or surveys, are top-down approaches that often isolate or neglect certain populations. Instead, snowball sampling may be used as a supplementary method, or to retrieve missing information when traditional methods do not suffice. When regarding the methodology for this thesis,

snowball sampling is used when responses from traditional methods, such as e-mail or letter invitations, are low.

3.3.3 Theoretical Saturation

The number of participants that have been interviewed for this thesis has been determined using theoretical saturation. This concept is defined as the point at which no new information has been revealed from the data collected, themes and ideas are being repeated, and no new insights have been obtained; thus, additional interviews or reviews of documentary materials are not required (Strauss & Corbin, 1998; Bowen, 2008). Theoretical saturation is commonly used in qualitative research when collecting and analyzing primary information as an indicator of when researchers can cease data collection.

In order to ensure that theoretical saturation has been achieved, several elements should be present. Firstly, sampling must take place on the basis of concepts that are theoretically relevant to the study and its anticipated results (Bowen, 2008). This includes purposive sampling to include participants that would provide the most relevant information to the study, and using a variety of methods to collect data. Secondly, the presentation of data and full disclosure of methodology must be revealed to readers to demonstrate that the researcher has properly followed the standard procedure for survey research, thus inspiring confidence in the data results (Bowen, 2008).

3.4 Data Collection

The main methods for collecting research throughout this study are through semi-structured interviews and document analysis, such as meeting minutes, summary reports, completed surveys and webcasts of previous meetings.

3.4.1 Semi-structured interviews

The semi-structured interview is common within qualitative research because it allows researchers and interviewees to engage in a conversational manner, while still following a set of interview questions pertaining to the subject matter (Longhurst, 2010). In several cases, such as this study, a layout or interview matrix was designed prior to the conversation (please see Appendix C for a copy of the interview themes and questions). Unlike structured interviews, in which interviewees are restricted by the type of answers they are able to provide, semi-structured interviews allow for flexibility to discuss further issues and details. Data for this study was collected from late November 2012 to August 2013, in the form of Skype, in-person or e-mail correspondence with the 13 individuals identified in Appendix B. The conversations were recorded either in person using voice recording software on a smartphone, or using voice recording technology for phone calls. The advantage of recording audio rather than writing responses is that audio recordings provide greater accuracy, and writing may distract or unnerve participants during the interview process (Schensul et al, 1999).

There are several benefits to conducting semi-structured interviews as they pertain to this study. Semi-structured interviews allow for casual and procedural conversations that can set the tone for a working relationship. Longhurst (2010) emphasizes that establishing comfort is a large factor in obtaining a free-flowing, honest and friendly conversation. As noted in the literature review chapter, Gallagher (2009) and Bishop et al (2011) reveal considerable success when researchers gain the trust of interview participants in casual, neutral settings, or places that are of particular interest to the organizational group represented. In his reflection on difficult or sensitive questions, Hay (2005) also notes that face-to-face interviews provide the informant with the opportunity to correct the interviewer and offer personal information that would otherwise not be known through online

surveys. These revelations are necessary when conducting interviews with members of society who are involved with controversial or politically charged planning projects, as many of the participants in the case studies were.

Lindlof and Taylor (2002) also note that interviews are an efficient way to gather information about processes without bias from the researcher. In participant observation, researchers can participate in the process but only observe and thus add their own biases and perspectives; in the interview process, other members of the community can share observations and experiences that are based on their own perspectives.

Semi-structured interviews also allow for interviewers to explore a pre-determined set of questions, but remain open and flexible to other areas that may arise that the interviewer has not yet considered (Corbetta, 2003). This is essential when the interviewer is dealing with a variety of people from different regions that have varying priorities for their respective communities, where the questions may not necessarily apply to all. Corbetta (2003) also recognizes that not every informant has the same experiences, and thus not all the questions will pertain to each one. In this situation, semi-structured interviews allow the informants to introduce other themes that they deem important for a fuller understanding of their situation, even if these themes have not been raised in other interviews. The interviews are categorized as semi-structured because they contain both non-directive (participants will provide a general overview of an issue), and directive (structured to allow participants organize their knowledge) questions.

Before beginning each interview, I informed each participant that they could refuse to answer any questions and could also stop the interview if they wish, as per the University of Waterloo's Ethics protocol. The duration of each interview ranged from 15 to 40 minutes, depending on the

participant's availability. Conversations were recorded on either a smartphone or using Skype, and were later replayed and analyzed for coding purposes. For participants who responded via e-mail, I treated their text as transcribed material and coded it similar to the previous interviews. I considered e-mail responses as a valid form of data collection, as Meho (2006) notes that the benefits of using e-mail interviews include reducing the costs of transcription, accessing a wider range of individuals who may be constrained by hectic work schedules, and obtaining more detailed and thorough answers from people who are more comfortable expressing their opinions in writing rather than speaking. Shortly following each interview, I sent each participant a letter expressing my gratitude for their time and insights, and informed them that I may contact them if I required additional information (please see Appendix D for a copy of the follow-up letter).

3.5 Data Analysis

One benefit of using case studies in thesis research is that a variety of resources and information can be used to complement the other. The analysis of documents, reports and transcripts involves transcription and coding to select relevant pieces of information that may be used to answer the research question(s).

3.5.1 Transcription

Prior to being coded (which will be explained in section 3.5.2), each conversation that was recorded using Skype or on a smartphone was transcribed within two weeks of the interview date. Following completion of each interview, the recording was downloaded and saved in three password-protected locations. The file was identifiable only by the date and time of the interview, which corresponded to the list of participant data (see Appendix B). I was the sole transcriber, which meant I was responsible for replaying the interview and typing the conversation. This process was time-consuming and meticulous: each thirty minute interview took approximately three hours to transcribe,

due to constant replays and verification. The transcripts were saved in a folder under the participant code or number that I assigned to each individual, which is a confidentiality measure that McLennen et al (2003) refer to as “source labeling.”

The purpose of transcription is clear in that it structures the conversations in a form that permits closer analysis by the researcher; however, there are numerous academic debates on what is meant by “proper” interview transcription (Kvale & Brinkmann, 2009). One of the most significant issues with transcription is that of “verbatim,” and the question of whether the interview should be transcribed word-for-word, or if there is leniency in revising and refining the data without affecting the overall validity of the study. Generally, I transcribed each word as I heard it spoken during the interviews to ensure accuracy and avoid omissions of words that could potentially have a significant effect on the interpreted data (Mergenthaler & Stinson, 1992). In the instance where I could not decipher a word due to lack of clarity from the participant or background noise, I reviewed the context of the entire sentence and made an assumption about the missing word based on the likelihood that “alternate bizarre phrasings would not have been intended or therefore uttered” (Poland, 1995, p. 298). The disadvantage of typing each word verbatim, rather than altering the grammar and terminology during transcription, is that interview participants can appear “somewhat incoherent and inarticulate,” which means transcripts include several continuous sentences, which can result in a difficult coding process (as discussed in the following subsection) (Poland, 1995, p. 292). I believed it was better to capture all data, regardless of its organization and coherence, and spend more time reviewing typed script rather than replaying recordings; thus, the transcription style I selected was verbatim. The only parts of the conversations I omitted were ones that were not thesis related, such as discussions about mutual acquaintances, interruptions from third parties, and explanation of interview protocol.

Valid interpretation of an interview is also flawed due to many factors that may not be recorded during transcription, including body language, facial expressions, overall appearance, tone, pauses or gestures (Poland, 1995). Failure to capture the appropriate sentiment or physical motions of the participant can have a significant effect on how a researcher assigns codes to certain lines or sentences. In order to increase the validity in my interpretations, I followed certain guidelines from Mergenthaler & Stinson (1992) with respect to using punctuation markers to indicate changes in the way of speaking, emphasis, pace and tone. For example, in the sentence below,

“CodeBlue got the – look, I’ve never been at a city council meeting
to see the councillors turn and clap US, and CodeBlue.”

the hyphen in the first line indicates a sudden halt in the participant’s initial thought, and the straightforwardness of the second part of the sentence. The word “us” is also capitalized to emphasize the unusual occurrence of elected officials lauding a community group during a council meeting. Since the conversation is transcribed in this manner, using certain punctuation and wording, it can be interpreted during the coding stage that the community group had great influence over city councillors.

3.5.2 Coding

Following the transcription of each interview, I then coded the data in order to identify relevant themes and ideas. Coding is the process of assigning tags to texts (either primary research or secondary sources) based on categories or themes that are relevant to the study topic (Cope, 2012). The usage of codes to decipher and understand data is common in qualitative research, as Strauss & Corbin (1998) have noted that coding essentially quantifies qualitative data. This technique was selected for this study because coding organizes the multitude of information that is produced in qualitative research, whether it is from interview transcripts or primary and secondary sources. In this technique, data is reduced into smaller “packages” that help make sense of the thoughts and ideas

informants are relaying (Hay, 2005). This is especially useful as qualitative interviews allow informants to explore feelings, thought processes and emotions, in the absence of numerical or quantifiable data (Strauss & Corbin, 1998). Coding is also useful when analyzing primary or secondary sources of data collection, such as meeting minutes, press releases or documentation, as this thesis has incorporated by the usage of case studies.

Coding is a three-part process that involves the detailed analysis of data collected by the researcher, in order to better understand and draw conclusions about the issue. Many researchers use “micro-analysis,” which is the detailed line-by-line analysis of a transcribed interview, to gain insight into relevant themes and categories (Strauss & Corbin, 1998). I initially began coding in this manner, but as discussed in subsection 3.5.1, it is natural for interview participants to speak in long-winded, often unstructured sentences; thus, one line of transcribed text may contain lots of repetition or lack a central idea. I discovered it was easier and more effective to code by sentence in order to capture a complete theme or thought within the data.

3.5.2.1 Open Coding

I based my coding methodology on that which is found in Strauss & Corbin’s (1998) book, *Qualitative Research Methods*. The authors advise separating this process into three detailed steps, in which the researcher must ultimately reconcile their codes with the research questions and background literature (Hay, 2005). The first step is *open coding*, in which the data is broken down into discrete parts and closely examined for recurring words and phrases. During this stage, I simply read every sentence of the interviews and assigned each one a main theme or summary of ideas. This is also referred to as “latent content analysis,” where the researcher assesses visible surface content

and searches the text for relevant themes (Hay, 2005). This differs from “manifest content analysis,” in which the researcher identifies a predetermined set of words or codes within the documents. I coded my transcripts according to the questions, “what is this about? What is being referenced? Whom is this referring to?” My goal at this stage was to ensure the codes were short and concise, which would be beneficial when organizing codes in the second stage. This is an ongoing process that occurs during and long after the data has been collected, as I re-read the transcriptions for several months during the data collection phase and made changes to the codes where appropriate. It is after this stage that the emergence of themes, patterns and comparisons are seen in the data. An example of open coding using data from one participant interview is shown below (codes are included in bolded capitalized words):

“So my biggest thing in most cases is that most people don’t invest over time in a problem solving process (**SACRIFICE DEPTH FOR TIME**)... The other reason is I think people aren’t very good at consultations generally is that they aren’t very good at involving a broad range of diverse interests, so they often hear from the people who are really opposed (**EXCLUSION/BIAS**). You also have to pull out the people who have a vested interest in reusing those brownfields, [such as] land use planners and people in adjacent communities who don’t have enough park space or school space (**SPECIALIZED INTERESTS**). People who can see a benefit to that hole in the urban fabric often don’t necessarily know they have a vested interest, so you have to go get them, and they don’t necessarily come out... (**HIDDEN STAKEHOLDERS**)” (Personal communication, March 18, 2013).

The main topic discussed in this segment is that of retention and engagement strategies for the stakeholder engagement process. In the first part, the participant expresses frustration that some facilitators or proponents may conduct shorter consultation sessions, which ultimately restrict the

amount of information gathered in each one. They also consider that many facilitators and proponents do not recognize a wide variety of stakeholders with specialized concerns, which poses the question: does this result in a bias of participants at the consultations who are in favour of or opposed to the project? Lastly, they suggest that it is a responsibility of facilitators and planners to reach out to stakeholders who can provide unique insights, and that engagement strategies should include this point. Where interview participants clearly noted a difference between the brownfield and non-brownfields public participation process, I included the word “**DIFFERENCE**” before the code in order to indicate its importance in answering the research questions.

3.5.2.2 Axial Coding

Once all the transcribed interviews and other data had been coded, I then analyzed all the codes and started relating them to each other and placing them in similar categories. This second step is *axial coding*, which involves the search for causes, context, strategies and consequences within the codes as they pertain to the overall research question and sub questions (Strauss & Corbin, 1998). This stage of coding was often overwhelming and time consuming, as I had hours of transcripts to read and several hundred codes to organize. In order to efficiently perform this task, I began placing the open codes into categories based on the following criteria:

- a) identifying frequent and widespread usage of terms to suggest their relevance to my study (Bowen, 2008);
- b) seeking answers to the questions of what, when, where, with whom, how and with what consequences (Strauss & Corbin, 1998); and
- c) using deductive and inductive thinking to place codes under specific elements (see Table 3) (Borgatti, 1996).

Thus, for each category that consisted of the open codes, I associated it with one of the elements presented in Borgatti's (1996) table (see Table 3). An example of axial coding using data from my research is listed in Table 4. I determined that the overall phenomenon that my codes discussed was the public participation process for brownfield revitalization projects. Each of the categories under "Axial Coding" in Table 4 pertains to the first research sub question, which asks how the engagement, communication and retention strategies for brownfield public information sessions differ from other sessions. The first four points in the table describe some of the common themes or answers that interview participants provided when asked about engagement and invitation strategies. Thus, when considering the relationship between the first set of codes, I established that engagement and invitation strategies were a causal condition of the public participation process. The reason for this is that the manner in which facilitators or planners engages with the public, or the type of individuals that they invite, can have a significant effect on the outcome of the sessions. The process of axial coding resulted in the open codes being rearranged into six main categories that were interrelated to an overall idea, and which eventually contributed to answering the main research question and sub questions. A more detailed discussion of these codes will appear in Chapter 5.

Element	Description
Phenomenon	This is what in schema theory might be called the name of the schema or frame. It is the concept that holds the bits together. In grounded theory it is sometimes the outcome of interest, or it can be the subject.
Causal conditions	These are the events or variables that lead to the occurrence or development of the phenomenon. It is a set of causes and their properties.
Context	Hard to distinguish from the causal conditions. It is the specific locations (values) of background variables. A set of conditions influencing the action/strategy. Researchers often make a quaint distinction between active variables (causes) and background variables (context). It has more to do with what the researcher finds interesting (causes) and less interesting (context) than with distinctions out in nature.
Intervening conditions	Similar to context. If we like, we can identify context with <i>moderating</i> variables and intervening conditions with <i>mediating</i> variables. But it is not clear that grounded theorists cleanly distinguish between these two.
Action strategies	The purposeful, goal-oriented activities that agents perform in response to the phenomenon and intervening conditions.
Consequences	These are the consequences of the action strategies, intended and unintended.

