Planning for Complete Streets in Toronto:

An Exploration of Public Engagement and Policy in Street Design, A Case Study of Queens Quay West

MES Candidate, Alexa Aiken

Supervisor, Laura Taylor

A Major Paper submitted to the Faculty of Environmental Studies in partial fulfillment of the requirements for the degree of Master in Environmental Studies, York University, Toronto, Ontario, Canada.

September 3, 2017

ABSTRACT

This major paper evaluates the concept of complete streets and the impact this approach to street design has on various users through a case study of the Queens Quay West revitalization process in Toronto. A complete street is defined as treating all street users equally while enhancing the environmental, economic and safety conditions of the street, thus resulting in an enhanced quality of life. Complete streets challenge auto-centric street design by enhancing facilities such as cycling lanes to accommodate all modes of transportation.

The concept of complete streets is relatively new, resulting in a lack of empirical evidence. This led me to investigate Queens Quay West which is the first complete street in Toronto. I conducted a comprehensive literature review of street design and public engagement strategies to determine if the stakeholder desires in the Queens Quay West revitalization process were reflected in the final outcome of the street.

This paper also discusses the legal framework involved in street design and the policies and guidelines that paved the way for the implementation of the *Toronto Complete Street Guidelines* (2017). This policy review concludes that the guidelines have streamlined complete street implementation and have promoted the ideology.

In conclusion, I suggest that the Queens Quay West engagement strategy was extremely successful with a number of efforts being made to fully engage stakeholders. The public's desires were largely reflected in the outcome of the street. My research demonstrates that Queens Quay West sets a precedent for future complete streets in Toronto.

FOREWORD

The Major Paper is the final piece needed to satisfy the requirements of the Plan of Study for the Master of Environmental Studies (Urban and Regional Planning) Program at York University's Faculty of Environmental Studies. This paper compiles a literature review, primary research, and a case study, which studies the stakeholder engagement tactics during the Queens Quay West revitalization project and whether the public interest was represented in the outcome of the project. This paper also reviews the new *Toronto Complete Streets Guidelines* and assesses the impact it can have on the facilitation of complete street implementation. My work draws on the three components of my Plan of Study: 1) urban and regional planning; 2) effectiveness of public engagement in urban planning; and 3) complete street policy. I address how complete streets are conceived (1), are implemented (1)(2), how the public becomes engaged in the process (2), and how policy can impact the implementation process (3).

Component 1, 'Urban and Regional Planning' comprises of the economic implications, social impact and political outcomes of planning. These elements are viewed through various theoretical lenses to determine good planning practices. The components of this learning strategy include fulfilling the Ontario Professional Planners Institute (OPPI) requirements and gaining a better understanding of various forms of transportation. Value was added to each learning objective through most courses taken towards my degree. These objectives were also developed throughout my Major Paper by the study of the positive effects of alternate modes of transportation and how to properly integrate them into city streets. This is a major objective of complete streets as well.

Component 2, 'Effectiveness of Public Engagement' focuses on the exploration of problems in public participation in the planning and strategies to overcome these concerns. A detailed study of each objective in Component 2 was conducted. Objective 2.1 accesses the public engagement process in planning and the theories behind it, while 2.2 focuses on large development projects initiated by municipal organizations and objective 2.3 focuses on assessing meaningful public engagement. All these components were studied in various classes, but were explicitly focused on in the course: ENVS 6120: Public Involvement in Planning, where I studied the public engagement process, and in ENVS 6699: Field Experience, where I assisted with public engagement strategies for the municipality. My Major Paper focuses on these learning objectives in Component 2 throughout, mainly addressing them in Chapter 4.

Component 3, 'Complete Street Policy' is concerned with the legislative policy frameworks and guidelines that can influence complete street implementation through regulation and guidance. Through my policy and literature reviews and my contact with stakeholders for the Queens Quay West revitalization project, I have contributed to each learning objective of Component 3 of my Plan of Study. The objectives aim to give me a better understanding of complete street design and policy and to understand the *Toronto Complete Streets Guidelines* to comprehend how to implement complete streets within the city. Policy was studied mainly through two courses: ENVS 6165: Land Use and Planning Law and in ENVS 6321: Environmental Planning and Design Workshop where

I gained foundational research into the broader policies that guide planning in Toronto. Specific complete street policy and guidelines were explored throughout Chapter 5 in my Major Paper.

ACKNOWLEDGEMENTS

I would like first and foremost to thank my supervisor Laura Taylor, for her continued guidance and support to help me reach my full potential. I could have not of written this paper without her.

I would also like to thank my parents, for their continued tireless support throughout my educational career. Their advice and assistance made this paper possible.

In addition, I would like to thank my boyfriend, Daniel Babin, for his loving support throughout university. Without his encouragement, I would not have been able to challenge myself to produce a paper I am proud of.

I would like to thank my manager, Al Rezoski, for his assistance at connecting me with fantastic interviewees.

Lastly, I would like to thank my friend, Marissa Cumming for her patience editing my paper. She is an amazing friend for spending hours upon hours editing with me.

TABLE OF CONTENTS

TABLE LIST

FIGURE LIST

ACRONYMS AND KEY ACTORS

BIA= Business Improvement Area — A BIA is an association that consists of commercial property owners in the area to provide a voice for the community. The goal is to collect funds for streetscape improvement with the ultimate goal of beautifying the area and increasing the customer base.

CLC = Construction Liaison Committee — This committee formed to oversee the construction process, relay information about the process to the community, and to voice concerns to Waterfront Toronto and the construction contractors.

EA = Environmental Assessment Study — This is a study done to assess the environmental effects of a plan or policy prior to construction. In the case of Queens Quay West, the EA assessed the revitalization of the street and the positive and negative consequences involved.

LRT = Light Rail Transit — This is electric powered transit that operates in a dedicated right-of-way with an extensively larger capacity than buses.

SAC = Stakeholder Advisory Committee — This was a committee formed during the Environmental Assessment process of the Queens Quay West redevelopment to represent interests of various stakeholder groups.

Waterfront Toronto — Waterfront Toronto is a government organization created to manage waterfront projects resulting in the Waterfront Revitalization Strategy. Waterfront Toronto is explained in greater detail in Chapter 3 on page 24.

YQNA = York Quay Neighbourhood Association — This association represents residents of the Central Waterfront stretching from Rees Street to Yonge Street to protect and shape the area. The neighbourhood association provides a voice for the residents of the area and represents their interests.

TERMS OF CLARIFICATION

Active Modes of Transportation — In the context of this paper, active modes of transportation included cycling, walking, running, and any means of transportation where one is doing exercise.

Alternate Modes of Transportation — In the context of this paper, alternate modes of transportation mean any mode of transportation that is not by car, which includes transit use and active modes of transportation such as cycling, and walking.

Auto-Centric Design- The prioritization of automobiles in street design above all other users

Official Plan — An Official Plan is a municipal document required by the *Planning Act* to give a vision of a municipality's future. An Official Plan sets goals and policies to guide development and change in the municipality.

Paradigm — A paradigm is a theoretical framework that guides a way of thinking. In this context, the complete street paradigm is a new way of thinking about street design, shifting from the auto-centric model to the complete street model.

Public Realm — Public Realm is any part of public space, which includes but is not limited to parks, government owned buildings, and streets. Creating a vibrant public realm is an essential component of complete streets.

CHAPTER 1: INTRODUCTION

Many Torontonians know Queens Quay West as a connection to the waterfront which contains facilities for various modes of transportation such as cycling, jogging or taking a leisurely walk. However, it was only as of 2015 that Queens Quay West transformed into the iconic street it is known as today. Prior to the 10-year revitalization process, Queens Quay West was in disarray, consisting of a wide vehicular right-of-way and poor pedestrian and cycling facilities. The street was unappealing, which resulted in it being a barrier to Toronto's waterfront. The revitalization of this street allowed Queens Quay West to transform into Toronto's first complete street.

The objective of this research paper is to evaluate the revitalization process, which focuses on stakeholder engagement strategies to assess the influence stakeholders had on the street. This paper also concentrates on five principles of complete streets that also overlap with my personal reason for studying the subject. These principles demonstrate the impact of complete streets on the quality of life, and the benefits they achieve for the environment, health, safety and economy.

This analysis begins with a general study of street design, and what defines a street as successful. The investigation then evolves into a case study of the Queens Quay West revitalization process and the stakeholder engagement strategy. The analysis then concludes with a policy review of complete street related policy and a comprehensive review of the new *Toronto Complete Street Guidelines* to determine their effectiveness in future complete street implementation. My research demonstrates that the stakeholder desires were successfully integrated into the Queens Quay West revitalization process to create Toronto's first complete street.