Table 3: Elements for Axial Coding

(Source: Borgatti, 1996)

Axial Coding	Open Coding
Engagement and Invitation (Causal Condition)	<ul style="list-style-type: none"> • Reaction to government inaction • Difference – stakeholders difficult to identify • Consider short term users • Shared responsibilities
Communication between facilitators and participants (Action Strategy)	<ul style="list-style-type: none"> • Variety of online methods • Difference – project as solution to contamination • Difference – archeology, industry, ecology vs. greenfield information sessions • Preparation eases public concerns
Retention and follow-up (Consequence)	<ul style="list-style-type: none"> • Staggered sessions necessary • Difference – provide contamination updates • Use events and festivals to retain interest

Table 4: Axial and open codes using research data

3.5.2.3 Selective Coding

The final step is *selective coding*, where I integrated and refined the categories that I had assigned to view the larger pictures and draw conclusions based on those findings. During this stage, data can be revisited and re-coded at any stage, as I found it was necessary to do in order to understand the overall phenomena taking place. The selective coding process was both the simplest and the most complicated part of grounded theory. Compared to the first two stages, I considered selective coding to be more direct and clearer when deciphering the meaning of the collected data; in other words, I knew almost immediately what the answer to my research question was, and its explanation. My experience was validated in Strauss & Corbin's (1998) work, as they describe selective coding as "likely to pertain to the filling in of categories and refinement of the theory, [and] very specific and directed at what further needs to be thought about or done to finalize the theory" (p. 237). However, demonstrating how I arrived at this answer was convoluted and difficult to express in writing. Although open and axial coding were time consuming in that there was plenty of data to read and analyze, I had a clear idea of where to categorize the codes during these stages. When performing selective coding, the data was complete and accessible, but I was unsure of the best manner of linking the concepts together to arrive at an overarching theory. Upon reading various articles about grounded theory, I understood that assembling data into diagrams can assist the researcher by finalizing relationships, discovering gaps in logic and simplifying the interpretation of data (Corbin & Strauss, 1990; Sturges et al, 2005). To arrive at the final stage in coding, I answered critical questions posed by Corbin & Strauss (1990), and assembled my codes into a concept map introduced by Sturges et al (2005).

Selective coding involves identifying the emergence of a core category, which links and relates to all other sub-categories, as they are conditions, action strategies or consequences of the

overall phenomenon (Corbin & Strauss, 1990). When determining the selective codes for this thesis, I reviewed the categorized codes several times and answered the following questions, which are based on Corbin & Strauss' (1990) observations:

(a) What is the main analytic idea presented in the research?

- a. The main findings reveal that few interview participants acknowledged differences between the public participation processes for brownfield projects versus other projects, and the individuals in this category indicated minor differences that reflected site-specific experiences. Thus, the analytic idea or pattern in this research is that the process for engaging with the public, through voluntary and policy driven measures, is not unique compared to other planning processes.

(b) How can I conceptualize my findings in a few words?

- a. In summary, my findings can be conceptualized in stating that the issues surrounding brownfield revitalization projects, such as environmental contamination, industrial heritage and grassroots support, are noteworthy parts of the process, but are not significant enough to warrant unique strategies for the public participation process.

(c) What does the action or interaction refer to?

- a. There are several “actors” that create linkages in this thesis: the general public, representatives from community organizations, planners and facilitators, and policy makers. Each interaction involves reaching people who can provide the greatest wealth of information and expertise to create an optimal brownfield project. These interactions then become part of the public participation process – for example, the facilitators create engagement strategies to seek the most knowledgeable individuals, while municipalities create strategies to ensure that all key players are involved.

(d) How do I explain the variation that exists between categories?

- a. I measured the variations between each category according to which codes included more “**DIFFERENCES.**” For ones that did include more, I looked again at the context and saw that the data applied more to site characteristics, rather than a brownfield as a whole. It is at this point that I am able to see that unique circumstances within any project will dictate how the public participation process is managed, which is not exclusive to a brownfield project.

Answering each of the previous questions aided in clarifying some of the coding; however, in order to further refine my answers, I organized my work into a data analysis map (see Figure 8), which should be read from bottom to top in an effort to “reflect visually the inductive nature of the process – moving, through several analytic iterations, from the ‘ground’ up” (Sturges et al, 2005, p. 4).

The table is separated into levels, which indicate the various steps that are involved in the coding process. Levels 1 and 2 represent open and axial coding, at which point codes and categories are established. Level 3 includes the themes represented among the aforementioned categories. In order to arrive at these themes, I reviewed the axial coding and asked “what are the themes embedded in the conceptual categories?” (Sturges et al, 2005, p. 6).

Level 4 involves verifying the validity of my conceptual work by checking my data against themes that also appear in the literature review and other documents, plus looking for additional themes that arise in the data (Sturges et al, 2005). This step is particularly time consuming, as it also involves the process of member checks (refer to section 3.6.1).

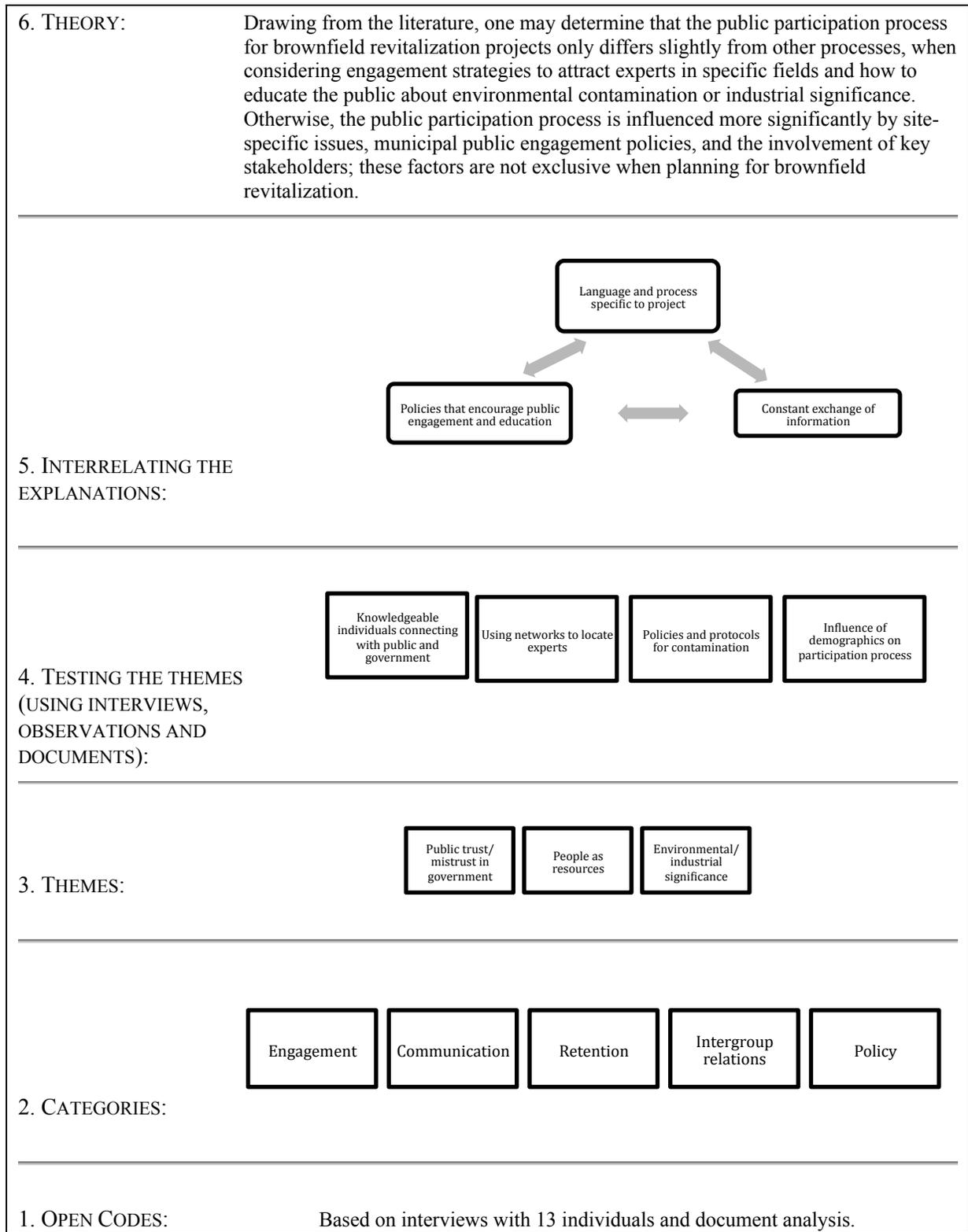


Figure 8: Data analysis map for the selective coding stage

Level 5 demonstrates how explanations that arise within the data are interrelated. During this phase, selective coding became very clear and I realized the connections that existed between my codes. It was also reassuring to learn that searching for interrelated explanations involved coming to “conclusions about contradictions within an explanation,” as I was initially concerned that slight inconsistencies among my codes meant that I was coding my data incorrectly. When I reviewed the contradictions that existed within my coding (for example, some participants stated that addressing contamination issues during the public participation process was a prominent topic, while others stated it was not), I found that there was a common link between the two concepts (that the process was influenced more by site specific issues rather than brownfield issues in general).

Finally, once I completed the first five stages in Sturges et al’s (2005) analysis map, I was able to articulate a theory that encompassed all the analysis that occurred during each step in coding. This theory is presented in Level 6 of the data analysis map, and served as the basis for writing the Results chapter of this thesis (refer to Chapter 5).

It is important to remember when analyzing qualitative data that the process does not occur only once, but is ongoing as the researcher continues to collect new data. This is referred to as constant comparison, where new items were checked and compared with the rest of the data to establish analytical categories (Pope et al, 2000). As I added and coded more data, new findings were repeatedly compared to older findings in order to group answers to similar questions and discover discrepancies around a central issue (Dye et al, 2000). It was during selective coding that I understood that coding is a cyclical process, as the final stage involved tying together initial codes that arose in the research questions, background literature and categories inherent in this thesis (Hay, 2005). It is through coding that the data collected during the interview process comes to fruition and I was able to make sense of my findings.

3.6 Limitations in methodology

The issue of validity in qualitative research is commonly discussed and debated among researchers. Whitemore et al (2001) state that due to its contextual and subjective nature, qualitative research is generally viewed as less valid than its quantitative counterpart; while Thomas and Magilvy (2011) even claim that qualitative validity or rigor is an oxymoron, as qualitative research encourages journey and exploration among its subject matter, and results should not lead to firm boundaries. The data included in this thesis is also subject to scrutiny; therefore, I have taken several precautions to ensure that the data presented inspires confidence among readers. There are certain threats to internal and external validity that are discussed in this section that I have acknowledged and attempted to mitigate.

3.6.1 Internal Validity

Internal validity threats occur in qualitative research when “experimental procedures, treatments, or experiences of the participants...threaten the researcher’s ability to draw correct inferences from the data about the population in an experiment” (Cresswell, 2009, p. 162). The most prevalent limitation with regard to participant selection in this thesis is sampling bias. This occurs when sampling characteristics are not congruent with the characteristics of the community or targeted sample population as a whole. This is normally due to a lack of time or resources on the part of the interviewer, or in the instance when populations are dispersed greatly, and interviewers cannot reach many to obtain an accurate sample (Schensul et al, 1999). The first part of this statement is true in my experience, as my data must be collected, transcribed and analyzed in approximately one year, which meant selecting a limited number of participants for this study would have to suffice. Since one of my objectives was to select at least one case study from four areas within Ontario, the geographic locations of my participants were very dispersed and I did not have sufficient funds to travel to each

study site to take a personal inventory and meet additional participants. In this case, I acknowledge that there are many individuals that I could not speak to who could have provided alternate perspectives on my research question, in addition to enhancing my study if the appropriate time and resources were available.

While compiling a list of potential participants, there were many people that I was unable to contact for this study, and thus affected the quality of results. Many of these reasons were beyond my control and included circumstances such as:

- (a) some key informants had left their positions with the affiliated organization, and could not be reached;
- (b) the organization no longer was associated with or could share information about the site; and
- (c) current staff were unaware of the practices or process that took place during projects that were created more than ten years prior to the study.

In these instances, I was forced to exclude the case study from this thesis, or obtain information about the participation process from secondary sources of data.

This study certainly does not represent a complete picture of the public engagement process for brownfield projects throughout Ontario because there have been many brownfield case studies that have been omitted in this research. As stated in Section 3.2, one of the criteria for selecting a case study was that there had to include adequate documentation of an intensive public participation process in order for it to be accurately documented. Thus, those projects which did not generate enough controversy or importance to justify documenting a public participation session were excluded. Alternately, in one instance, the proposed revitalization was too controversial and politically charged, so the public participation process was cancelled as elected officials and the public interest group could not come to agreement.

Another limitation includes using secondary data as a source of information for this thesis. Although secondary data provides a supplement for primary research in this study, using documents, maps and records that were created prior to the study means that there may be incomplete data, missing documents or changes in definitions that may no longer apply to the thesis (Schensul et al, 1999). Analysis of secondary data is also highly dependent on the interpretation of the researcher, as it may be impossible to revisit or contact individuals mentioned in the documents for further investigation. One notable instance of this limitation during the writing of this thesis was discovering that a key informant who was mentioned in a report and was greatly involved in the public participation process was no longer employed by a certain municipality, and thus could not be contacted to arrange an interview. Under these circumstances, the informant's text that was included in the document sufficed as data for this study.

The procedure for collecting research is also subject to threats to internal validity, but many precautions have been taken during this study. Prior to conducting semi-structured interviews, the questions were pilot-tested by five individuals who had no prior knowledge of the methodology or research question to evaluate the clarity and effectiveness of the interview questions. The benefit of including pilot studies as part of the methodology is that critical concerns or issues can be identified and resolved before the information is coded, thus saving the researcher from lengthy revisions and further establishing the study's validity (van Teijlingen & Hundley, 1998). During this process, the sample participants provided feedback on the quality and comprehension of the questions being posed. Three individuals reviewed the questions and suggested revisions, and two individuals acted as interview subjects. From this experience, I gathered that some of the questions were repetitive, as respondents had already provided sufficient answers in previous questions and thus could be removed from the final version. Respondents also encountered trouble understanding the questions due to a lack of clarity or wordiness; thus, these questions were reworded. The final version of these questions

is included in Appendix C of this thesis. None of the alterations required additional approval from Ethics.

Another method of ensuring internal validity is through member checks. Ideally, after each interview has been coded, a researcher should send a summary of the main findings to the participant to verify if the information has been perceived correctly; however, due to time constraints, I could only send my results to a sample of my interview participants. The benefit of performing a member check on a number of my research participants is to ensure that I have accurately translated their viewpoints into my data, which will decrease the chances of misrepresentation in my study (Krefting, 1991). Each of the participants I sent my findings to confirmed that I had interpreted their thoughts correctly.

3.6.2 External Validity

Verification is an ongoing process, and has been performed throughout the writing of this thesis. Several researchers consider a study to be valid when it is “transferrable,” or when the results presented in the study can be applied to other groups in similar geographic or demographic circumstances. This is also referred to as external validity, where the study becomes generalized beyond the immediate case studies (Yin, 2009). Cresswell (2009) identifies that threats to external validity occur when researchers “draw incorrect inferences from the sample data to other persons, other settings, and past or future situations” (p. 162). Although every effort has been taken to ensure the methodology of this study is performed with legitimacy and documented in detail, the results of this thesis cannot be considered statistically generalizable for two main reasons:

- (a) the sample size used is not representative of the population as a whole. In Section 3.6.1, I acknowledged that it is entirely possible that I have excluded many experienced, knowledgeable individuals who have participated in the public engagement process regarding brownfield revitalization sites, but due to the lack of publicity or readily

available information about these people, I was unable to contact them as interview participants. Added to this unreliability is the fact that the selected participants are geographically variable and the size and scope of their projects vary; thus, the sample size is unable to be generalized to the entire population.