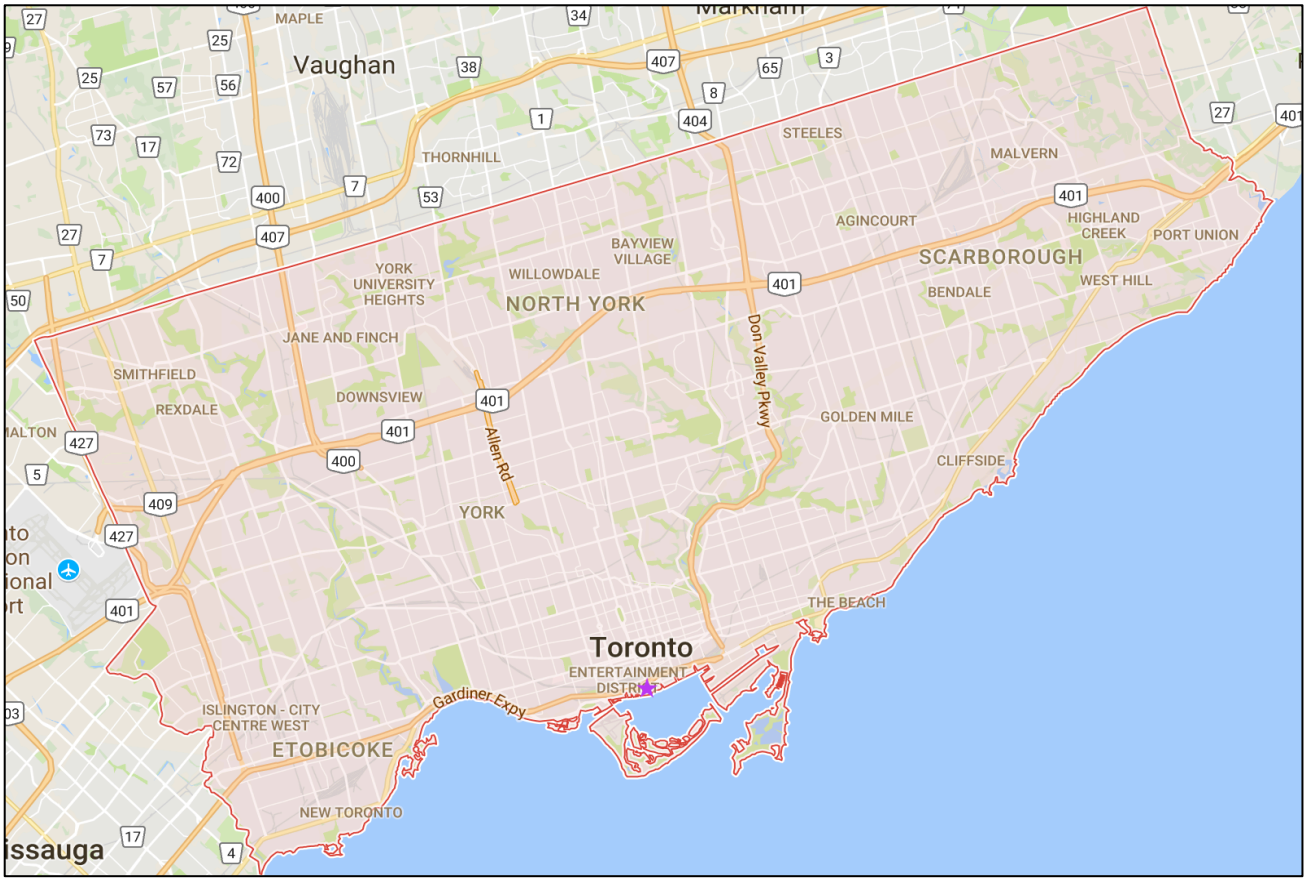

Figure 1: Context Map of the City of Toronto with Queens Quay West in Purple
Source: Google Maps, 2017

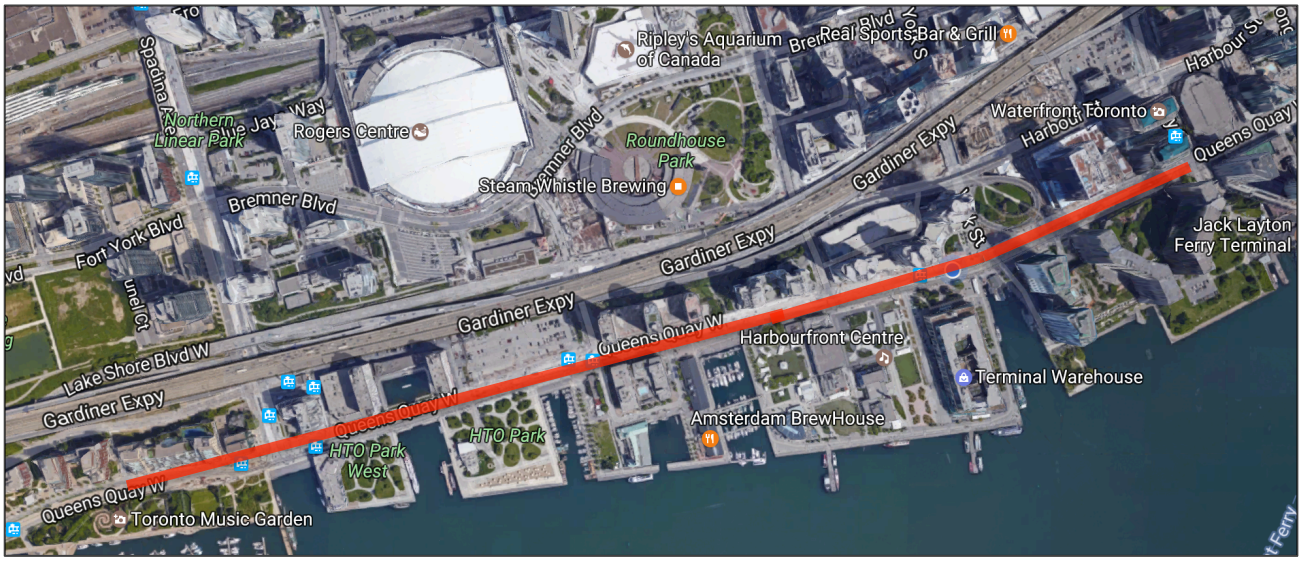

Figure 2: An Aerial View of Queens Quay West Marked in Red
Source: Google Maps, 2017

1.0 Research Topic

This paper is an exploration of the complete streets paradigm, and the influence the stakeholders can maintain on a municipally run large-scale complete streets project. The paper applies the knowledge gained from the complete street of Queens Quay West located by the lakeshore in downtown Toronto. The extent of the project ranged from Yo-Yo Ma Lane to Bay Street, approximately 1.7 kilometres and took a decade to complete. The street marks the implementation of the complete street paradigm into Toronto.

In the early 20th century, streets were retrofitted to primarily support automobile traffic through a Fordist society, treating alternate modes of travel as secondary in street design (Kipfer, 2015). This became the growing norm until challenges to the auto-normative street design started to develop to foster safety, accessibility and provide adequate amenities to create a street treating all users equally. This alternative ideology sees a street that takes into consideration all users by promoting equity in street design as "complete". Thus, the term complete street was developed. This paper explores the components of a successful street and how they are portrayed in the complete street paradigm.

As stated above, the focus of the paper is the Queens Quay West revitalization process. I will particularly concentrate on the stakeholder engagement throughout the revitalization process and whether the recommendations of the stakeholders were reflected in the outcome. This allows for a deeper exploration of theories on public involvement in planning and determining best practices (Lane, 2005; Campbell & Marshall 2002; Parker, 2002; Wheeler 2008; Frieden & Morris, 1968).

An essential component of investigating the revitalization of Queens Quay West is an exploration of policy involving complete street implementation practices. Some of

these policies include an analysis of the *Provincial Policy Statement*, the *Toronto Official Plan*, supporting documents such as *Vision Zero* and the *Toronto Bike Plan*, and finally an examination of the *Toronto Complete Streets Guidelines*.

This paper brings together public involvement in conjunction with the policy documents to advocate for complete street design.

1.1 Research Objectives

The objective of the paper is twofold. First, the objective is to research the Queens Quay West redesign project and to determine if the principles and hopes of the stakeholders were delivered through the process. This objective also examines if the stakeholders considered Queens Quay West to be a successful complete street. The second objective is to analyze the new *Toronto Complete Street Guidelines* and related documents to assess if they alleviate tension caused by the current complete street practices. According to a representative of Waterfront Toronto #2, a major obstacle with the redesign of Queens Quay West was that there was no policy document to guide Waterfront Toronto through the complete street implementation process. Additionally, the coordination and design of the street could have been implemented easier with a guiding document to assist with the process.

My objective throughout the paper is to bring attention to the public engagement process to observe sterling and substandard engagement practices. The hope is for Queens Quay West to set a precedent for complete street projects across the city and making it essential to highlight imperfections along Queens Quay West. This, in turn, will further improve the quality of complete streets in the future. Guiding the paper is the principles of complete street design, the municipal development process, my experience of the public realm, interactions with various stakeholders and the greater socio-political

context. As a student of the Masters of Environmental Studies program (with a focus on Urban and Regional Planning), I have an interest in complete streets to help improve Toronto's public realm as it is in need of severe improvements, as further discussed in Section 2.2. As I emerge into the field of urban planning, I feel the public interest often tends to rely almost completely on the statutory process, which is often insufficient at incorporating the public desires into the finished product. This paper has given me a greater understanding on how to sufficiently integrate the public into the process to result in a more widely desired outcome. I see it as my responsibility as a planner to advocate for the public interest and the greater good of the municipality.

The paper concludes that the stakeholder involvement process during the Queens Quay West revitalization process was substantial and the stakeholder desires were adequately represented in the outcome. In addition, the *Toronto Complete Street Guidelines* are comprehensive and embody the principles of complete streets, thus facilitating its implementation.

1.2 Paper Outline

I have prepared the chapters thematically throughout this Major Paper. Chapter 1 is a general introduction into my research topic and the methodology that supported this research. Chapter 2 comprises of theories and research behind the design of streets. The chapter also dives into some of the benefits and critiques of the emerging complete street paradigm. Chapter 3 builds off of that framework creating a comprehensive study of the Queens Quay West revitalization project in chronological order and the key actors involved. Chapter 4 focus on the stakeholder engagement process during the Queens Quay West revitalization to determine the level of impact and unpacks theories on what constitutes a successful stakeholder engagement. Chapter 5 then turns to analyze the

political side of complete street implementation by first scrutinizing the policy that inspired the implementation of the *Toronto Complete Street Guidelines*, followed by a policy review of the guidelines. Lastly, the concluding chapter summarizes the findings of the analysis, suggests areas for future research, and provides recommendations for future complete streets within Toronto.

1.3 Methodology

Throughout this research I explored the theoretical components of a good street by analyzing the *Toronto Complete Streets Guidelines* and exploring the Queens Quay West revitalization process. This research will provide a foundation framework for enhanced public engagement in municipal projects, particularly complete street projects. To evaluate the outcome of the Queens Quay West revitalization project, I primarily used qualitative methods—literature reviews, site visits, and interviews—with some policy review. I worked for the City of Toronto as a community planning intern during the duration of this paper, which aided in the correspondence of my interviewees. My findings were discussed using mapping and photography to provide a visual representation to some concepts. The methods I mentioned are outlined in the following section.

1.3.1 Site Selection

I selected Queens Quay West based on the fact that it was Phase 1 of a large-scale complete street project that had been finished in 2015. Toronto does not have many street projects done to this scale. Originally, I was planning on doing three case studies based on three different levels of completion: Queens Quay West (a finished complete street project), Eglinton Connects (a complete street project that is in the process of being built) and Murray Road (a lower scale regeneration project that has not officially been

proposed). I was advised this would be too large of a task to take on, and as I continued researching, I realized that three case studies would not be possible. I felt Queens Quay West would be most beneficial to study as it was one of the few finished complete street projects in Toronto, and thus, had statistical data to study based on results. I would also be able to conduct site visits to experience the change that the complete street has had on the neighbourhood, as well as have discussions with people who were directly involved with the project.

1.3.2 Literature Review

I gathered the bulk of my literature review prior to interviews but did not put it into writing until my fieldwork and interviews were completed. My literature review draws from two main currents of thought: the analysis of street design and benefits of complete streets, and an investigation of the public engagement process. The first current of thought is explored through various theoretical perspectives throughout my paper and is heavily focused on in Chapter 2, while the second is explored throughout Chapter 4.

Chapter 4 also focuses on research conducted by LURA Consulting throughout the Queens Quay West EA process. LURA Consulting synthesized all the public meeting data from the EA process into a large comprehensive document detailing every comment submitted to Waterfront Toronto and the results of all public meetings and SAC meetings. Each question that was asked during the meeting was also documented in this report. As a researcher, I comprehensively analyzed the report, drawing out themes of concerns and comments from the public, which I detailed throughout the chapter. This extensively detailed report ensured transparency in the EA process and assisted with the conclusions that justify why Queens Quay West was strategically designed.

1.3.3 Site visits

The goal of my site visits was to research how the area was being used and search for any conflicts of use. I choose not to count the amount of pedestrians and cyclists because Smith Lea, Mitra, Hess, Quigley and Lowen have already recently compiled observations in their report, *Complete Street Transformations* (2016). My observations were to be qualitative as opposed to quantitative.

I visited Queens Quay West as a researcher for the first time on Monday, January 23rd at 3:30 to 4:15 pm. It was about 1°C and the sky was grey, with a noticeable low pedestrian volume. I accessed the site by TTC to Union Station and walking about 10 minutes to the site. On my way back home, I caught a streetcar on Queens Quay West. I walked the length of the Queens Quay West redevelopment and also further East, where I noticed a notable difference in the aesthetic environment of the area. Throughout the visit, I took photos of the area to paint a picture of the area as well as to provide further context to my recorded observations.

Figure 3: Queens Quay West on Site Visit #1
Source: Alexa Aiken on January 23rd, 2017

I visited Queens Quay West for the second time on Saturday, February 11th at 12:30 to 1:15 pm. The temperature was 4°C and the ground was covered with a blanket of

snow from heavy snowfall the previous day, although it was shovelled to allow people to comfortably walk and bike. The sky was sunny and it was a beautiful day to be outside. I accessed the site this time by walking from Lake Shore East, about 15 minutes, and walked the length of Queens Quay West. On my way back, I accessed the site by walking 10 minutes to Union Station and taking public transit.

Figure 4: Queens Quay West on Site Visit #2
Source: Alexa Aiken on February 11th, 2017

I then visited Queens Quay West for the third time on Saturday, June 10th at 11:15 to 12:00 pm. The temperate was 22 ^{o}C and it was a sunny day. I accessed the site by walking from Union Station with the goal of taking photos of the street in summer and gathering data of its contrasting use in the summer months. The Waterfront Business Improvement Area (BIA) was also hosting the "Waterfront Artisan Market" on this date, which brought in a large number of people to the street.

Figure 5: Queens Quay West on Site Visit #3
Source: Alexa Aiken on June 10th, 2017

I also visited Queens Quay West less formally on multiple occasions through March and April to observe the change in usage as the weather got warmer to take photos of the changing landscape.

1.3.4 Interviews

In order to fully understand the revitalization process of Queens Quay West, it was important to conduct interviews with stakeholders involved in the project. It was also imperative that I obtained a variety of perspectives from people of various organizations and levels of involvement in the project. Based on availability, four one-on-one interviews were conducted which ranged from 30 to 40 minutes in length. Three interviews were conducted in person while one was conducted by phone. Interviewees were from the York Quay Neighbourhoods Association, Waterfront Toronto and the Waterfront BIA.

The interviewee was given the consent form to sign before the interview commenced and was notified that they were able to withdraw or omit information at any time. The interviewee was recorded using iTalk software on a password-protected phone. The interview was then transferred to an encrypted computer and deleted from the phone.

These files were later deleted once the project entered its final stages. After the interview, these recordings were played back and manually transcribed and renamed to reflect interview order.

The first interview was conducted in February 2017 with a member of the York Quay Neighbourhoods Association (YQNA), who was highly involved with the Queens Quay West project. This interviewee was a member of the Stakeholder Advisory Committee (SAC) and later, the Construction Liaison Committee (CLC) representing YQNA throughout the Queens Quay West revitalization process. Throughout this paper, this interview subject will be referred to as "a member of SAC" and "a member of CLC". The interviewee answered a specialized set of questions geared towards the public involvement with the Queens Quay project.

My second and third interviews were conducted in March 2017, both with employees of Waterfront Toronto that were highly involved with the Queens Quay West project. These interviewees answered a specialized set of questions tailored towards city employees. These subjects will be referred to as "Waterfront Toronto #1" and "Waterfront Toronto #2".

My fourth and final interview was conducted in March 2017 with the Chair of the Waterfront BIA. The Chair was highly proactive throughout the entire Queens Quay West redevelopment and had a strong business perspective representing the feelings of various businesses in the area. He has explicitly asked me to refer to him as the "Chair of the BIA" throughout my paper.

Table 1: Identification of Interviewees in this Major Paper

Position	ID in Major Paper	Date Interviewed
Member of the YQNA	Representative of the YQNA, SAC, and CLC	February 2017
Waterfront Toronto Employee	Waterfront Toronto #1	March 2017
Waterfront Toronto Employee	Waterfront Toronto #2	March 2017
Chair of the Waterfront BIA	Chair of the Waterfront BIA	March 2017

1.3.5 Policy Review

The planning document in focus for this paper was the *Toronto Complete Streets Guidelines*. This collaborate city planning document was the combined effort of the divisions of city planning, transportation services, engineering and construction services, Toronto Urban Fellows, the technical advisory committee and stakeholder advisory groups. The guidelines were released in December 2016 to reflect the City's Official Plan vision for complete streets. Part of this research involved scrutinizing statements made in the complete street guidelines to determine the level of commitment made and feasibility of such statements.

I choose to investigate the *Toronto Official Plan*, as it is the initial municipal document that referred to complete streets and encouraged complete street concepts to be utilized. I also reviewed *The City of Toronto Bike Plan* and *Vision Zero* reports to gain a greater understanding for how the *Toronto Complete Streets Guidelines* integrate into alternate city policies and guidelines.

1.3.6 Mapping

Throughout the Major Paper, I used a variety of mapping techniques. The first was a map showing the extent of the study area, created using Google Maps. The second technique was a cross-section of the finished Queens Quay West, constructed using StreetMix.net. I added in dimensions and public realm elements collected through research and observation to create the complete street. Maps were also used to demonstrate connections of various infrastructures in Queens Quay West to the rest of the downtown core. Overall, the maps gave context to a complex street design.

My research on the Queens Quay West redevelopment project had one main purpose, which was to assess the revitalization strategy and to determine the level of stakeholder involvement to establish the impact on the final design. The stakeholder involvement was also assessed to provide further recommendations for future projects of a similar nature.

CHAPTER 2: THE FOUNDATION OF STREETS

In this chapter, I briefly review the historical evolution of streets and how auto-centric design became widespread. The auto-centric street design contrasts what many people view to be a good street that properly accommodates street users. However, it becomes evident that these views of what makes a good street are aligned with the complete street paradigm. The chapter then explores the complete street paradigm that examines the benefits and critiques of complete streets. These ideas will be revisited in the conclusion after discussing my evaluation of Queens Quay West. Complete streets are the most recent design approach to try to balance the multiple demands of modern society on busy streets. In this chapter, I acknowledge the long history of street design, define complete streets, identify the benefits of complete streets, and critique the complete street paradigm.

2.0 A Brief History of Streets

The street used to be a place of diverse social activity when transportation was limited to foot and horseback. With its evolution through the increased use of new technologies, the street became a place of overwhelming diversity (Çelik, Favro & Ingersoll, 1996). The street evolved from being a public space into an area to promote business and private industry, referred to by Çelik et al. (1996) as an evolution into the pseudo-public realm. In Paris, Baron Haussmann redefined streets by widening boulevards to favour capitalist imperialism within the country and support military transport (Kipfer, 2015). This movement reorganized the street to support the movement of transportation and to redefine infrastructure development in cities across the world (Kipfer, 2015). Streets evolved further in the 20th century, with the introduction into a

Fordist society (Kipfer, 2015). With the invention of the automobile, cars invaded the street with their dominant size and overwhelming power and speed (Çelik et al., 1996). Roadways were redesigned to favour the automobile creating a vehicle-dominated society (Çelik et al., 1996).

The focus on automobile centred streets resulted in the well-being of other street users to gradually diminish (Hamilton-Ballie, 2008). The decline in the quality of the public realm was intertwined with numerous environmental, health, safety, social and economic concerns resulting in a lowered quality of life (Hamilton-Ballie, 2008). Streets became antisocial places, used simply to get from one location to another with minimal social interaction. Societies started to look for solutions to the declining quality of streets. This resulted in the emerging planning paradigm of complete streets.