- (b) the results of this study may not be replicable, as the answers provided by the participants the first time may vary if the study were performed a second time. The reason for this is that the answers provided may “be complicated by extraneous and unexpected variables” such as “increasing insight on the part of the researcher, informant fatigue, or changes in the informants’ life situation” (Krefting, 1991, p. 216). For example, when asked the same questions, the informants may remember something about the participation process that they neglected to mention the first time, or are experiencing personal issues that alter the quality or honesty of their responses. For these reasons, the results may not be the same upon further experimentation and thus may be considered non-generalizable.

However, for several reasons, generalizability to a larger study sample is not a main objective of this thesis. As mentioned in the beginning of Section 3.6, many researchers are not concerned with measuring the generalizability of qualitative research. Using people and anecdotal responses as research data, which is subject to many uncontrolled and subjective factors, often does not produce a study that can be entirely dependable or replicable, when compared to the objectivity that many quantitative results provide (Morse et al, 2002). Alternatively, this thesis focuses on producing a “coherent and illuminating description of and perspective on a situation that is based on and consistent with detailed studies of that situation” (Schofield, 2002, p. 174). In other words, by providing a detailed history of and current political, demographic and geographic picture of each case study, as seen in Chapter 4, the results of the interviews can be compared against the circumstances within each study, and may then be judged on their validity.

Schofield (2002) also suggests that generalizability is not a great concern for all researchers, since some choose to focus on studying unique or exotic cultures. While this is not entirely true of the demographics in this study, the situation I have studied is unique politically, when compared to other circumstances throughout the country, and also when compared to American studies; thus, my goal is not to apply my findings to the greater context.

Also, the results of this study may be considered analytically generalizable because they can contribute to the overall theory being studied, in which “findings from one study may be used as a guide to what might occur in another situation” (Taber, 2000). The theory in question is that of public participation; thus, these findings may be applied to similar circumstances concerning brownfield revitalization planning projects.

Overall, the internal validity of this study is far more important and worthy of investigation than the external validity. I, as the researcher, have taken many approaches to ensure that the methods used when collecting research are performed accurately, are justifiable, and are documented to ensure that they can be referenced at any time.

Case Studies

4.1 Case specific sites

The following brownfield case study sites and municipalities will provide the foundation for the interview participants selected for this thesis. Each of the sites has met the criteria outlined in Section 3.2. In this section, a brief history of each site or municipality with respect to the existence of brownfields will be provided, which will include projects' industrial significance and how redevelopment plans have influenced the future of the site. These case studies will be revisited in Chapter Five, where conversations with individuals associated with each site and municipality will be presented and assessed.

4.1.1 City of North Bay – Waterfront Redevelopment and Rail Lands

Approximately 35 acres of land on North Bay's waterfront is slated for redevelopment from underused, industrial brownfield lands to parkspace, recreation and commercial uses. It is fitting that the rail lands are being transformed into a centre of economic and social activity, seeing that this area was the industrial backbone of the early city.

The inauguration of the Northern Railway of Canada from Gravenhurst to North Bay in 1886 predates the establishment of the city by five years (Bladen, 1934). During the following two decades, North Bay's rail lines had consolidated with the Grand Trunk Railway, had rights secured by the Canadian Pacific Railway, and had opened a new line called the Northern Ontario Railway (currently Ontario Northland) (Bladen, 1934). North Bay was in a position to become a "boom town" due to the accessibility provided by the railway: vast mineral sources were discovered during construction of the railway, the city was in the position of receiving all supplies for construction, and it earned a reputation as a "gateway" to the north, as it was positioned between "Old Ontario" and the expansive landscape of natural resources (Gard, 1909). Gard's (1909) account of the city at the turn of the

twentieth century describes a small but lively town with big city aspirations due to the promise of prosperity from harvesting minerals and silver in the north, with a downtown core that included churches, schools, theatres, and meeting spaces for orders and societies.

During both World Wars, the railway continued to play a large role in the economic vitality of North Bay. As a junction for the Canadian National, Canadian Pacific and the Northern Ontario railways, trains passed eastward through the city and along its waterfront, carrying crops, war supplies, passengers and troops heading to the Maritimes for embarkation overseas (Gunning, 2004). With the construction of highways connecting North Bay to the Southern and Northern Ontario regions, rail transportation became less frequent, and by the 1990s, the CN line was abandoned.

Similar to many waterfront cities, the industrial area has always created a barrier between North Bay's downtown and the water. This is not a recent concern to the municipal powers in North Bay; in the city's first official plan of 1928, the railway was identified as a significant barrier to community growth (City of North Bay, 2008). Upon acquisition of the CP and CN rail lines in the 1990s, the City removed the rail line and reconnected arterial streets to include new parks, infill affordable housing, and new or renovated buildings (City of North Bay, 2008). Despite the progress that the City has achieved in recent years, North Bay's waterfront was still approached hesitantly because it is considered a brownfield site due to the prominence of contaminants that are associated with railway construction and transport. The area will be revitalized into a gathering space for the community, with parks, gardens, children's play area and numerous cycling and walking trails that connect residents to other city amenities (see Figure 9).



Figure 9: Rendering of North Bay's Community Waterfront Park

(Source: City of North Bay, 2010)

The waterfront revitalization of North Bay is included as a case study in this thesis because it is an example of a brownfield revitalization site that has attracted multi-governmental level funding, considerable public interest and is surrounded by a number of special concerns. Census data from 2011 reveals that the population of North Bay is aging, while overall decreasing slightly (Statistics Canada, 2012). Single-family detached housing is still the most popular type of dwelling throughout North Bay, which indicates that a large percentage of the city is still low-density suburban.

The revitalization of the waterfront is also a brownfield project that has secured funding from all three levels of government, and continues to receive donations from individuals to create the pergola in the civic square. The project has also gained considerable public support from non-profit organizations and local citizens who have contributed significant time and resources to ensuring the vision comes to fruition. For these reasons, the lessons gained from this case study will provide insight to answering the research question in this thesis.

4.1.2 City of Toronto, Neighbourhood of Parkdale – Canada Linseed Oil Mills

Toronto's west end neighbourhood Parkdale has experienced significant changes throughout the past century that are unique within many urban centres in Ontario. Evolving from a homogenous,

industrial area in the early 1900s to the present-day multi-cultural and vibrant neighbourhood, Parkdale's history and present is represented by the Canada Linseed Oil Mills factory.

Created in 1910 by Montreal-based Canada Linseed Oil Mills Ltd, the factory produced linseed oil, which was used in varnishes, medical products and food for livestock (Wencer, 2010). The location of the factory on Sorauren Avenue, between Queen and Dundas Streets, was strongly affected by the railway line running directly east of the street, and the railway junction just north of the site. The oil mills, like many factories in Parkdale, was connected to all industry in Southern Ontario due to access to the railway (Wencer, 2010). The character of the neighbourhood was also highly influenced by the presence of industry in Parkdale. Teelucksingh (2002) notes that there was a strong demographic divide due to income in the early 1900s: citizens of Anglo-Saxon ethnicity lived in large Victorian-style housing in the south end by the lake, while working-class families lived in lower-income housing in the north end near factories and the rail line. Whitzman (2006) notes the correlation between working-class housing in the north end and the manufacturing industry, stating that Parkdale attracted residents who were skilled labourers and worked in nearby industry.

Parkdale's character changed and evolved in response to the manufacturing industry. Throughout the Great Depression, many residents left the neighbourhood and later returned to the factories during World War Two to manufacture munitions (Wencer, 2010). A decade later, Parkdale encountered further change, as Eastern European immigrants settled along



Figure 10: Map of Parkdale indicating the higher percentage of single-detached housing in the north end, as represented by the darker shaded area

(Source: map created on SimplyMap software using 2006 census data)

Roncesvalles Avenue, and the construction of the Gardiner Expressway in South Parkdale obstructed residents from easily accessing Lake Ontario (Teelucksingh, 2002). The Canada Linseed Oil Mills factory ceased production in the 1960s, and was purchased from the City of Toronto in 2000 for \$2 million (Wencer, 2010). The building remains vacant today, as a sign of Parkdale's industrial past. The factory has significant potential to rejuvenate a neighbourhood that is considered one of Toronto's most vibrant areas. The north and south income divide still exists today in Parkdale; however, the south end of the neighbourhood is now home to many immigrant families living in high-density or social housing, while the north end is home to single-dwelling older homes (see Figure 10) (Teelucksingh, 2002).

Parkdale is also unique within the city in that it is denser, rents are lower, there are more visible minorities, and there are more government transfer payments than other neighbourhoods in the city (see Figure 11) (Teelucksingh, 2002).



Figure 11: Map of Parkdale indicating the higher percentage of visible minorities in the south end, as represented by the darker shaded area

(Source: map created on SimplyMap software using 2006 census data)

It is due to the demographic and socio-economic disparities in Parkdale that the Canada Linseed Oil Mills site is a case study for this thesis. The site is now surrounded by a park that hosts parades and a farmers' market, and consists of a town square and recreational amenities that are used by all members of the neighbourhood. The City of Toronto has allocated funds towards the construction of a community centre and event and retail space in the factory in their Capital Budget for 2018, demonstrating that the City realizes the

potential and necessity of a communal space for Parkdale residents (City of Toronto, 2012).

In addition to financial challenges, the factory has faced obstacles with respect to its history as an industrial site. Both physical and chemical concerns from the nearby community and municipality have increased the complexity of rehabilitation. Chemical treating has been heavily present in the drying of linseed oil for the purpose of wood varnish or oil paints, as was performed in the factory. In documentation dating from the 1920s, it is noted that lead, cobalt and manganese were key ingredients in the drying process (Evans, Marling & Lower, 1927). During the period of inactivity at the factory, these chemicals have been latent in the soil and are subject to heavy cleaning and rehabilitation. The building also faces possible demolition, as it is not structurally sound and is subject to additional repairs. Despite these setbacks, the Canada Linseed Oil Factory is approved in the city's capital budget for development in 2017-2020, and is expected to represent a revitalized area of the City.

4.1.3 City of Ottawa – LeBreton Flats Redevelopment

Ottawa's LeBreton Flats redevelopment project can be considered the quintessential example of public participation planning in the capital region, and a model of successful community engagement initiated at the federal level. The lands were initially owned and named for War of 1812 veteran Captain John LeBreton (Conroy, 2002). The geography of the area influenced the constantly evolving lumber and timber industry. Located near the lumber mills on nearby Chaudière and Victoria Islands, LeBreton Flats became a mixed community for lumber workers and their families (Jenkins, 1996). While predominantly a French-Canadian and Irish working-class neighbourhood, the area experienced a large increase in immigrants in the mid-nineteenth century due to the growth of the lumber industry, which also spurred the creation of a railroad, lumber piles and modest stone houses (Taylor, 1986). As an indication of the importance of the area to the lumber industry, in 1874,

five of Canada's largest lumber producers were located in the Ottawa Valley, and the sawmill owned by lumber and railway baron J.R. Booth at Chaudière Falls produced more board feet of lumber than any mill in the world (Picton, 2009).

Despite a recession in the 1870s and a fire in 1900 that threatened the steadily declining timber trade, the character of the LeBreton Flats neighbourhood remained constant into the twentieth century (see Figure 12). The area was known as “the tradesmen’s entrance to the city,” where unskilled and semi-skilled labourers resided among unzoned and mixed housing styles that attracted a new wave of immigrants to



Figure 12: LeBreton Flats as it appeared in 1900 as a timber mill (L), and in 2012 as an underused industrial area (R).

(Source: www.pastottawa.com/tag/lebreton-flats/288/)

the area (Jenkins, 1996). By the 1960s, industrialization had ceased in the LeBreton Flats area, but the neighbourhood still continued to attract metal industries, scrap yards, automotive vehicle servicing, and storage and wrecking yards (Moore, 2005).

Due to its past industrial uses that occurred throughout a century, LeBreton Flats became extremely contaminated. Since the mid-nineteenth century, sawdust and edgings from the lumber mills polluted the air and water, while bulk oil storage facilities and waste material warehouses emitted chemicals from petroleum products that included benzene, toluene, and xylene (Jenkins, 1996). In addition to the industries' waste, the area was a popular site for depositing garbage, wood products and dirty snow, which meant methane was heavily present in the soil (Jenkins, 1996; Baias & Parent, 2012). Remediation solutions that surrounded the site in the mid-twentieth century ranged

from transporting contaminated soil to an offsite landfill, to excavating and reburying the soil in the vicinity (Moore, 2005).

Ottawa was not excluded from the massive urban renewal projects that were prevalent in many North American cities during the 1960s and 1970s. In 1962, the National Capital Commission (NCC) notified LeBreton Flats residents of expropriation and demolished nearly 550 dwellings to prepare for an urban renewal project that would include a government office complex, as proposed in the 1950 *Plan for the National Capital* for a more modern and updated city (Jenkins, 1996). The plans did not materialize, and LeBreton Flats sat vacant and idle for nearly four decades.

Redevelopment on LeBreton Flats eventually resumed following a 1996 plan that encapsulated updated planning policies and principles. Currently, the Canadian War Museum, parkspace, and some high-density housing exist on the lands, with the NCC project proposing sustainable development through a mixed-use community, ample greenspace, pedestrian friendly features and access to transit stations and the waterfront (National Capital Commission, n.d.). As expected with many large-scale brownfield projects, there were many stakeholders who thought that their knowledge of and recommendations for the site should be included in the planning process. Challenges that the NCC encountered during the public participation process included determining the types of individuals to involve in the process and how to collect stakeholder input. Currently, LeBreton Flats represents an opportunity for the City of Ottawa to develop a community that embraces sustainability while honouring its past as an industrial centre.

4.1.4 City of Toronto – Port Lands Redevelopment

Toronto's port lands have become a prime case for revitalization due to their advantageous location and capacity for recreational, commercial and institutional uses. Like many North American cities, Toronto has a strong industrial history, and its geographic location on Lake Ontario provided

attractive economic opportunities for immigrants in the nineteenth century. Naturally, industry appeared around the port lands due to the abundance of capital and labour in the area, and its proximity to the Toronto market, resulting in the area as the site for economic activity and public sector investment for approximately one hundred years (Desfor & Vesalon, 2008; Lehrer & Laidley, 2008). One of the largest industries in the city was the Gooderham and Worts spirits factory, which was located on the Don River and was a major source of employment, as it produced more spirits than any other distillery in Canada in the nineteenth century (Desfor & Vesalon, 2008). The industrial nature of the port lands had such an influence on the city's demographics that it was recorded from 1871 to 1901 Toronto's population increased threefold to approximately 234,000 people (Desfor & Vesalon, 2008). Similar to Parkdale, another industrial neighbourhood within the city, residents settled in the area in the hopes of obtaining employment.

With a flourishing industrial waterfront and growing economy, the federal government recognized the need for protecting the port lands' reputation as an economic hub. In 1911, the Government of Canada created the Toronto Harbour Commission (THC), which was responsible for developing the waterfront as a port for commercial and industrial uses (Desfor et al, 1989). As evidence of early stakeholder engagement in the interest of the port lands, in 1912, the Toronto Harbour Commission reclaimed approximately 400 hectares of marshland on the eastern section of the waterfront for industrial, railway and storage uses, at the consensus of various local interest groups (Desfor et al, 1989). THC continued its influence well into the mid-twentieth century; from its inception to the 1940s, the agency invested \$25 million in lakefilling, with the aim of allocating 2,000 acres of land for new industrial and shipping facilities (see Figure 13) (Lehrer & Laidley, 2008).

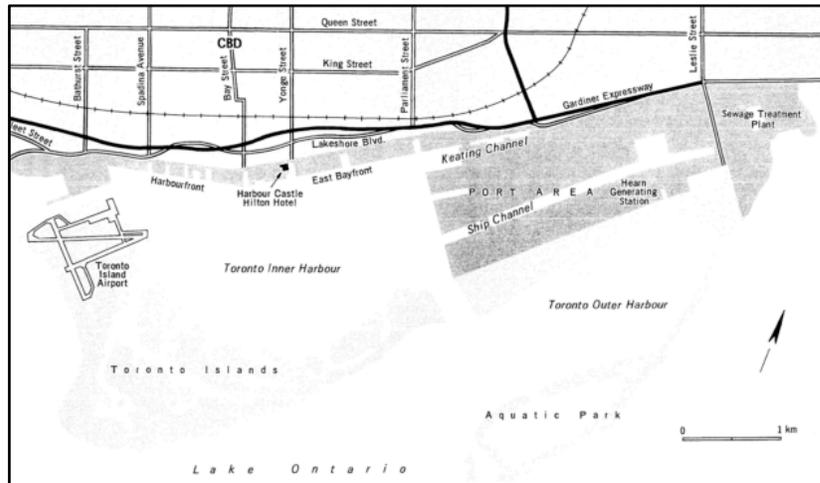


Figure 13: Toronto's waterfront industrial lands in the mid-twentieth century, as represented by the shaded area

(Source: Norcliffe, 1981)

The influence of the port lands as an industrial and shipping centre would wane in the post-war era, as the area succumbed to many economic and urban issues that plagued North American cities during this time. For a brief period from 1968 to 1977, the average cargo tonnage per ship handled in the port lands increased by 52 percent due to substantially larger vessel sizes (Norcliffe, 1981). However, trade in the port lands declined steadily throughout the 1970s for a number of reasons: industry was leaving the urban core for cheaper suburban land, and the city was experiencing economic restructuring and technological changes which no longer placed priority on the shipping industry (Norcliffe, 1981; Lehrer & Laidley, 2008). By the 1970s, only one of six firms located on the port lands were actually port-using industries, with the others being market- or labour-oriented industries such as printers, engineers, and manufacturers (Norcliffe, 1981). In realization that shipping was no longer the dominant industry, in the early nineties the THC transferred more than 300 acres of land to the Toronto Economic Development Corporation (now referred to as the Toronto

Port Lands Company) with the intention of redeveloping the unused lands for job creation (Desfor, 1993; Lehrer & Laidley, 2008).

Despite offering an environment rich in potential for outdoor recreational activities, the port lands have always been subjected to environmental contamination. Since the late nineteenth century, there have been recorded fears of diseases from untreated sewage in the harbour, and contaminants and heavy metals have been found in soils surrounding the port lands (Desfor & Vesalon, 2008; De Sousa, 2003). The port lands have also historically been the focus of public interest and consultation, from the influence of the stakeholders in the THC's 1912 land purchase, to former mayor David Crombie's public input sessions on the port lands' development for the 2008 Olympic bid (Desfor et al, 1989; Lehrer & Laidley, 2008).

Currently, the tripartite agency Waterfront Toronto is responsible for conducting and analyzing public participation sessions with respect to the redevelopment of the port lands. Plans for the waterfront, and especially the port lands, reflect global capitalism and a post-industrial society that focuses on accessible parkland, mixed use housing, commercial and institutional features, and amenities that promote physical activity and collaboration (Lehrer & Laidley, 2008). As redevelopment of the port lands progresses, this area of land that was once the entrance to Toronto's market and has been idle for many decades will once again demonstrate its importance as an economic centre.

4.1.5 City of Kitchener – McLennan Park revitalization

For years, Kitchener residents commonly referred to a 35-metre hill located on a 39-hectare landfill site as "Mount Trashmore," due to its immensity and presence within city limits (City of Kitchener, 2003). Although the topsoil and grass-covered hill eventually became a site for recreational activities such as biking and tobogganing, environmental contamination from its previous

use has remained a threat to nearby residents and has only recently been addressed through extensive consultation with professionals and the public.

McLennan Park's central and accessible location renders it a popular case study for assessing how the public interacts with and perceives the site. For years, the site was comprised of four sections: a hydro corridor, hill, field and woodlot. It is surrounded by a residential neighbourhood that was built between the 1960s and 1980s with several single-family dwellings, and has experienced substantial suburban growth to the south, west and southwestern areas of the site (City of Kitchener, 2003). It is highly accessible by local, regional and provincial roads and transit services, and by bicycle on the intersecting hydro corridor (see Figure 14) (City of Kitchener, 2003). For these reasons, McLennan Park has been a well-known site for sledding and tobogganing by local residents, due to the construction of a large hill that was originally planned as a ski hill with a rope tow. It is necessary to review the circumstances under which the hill was created, and why it is a controversial site that required extensive consultation before becoming the present-day McLennan Park.



Figure 14: Kitchener zoning maps 90 (L) and 115 (R)

(McLennan Park and hydro corridor are represented by the green area, and are categorized as a P-2 Open Space Zone under Section 28 of the City of Kitchener's zoning by-laws. Source: http://app.kitchener.ca/zonebylaw/es_zonemain.aspx?status=c&dir=PublishedCurrentText)

The Ottawa Street landfill was formed in 1958 in Kitchener's Laurentian Hills residential neighbourhood and was operated by the City until the Region of Waterloo assumed responsibility for the site in 1973 (DeRuyter, 2011). Three years following the change in management, the landfill reached capacity and was effectively closed (City of Kitchener, 2003). In the same year, methane was detected in nearby townhouses and a school (DeRuyter, 2011). Methane is a by-product of rotting garbage and can be explosive if not monitored, which prompted researchers from the University of Waterloo in the late 1970s to monitor the path of methane under the Ottawa Street landfill (Farquhar & Metcalfe, 1986). For the next two decades, the Region attempted to control the odour from the landfill by installing charcoal filters near vents; charcoal has the property to absorb odourous gas components, such as methane (DeRuyter, 2011; Roy, 2007). Following the evacuation of the affected townhouses in the mid-1980s, the Region began to investigate and remediate groundwater, leachate and gas impacts at the site, and eventually installed methane monitoring and alarm systems in 1995.

Exactly 25 years after the landfill's closure, in 2001 the Ministry of the Environment acknowledged that the site conditions now satisfied the provincial environmental health and safety concerns, and did not pose a significant risk to the public (City of Kitchener, 2003). Nevertheless, environmental contamination remained an ongoing concern for the Region. In 2004, 1,4-dioxane was detected in four of five production wells in the landfill's vicinity, prompting the Region to shut down the wells to conduct a groundwater sampling investigation (City of Kitchener, 2007). Engineers have revealed that gas generation is likely to continue for several years, and as such, the Region has installed a landfill gas barrier and collection system that collects and treats the landfill gas on site (City of Kitchener, 2003).

The site's former usage as a landfill was greatly considered in the plans for revitalization. Issues included the incorporation of landfill gas detection systems and active ventilation systems, and for public usage grounds to be located far from treatment buildings for safety reasons. The City of

Kitchener acknowledged the potential in revitalizing this site while also promoting the case as compatible with the province's Smart Growth strategy by remediating and repurposing a formerly contaminated area, and noted that there is a growing public awareness of the immediate and larger natural environment (City of Kitchener, 2003). It is for these reasons that it is essential to investigate how the public participation process addresses these environmental concerns in their strategies and implementations.

4.2 Municipal Case Studies

In addition to specific brownfield case studies, this thesis will also review the municipal protocols for public participation for brownfield revitalization for certain municipalities. These municipalities include the City of Kingston and Halton Region. The reason for selecting these particular municipalities is that, in conversation with policy analysts and researchers, these regions have been noted for their progressive or exemplary approaches to brownfield redevelopment.

4.2.1 City of Kingston

The City of Kingston has been selected as a secondary case study for this thesis, as the municipality has received praise and recognition, particularly from the Canadian Environmental Law Association, for its brownfield revitalization program. The City's brownfield inventory has been a subject of interest for many scholars and researchers, due to the area's long industrial history and the buildings that remain as a legacy.

Kingston's location as a waterfront city was certainly advantageous in attracting manufacturing and shipping opportunities throughout the past century. Over 40 industries have operated on Kingston's inner harbour, which included a coal gasification plant, former tannery and lead smelter, manufacturing and fabrication companies, textile and grist mills, shipping yards, and a railway corridor (Manion et al, 2010). Although most of these industries are no longer in operation,

the buildings and areas that housed these manufacturing activities still exist as brownfield sites; several chemicals have been discovered in these abandoned and unused properties, such as mercury, cobalt, copper and lead, which pose a threat to human, wildlife and ecosystem health (Manion et al, 2010). Some notable brownfield properties in Kingston include the Davis Tannery and Lead Smelter, and the Belle Park former landfill site, which was the 2013 recipient of the Federation of Canadian Municipalities' Sustainable Communities Award for its innovative design in using pumps and extraction wells to pull leachate from the groundwater (City of Kingston, n.d.; Federation of Canadian Municipalities, n.d.).

Kingston, like many municipalities that have formerly industrial properties and are managing strategies for sustainable growth, has experienced difficulty in attracting developers and investors to brownfield sites for fear of contamination (as discussed in Section 2.1 of this thesis). However, Kingston's efforts in improving the image and fate of the City's brownfield sites have received accolades from planning and environmental organizations for their progressive tactics. In 2002, the City approved the formation of a task force for the purpose of "review[ing] and develop[ing] a strategy for the remediation and redevelopment of lands affected by Brownfields" (Sustainability and Growth Group, City of Kingston, 2013). Comprising of a city councillors, property owners, academics and individuals from economic development organizations, the City of Kingston Brownfields Task Force is responsible for discussing potential sites where brownfields might apply, and reviewed the program's elements and components (Sustainability and Growth Group, City of Kingston, 2013). The formation of this group is indicative of the City's commitment to ensuring contaminated lands are remediated and made accessible for all citizens.

The City of Kingston was also involved in a 2011 workshop series that addressed the local challenges and opportunities associated with brownfield redevelopment, which was organized by the Bloom Centre and the Federation of Canadian Municipalities. Throughout five months in 2011, the

City of Kingston, along with other municipalities, participated in a workshop series that sought solutions to common brownfield problems, and communicated these issues to a larger public. The series was awarded a 2011 Canadian Urban Institute Brownie Award for Excellence in Communications, Marketing and Public Engagement.

4.2.2 Halton Region

Halton Region is seemingly an unlikely candidate as a case study for this thesis: it encompasses the Toronto suburbs of Burlington, Oakville, Milton and Halton Hills, which include considerably fewer brownfield sites than the nearby cities of Toronto, Brantford and Hamilton. De Sousa (2008) notes that Oakville and Burlington, the Region's most populous cities, had a combined estimated total of 21 brownfield sites in 2004, compared to 43 in Brantford and 200 in Hamilton.

Nevertheless, two notable geographic features have contributed to an industrial history in the Region. Oakville and Burlington's locations as waterfront cities established the Region as a busy shipping centre in the mid-nineteenth century, where schooners of grain, lumber, potash and tallow (beef or mutton fat, processed from suet) sailed to harbours in Montreal and the United States (Halton Region(b), n.d.). Secondly, the Niagara Escarpment, which is directly west of the Region, provided the raw materials for "limestone quarrying and burning, brick and tile making, and marble quarrying" (Halton Region(b), n.d.). Limestone quarries near Milton were the site of burning in large kilns, which were then powdered for use in cement and shipped by rail to Toronto (Halton Region(b), n.d.). Both shipping and burning activities are a significant source of pollutants, which have a high possibility of becoming embedded in the soil and water that surrounds the historical industrial areas, and thus becoming brownfield sites.

Halton Region is responsible for two issues relating to potentially contaminated sites: ensuring that they are assessed properly, and that they are cleaned up before development can occur.

Proper site assessment refers to the process of filing a Record of Site Condition, which is discussed in Section 2.1.1 of this thesis. It is only after these stages have been completed and when the site meets Provincial Guidelines and Regional standards for soil and groundwater quality that development is able to occur (Halton Region(a), n.d.).

Halton Region's approach to ensuring the public has been provided adequate arenas for input and consideration is the reason why this municipality has been selected as a case study in this thesis. The Canadian Institute of Environmental Law and Policy has noted that Halton Region is one of few municipal regions that have developed its own procedures for involving the public in brownfield redevelopment projects (Canadian Institute of Environmental Law and Policy, n.d.). These procedures are listed in the Region's updated protocol of June 2011, which will be assessed and discussed in Chapters 5 and 6 of this thesis, along with conversations from individuals within Halton Region's planning department.

Results

The results presented in this chapter are based on the analysis from the participant interviews, document analysis and case study research that occurred over a ten-month period during the writing of this thesis. A complete list of interview participants and dates is included in Appendix B, while a complete list of supplementary materials is included in Appendix E.

The study results are separated into five categories, which are affiliated with the research sub questions. An analysis and explanation of the nature of these findings will be discussed later in this chapter.

5.1 Engagement Strategies

None of the interview participants mentioned that the word “brownfield” was a factor in attracting attendees to the participation sessions or providing feedback on the proposed projects. Instead, they estimated that residents were more likely to attend sessions for political and civic reasons, rather than interest in revitalization or environmental initiatives. Several of the participants noted that attendance at meetings and initial assemblies was the result of widespread opposition to or anger at mismanaged municipal politics, which can also be referred to as a “reaction to inaction.” It is for this reason that attendance patterns became visible during the participation sessions. As one participant describes his experience,

See, the city wanted to get their money back right away, and they saw doing that by having a developer come in and pay them back. They didn't look at the long term at all, of a park that would last 100 years. So [participant #2] will tell you this, what really got us going was the word “No,” and it was that moment when he said “no, pack up your bags, stop it.” And he did allow us to go through with it after a while. We negotiated with him and he finally said, “okay, go ahead.”

Other participants noted that the reasons for forming the public engagement groups included individual initiative and interest in the projects, the request of an umbrella organization, and the

encouragement of a Member of Parliament, as one account of a participation session stated that “[the MP] explained that he wanted to hold the event to kick-start discussions about Phase 2 of [the development], as the Phase 1 process (and outcome) was less than satisfactory.” Another participant mentioned the importance of collaborating with city staff to ensure optimal attendance, stating that “[the group and the city] would pick a date together, and we would help promote it, to make sure people came out to it.”

The most common engagement strategies that were mentioned by interview participants and within documentation include: informal invitations to join the sessions between stakeholders; notices in newsletters and e-mail alerts; follow-up invitations for those who previously attended similar sessions; direct mail invitations to residents in the surrounding vicinities; advertisements in local papers; and the usage of social media. Several participants accredited the success of the public participation sessions to the existence of a community group network that consisted of experts in fields that were relevant to brownfield revitalization planning.

At least two participants noted that, given the environmentally sensitive nature of brownfield sites, the public participation sessions tend to attract people who are generally opposed to the projects.