2.1 Defining Complete Streets

The complete streets concept was coined in 2003 by an advocacy group named American Bikes (McCann, 2013). American Bikes advocated for cycling facilities to be included by law in street redevelopments (McCann, 2013). Advocates of inclusive streets eventually formed the National Complete Street Coalition, which assists American cities with complete street implementation (McCann, 2013). The complete street paradigm aims to challenge the auto-normative standard by prioritizing all the streets users while maintaining safety, improving environmental and economic conditions, and increasing the quality of life. Complete streets aim to treat all street users as equal by prioritizing safety and accessibility. This can be done by designating cycle lanes, widening sidewalks, adding vegetation and improving the overall streetscape to fit the needs of the area. Traditional transportation approaches focused on an auto-centric design (in this context meaning giving priority to cars in the design of the street), treating non-vehicle

users as secondary in the street design. The complete street paradigm has rapidly spread; as of 2014 the United States had implemented complete street policy in over 600 municipalities (IDEA & GOBike Buffalo, 2014). This movement has continued to spread into Canada with a growing number of municipalities adopting complete street paradigms. Since then, complete street principles have spread into the *Planning Act* and the *Toronto Official Plan*, and are outlined in various Toronto guideline documents such as *Vision Zero*. This ultimately led to the creation of a municipal document for complete streets, and in December 2016, the *Toronto Complete Street Guidelines* were released to assist in implementing complete streets within the city. Complete streets alter more than the street's appearance; they affect how people utilize the street and view their environment. The concept gives a voice to commonly decentralized groups of people on the street as a manner to create a more inclusive and equitable environment (Zavestoski & Agyeman, 2015).

2.2 Defining A Good Street

Interview subjects (which included a member of the York Quay Neighbourhood Association (YQNA), the Chair of the Business Improvement Area (BIA), and members of Waterfront Toronto) were asked what elements make a good street. There was a consensus among interviewees that providing room for pedestrians and cyclists to comfortably use the street was a key factor. The street is a majority of the city's public realm and pedestrians, cyclists, and transit activity needs to be considered equally. A representative from Waterfront Toronto #1 added that streets should facilitate socialization while maintaining excellent design. The street needs to respond to the needs of its users. Less people are driving and more people want convenient alternate transportation options. Additionally, the Chair of the BIA stated that good streets should

be walkable while supporting a mix of retail, mixed-use developments, and maintain connectivity for all transportation modes to the neighbouring areas. There was a consensus that a good street must also be aesthetically pleasing by incorporating green space and public art.

Although interview subjects were defining what they felt makes a good street, their views are aligned with complete street ideals. Despite each street being unique, complete streets often reflect the following principles, as compiled by Moller (2010). (1) Improved transit access and right-of-way, whether that is a dedicated transit lane or improved transit shelters; (2) increased vegetation; (3) upgraded pedestrian facilities, such as larger sidewalks, narrower crossing distances and convenient crosswalks; (4) increased street furniture; (5) enhanced cycling facilities, such as a dedicated cycling lane and bicycle racks; and (6) improved aesthetics of the street (Moller, 2010). It is important to remember that the context of each street is different (Moller, 2010), and while a bicycle lane may be considered essential for a street like Queens Quay West, it may be considered unnecessary in a calm side street with little cycling activity. A good street needs to be context sensitive while also containing the infrastructure to accommodate the needs of its users and enhance their experience. Prior to the Queens Quay West revitalization, 25 percent of the street's users were accessing the street by car while taking up 60 percent of the right-of-way (Waterfront Toronto, 2014). This did not respond to the needs of its users, as 75 percent of the street's users were considered secondary in the auto-centric street.

2.3 Benefits of Complete Streets for an Improved Quality of Life

A complete street must support an increased quality of life and foster environmental, health, economic and safety benefits. Complete streets are necessary for

the future of urban and transportation planning. They offer a web of connections to public spaces, facilities and destinations. A well-designed public realm which is fostered by complete streets, encourages social interaction by opportunities for social contact through coincidental encounters, also observed in Burden's 2003 paper *Level of Quality (LOQ) Guidelines* (Moller, 2010). This social interaction observed in complete streets indeed does not occur with the use of automobiles.

Health and environmental benefits of complete streets strongly overlap; with improvements to the environment directly impacting the health of the immediate community (Anderson & Searfoss, 2015). The most significant environmental benefit of complete streets is the improvement in air quality as a result of reduced automobile travel and heightened use of alternate modes of transportation. A study conducted by Toronto Public Health assessed the hospitalization of respiratory and cardiovascular illnesses (Moller, 2010). As a result of traffic pollution, 1,700 people, 96 percent of whom were seniors, were hospitalized (Moller, 2010). Considering the aging population and the growing need to better accommodate the elderly population, this number will only grow unless mitigation tactics such as complete streets are effectively implemented. The Heart and Stroke Foundation reported in their 2008 report that air pollution in Canada is linked to 6,000 deaths per year (Moller, 2010). Data from more recent Heart and Stroke Foundation studies focused on alternate causes to cardiovascular illnesses. A limitation to this study is that the 2007 and 2008 period was littered with smog warnings, partly a result of the coal industry and automobile usage. The results of each type of pollutant were not isolated. Nonetheless, vehicular pollution has been found in various studies to be directly related to the deterioration of the environment and thus, human health (Chester & Horvath, 2009).

A healthy active lifestyle can reduce obesity, especially in youth, and thus reduce the risk of "lifestyle diseases", for example diabetes, coronary artery disease, stroke, and various cancers (Moller, 2010, p. 4; Jassen, 2012). To receive ideal health benefits, 30 minutes of physical activity is required per day (Moller, 2010). However, the Public Health Agency concluded that 63 percent of Canadians do not complete this optimal amount of exercise (Moller, 2010). As walking has become an increasingly popular form of exercise in Canada, walking needs to be encouraged through complete street implementation to improve Canadian's physical health (Moller, 2010). The possibility of developing type 2 diabetes can be reduced by 58 percent by completing the required amount of exercise (Moller, 2010). Type 2 diabetes costs the government $1.4 billion yearly (Jassen, 2012). Complete streets promote an active lifestyle by making active modes of transportation inviting and safe by producing adequate facilities for these modes of transportation. Complete streets also foster connectivity of these facilities to the surrounding area, which, in turn, creates a healthier population.

Healthcare is one of the largest costs to the Canadian government and treatments for preventable lifestyle illnesses cost $6.8 billion a year as of 2009 (Jassen, 2012). In addition, traffic mortality and injury rates are a significant cost to the government. These can be greatly diminished with traffic calming measures and other safety benefits complete streets provide. Anderson and Searfoss (2015) discovered in their study of 37 complete street projects that 25 projects (70 percent) saw a reduction in collisions after complete streets were implemented. A decline in injuries was also seen in 56 percent of these complete street projects (Anderson & Searfoss, 2015). Unfortunately, Toronto currently lacks the infrastructure along many of its streets to safely support active modes of transportation by providing dedicated cycling lanes, and adequate crosswalks.

Complete streets aim to reduce these tensions and create a greater quality public realm for everyone. This will inevitably improve the overall quality of life for the street's users.

2.4 Critiques of Complete Streets

Complete streets are highly regarded in the planning field, and due to its optimistic nature, adequate critiques of its paradigm are not highly spread. A lead critique of complete street ideals is Zavestoski and Agyeman's (2015) idea that complete streets are still incomplete. Zavestoski and Agyeman (2015) pose the problem of equity in streets by asking whom complete street redesigns benefit. In lower-income areas, people fear that a structural redesign of the street can ignore the concerns of the community by making the area more desirable to live and visit, thus fostering gentrification (Zavestoski & Agyeman, 2015). Haffner (2015) defines this concept as ecological gentrification, which is the aftermath of green space improvements in a low-income and park-poor neighbourhood. Green space improvements are argued to increase property values, which results in the unintended consequence of gentrification (Haffner, 2015). This creates a paradox, as often the individuals in these communities are often discounted from utilizing these created green spaces (Wolch, Bryne & Newell, 2014). The goal of complete streets is to prioritize the facilities and connectivity of all modes of transportation. Zavestoski and Agyeman (2015) argue that this methodology ignores the needs of the neighbourhood and thus, resulting in gentrification through the increase of economic vitality of the area. This can cause some residents to sell their homes due to the economic benefit or be displaced, as they would not feel comfortable in the changed area (Zavestoski & Agyeman, 2015). It is also equally important to ensure that there is a positive outcome for the current residents in the community (Haffner, 2015).

Moreover, complete streets must not emphasize past inequalities in planning, but rather should address and overcome those disparities in the planning process (Zavestoski & Agyeman, 2015). Many of these inequalities have been seen in the public involvement process when members of the public do not have equal levels of influence. As a result, lower-income groups tend to need a strong reason to become involved in the public process (Zavestoski & Agyeman, 2015). They must be given a chance to share their desires in a safe environment without being discouraged to become involved in the public process (Zavestoski & Agyeman, 2015).

Cycling activists groups in particular, have a tendency to impose their views about cycling infrastructure onto the community, believing cycling facilities are universally desired (Zavestoski & Agyeman, 2015). As a result, it is important to uncover the most pressing needs and desires of the community. If proper community consultation is not implemented, the outspoken views of groups such as these could overshadow the true community desires, reducing the equity in the revitalization process (Zavestoski & Agyeman, 2015).

In contrast to Zavestoski and Agyman's theory, Moller (2010) sees complete streets as a method of improving equality in the public realm as a street that promotes walkability "provid[es] mobility for the poorest residents of a city" (p. 16). In addition, designing for all populations, especially vulnerable ones allows mobility challenged populations, such as the elderly and children, to safely and efficiently reach their destination forgoing automobile use (Moller, 2010).