People who can see a benefit to that hole in the urban fabric often don't necessarily know they have a vested interest, so you have to go get them, and they don't necessarily come out of the antes. So the city job or whoever is doing the consultation job is to find the interest and that doesn't always happen.

They also recognized that it is also a challenge to reach a variety of individuals in order to achieve a fair and balanced perspective on brownfield revitalization planning participation sessions. One participant included the phrase “short term/interim users” when describing those who are frequently excluded but contribute significantly to the project and should be considered during engagement strategies.

Participants displayed mixed responses when discussing the role of social media as an engagement strategy. One participant noted that,

So the interesting thing that I found was that somebody had complete command of social media and unlike other times, if you go back to the early 90s...the word got out so rapidly, and I was so impressed by these young guys.

Several other participants also noted that social media was an asset in reaching people who would not otherwise have known about the planning project or the public participation sessions. Many stated that social networking sites such as Facebook and Twitter were included as a strategy in the initial outreach stages. Certain individuals relied less on social media as an engagement strategy (while noting its misconception as a universal outlet), and more on the physical interaction between established community groups to engage others in participation.

There was a social media strategy. I understand that eight percent of Canada is on Twitter, and that 80 percent of the traffic on Facebook is generated by twenty percent of the people, so we don't actually reach very many people, but if you don't do social media, it's a real big problem... So it was on Twitter, and it was on Facebook, but probably some of the most effective outreach happened on CodeBlue and the work that they did reaching out through markets and their own networks.

There were significantly more responses in the interviews among people who stated that social media was an asset compared to that which was found within the literature.

The only mentionable difference in engagement strategies between brownfield public participation sessions and others was that key stakeholders and interested members of the public might often not live in proximity to the sites, due to former zoning by-laws that prohibited nearby residential development. Thus, outreach strategies may involve contacting people who are associated with the site, but may not be residents of the area, or who have lived near sites similar to those being revitalized. In demonstrating how engagement strategies may differ for brownfield projects, one participant stated,

Well, [with] brownfields usually there's nobody actually living right there, so that's different. You have to find people sort of by proxy...maybe people that have moved onto another brownfield location in the city. You can say "okay, try to think back to before you moved here, would you have an opinion about how this land should be developed or whatever?" So the fact that nobody lives there is an issue...

Another participant noted that while this point was true, living near a brownfield site could encourage an individual to learn about the environmental and economic issues surrounding the project, and thus may naturally be inclined to attend participation sessions regardless of engagement strategies. Among all the participants, only one stated that they did not live in the same neighbourhood as the specified brownfield site, whereas all the others lived nearby and were involved as part of community groups or interested residents, or invited by municipal planners as key stakeholders.

5.2 Communication Strategies

Several facilitators and participants within the sessions noted that the manner in which the groups discussed the issues and considered solutions varied according to the individual presenting the subject matter, and the stage at which the project was being discussed (please refer to Table 5).

Name of brownfield project	Type of communication strategy used
North Bay rail lands redevelopment	One city-run presentation, followed by over 70 presentations by the community group, which include using images and diagrams to present ideas.
Canada linseed oil mills	"Town square" meetings held in conjunction between the City of Toronto and community group on site, where the public provided their own visions in design charettes.
Port Lands redevelopment	Three rounds of public consultation organized by Waterfront Toronto (WT), which included roundtable discussions and an online forum. A Stakeholder Advisory Committee also met with WT separately, and conducted further private

	meetings with smaller groups.
LeBreton Flats redevelopment	A consultation session organized by a local Member of Parliament, which included various stakeholders in a roundtable discussion format.
McLennan Park Redevelopment	Three public meetings organized by the City of Kitchener, at which three concepts were described, and residents provided input in moderated discussion groups.

Table 5: Communication strategies used in each case study

Most of the strategies consisted of a combination of visual aids, design charettes and group discussions, which the literature states is common in most participation sessions. The various social and economic issues in brownfield revitalization projects are recognized in the structure of the sessions, as one account noted that “topics [among the roundtable groups] ranged from social issues to affordable housing to culture to architecture and design, heritage and history, transportation, and so on.” Several other participants acknowledged that representatives from a diverse array of community groups were involved in the sessions, which was likely to result in a variety of planning perspectives. It is also noted that several participation sessions were the result of collaborations between the community, government and other agencies, which will be addressed in further sections in this chapter.

Contrary to social media playing a significant role in engagement strategies, there is a notable lack of social media as a tool for facilitating discussion. In one case, online discussion forums were used as a complement to the meetings for individuals who were not able to attend the sessions. None of the other participants that were associated with the other case studies mentioned if the public could virtually “attend” sessions without physically being present.

Interview participants frequently mentioned the distribution of materials and resources that provided information about the significance and issues of the revitalization project. There were various answers among the participants regarding the appropriate time to distribute the materials and

how much information was required, but overall, they agreed that this was an important component in the participation process. One participant in particular thought that the information provided at the sessions contained extensive and relevant information that was necessary to conduct an efficient participation process:

The material that was presented was mostly by [umbrella organization] or consultants working for [umbrella organization], the material was presented at the meetings, nobody had the material ahead of time. So generally it was a ton of data, information, even if it was done in summary. So people didn't really have a chance to get into the nitty gritty, and sometimes you talk about that stuff with colleagues, and it comes alive and you begin to formulate a much better response to it.

The materials may also include information about issues that are pertinent to brownfield revitalization projects, such as industrial heritage, archeology or environmental contamination. Although few interview participants raised this point as one of notable significance in the public participation sessions, those that did so mentioned its importance in creating a fair and complete process. In comparison to much of the literature in Chapter Two, the issue of demographics and cultural differences did not factor into the communication strategies at these sessions. Only one interview participant stated that the municipal government had incorporated plans to construct a cultural centre on a revitalized brownfield site, but those plans did not materialize:

Yes, we were very close to partnering with the Tibetan community in Parkdale was looking for...at one point they were looking to build a Tibetan community centre, and at one point they were open to the idea of a joint facility in one physical building, but two different uses depending on the time of week.

Many of the interview participants did not mention the length of time or participants' concerns in discussing contamination issues. In response to being asked if residents required additional information or explanation of contamination issues, an interview participant stated:

Amazingly, no one ever asked about that! We always explained that the main contaminants were coal and diesel fuel and oil, and no one ever questioned it beyond that. I think generally people understand fuel spills, and there was not anything dangerous or unknown that may have raised issues.

When asked if the issue of contamination mattered for brownfield projects during the participation sessions, one participant offered an insightful perspective on communicating pollution to the public:

In a greenfield...is anything in the province green anymore? You're still going to have environmental contamination potentially on the land. More what you're doing is will it contaminate other land? That must be the case with those power plants. You've got smoke and vapour discharging.

However, one interview participant did state that contamination was a notable concern at the beginning of a project, and thus session organizers or agencies were forced to decide how to present these hazards to the public.

Participants, other than the landowners themselves, generally have other concerns.

During the early Port Lands consultations and in the early days of the WT (Waterfront Toronto) mandate, Port Lands preparation, including analyzing contaminant issues was more prominent. WT continues to inform the public about its evolving plans for soil remediation on site as part of the regular reporting. That seems to satisfy most meeting participants.

This indicates that in some instances, regular reporting about contamination issues is necessary to inform residents of the progress that is being made at the site, but does not state how this information is presented to the public. During roundtable discussions for one project, when prompted what the most important issues or concerns were associated with the site, contamination only appeared once as a response, as one resident stated they were concerned about "liabilites – Ralgreen landfill – not develop heavy facilities." The most common concerns were (in descending order of number of mentions): parking/traffic, access to outdoor activities, security/safety, wildlife preservation, and development. Interestingly, in a roundtable discussion from another case study, the main

environmental concern for the site was not contamination from former use, but how to ensure the nearby waterway was a prominent historical and ecological feature in the site's design.

None of the participants mentioned that a community improvement plan (in the format discussed in Chapter Two) was used during the public participation stages, although brief research revealed that community improvement plans exist for most of the neighbourhoods or areas associated with the projects in these case studies. When asked if a plan was consulted during the sessions, one of the participants sounded unaware of the composition or the purpose of such a plan, but continued to state that a well-organized session would relay the necessary information, regardless of official plans.

5.3 Retention and Follow-up Strategies

There did not appear to be a problem with retaining participants at the sessions because the most informed and active participants were those who were knowledgeable and had a vested interest in the proposed project. Those who ceased to attend the sessions were either unaware of the issues and unable to provide sufficient feedback for the project, or were satisfied with the calibre of expertise at the sessions, and did not feel it was necessary to continue attending. As one participant explained:

PARTICIPANT: Attendance at those public meetings diminished each time.

INTERVIEWER: Would you [attribute] that to just the fact that people did want to hear repetition, or was there something that they were put off by?

PARTICIPANT: I think a lot of people saw that something was happening as a result of the first meeting. So they said I've done my bit. So each time it was a stalwart that had something to say that would stick with it.

Normally, when attendance declines among participants, it is cause for concern among facilitators and planners because certain individuals could provide important insight about the proposed projects, but in these circumstances, retention strategies were not used because representation was adequate.

Alternatively, retention among the same individuals was not consistent, but one participant noted that a different person would represent the same organizations at each session:

The other thing was there wasn't necessarily consistent attendance from meeting to meeting. The [organizations] would send a different person. So we really were mostly just listening...

Most participants agreed that the sessions must occur in stages, and in a staggered format in order to allow the public to absorb the information presented in previous meetings, and develop educated opinions about the proposed project. This is certainly not exclusive to brownfield revitalization planning, but is nevertheless a necessary step in relaying significant information to the public. As one interview participant states, patience is required when organizing an efficient session:

But in most cases, first of all, you have to talk to people more than once, because most people say, I'll just hold a couple of meetings and I'll get it over with because they're terrified of holding a public meeting. I like to talk to people three times, so the first time you can understand people's issues, the second time you can figure out and test ideas on how to address issues and the third time you can come up with the plan so if you understand the issues and ways to deal with them, people can say "well I don't like that way, and I like that way, and a little bit about that way" so you can figure out a plan and you can draft a plan and come forward.

If you talk to people over time, then they see that their issue that they raised in the first place is not – you don't end the process with the fact that the issue is still there. You actually work over time so you figure out how to address it so you can say "okay sir, you're really worried about ..if I could tell you that this particular clean up process could make it, for example the pollution on the site would be cleaner than anywhere else in the city right now, would that make you comfortable?" there would still be something in there, but it could make it cleaner than anywhere else in the city, would that be enough for you? What if I made it the same?

In some cases, participants were given the option to decide their level of activity and involvement in the participation sessions. One case study mentioned interested individuals were

required to provide their name and request to be contacted if they would like to remain a participant in future sessions.

Some interview participants also mentioned that inviting the community to experience and learn about the revitalization plans in different manners, other than an information session, helped strengthen their cause and provide constant reminders of the project's status. In one instance, the manufacturing of linseed oil from flax will be incorporated into the design of the proposed area. An interview participant also describes how frequent fundraisers for purchasing items that honour the history of the city and the site continue to attract residents to the project:

It's how you live your life everyday, and how you bring that to your community, and that's what the pergola is all about. It's to say "there's no limit to the ways we can make life better."

And it's very unique, because each leaf has a name of a non-profit organization, or a couple, or a family, or an individual, living or passed. And there's a picture or a story of who that group or individuals are. And how they've inspired others to live a little bit better. It's pretty awesome. It's a pretty unique idea, and we're looking at selling the rest of the leaves.

Overall, the strategies for retaining participants during the consultation sessions were not as specific or necessary as those that were presented in the literature review, although the issue of trust is a prevalent topic that relates to retention strategies, and will be discussed further in this thesis.

5.4 Collaboration between various players

As each interview progressed, it became clear that it was necessary for various levels of government, private sector employees, representatives from community groups, and the general public to create networks that would allow each party to share resources and gain insight that would ensure the efficiency of the public participation process. In order for this to happen, there should be an individual who could act as a representative and liaison for the project between all actors. Nearly

every interview participant noted that appointing a “champion” was essential to gaining support and ensuring the success of the project. In most cases, the champion was the lead representative of a community group:

[Participant name] did the presentations. He’s always been our champion and our voice. And I do that as well, but not on the level that he’s done it for sure. We both speak on behalf of the community waterfront friends, but he’s really the public image for the project, and he’s very good at it. You need a champion.

or the entire group:

CodeBlue set up, and went after the mayor, and got the petitions and a bit of street theatre at NPS, and forced council and the mayor eventually came around, to decide how to study how to accelerate the process.

The champion invested considerable effort, research and resources into assembling the community to inform them of the benefits and impact of the revitalized brownfield site on the surrounding area.

One participant insisted that the champion should be an adaptable position, and one that was part of a larger movement, rather than self-serving interests:

...you can accomplish anything as long as you don't mind who takes the credit! That has been our mantra since the beginning.

[Participant name] and myself have certainly gotten much more credit for the vision than I ever expected we would, but as I say, more detail oriented people are pushing us aside now and taking it over, which is a bit hard on the ego, yet is exactly what has to happen.

Each of the participants whom I spoke to mentioned that this role was essential in order to galvanize public support for a brownfield project. When analyzing anecdotal notes or completed surveys from participation sessions, these statements were not outwardly acknowledged, but it was evident that one organization or individual played a large role in amassing support for the revitalization project.

Several of the interview participants associated the champion with the theme of trust, reliance or credibility:

One of the City planners told me early on that if this had come from the city, it would not have been accepted, as most people view the city as a group that raises and collects taxes, and it would have been a tough sell. The fact that the concept came from a grass roots group outside the city established a lot more **trust**.

We went with the idea that we were going to present an alternative vision, and we were going to remain as positive as we possibly could, and to earn their **trust** and to have them believe that what we were doing was the right thing to do.

[The government agency] laid back and citizenry forced this on them, so in that respect, my comments about [the government agency] relied on the knowledge and information of non-profits. As well as information, I guess I should have said...not authority...believability...**Credibility**. That's a better word.

You have to explain to people all of the consequences, both positive and negative, and I think that takes a lot of effort. It has to come from a **credible** source, and I think in most cases, if the city did those three things, it would make a huge difference in people's willingness to accept it.

While the word "credible" or "trustworthy" may be associated with a knowledgeable and experienced individual, there was no indication from any of the participants that the champion displayed considerable expertise in the area of brownfield planning. Some of the individuals had strong connections to professionals in the engineering or architecture industries, which are assets in brownfield planning, but otherwise, this characteristic was not different from other participation processes.

Furthermore, a leader or champion that served as a connection to the greater public displayed an ability to transfer knowledge between facilitators and planners, and the general public. This indicates that many were either professionals or specialists in a specific area, or were connected to planning related professionals, such as architects, engineers and graphic designers, who assisted in the public participation process.

We had an architect, two fantastic architects, [name] and [name], and they're very environmentally conscious, and they came on board, and were just fantastic, very creative and with beautiful ideas. They were instrumental in bringing that vision to become a plan, not a vision but a plan.

For most participants, they noted that their position within their respective community groups or organizations was that of chair, founder, lead contact, or president/executive director. Each of these people were affiliated with their organizations for a long period of time, and had strong ties to the neighbourhood or revitalization area.

When discussing the dynamics and working relationships between facilitators, representatives and the general public in the participation process, there was no indication that there was anything unique or extraordinary about the process as it related to brownfield planning. Some participants did mention that they used their elevated positions and connections to leverage support and provide insight for the project from municipal administrative staff, such as Chief Administrative Officers and funding agencies:

Yes, luckily we had...we had a guy – and he was my man I could go to, and talk to in the background, and he would give me some help. Actually, another thing that helped us a lot was, I went to a government agency called FedNor, which is a northern federal funding agency that the government has, and there was a guy there named [name], and he was the one who first said “here's what you do: you make your public presentation and get the vision nailed down, then secondly, is have a business plan done, so you can show that this thing will actually make money.”

The only instance where a participant noticed a difference between the participation session for the brownfield project versus other projects was that people assembled quickly and efficiently of their own volition, whereas in other situations, the planning agency or governmental body played a significant role as champion and in collaborating the participation sessions:

And then you catch on to this – we took on the role as promoter because agencies like WT did not take a strong stand against the ill advised government. So I want to be really clear that in the end citizens involvement was really necessary to WT. So unlike a normal brownfields process like I've been involved in, let's say that proponent for the government agency if they lose the projects....in this case, the SAC never would have come about except for CodeBlue citizens.

Overall, collaboration between representatives from community groups and government organizations or planning agencies was not atypical for the brownfield revitalization projects studied within this thesis.

5.5 Government and Policy Response

The review of policy documents pertaining to the public participation process near brownfield sites consisted of assessing two municipalities that are noted for their approach in brownfield remediation strategies. There is little detail pertaining to the organization of the sessions, but there is an indication of the circumstances that would require a public participation session. Halton Region states that it has:

“... the right, during the site assessment and/or remediation process, and where the planning process provides opportunity, to conduct a formal public consultation, or request that the proponent completes public consultation”

in their protocol for reviewing development applications at contaminated sites. In a conversation with a planner at the Region, they confirmed that this process does occur; however, it would likely be

under “extraordinary circumstances where there is great public interest in the property.” In the same conversation, the participant noted that the process is usually informal, as the proponent would *likely* be asked to invite the general public to provide input. The participant also noted that:

If a planning application triggers an environmental review of the property (see Table 1 of the Protocol), a more formal process would be involved, depending on the type of application...[where] there is an opportunity to hold a public information meeting as part of a planning application.

The City of Kingston has also been recognized as a leader in brownfield revitalization, which is one reason why this city has been chosen as a case study in this thesis. Upon further investigation into Kingston’s policies and protocols surrounding this process, it was found that there is a greater emphasis on the grant and rebate program to encourage brownfield revitalization, as the city is “blessed” with a significant amount of formerly industrial lands but encounters typical hesitation and opposition from funders and the public. When asked if there is a streamlined public participation process for brownfield planning, a member of the city’s engineering department stated,

“The Committee must review and recommended any application and during these meetings, the public is welcome to attend and comment **as per any topic** at a Planning Committee Meeting.”

A co-ordinator who has worked with a sustainability consultation group that facilitated several information sessions in the Kingston area pertaining to brownfield redevelopment echoed several of the strategies and tactics that other facilitators have mentioned during interviews. One notable method of ensuring a successful session that involves many technical terms and a lengthy process is to:

“present the information in a way that all people (general public – laymen and others who may be more technical) understand the issues, solutions and opportunities. It is also important to allow the audience to feel involved – early on in the process – before decisions are made – so that they can feel that their comments are heard and

used to develop the project... this way the audience will be more engaged and willing to accept the project – understand the benefits and accept the tradeoffs.”

The mention of “tradeoffs” is similar to that which was mentioned by one participant in stating that people may be more willing to accept planning changes if they understand there are certain consequences to every decision. This is a common theme that is repeated throughout much of the planning literature.

On a provincial level, the Ministry of Municipal Affairs and Housing’s *Community Improvement Planning Handbook* is a resourceful tool that assists municipalities in building plans for their communities while also providing detailed steps in preparing for and conducting public participation sessions. While it is not specific to brownfield revitalization planning, the handbook provides useful information on assessing the history, economics and challenges of a site, drafting a plan and reporting to council.

5.6 Discussion

Overall, the results suggest that among the case study sites identified in Chapter Four and using examples from the literature review, it can be determined that there are little to no differences between the public participation sessions for brownfield versus non-brownfield projects. Many of the participants interviewed indicated that an efficient process will include several elements that are applicable and transferrable to all planning projects; however, some participants noted certain ways in which the outcome, effects and strategies of these participation sessions differed, which will be discussed further in this section.

This section will organize the analysis of the findings based on the research questions. Many of the responses will refer to themes and theories introduced in the literature review.

Question One – How do engagement strategies differ for brownfield projects?

The rationale for reviewing the various engagement strategies in brownfield revitalization planning projects is that ineffective strategies were often mentioned in literature as obstacles to attracting participants who were knowledgeable and could provide the greatest wealth of information about the project sites. As my research progressed, it became clear that this was more of an American, rather than Canadian, phenomenon. Unlike the careful process of reaching out to demographically similar informants from within an ethnic community, as seen in O'Neill et al's 2008 study, facilitators and planners associated with the case studies in this thesis used conventional or generic methods of public engagement. It became clear at the beginning of data analysis that many of the engagement strategies used in other participation processes are applicable when inviting the public to become involved in the brownfield revitalization planning process.

The statement "reaction to inaction," which described how many participants in these case studies assembled in section 5.1, indicates that many of these projects included a lack of foresight and commitment from the municipal government; however, the act of forming community action groups as a response to an environmental planning issue is not exclusive to brownfields projects, as is

discussed in Whitelaw et al (2008), so this is not considered unique to the public participation process for brownfields.

It was not surprising to see that social media played a significant role in informing and inviting people to participate in sessions. This engagement strategy, however, is not unique when attracting people to participate in brownfield revitalization sessions, as many other planning projects involve controversial issues that require an extensive audience that is best reached through innovative forms of media. However, rather than attributing the role of social media to a factor in brownfield engagement strategies, it is more accurate to say that social media is a contemporary strategy that is applicable to several participation sessions.

One important point in the results chapter is that it is often difficult to identify the most appropriate stakeholders to participate in the public engagement sessions, as quoted by one of the interview participants. This statement indicates that there is additional research and investigation that is involved in identifying stakeholders that would provide sufficient input in a participation session concerning brownfield revitalization projects. This point is associated with the previous observation in this subsection that gives credence to existing networks being catalysts in bringing public attention to revitalization projects.

Overall, the fact that none of the interview participants mentioned that a brownfield project was used as an attractor in creating engagement strategies for the public participation session indicates that it is not imperative to develop a separate set of invitation or engagement strategies when inviting the public to participate.

Question Two – Do the communications strategies for a brownfield public participation session differ?

Most of the communications strategies used by facilitators or planners for the case studies within this thesis were not different than those used for other planning issues. One reason for this could be that brownfield redevelopment is an exercise in community improvement, which exists in nearly every planning project, as it was reiterated by one of the participants. The three areas that were analyzed in this section to determine if there are any differences between the public participation process for brownfield projects versus non brownfields are: the type of sessions, the materials used, and how contamination issues are addressed to the general public.

A few participants mentioned that materials were distributed at information sessions to inform residents about the issues that were relevant to the project. As this is certainly not exclusive to brownfield sites, some of the literature suggests that using diagrams, renderings and site plans, as several case studies exemplified, may be an effective way to communicate issues that are foreign or involve complicated procedures, as brownfield revitalization often does. Al-Kodmany (1999) discovered that providing residents at public participation sessions with graphics increased participation, unveiled critical issues and presented the issue as one in community building. Distributing materials is also a necessary step in establishing a project narrative, which sets the tone for the entire revitalization vision, as it was mentioned in Fontaine's (2008) article. Using appropriate language and explaining uncommonly used terminology, which is normally encountered when discussing contamination at brownfield sites, is also consistent with Swerhun (2012)'s description that framing the narrative is about selecting the right language to organize the content of the discussion.

Ethnic or multicultural issues were not featured as prominently as subject matter as they were in much of the literature, and that the mention in this example was specific to the neighbourhood, not to the fact that it was a brownfield site. One example is that of the Tibetan community in Parkdale,

who were unable to come to an agreement on how to use the industrial space to their advantage. When asked if materials or sessions were provided in other languages or tailored to certain ethnic groups, many participants said no; this is unlike the situation in many American articles that describe “ambassadors” for ethnic communities and presented the information in languages other than English. I was not expecting this to be common in less ethnically diverse communities, such as North Bay, but I was mildly surprised that public participation sessions in larger metropolitan areas with a larger ethnic population did not accommodate for non-English speakers.

I was also surprised that contamination did not feature as prominently as I originally anticipated as a communication topic, and thus did not require many different communication strategies. In the literature, such as Bibeault et al (2001), some researchers suggest that when working on a project that involves a contaminated or formerly industrial site, it is necessary to inform residents about the hazards and dangers of the chemicals in informative and simplified ways. As one participant explained, these issues were discussed early in the sessions, and participants were confident in the responses they received, thus this issue was not constantly addressed during the sessions.

Another explanation as to why contamination issues may not have been discussed as widely as anticipated is because contamination is not necessarily unique to brownfield sites in contemporary planning, and a protocol to introduce these concepts to the general public is not required for brownfield public participation sessions. One participant’s contemplative statement “is any project really green anymore?” infers that residents are aware that contamination and hazards are part of community planning projects, whether they are located in rural, suburban or urban areas. Thus, it is nearly redundant to state that contamination issues should be regarded as a unique part of brownfield revitalization in contemporary planning.

With regard to the lack of official community improvement plan usage, this may be a significant area which is not commonly used at participation sessions, but may offer a concise, succinct plan that is easy to follow and can universally be understood at public participation sessions. As one participant noted, “all planning projects are an exercise in community improvement,” it would be acceptable that a standard community improvement plan be used during these sessions.

Question Three - Are retention strategies different for brownfield revitalization projects?

The reason for investigating retention strategies as they pertain to the public participation process for brownfield projects is that there is evidence in the literature that often, it is difficult to retain diverse populations who attend participation sessions for revitalization projects throughout the entire length of the process. Despite concluding that the demographics which participate in the sessions differ from those presented in the literature, I still consider it necessary to understand if there are specificities within the brownfield revitalization process that are convoluted and intensive that require special strategies to ensure attendance is retained.

It is through the process of retention and staggered engagement sessions that the fears, confusion and inquiries that the public may have regarding brownfield revitalization sites will be exposed, and the facilitators or planners can accurately address these issues. I concluded from listening to many facilitators that it is helpful to document the concerns that arose in the previous sessions, so they are addressed in the following sessions and the public feels a sense of closure and satisfaction.

The theme of trust and confidence was very prevalent among participants when I spoke about how and why they continue to participate in those particular participation sessions. As noted by the quote on page 94, it takes considerable effort on the part of the facilitator to record and readdress the situations and concerns that participants introduce in the first sessions. In order for the participants to

feel that their time and input at the sessions is worthwhile, there must be a feeling of trust between both parties. This sentiment is congruent with Margerum's (2002) claim that holding several public information sessions establishes a trusting relationships between the general public and facilitators, on whom they rely to provide updated progress about sensitive information relating to the project.

This leads to a second point about retention strategies that suggests that contamination updates are a necessary part of the ongoing consultation process. As mentioned in a quote in section 5.2, government agencies, developers, or municipalities may provide continuous updates to the public at consultation sessions, as the remediation process is costly, time consuming and can have significant effects on the surrounding environment. In this regard, contamination updates should be a necessary part of the retention process for brownfield revitalization projects.

While contemplating ways in which their projects have raised funding and earned community attention, two participants mentioned that physically visiting the sites to learn and become involved with the revitalization planning is an effective strategy. While this tactic is certainly not exclusive to a brownfield revitalization project, I believe this is an advantageous strategy for revitalization, in that a brownfield site is associated with industrial history and civic character that can easily be celebrated in the form of festivals, marketplaces and playspaces. There are many factors that can affect whether this action is possible, such as the condition of the site and its safety for the neighbourhood; however, inviting the public to visit a brownfield site can be a rewarding and successful tactic for public engagement.

Question Four - Do the networks and collaborations between certain key players in the public participation process have an effect on the final outcome?

The results of these interviews reveal that, similar to many planning projects, functional and efficient networks between key players are essential in a brownfield revitalization project's success.

Many of the points discussed during the interviews indicated that none of the tactics or relationships were exclusive to the public participation process for brownfield revitalization, but the types of players involved varied greatly.

Thus, it was revealed that the valuable role of the “champion” acted as a link between the public (who requires accurate information about contamination issues and project updates), and the governing body or planners (who possess this information but must be held accountable by the public). The champion, therefore, should appear trustworthy and reliable to both parties to relay critical information to each side. The theme of trustworthiness and competency is a significant focus in Fontaine’s (2008) article, in which he notes that a “credible champion” should be a constant feature in the brownfield planning process when providing a link between the public and planners or officials.

Trust, or responsibility, is particularly important when discussing brownfield revitalization planning because there are major liabilities associated with becoming a key player in a revitalization, in that environmental contamination could delay a project, which means investors or funders could withdraw their support, causing negative repercussions for the project’s future and reputation. This is referenced in Section 2.1.1 of this thesis as a common problem when amassing resources and interest in brownfield planning. It is expected that a knowledgeable person who can reassure others of risk mitigation and anticipated successes is necessary when a topic revolves so closely around finances and investments, as brownfield planning does. When asked if many people inquire about their property values during participation sessions, one of my interview participants immediately responded, “Absolutely. It’s a huge issue... I think that, my experience to date has been that the property value argument is really tough to be won by either side, but when people believe one particular view, they really have a hard time seeing the other point of view.” This indicates that

additional effort should be placed in ensuring the appropriate, knowledgeable individuals are involved in the public participation process to provide accurate and relevant information to the public.

Although it was commonly mentioned among participants that having strong networks with government and other important groups was necessary in brownfield planning, this appears to be more closely affiliated with environmental planning in general. Whitelaw et al (2008) strongly praise the efforts of grassroots and non-governmental organizations in the achievement of several environmental initiatives throughout Canada, and the responses from the interview participants reaffirm the importance that these links play in establishing success in the participation process. I do believe that although it is not unique to brownfield planning, collaboration among certain players is more noticeable and pronounced, as there are more complexities involved in this issue. For example, collaboration between key players may involve environmental remediation engineers, archeologists (depending on age of the site), architects, local historians and family members or those who have an historic stake in the revitalization of the site.

Another comment that was stated by an interview participant that deserves further reflection was that, in his experience, the assembly of the community group was unique when referring to the brownfield case study in question because normally, this action would occur at the insistence of a larger governmental body or agency. While this may be true of several brownfield projects, I concluded in this instance, it was more dependent on the project itself. There are many factors that may cause the sporadic assembly of an activist or special interest group, such as the timing of the project, political influences or perceived threats to the community. As these are not specific to a brownfield project, I disregarded this comment as one that is indicative of the difference between a brownfield and non-brownfield planning session.

As expected, overall, the networks and dynamics between different players in the brownfield revitalization public participation process were similar to those in any environmental or social justice issue. The only notable difference was the types of people who may be involved, seeing that brownfields attract a wide variety of interests and issues, which can have an effect on the conversations and requirements between each group.

Question 5 - Are guidelines directed toward public participation for brownfield revitalization sites reflected in certain Ontario municipal policies?