Despite these critiques of complete streets, Queens Quay West is in an unusual circumstance; the area is wealthy and educated, allowing residents and business owners to be highly involved in the design and implementation process of the revitalization. The

street was also designed for the high influx of tourists in the summer months, considering the unusual needs of such a diverse street. The street is considered by representative #2 from Waterfront Toronto as a civic street, belonging to the entire city. Themes of inequity were mitigated by the creation of a stakeholder advisory committee, also known as SAC, which contained a diverse group of individuals representing varying community interests. Evidently, the process had its shortcomings, which are expressed in great detail through chapters 3 and 4.

CHAPTER 3: QUEENS QUAY WEST SITE ANALYSIS

3.0 Introduction

The complete street of Queens Quay West, between Yo-Yo Ma Lane and Bay Street, took a decade to construct and was completed in 2015 (Smith Lea et al., 2016). Alterations to the street included a reduction in the speed limit, urban greening and an expanded pedestrian walkway (Smith Lea et al., 2016). Currently there is a substantial increase of bike users in the area, resulting in over 6,000 cyclists on a typical weekday (Smith Lea et al., 2016). Queens Quay West contains various tourist attractions such as the Harbourfront Centre and the Jack Layton Ferry Terminal, making it a popular destination among visitors. The street is viewed as a success by many of its users and stakeholders who were involved in the planning process. Due to the resources of Waterfront Toronto, the organization was able to provide an extensive stakeholder involvement process for the street.

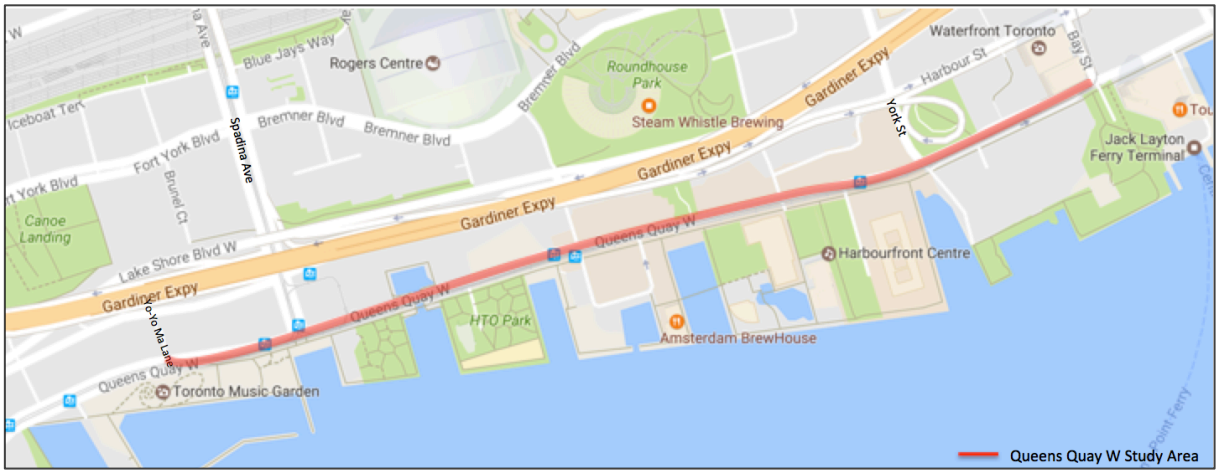

Figure 6: The Queens Quay West Study Area Displayed in Red
Source: Google Maps, 2017

3.1 An Introduction to Waterfront Toronto

Waterfront Toronto was created in 2001 on behalf of three levels of government to manage redevelopment of Toronto's waterfront (Waterfront Toronto, 2017). The organization has a wealth of resources, funded by the federal, provincial and municipal governments. Due to being a government organization, Waterfront Toronto is instructed to maintain a good level of transparency, which can be seen throughout their projects (Waterfront Toronto, 2017).

Waterfront Toronto began planning Queens Quay West back in 2003, taking the role of managing the overall project and leading the public engagement process, instead of City Planning in the City of Toronto. This decision was made because Waterfront Toronto was created for the purpose of managing the waterfront projects (Waterfront Toronto, 2017). Due to their wealth of resources, the public engagement process was extensive, creating a community engagement plan for each project. Part of that plan was the organization of a stakeholder committee, which consisted of the York Quay Neighbourhood Association, The Waterfront BIA, various organization advocates (such as advocates for cycling), the local councillors, and other neighbourhood associations such as the Bathurst Quay Neighbourhoods Association (Waterfront Toronto, 2017). This committee met frequently and according to all of my interviewees, was the deciding factor on the Queens Quay West street design. They voted on decisions such as: the architecture and organization of the street, and desired features on Queens Quay West. According to a representative of Waterfront Toronto #1, a technical advisory committee was also formed, representing different sectors of the municipal government, to review and critique conceptualized drawings of the street. Another part of the community

engagement plan was the hiring of communication and project management staff to help resolve the issues that arose in a timely manner.

Multiple interviewees stated that Waterfront Toronto was prudent with their finances for Queens Quay West by strategically investing in long-lasting quality materials which would reduce lifetime costs. Waterfront Toronto #1 highlights red and gray granite sidewalk to be one of those cost-effective financial decisions. These were expensive to install, but will have a stronger durability than concrete. Aside from the granite being more appealing than concrete, in the event of underground repairs, the workers simply need to lift up some individual blocks, which they could reposition after the repairs have been completed.

3.2 History and Difficulties with Queens Quay West Prior to Revitalization

According to a representative of the SAC, Queens Quay was constructed in the early 1920's to provide access to the docks on Lake Ontario. It runs East-West parallel to Lake Shore Boulevard and the Gardner Expressway and is three kilometres long, ranging from Bathurst Street to Parliament Street. The area was highly industrial, but eventually transformed into a retail-oriented street. The streetcar line opened on Queens Quay in 1999 and now consists of two lines with a dedicated right-of-way: the 510 Spadina line, stretching from Spadina Station to Union Station, and the 509 Harbourfront line, stretching from the Exhibition Loop to Union Station.

Back in the early 2000’s, Queens Quay West was in disarray. The street contained narrow inadequate sidewalks and significant room for cars, not accommodating the vast amount of pedestrians and cyclists (similar to Queens Quay East today). In its location beside Lake Ontario, the area attracted a large number of tourists and locals, but did not provide the appropriate space to accommodate them. Queens Quay West acted like an

obstacle to the waterfront rather than enhancing it. The street's lack of vibrancy hindered business activity and the public realm (LURA Consulting, 2009). These conditions are exhibited in figures 7 and 8. Another problematic feature of Queens Quay West was the lack of connection to the surrounding area, such as the Martin Goodman Trail, which broke off at Queens Quay West (LURA Consulting, 2009). Cyclists were forced from the isolated Martin Goodman Trail onto the busy street, making the cycling experience unpleasant and dangerous. Although I did not ride my bicycle along Queens Quay West, cycling is an efficient and effective mode of transportation. Cyclists were keen on getting this gap in the Martin Goodman Trail fixed. The street was 60 percent vehicular right-of-way yet the number of people traveling by car was only 25 percent (Waterfront Toronto, 2014). This triggered the redesign of the unpleasant street into Toronto's first complete street. Queens Quay West became the first step in a larger revitalization process on the waterfront.

Figure 7: Queens Quay West Prior to Revitalization
Source: Google Maps, May 2007

Figure 8: Queens Quay West Prior to Revitalization
Source: Google Maps, April 2009

3.3 Demographics of Queens Quay West

Statistics for the area were taken from the City of Toronto, which divided the 2011 National Household Survey data into wards and charts. (The 2016 census data was not used, as it is still incomplete because not all data has been released yet). A couple of limitations were identified in using this data. As of 2011, the census long-form was optional, and thus could contained skewed data from inconsistent responses. Another limitation was that the Queens Quay West redevelopment was completed in 2015 so any effect it had on the area, or recent developments, is not represented in this data.

Queens Quay West falls in two wards: a majority of the regeneration which is found West of York Street is contained in Ward 20, and York Street to Bay Street is contained in Ward 28. As of 2011, Ward 20, Trinity-Spadina, was comprised of a highly educated population, with 73 percent of residents obtaining a post-secondary education, compared to the city average of 58 percent (Census Canada as cited by Toronto, 2014). 36.5 percent of people in this ward were between the ages of 25 to 34 years old and 58 percent of people lived in an apartment or condominium (Toronto, 2014). This differs

slightly from Queens Quay West, where there are currently only high-rise residential and commercial buildings. According to multiple interviews and site visits, residents of Queens Quay West consist of families with young children and an elder population. This would make accessibility and safety a top concern, which the regeneration has adequately addressed by transforming it into a complete street. The revitalization took over a decade to complete, beginning in 2003.

3.4 The Revitalization Process

In 2003, City Council adopted the Central Waterfront Secondary Plan to assist with the revitalization of the Toronto Waterfront. According to a representative of SAC, the first major project to revitalize the waterfront was the revitalization of Queens Quay West. Work on the revitalization of Queens Quay West began in 2006 with the Central Waterfront Design Competition, consisting of international designers that held a two-week exhibition in Brookfield Place displaying the street designs. This is where many individuals first got involved in the regeneration process, voting on and critiquing the designs for the street. This competition concluded with a public meeting, which 500 people attended to decide on the winning design (LURA Consulting, 2009). The competition resulted in West 8 + DTHA being named the winner (LURA Consulting, 2009). Following the competition, an Environmental Assessment Study (EA) of Queens Quay West commenced, which consisted of four public meetings and five Stakeholder Advisory Committee (SAC) meetings in a two-year period. The SAC was assembled consisting of various stakeholders including but not limited to: Waterfront Toronto, various neighbourhood association members, Business Improvement Area (BIA) members, and developers. This committee advised Waterfront Toronto on the EA, and concerns and issues they had with the revitalization process.