There were no specific policies or protocols aimed at involving the public in the participation process for certain municipalities when looking at brownfield revitalization projects. Halton Region appears to have the most specific policy regarding this issue, as it addresses the person that would initiate and under what circumstances the public participation process would be necessary when consulting for a brownfield project. The language in the protocol and by the participant is very clear in that the Region must take responsibility in recognizing when a public participation process should take place based on environmental concerns, or delegating to the proponent that they must assume this task; the phrase “the Region has the *right*” in the statement evokes images of environmental justice, where the government must involve the public for their own benefit. However, it is important to note that the Region does not include how the sessions should be run, or how to properly communicate the importance and benefit of including brownfield revitalization projects in certain communities. Other municipalities, such as the City of Kingston, place a greater emphasis on financing and the environmental assessment process rather than the public participation process when involving brownfields.

One question that arose while analyzing the municipalities’ approach to the public participation sessions near brownfields was that of why certain guidelines for brownfields, or even related types of planning issues such as heritage and reconversion projects, were not mentioned in

official plans or legislative pieces. Based on my conversations with planners and other facilitators, it became clear that it was unnecessary to create a set of expectations and regulations to address one type of planning issue, since many of the interview participants noted that a good planning process would apply to any issue. However, I still maintained that the public does not always view brownfield projects favourably, and in order to provide accurate and appropriate information to people, there should be at least a set of suggestions that planners, municipalities or general community interest groups can follow. This will further be discussed in the following chapter, which includes recommendations for stakeholders in the brownfield revitalization process.

Conclusion

A greater analysis of the coded primary data collected during the construction of this thesis revealed that, overall, there are very little differences between the public participation processes for brownfield projects as opposed to non-brownfield projects. The engagement, communication and retention strategies that were assessed in this thesis do not differ from the standard processes, and use methods and strategies that focus on contemporary tactics like social media and promoting diversity. Many of the same key players that are instrumental in galvanizing the public participation process for brownfield revitalization sites are also present in other environmental and planning project movements. This indicates that regardless of the type of project, individuals who can act as champions or knowledgeable people for the movement are highly valued and necessary in order to achieve an efficient process. Finally, the lack of mention of guidelines for public participation processes in municipal legislation or official plans suggests that these sessions should follow the same guidelines that are produced for other planning projects, and should still result in a public participation session that is efficient, fair and rewarding for all those involved.

Conclusion

Overall, drawing from the literature and primary research undertaken with participants and resources mentioned in this thesis, one may determine that public participation sessions for brownfield revitalization sites are not dissimilar to those practiced in other planning projects. This is considered a “null result,” in which there is “no difference between treatment effects or of no association between variables” (Greenwald, 1975). The concluding statement applies to the five site-specific and two municipal case studies that were based in Ontario, and was determined using primary and secondary research over a ten-month collection period. In order to arrive at this conclusion, it was necessary to review the circumstances surrounding these case studies, literature, anecdotal material, transcripts, conversations with planners and my personal experience at public participation sessions from non-brownfield planning projects to obtain a fair comparison.

The results of this thesis are not statistically significant or entirely transferrable, due to the small sample size and geographic restrictions of the case studies, but are intended to serve as an example of a procedure that involves a very specific type of planning project. The hypothesis for this thesis was based upon literature that was taken from American sources that describe the differences in the public participation processes for brownfield projects. As I began research, I expected that some of these differences would appear in the Ontario context, as described in Chapter One. As the research progressed, I concluded that the participation process is not dissimilar because these case studies were less of a “brownfield” concern, and more of a development concern. Generally, it was revealed that the public understands the benefits of brownfield revitalization projects, and issues that I anticipated to be specific to this process (such as contamination and heritage preservation) were not apparent. Based on the answers provided to the interview participants, the most common concerns from attendees were related to property values, effects on surrounding transit and infrastructure, and economic impacts. This appears to be a positive indication that the public is more receptive to the

idea of brownfield revitalization in their neighbourhoods, and realizes the positive economic, social and sustainability implications of these projects.

While these conclusions reveal that public acceptance of brownfield revitalization is growing, the finding that there is little to no difference between brownfield and non-brownfield participation sessions was concerning to me because it implied that the study was performed incorrectly or would not be viewed as “valid” to other researchers. However, Greenwald (1975) argues that null results are legitimate and worthy of being published because they should be judged on the adequacy of research procedures and the importance of findings. While I argue that the results presented in the previous chapter have contributed to formulating appropriate recommendations relating to this subject, the findings also raise a valid point about whether the sessions manifested fundamental problems that affected the overall quality of the participation process. Planners who are involved in brownfield planning may read these results and question, “is there an issue or approach missing within the sessions that would have significantly enhanced their efficiency? Have the public participation sessions in the case studies followed appropriate tactics that allowed for optimal results, and avoided potential problems and consequences?” Before I am able to properly present recommendations and future suggestions to researchers in this field, it is necessary to compare the strategies and tactics used by planners in these case studies with ones that are commonly found in public participation literature and guidelines.

The first strategy is what Swerhun (2012) refers to as “creating a big tent,” which means attracting a variety of stakeholders with regard to demographics, socio-economics and expertise in the project. This often proves to be a difficult stage in achieving an efficient public participation process, as reaching out to diverse groups of individuals can require additional resources, time and “insiders.” The planners involved in these case study sessions used engagement strategies that were intended to

attract a diverse group of attendees that represented many different occupations and special interest groups. These strategies included traditional print advertising, messaging through social media and online media, mail invitations, and collaborating with and contacting existing community organizations and non-profit groups through “word of mouth” tactics. While these strategies were effective because they did reach many participants who could engage in the sessions regardless of location or time commitments, the result was that in many case studies, the same types of people would attend the sessions – leaders or representatives of community groups, activists within the community, outspoken opponents, and those with a personal goal or agenda. Only one case study mentioned working with a specific ethnic group in considering their needs and plans for the revitalized site, which was surprising since many of the case studies were located in mid-size to large culturally diverse centres. This presents a concern for the public participation process, as the lack of diversity may be attributed to planners being unable to reach numerous individuals of different ethnic backgrounds that could contribute to the sessions. What the interview participants did not mention, that appeared many times in the literature, is if they made extra effort to seek people who may not have learned about the process through the engagement methods used, and if they attempted other engagement tactics, such as attending cultural festivals, local business improvement area meetings, and events at seniors centres to talk to and invite residents to the public participation sessions. This inability to attract a variety of individuals from different ethnic backgrounds, ages or other demographic variables is likely to be attributed to another factor that the participation sessions omitted, which is establishing trust between facilitators and marginal members of the community.

Another common strategy within public participation sessions is building strong relationships and collaborating between planners, decision-makers and session attendees, or as Eiser et al (2007) mention, the importance of establishing trust between planners and the general public. When reviewing the participation processes in each case study, a researcher may question: “have the

planners or facilitators in each study demonstrated that they are trustworthy and can conduct a meaningful, efficient participation session?" Firstly, most of the participation sessions in the case studies included a champion or leader who could communicate easily with the public, and could link the public and private sectors, as per Fontaine's (2008) suggestions. Overall, the individuals who acted as champions or links between notable players were knowledgeable, approachable, and involved in many facets of organizing the participation sessions. This pattern was repeated in almost each case study, regardless of population size or financial value of the revitalization project.

Secondly, the transparency and motives of the session organizers greatly influenced how the public responded to the planners and how much they were willing to participate. This aligns with Eiser et al's (2007) theory that trust is closely associated with municipal government's openness and motives, rather than their complete knowledge of a project. Several session organizers or planners consulted with and invited individuals who were prevalent in brownfield planning, such as engineers, architects and heritage experts, to speak at the public participation sessions. From a consultation planning perspective, this is a strategic action that will ensure participants receive a variety of information from experts in different disciplines, and not a one-sided account from elected officials. This is effective for participants who are already familiar with the project, and can easily find information about the project in a variety of ways. It is difficult, however, for those who cannot trust elected officials because they either a) are not familiar with the dominant cultural values and policies, or b) are from a culture or country that does not encourage active participation and contributions in government affairs. This is a concern for an increasingly diverse society, and especially when citizens are encouraged to be critical of government motives. It is particularly important to establish trust in a planning project that may affect personal interests, such as property values and neighbourhood character, as it is seen in brownfield planning. It is important for the government to find a manner in

which they can prove to be trustworthy that citizens' opinions are valuable and necessary in the planning process.

It is also crucial to revisit Tuler and Webler's (1999) criteria for effective consultation to understand if the case studies included these elements in their participation processes. A description of each element according to Tuler and Webler (1999) is listed below, along with its relevance to each of the cases examined within this thesis:

1. Access to the process – this implies that a variety of methods were used to invite and attract participants to contribute to each session, which reduced financial and geographic barriers to participation. Each case study demonstrated accessibility to the processes, as sessions occurred in various public facilities, on multiple dates, and, in one case, in an online forum. One area that could have been improved, as discussed earlier in this section, was utilizing strategies that attracted individuals who normally would not attend these sessions.
2. Power to influence process and outcomes – this element includes ensuring that participants' visions and concerns are considered during the sessions, and that each party is provided with equal amounts of time to speak. This was less evident in the North Bay case study than the others, where municipal staff was initially unwilling to consider alternative options, but later worked with the community group to create a viable site plan. The remaining case studies also demonstrated equal participation by responding to ideas and concerns that arose during previous sessions, thus indicating that planners and facilitators listened to and valued participants' input,
3. Access to information – Tuler and Webler (1999) state that obtaining expert advice and assistance from professionals is beneficial to an effective participation session. This element was present in all the case studies: experts provided services and counsel to participants, who then took this information to elected officials or planners to support their arguments. In some

cases, such as those in North Bay, Ottawa, and Toronto, engineers, architects and historians were invited to converse with and participate in the sessions, which increased the transparency of the process.

4. Structural characteristics to promote interactions – this element emphasizes how the planners or facilitators have created an atmosphere that allows for optimal participation amongst attendees. This is evident in participants’ descriptions of roundtable sessions, the introduction of topics and themes as discussion, and types of materials used to facilitate conversation. All the case studies used conventional and effective methods to promote discussion.
5. Facilitation of constructive social behaviours – Unlike the previous point, this criterion focuses on the ground rules or incentives that enforce positive conversation amongst participants. This can include explanations from planners or facilitators about how the sessions will be conducted, or the inclusion of opportunities for networking and discussion among attendees. It was very interesting that liaisons and collaborations between participants occurred as a result of opposition from elected officials; however, it is not implied whether this is a product of an effective public consultation session or existing liaisons and connections among participants.
6. Improving social conditions for future processes – this involves a process in which participants can “re-create the conditions necessary to allow future policymaking processes to occur” (Tuler & Webler, 1999). This step is critical in ensuring the sessions were run without conflict and established a sense of community among participants so that these processes could be replicated in the future. None of the case studies included sessions that were entirely conflict-free; however, throughout these processes, I noted that attendees developed skills that could be beneficial in future participation sessions. These included learning how to converse and negotiate with elected officials, prioritizing the vision of the group rather than

the interests of one individual, and sharing written notes and perspectives with facilitators or planners so they may be used as a guide for future occasions.

7. Adequate analysis – as the final criterion, this step is largely involved in assessing the role that municipal officials played in the process, and that of accountability (which was introduced in Chapter One as a reason why public participation has recently grown in importance). Each representative from each case study provided a detailed assessment on the demeanour, actions, impact and interest of each planner or elected official that attended the sessions.

By examining and comparing the strategies that were used in each case study session to those which are introduced in the literature and interview transcripts, I am now able to identify and reflect on the areas that require improvement. Ultimately, I can then provide recommendations for future public participation sessions that may then enhance or complement the efficiency of these processes.

6.1 Recommendations

The final intention of this thesis is to provide recommendations for planners, governments and academics that are involved in the public participation process or in brownfield revitalization planning. These suggestions are based on limitations and gaps that have been identified in both the literature review and in my primary research by speaking with interview participants and reviewing existing documents and transcripts. My recommendations for including tactics and strategies in the public participation processes are as follows:

6.1.1 Provincial and municipal governments should collaborate in order to create, maintain and update a brownfield inventory in Ontario

One of the largest limitations with acquiring information on existing brownfield sites was the lack of a complete brownfield inventory and financial data on the sites, as mentioned in Chapter Two,

and particularly in Hayek et al's 2010 article. A comprehensive database of existing sites, including industrial history, environmental contamination, and plans for remediation and prospective financiers could be included on the Environmental Brownfields Registry for public observance and comment. This would require sharing information between municipal government offices responsible for brownfield and urban development, and the Ministry of Municipal Affairs and Housing. Publicizing this information would ultimately benefit researchers in academia and those working in urban redevelopment. The anticipated benefit of creating a complete directory that is available to the public is that it may generate interest in brownfields projects by providing transparent and accessible information. This may further encourage residents to attend participation sessions, provide input in online forums and discuss planning projects with their elected officials. Additionally, any information provided in a comprehensive database can serve as background information for participants prior to attending a participation session.

6.1.2 Create an open and trusting relationship between planners, elected officials and important stakeholders by examining the demographic area of the brownfield project

In addition to historical, environmental and applicable policy research for each site, prior to the public participation process, planners should also review the ages, cultural affiliations and other notable demographic patterns that exist around the brownfield revitalization site. This may include reviewing census data, attending cultural events and festivals, and observing the existing amenities that are present in the area. It is important to determine how these demographics could influence, alter or accommodate the redevelopment. For example, if the site is in a predominantly multicultural area, planners should meet with representatives or members of that community to explore ways in which the centre could meet the groups' needs. This step would also ensure that planners are reaching the appropriate individuals, and devising strategies that ensure all demographics are adequately represented in the participation sessions.

Inviting and retaining members of society who are often difficult to reach will require some additional effort in strategies and tactics. For example, in the literature, some researchers state that hiring a translator or speaking to participants in smaller, more intimate and familiar settings exemplifies planners' commitments to ensuring that participants are most comfortable in sharing their opinions. In planning projects that involve sensitive populations, I recommend that the sessions consist of fewer participants, are less formal so participants are able to share information as it arises, and are numerous other experts involved so that participants can see differing perspectives from other professionals.

Knowledge of the surroundings and demographic patterns affecting the site will also inspire trust from the general community in planners' abilities to provide recommendations and suggestions for further planning projects. One other strategy that has proven to be effective in many planning projects, and particularly in Buchanan's 2010 study about brownfield redevelopment in Philadelphia, is to create a community benefit agreement between developers and members of community organizations. There is great potential for success if this process were applied to the case studies which have been examined in this thesis: community groups have already proven to be highly organized in assembling and establishing a mission, there is strong evidence of collaboration between different levels of government and different sectors, and formal agreement forms were used in at least one case study. It is thus my recommendation that the main community group, or the "champion" or representative of a collaboration of many community groups use the public participation sessions as a dialogue with planners to present their goals and needs for the community and the project, and, with legal assistance, draft an agreement that incorporates all these needs in one document. As a result, the time and effort each party invested in the participation sessions is brought to fruition and documented, which emphasizes the importance and advantages of the public participation process.

6.1.3 Update the Ministry of Municipal Affairs and Housing's 2008 Community Improvement Planning Handbook with recommendations for facilitators and community groups

Lastly, it was noted throughout this thesis that there did not exist a set of guidelines or suggestions for planners or municipalities in Ontario regarding brownfield revitalization planning, terminology or commonly addressed issues in public participation sessions. As brownfield revitalization projects vary by municipality, population, industrial history and development potential, which are all regionally influenced, it is understandable that it would be difficult for the province to create a list of guidelines or suggestions that would be universally applicable under all circumstances.