3.4.1 The Test Street

The first physical step in the Queens Quay West revitalization was the creation of a 'test street' with the help of Mayor David Miller. According to a representative of SAC, this trial included the reduction from four to two lanes on Queens Quay West and the placing of geraniums and sculptures down the entire street. A picture of this test street can be seen in Figure 9 below. This trial was extremely popular, giving people a visual and a sense of the street's potential. A small percentage of people were unhappy with the 'test street', stating that many people used the street as a throughway and two lanes would not be enough to accommodate the automobile usage. Despite this challenge, the 'test' Queens Quay West diverted throughway users to other streets running parallel. This is addressed in greater detail while discussing communication with Waterfront Toronto in Chapter 4. The test street resulted in an active discussion of what makes a successful street.

Figure 9: Queens Quay West Test Street
Source: Ulla Congress, used with permission

3.4.2 The Creation of A Successful Street

A good street is one that responds to the needs of the users prior to their arrival. Queens Quay West prior to revitalization encouraged driving behaviour through the substantial right-of-way. Road widening would further encourage driving thus worsening

traffic congestion (ITDP, 2011). The answer was to create a complete street with a fantastic public realm. Heightening amenities for walking, cycling, and the use of public transit would encourage people to utilize the above alternative modes of transportation and discourage vehicle use (ITDP, 2011). These modes of transportation can significantly accommodate more people while also utilizing less amount of the roadway. This shift would also increase the overall efficiency of the street, thus reducing congestion. According to this theory, the reduction of lanes would not increase congestion but shift vehicular use to alternate modes of transportation (ITDP, 2011). Moreover, this reduction would also displace throughway use to streets with a poor public realm such as Lakeshore Boulevard (ITDP, 2011). There was a consensus among all of my interview subjects that a successful street maintains space for all users while encouraging connectivity to the surrounding area. These beliefs were also some of the shared goals of Queens Quay West. This framed the SAC's mentality throughout the design and construction process.

3.4.3 The Queens Quay West Construction Process

The Stakeholder Advisory Committee transformed throughout the development process and eventually became the Construction Liaison Committee (CLC). The CLC acted as a beacon of communication between Waterfront Toronto and the general public. In addition, the entire process generated frequent news coverage, which highly publicized the street, promoted awareness, and opportunity to get involved. According to a representative of CLC, during the construction period, Queens Quay West was transformed into a one-way street Westbound for three years (2012 to 2015). Despite the work of the CLC, many people were unhappy with the construction process. As referenced earlier, the demographics consist mostly of families with young children and elders, which brought up safety concerns (Toronto, 2014). Additionally, many people

were confused and had difficulty finding their destinations. The representative of CLC stated that the construction period was noisy and difficult for the local population, especially if one's condominium faced the street. Many individuals relocated or rented out their place during the construction period due to its challenges. The construction was also challenged by its timing, as it occurred alongside the preparation for the Pan Am Games in the Greater Toronto Hamilton Area (GTHA). Although the construction was challenging for residents of the area, the businesses of the area suffered profoundly.

3.4.3.1 Challenges of Commercial Locations During Construction

A major issue with any construction project is the impact it has on the businesses in the area. The businesses were negatively affected during the construction process but this issue was minimized by the extensive effort and dialogue put forth by Waterfront Toronto. Waterfront Toronto (2014) engaged in continuous dialogue with each of the businesses in the area to ensure minimal negative impacts throughout the construction process. A member of the CLC stated that the businesses remained accessible to the public throughout the process. Business owners remained mostly compliant during the construction process, as the final outcome would outweigh the temporary inconveniences. However, according to the Chair of the BIA, it was difficult for many business owners to grasp the new design, as often people are confortable with the status quo. With such an innovative new design, it was a challenge to accept that streets are dynamic and evolve with changing needs of the population. This mentality resulted in many businesses being sceptical of the process. According to the Chair of the BIA, many restaurants and businesses that relied on group travel were uprooted from the area as a result of the construction. These businesses have still not returned to Queens Quay West. This further challenged Queens Quay West, as the street does not provide an ideal mix of retail uses.

As observed in various site visits, the area still has a deficiency of restaurants and medical offices. The street still needs to attract these high value tenants, hindering the business recovery in the area resulting in retail voids. It is still unclear if the overall economic performance of the area has increased as a result of the revitalization. Nonetheless, Waterfront Toronto maintained their promise of creating an efficient and timely construction process for Queens Quay West.

The construction finished on its targeted completion date due to the strategic planning of the construction manager who was employed by Waterfront Toronto (Waterfront Toronto, 2014). The construction manager's office also acted as another beacon of communication where the public could call or email to express their concerns (Waterfront Toronto, 2014). Overall, the construction of Queens Quay West was a challenge for residents and businesses in the area, but many impacts of this period were mitigated by Waterfront Toronto's proactive efforts.

Figure 10: Queens Quay West Construction
Source: Ulla Congress, used with permission

3.5 The Connectivity of Queens Quay West

The improvements to the pedestrian realm in Queens Quay West are beneficial for people using alternate modes of transportation. However, these transportation facilities would be hindered with a lack of connectivity to the rest of Toronto. Conventional streets primarily support vehicular connectivity and evaluate transportation based on vehicular transit speeds (Litman, 2015). This can be an obstacle to active modes of transportation and hinder connectivity (Litman, 2015).

Connectivity is essential to determine the success of the area. Connectivity could be seen through: the connection of a green space network, the connection of transportation networks, and the accessibility to the surrounding area as a whole. If these new facilities were not properly incorporated into the neighbouring areas, the facility would not be properly utilized (Burden & Litman, 2011). For example, if one were to implement a cycling track on one street but not to the surrounding area, it would have an insignificant impact cycling activities on that street (Burden & Litman, 2011). Moreover, one would not be prompted to cycle if there is only a small isolated cycle route existing in hostile streets. The discontinuation of the Martin Goodman Trail (the multi-use trail and cycling network) through Queens Quay West is one of the many examples of disconnection. With the revitalization, the trail was connected, resulting in a vast increase in cyclists. Without this continuation of the Martin Goodman Trail, cyclists were forced onto the street without a dedicated area putting them at risks for collisions with vehicles. These disconnected and insufficient facilities encourage people to drive, even for short distances (Burden & Litman, 2011). Queens Quay West has taken that into consideration with the area only being Phase 1 out of the Waterfront Development Plan. Figure 11 shows the Toronto cycling network, including current and future connections. This

network expressed how the Queens Quay West strip is integrated into a larger cycling plan for the downtown core, ultimately leading to its success.

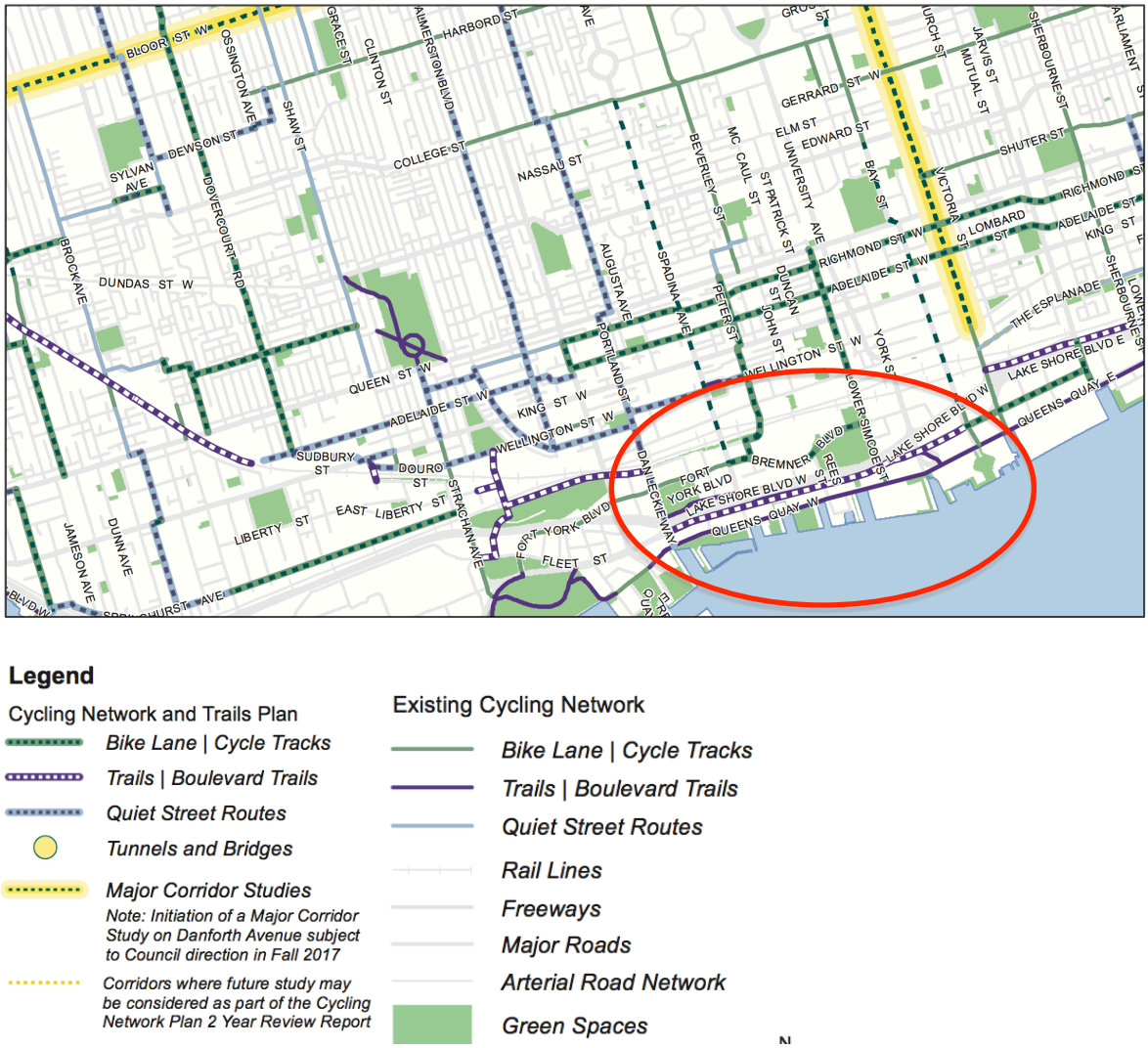

Figure 11: Toronto 10-Year Cycling Plan
Source: Toronto, 2016

Queens Quay West is a unique area as it is connected to only one side of the city. The other side of the street is the waterfront, making it a challenge to avoid complete isolation of the area from the surrounding city, especially during the construction process. The Chair of the BIA stated that maintaining connectivity to the surrounding area was done exceptionally well. However, there are currently connectivity issues between the north and south sides of the street. The south side of the street was transformed into the

pedestrian boulevard and remains a significantly more impressive pedestrian realm than the north side, as demonstrated in Figure 12. This has given south side businesses advantages, as most tourism in the area is concentrated on the south side. Crossing the street is still complex and is a lot of territory to transverse due to the various sections for different modes of transportation.

Figure 12: North and South Sides of Queens Quay West by Lower Simcoe Street
Source: Alexa Aiken on June 10th 2017

Transit on Queens Quay West is well integrated into the TTC network. Queens Quay West and Yonge Street is only a 10-minute walk from Union Station and both the Light Rail Transit (LRT) routes pass through Union station and one also passes through Spadina Station. The LRT guarantees service within 10 minutes, yet from personal experience, it was considerably more frequent. A diagram of the transit network can be found in Figure 13 below. These features are an essential part of the creation of a successful complete street.

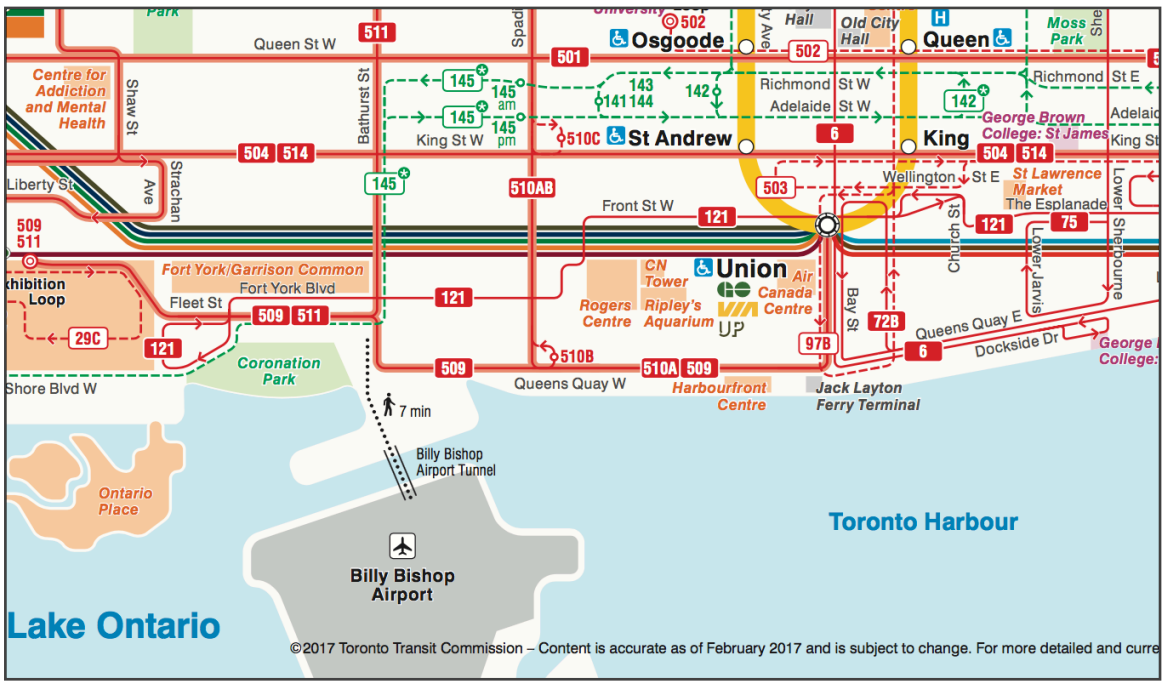

Figure 13: TTC Public Transit Map
Source: TTC, 2017

3.6 The Revitalized Queens Quay West

The revitalization of Queens Quay West stretches from Yo-Yo Ma Lane to Bay Street, extending 1.7 kilometres (Smith Lea et al., 2016). The goal was to transform the street into an iconic destination in Toronto, attracting and accommodating a significant amount of pedestrian and cycling activity. According to a representative of Waterfront Toronto #2, Queens Quay West is considered a civic street, meaning it was designed as a street for everyone. This is a result of the high influxes of tourists and non-residential users in the area. The street was dubbed ‘everyone’s waterfront street’ with the idea that everyone deserves a space on the street and a commitment to giving everyone access to a great public realm. The street was not simply designed for the residents and businesses, but with the entire city in mind. This, in turn, prioritizes connectivity, functionality, and aesthetics to create a truly civic street. This is a reason for the high budget for the project.

The project cost $128.9 million and was fully funded by Waterfront Toronto (Waterfront Toronto, 2017). The project had to revise the budget due to the high costs related to the aging infrastructure and underground conflicts, such as broken pipes and upgrades (Waterfront Toronto, 2017). Cycling in the area has greatly increased, accumulating to as many as 6,000 cyclists on an average summer weekday (Smith et al., 2016). On weekends, as of 2015, cycling has increased an average of 888 percent from 2007 (Smith et al., 2016).

Figure 14: The Revitalized Queens Quay West and Martin Goodman Trail
Source: Alexa Aiken on January 23rd, 2017

Figure 15: Revitalized Queens Quay West in Spring
Source: Alexa Aiken on April 28th, 2017

Another goal of the project was to connect the Martin Goodman Trail, a 17-kilometre multi-use trail, to Queens Quay West (seen both in Figures 14 and 15), as it was disjointed prior to development (Waterfront Toronto, 2017). The street currently consists of a pedestrian promenade on the south side, bordered by a cycling lane, which is part of the Martin Goodman Trail, a dedicated right-of-way streetcar lane in the centre, and with two lanes of traffic on the north side. The ground floors of most buildings are retail, consisting of mostly restaurants and coffee shops.

A cross-section of Queens Quay West was rendered using StreetMix software seen in Figure 16. This cross-section contains the average values of street widths and dimensions. These values were gathered from various reports on Queens Quay West, Google Map measurements and the use of PaveNet.

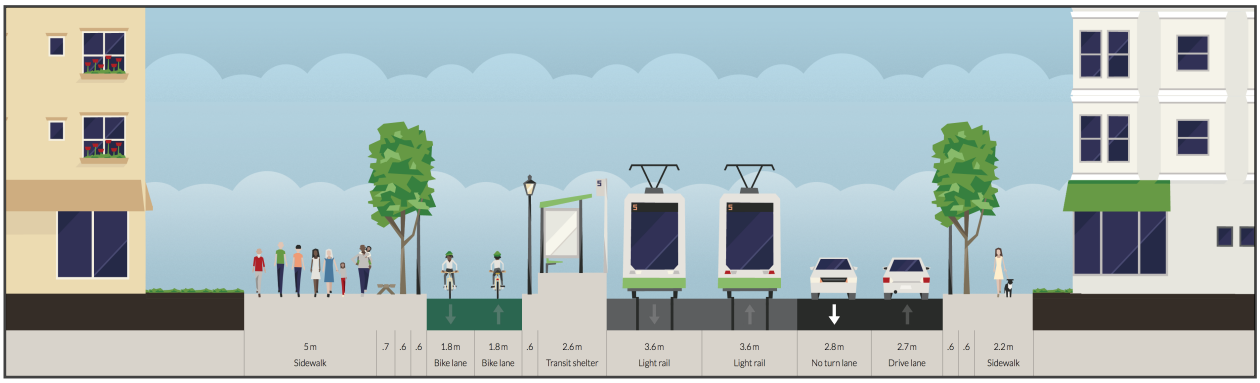

Figure 16: A Cross-Section of Queens Quay West
Rendered by Alexa Aiken using StreetMix.net

3.7 Principles of Complete Streets in Queens Quay West

In the introduction of this research paper, I introduced five principles I believe embodies the essence of complete streets. A street would need to provide environmental, health, safety, and economic benefits, thus facilitating an improved quality of life.

3.7.1 Environmental Benefits

Complete streets provide a vast amount of environmental benefits. With the revitalization of Queens Quay West, green spaces, such as street tree plantings, have been added to the public realm. These trees will reduce carbon emissions in the area and contribute to the environmental health. The increase in green space can work to reduce the urban heat island effect, often seen in the urban core (ITDP, 2011; ARUP, 2016). The urban heat island effect occurs in high-density urban areas as a result of the vast amount of dark pavement, trapping the heat and making the area significantly warmer than the surrounding area (ITDP, 2016). ARUP (2016) uncovered that the inclusion of a good pedestrian realm with additions of green space and shaded areas can decrease temperatures up to 9^{o} C. Increased green space can also divert and absorb a significant amount of runoff to prevent flooding. A 13-kilometre trail was implemented in Indianapolis, which diverts 18 million litres of runoff each year (ARUP, 2016).

In addition, the right-of-way alterations on Queens Quay West (by the reduction of lanes and the increased space for alternate modes of transportation) have been argued by a representative of the YQNA to reduce automobile travel on the street. Burden and Litman (2011) claim that complete streets can decrease vehicular travel per person by 10 to 30 percent. No conclusive evidence on this has been found on Queens Quay West, however, the increases in pedestrian, cycling, and transit activity can be argued to reduce automobile travel by providing viable transportation options. Moreover, increased pedestrian, cycling, and public transportation has greatly increased on Queens Quay West after revitalization. Litman (2013) states that the reduced automobile activity can diminish energy consumption, vehicular collisions, and air and noise pollution. Overall, the revitalization of Queens Quay West is argued to have a significantly positive impact

on the environment via the implementation of green space and the reduction of vehicular traffic. Further research needs to be explored on the environmental impacts of the street in comparison to the surrounding area.