However, the Ministry of Municipal Affairs and Housing does provide information and assistance in a handbook to those wishing to prepare Community Improvement Plans for a brownfield revitalization project. Some of the recommendations include: performing research on policies pertaining to the site, drafting a marketing plan, appointing a leader or “champion,” and promoting and monitoring the program. The handbook also explains the importance of and requirement for public participation in planning, but it does not provide further detail as to creating a participation session specifically for brownfield revitalization planning. Guidelines that could be included in this handbook are as follows:

1. Provide a “reference guide” to attendees, which includes brownfield-related terminology, such as names of chemicals and contaminants that were present in the surrounding groundwater and soil, diagrams and thorough explanations of the environmental remediation process, and the environmental benefits of brownfield revitalization.
2. Prepare a list of frequently asked questions about issues that pertain to brownfields, such as property values, infrastructure usage and heritage preservation.
3. Include interactive charettes and design tools that allow attendees to provide their input in a design that celebrates the site's history while also thinking of innovative future uses.

4. Establish a presence at community-oriented events, such as business improvement area meetings, cultural festivals, outdoor markets, and other meeting places. Ensure that the project's brand or vision is noticeable and clear.

6.2 Future Research and Implications

This thesis has provided the opportunity to research and investigate a particular area of public consultation planning, while also presenting options to future graduate students and researchers to continue these studies, or select an area within this study on which to focus and expand related research.

Further research on this topic could include assessing the efficiency of public participation sessions for brownfield revitalization projects from a demographic perspective, similar to that which reviews the ethnicities and racial aspects of the processes. This is one topic that was not expanded upon throughout this research, as the current statistics for municipalities in these case studies did not show similar racial and demographic patterns to those in the United States. As multiculturalism is increasing within Canadian urban centres, it is possible that these statistics could change in the near future, and thus it would be beneficial to revisit this research to discover if brownfield projects consider the characteristics of the neighbourhood in their designs. In addition to racial and ethnic patterns, researchers could review participation sessions to understand if they are adequately taking into consideration the needs of elderly people, lower income people, and special interest groups in the area. These findings could then be included in reports to city councils and government offices responsible for brownfield planning.

One of the greatest limitations in this study was the lack of time and resources to travel to numerous brownfield sites and meet with many other key stakeholders and planners who were instrumental in the public participation sessions. As a result, this study cannot be properly categorized

as “generalizable.” With adequate funding and a wider timeframe to complete this study, it is possible that future research could involve performing more extensive research on brownfield revitalization projects in Ontario (dependent upon the existence of a brownfield inventory), traveling to a greater variety of sites throughout the province to actively observe the planning sessions, and meeting with many more representatives who are involved in the project. This would provide a clearer and more accurate description of public participation in brownfield planning throughout the province, compared to the results in this thesis.

This study could also be replicated by graduate students in other provinces, as brownfield sites are also prevalent in Quebec, the Maritimes, and Western Canada. While it could be expected that the results would appear similar to those found in Ontario, it would be interesting to compare policies for brownfield revitalization that exist within each province to those in Ontario. Some lessons that could be applied to improving public participation sessions for brownfields are if incentives or community improvement planning makes revitalization appear more feasible and attainable, and thus people are more likely to participate in planning sessions.

Another option for further research could involve focusing more intently on the process in a single case study, and speaking to a wider range of participants, rather than a few representatives who do not always represent the majority opinion. Researchers could actively participate and observe by attending focus groups, roundtable discussions, and design charrettes; completing surveys; and performing subsequent interviews with a sample participant group. In this instance, the researcher would not have to encounter misinterpretations of participants’ words, because their own experiences would act as supplementary data.

6.3 Concluding Remarks

The public participation process is often deemed ineffective or is taken for granted in many circumstances. With regard to the planning sector, the public has many opportunities to comment on projects that affect the societal, economic and environmental well-being of a community. Brownfield revitalization is a topic that is growing in importance as people recognize its many benefits, and requires public involvement when determining how to transform idle sites into places that are universally appreciated. The public, however, cannot adequately partake in public information sessions unless planners and elected officials bear the responsibility for ensuring fair and inclusive access to the participation sessions. This thesis reviewed several case studies that involved brownfield revitalization and exemplified various methods and strategies for the public participation process. By continuing to study and learn how planners and elected officials engage the public in various manners relative to specific planning projects, people may understand the significance of the public participation process and further exercise their democratic right to improve their communities.

Appendix A – Recruitment Letter

Dear (Name),

I am a *graduate* student at the University of Waterloo who is working under the supervision of Professor *John Lewis*. I am in the process of writing my Masters thesis on the subject of public participation from citizens living near redeveloped brownfield sites.

(This paragraph will not be included when recruiting planners): Brownfields are vacant or underused lands that can potentially be redeveloped. One of the projects of particular interest to me is (*name of brownfield site/completed project*). During my initial research of the *associations/groups/clubs* involved in the planning stages of this project, I came across your name mentioned many times as an active participant in this process and representative of this group.

My research concerns people involved in the public participation process, their interaction with planners and local authorities, and their opinions on the overall process. Currently, municipalities throughout Ontario do not have a set of guidelines that indicate how to respectfully and effectively include all citizens in the public participation process. This is particularly relevant for populations living near brownfield sites, as studies show that populations surrounding them tend to be very diverse.

I believe that your opinions and perspectives on your experience in the public participation process would be highly beneficial to my research. I would be very grateful if you could find time to meet with me for approximately half an hour to discuss this issue. Participation in this study is voluntary and you may, at any time, withdraw during the process or refuse to answer certain questions. Our conversation will be audio-recorded, with your permission, and any quotations from you that I include in my thesis will be anonymous. Your answers will remain confidential and you will not be identified in the thesis or report. I will retain the electronic and physical data collected from our meeting for five years in a password protected location.

Your participation in this study is beneficial for many reasons. Firstly, you will have the opportunity to discuss parts of the public participation process that you enjoy or disagree with, and suggest how

they may be improved or changed. I trust that you will agree with me, as a previous participant in this process, that community involvement is a necessary part of planning, which should be available to all members of society. Your contributions have the potential to shape a set of guidelines for municipalities. Your participation in my project will enrich my research base and provide further support for the movement overall. There are no known or anticipated risks to participation in this study.

All project information, such as digital recordings and handwritten notes, will be encrypted and stored for five years in a secure location, accessed only by myself. This study has received ethics clearance by the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. Should you have any comments or concerns resulting from your participation in this study, please contact the Director of the Office of Research Ethics at 519-888-4567 Ext. 36005.

It will be my intention to telephone you at the number provided about a week after you receive this letter, to determine your interest and, I hope, to establish a time and place for our meeting. If you would like to reach me in the meantime, my telephone number is 647-220-6043, and my e-mail address is sdevelli@uwaterloo.ca. If you have any questions, please do not hesitate to contact either myself or Professor Lewis at 519-888-4567 ext 33185.

I greatly look forward to talking with you.

Sincerely,

Sonya De Vellis
Candidate, M.A. Planning
sdevelli@uwaterloo.ca
647-220-6043

Appendix B – Schedule of Interviews

Date	Description of Interview Participant	Participant Code	Interview Location	Method of Interview	Follow-up interview	Notes
November 27th, 2012	Member of community group	1	Waterloo	Skype	March 27th, 2013	
December 5th, 2012	Member of community group	2	Waterloo	Skype		
December 11th, 2012	Member of community group	3	Waterloo	Skype		
January 9th, 2013	Developer and business owner	N/A	Waterloo	Skype		Interview not counted as data
January 16th, 2013	Property Developer	N/A	Waterloo	Skype		Interview not counted as data
January 23rd, 2013	Member of community group	4	Waterloo	Skype		
January 30th, 2013	Member of community group	5	Toronto	In person	April 12th, 2013	
February 8th, 2013	Member of community group	6	Waterloo	Skype	April 30th, 2013	
February 27th, 2013	Member of community group	7	Waterloo	Skype		
March 18th, 2013	Facilitator	8	Toronto	In person		
April 5th, 2013	Facilitator	9	Waterloo	Skype		
April 11th, 2013	Planner	10	N/A	E-mail		
April 12th, 2013	Municipal engineer	11	N/A	E-mail		
April 25th, 2013	Member of community group	12	Waterloo	Skype		
August 12th, 2013	Facilitator	13	N/A	E-mail		

Appendix C – Interview Themes and Questions

Questions for members of community groups and organizations:

1. What is your:
 - a. Years of residency in _____ (city/community)
 - b. Profession
 - Arts, cultural, recreation, sports
 - Business, Finance, Administration
 - Engineer, Architect, IT
 - Farming, Fishing or Natural Resources
 - Health
 - Management
 - Processing, Manufacturing, Utilities
 - Sales, Services
 - Education, Legal, Government Services
 - Trades, Transport, Construction
 - Student
 - Other

2. What is your affiliation to the neighbourhood association/community group?
 - a. What is your role in the neighbourhood association/community group?
 - b. How many years have you been a member of this association?
 - c. How did you become involved in this association?
 - d. What is the main vision/goal of the neighbourhood association/community group?

3. What is your goal or initiative for the revitalized site?

4. What are some special concerns surrounding this site (eg., environmental protection, cultural amenities, variety of uses for the site)?

5. I understand that you have been involved in the planning process/stakeholder engagement process of the redevelopment of (name of site), as a representative of community association. The following questions will inquire about your experiences.
 - a. How did you learn about these sessions?
 - b. Did a member of the city facilitate these sessions, or was there a mediator involved?
 - c. Where were these sessions held?
 - d. What methods of public participation were utilized (roundtable discussions, open forums, one-on-one conversations, design charettes)?
 - e. What was the length of these sessions, and over what period of time did they occur?
 - f. Were participants also given the option to provide input through an online forum?

6. Please describe your knowledge of surrounding community issues relating to the site (i.e. examples)
 - a. What did you know about the site's historical significance prior to joining the neighbourhood association/community group?
 - b. What are some notable demographic or cultural issues in the community (eg aging, multicultural)?
 - c. In your opinion, how could the revitalized site complement or be better suited to the surrounding neighbourhood?
 - d. (can skip if similar to b) Were there any special concerns you had with the site, for example accessibility, risks to children, preserving elements of the building?
 - e. How do you feel that council/developers/planners are responding to these concerns? How do their plans for the site reflect the needs and character of the community or surrounding environment?

7. What was your overall experience in the stakeholder engagement session?
 - a. Establishing Trust and Relationships
 - Did you feel the facilitators had a strong knowledge of the environmental and economic issues surrounding the waterfront during the session?
 - Did the facilitators provide additional resources, images, or information to help you express your opinions?
 - Were people comfortable with the planning terminology used?
 - If you had questions regarding the language or needed clarification about certain terms, were facilitators able to assist you?
 - Were the materials or resources also provided in other languages, in addition to English?
 - How much time did the facilitators spend answering questions and explaining the goals of the meeting?
 - What was your level of comfort or trust regarding the facilitators of the session? Please describe the atmosphere.

8. Please describe the circumstances following the stakeholder input sessions.
 - a. Retention Strategies
 - Was input, either by yourself or other participants, recorded by facilitators?
 - Were there networking opportunities with other participants? Were you given the chance to collaborate with others who shared your visions?
 - Overall, how many sessions did you attend concerning this issue?
 - Were you asked for follow up sessions or clarifications on any of your points?
 - Were you encouraged to provide further information via online polls or surveys?
 - If you did not attend any additional sessions or meetings, please state the reason why. Could facilitators have changed the format/content/logistics of the sessions in order to encourage you to attend?

- Were there any additional public engagement events which raised awareness about this initiative (eg. Fundraiser, etc)?
9. Please describe your thoughts about the final project.
- a. If the project is still in the planning stages:
 - Are plans progressing according to the goals outlined in the public engagement sessions?
 - Do you think the stakeholder input process was useful or valuable?

Are there any other people who could contribute to this study that you could recommend?

Is there anything that I have not covered/asked you that you think would be important for this research?

For planners or facilitators:

Participant Name: _____

Region/City/Town: _____

1. Have you received concerns from/ have any of the following groups voiced concerns?
 - a. Ethnic minorities
 - b. Recent immigrants
 - c. Those of lower socio-economic standing
 - d. Recently unemployed/those affected by the loss of the manufacturing sector
 - e. Those who are concerned about environmentally-sensitive issues
2. When engaging with members of the community who have specific/specialized concerns or interests (cultural, environmental, socio-economic), how do you put in additional time or resources to ensure that all participants are comfortable with the planning process?
3. How have you noticed a definitive contrast among certain groups, associations or demographics when undergoing this process?
4. What types of measures are being undertaken by the municipality to ensure all citizens have access to a fair process?

Follow-up questions:

1. Are there notable differences between the consultation sessions for [brownfield project site] and other non-brownfield related sessions you have attended?
 - a) Are the attendees different? Do they have separate or unique concerns relating to the brownfield sites that are not present otherwise? For example, contamination...
 - b) Do sessions concerning brownfield sites require more information or explanations prior to the meetings than others?
 - c) Considering the information they were provided with prior to the sessions, did the attendees seem confident in their knowledge of the project site?
2. Do the facilitators use different language or terminology to describe contaminated or polluted sites? Do they take the time to explain processes such as environmental assessments, Record of Site Conditions, etc? Is this similar to other non-brownfield related sessions?

3. Were developers present at the session, and did they address proposed risk assessments? Were they helpful and knowledgeable in answering public questions relating to this point?

a) Are the interactions between developers and the public different at brownfield revitalization sessions as opposed to regular public info sessions?

4. When corresponding with the municipal government, did they have a Community Improvement Plan (CIPs) available concerning the site?

a) Have you been at non-brownfield related sessions where a plan was presented? What were the differences between the two?

b) Does the city address specific issues such as investment and environmental remediation in the CIPs?

Appendix D – Follow-up Letter

Dear (*Name*);

I would like to thank you for meeting with me last week. I learned a great deal about your involvement in the project, which will certainly be beneficial to my study. It was indeed a pleasure meeting you!

My thesis is proceeding according to design, and in particular my research for public participation is nearing completion. As you know I have already been analyzing reports from previous meetings and information sessions, and am now seeing a few more individuals such as yourself who can lend additional information and insights. Thank you for seeking permission from [**name of participant**] to share his/her contact details with me so that I could invite him/her to participate in an interview.

I hope you will get in touch with me if further thoughts occur to you about our conversation, particularly if you would like me to omit some of your answers from my thesis. Should you have any comments or concerns you could also contact the director of our Office of Research Ethics at 519-888-4567 Ext. 36005. This project was reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo.

I will, as promised, send you a typescript copy of the chapter, for your criticism and comments. I expect it to be ready for your review by November or December*.

Sincerely,

Sonya De Vellis
Candidate, M.A. Planning
sdevelli@uwaterloo.ca

* N.B. – chapter was not completed for the anticipated date, as data was still being collected during that time.

Appendix E – Supplementary Materials

In addition to semi-structured interviews, the following sources were also used as data in this thesis. They are organized by case study:

City of North Bay – Rail Lands Redevelopment

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City of Toronto (Parkdale) – Canada Linseed Oil Mills

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City of Kitchener – McLennan Park Revitalization

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Region of Halton

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City of Kingston

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