3.7.2 Health Benefits

Environmental benefits in the public realm correlate with the healthier local population. Saelens, Sallis & Frank (2003) compared numerous community studies of walkability in neighbourhoods and concluded that neighbourhoods with higher walkability scores directly correlated with higher rates of active transportation. Having a walkable physical environment enhances physical activity, particularly active transportation, within the area (Saelens et al., 2003). The environment is directly related to the rate of physical activity in the area and the improved physical activity can result in decreased rates of obesity and better overall health (Saelens et al., 2003). In the United States as of 2004, obesity costs healthcare $117 billion a year, and lack of physical activity costs $76 billion a year (Burden & Litman, 2011).

Figure 17: Queens Quay West Promoting a Healthy Active Lifestyle
Source: Alexa Aiken, June 10th, 2017

Queens Quay West has consistently been a street with high pedestrian volumes but the quality of the public realm has been lacking. As a result of creating a more walkable environment, higher volumes of people using active modes of transportation have flocked to the area. However, the long-term health impacts of a walkable revitalized Queens Quay West remain unclear. Previous research on complete streets has shed light on the potential long-term effects on improved health.

3.7.3 Safety Benefits

Cycling traffic on the revitalized Queens Quay West has increased immensely due to the connection to the Martin Goodman Trail. With a separate trail for cyclists and joggers, cyclists have felt entitled to speed through the area. This entitlement serves as a major issue, as the high traffic and pedestrian volumes in the area result in reoccurring conflicts between these groups. These allocated sections for various modes of transportation provide clarity to Queens Quay West users, but may also cause these users to be more reckless due to their perceived lack of danger (Dumbaugh, 2005). Whereby, if the lines remain unclear, people tend to be more cautious. This research is also evident in the width of vehicular lanes. Wide, defined vehicular lanes lure drivers into a heightened sense of security, which can result in a higher chance of distracted driving behaviour (Dumbaugh, 2005). Dumbaugh calls this to 'risk homeostasis theory', stating that visible risks such as trees and barriers increase street safety by encouraging drivers to drive cautiously (2005). Dumbaugh confirms this theory through his study of crash performance over a five-year period contrasting a traditional street to a street with a good pedestrian realm (2005). In this study, the street with a good pedestrian realm had two crashes resulting in injury compared to five crashes on the traditional street causing three fatalities (Dumbaugh, 2005). Numerous other studies have also come to the consensus

that a smart street design results in increased street safety. In the Bronx neighbourhood in New York City, traffic-calming measures have reduced pedestrian crashes by 67 percent (ARUP, 2016). Moreover, the separation of zones, such as the pedestrian zone, prevents zones from mixing thus reducing conflict between different modes of transportation (ARUP, 2016).

3.7.4 Economic Benefits of Revitalization

There is significant research which states that walkable streets result in an increase in retail activity. A study conducted by ARUP (2016) discovered that pedestrians spend on average 65 percent more money than drivers and visit shops more frequently. In addition, foot traffic can increase up to 40 percent in walkable areas (ARUP, 2016). Various case studies were conducted throughout the report, all resulting in increased business vitality in the areas studied (ARUP, 2016). A study done by the New York Department of Transportation (2013) is also consistent with these results through their six case studies analyzing the economic growth of these streets over a three-year period. These streets were modified to contain a better pedestrian realm resulting in the case studies drastically outperforming the sales growth of the surrounding areas (New York Department of Transportation, 2013).

In the case of Queens Quay West, according to the Chair of the BIA, this growth has not been seen in most businesses, as they have not recovered from the construction process. It is a challenge to isolate the cause for the change of retail patterns in the area, as the street was naturally growing in population over the 10-year revitalization period. The promenade makes it significantly easier for the pedestrians to interact with the street. However, the Chair of the BIA states that they are still searching for a good business model to implement to increase the economic vitality of the area. Overall, it is a difficult

task to isolate the reasons for the change in economic activity in the area, as the change itself is not consistent amongst retail units. I believe it would be beneficial to see an economic study of the area to detail the economic influence of the Queens Quay West revitalization and assist with future economic activity.

3.8 Conflicts from the Revitalized Queens Quay West

Queens Quay West is considered a bold project as it produced the first complete street in Toronto, which also encompassed all five of my principles. However, being such a bold and new typology of street in the city has caused some complications. The most pressing issue that has arisen with the revitalized Queens Quay West is proper signage to make protocols and clear directions for all users. Dedicated transit located along the south side of the street is uncommon in the city, as it forces cars that want to make a left turn south to wait for the specialized signal. A representative of Waterfront Toronto #1 stated that there have been some instances of cars driving into streetcars or visa-versa as a result to the confusion the signal causes. Due to this issue, the streetcars are forced to travel at a lower speed than desired to avoid these collisions. There is also a trivial amount of instances where people drive into the Queens Quay West streetcar tunnel. These people often consist of impaired drivers or people from out of town. As a result, more warning signs have been added to the Queens Quay West streetcar tunnel to deter drivers from entering. The city is attempting to find that balance in signage, creating clarity with signs without overwhelming users. Due to the uniqueness of the street, the various Toronto guidelines followed were difficult to apply to Queens Quay West.

Vehicular traffic was a pressing concern addressed throughout the public engagement process, as four lanes of traffic was reduced to two lanes. This is referred to as a ‘road diet’ and works to re-balance the needs of all users of the street (Schlossberg,

Rowell, Amos, & Sanford, 2013). This results in the mobility of other modes of transportation being expanded. Queens Quay West was previously utilized as a throughway, with many vehicles taking the street as a shortcut. With the revitalization and road diet, Queens Quay West has transformed into a slower method of vehicular travel around the city. A significant amount of traffic has been diverted to Lakeshore Boulevard, which is a quicker parallel route. People that frequent the area are now aware that Queens Quay West is not a preferred route for vehicles, as there are better methods to access the area. A representative of Waterfront Toronto #1 stated, "when you have a signature street such as Queens Quay West, you want people out there, enjoying the street" instead of driving through it. The revitalization process gave people a reason to take alternate modes of transportation, as they are now equally prioritized as vehicles.

Another problem that has developed after the revitalization is the pedestrian interaction with the Martin Goodman Trail. The Martin Goodman Trail is a multi-use trail, although the section along Queens Quay West appears to be only for cyclists, due to the constant bicycle signs dividing the trail. As witnessed on various site visits, despite the amount of signage, pedestrians still cross in front of cyclists and stand on the trail, blocking cyclists from passing. This has resulted in dangerous conflicts between cyclists and pedestrians. A problem area is the intersection of Queens Quay West and York Street, where the Martin Goodman Trail is covered with interlocking granite blocks, identical to the pedestrian boulevard. This makes it challenging to differentiate the trail from the pedestrian boulevard. That with the combination of high pedestrian traffic results in further conflict.

A representative of Waterfront Toronto #2 stated that the organization is currently attempting to notify pedestrians where they should stand by the implementation of

different signals and signs. The area is currently being monitored on a regular basis to observe any conflicts that may occur. Queens Quay West is complex with many uses and modes of transportation. This data collected by Waterfront Toronto will be used to find solutions to these problems in the near future.

3.9 Future Waterfront Projects

Queens Quay West is considered Phase 1 of the Waterfront Revitalization Project. Although Queens Quay West is considered completed by many, the street is still in progress. The many conflicts on the street require resolutions, as streets are constantly evolving. There is a consensus from the Chair of the BIA and both Waterfront Toronto representatives that the street is unfinished, as hydro and other utilities are unconverted. The street still contains some temporary lighting and wiring as well. Waterfront Toronto is attempting to replace all temporary infrastructures in the 2017 to 2018 period (Waterfront Toronto, 2016). However, even with these completions, the street will still be unfinished. This is because the surrounding context of the area has yet to undergo revitalization. Queens Quay West will be truly complete when the waterfront is entirely revitalized.

According to a representative of Waterfront Toronto #2, the next step to the project is the extension of the Queens Quay West complete street along Queens Quay East, better known as East Bayfront. The goal is to extend continuous transit, bike lanes and the complete street down to the Port Lands. Currently, a waterfront promenade is in the planning stages along East Bayfront, matching what was implemented in Queens Quay West, containing signature street elements. The representative of Waterfront Toronto #2 added that the expanded and improved transit will be implemented when more funding is acquired. East Bayfront is a two-stage process, upgrading the street piece by piece. The

plan for East Bayfront is to cover the streetcar line with grass, something that was conceptualized but never implemented in Queens Quay West. The representative of Waterfront Toronto #2 also added that prior to revitalization, the users of the public realm need to be predicted and accommodated. This would assist them to choose healthy transportation options before they develop an auto-centric mindset.

The complete street project will also continue into the West Don Lands, where the first stage of the project is nearly complete (Waterfront Toronto, 2017). In the Port Lands, a transit plan and redevelopment plan have already been conceived, but the redevelopment will not happen for a while (Waterfront Toronto, 2017).

These projects are imperative to the overall success of Queens Quay West and how the space is utilized. Queens Quay West is a marvel, but the surrounding streets still need to be revitalized, hindering the use of the complete street. A representative from Waterfront Toronto #2 predicts that with the completion of East Bayfront, there will be four-times the amount of cycling traffic in the area. This would be a result of the cycling path and transit facilities being more connected and consistent throughout the waterfront. This would also create a continuous waterfront promenade, attracting more pedestrian activity to the area. The ultimate goal and purpose of Waterfront Toronto is to eventually revitalize the entire waterfront, and Queens Quay West is a small but significant part of that vision. In the past, Queens Quay West acted as a barrier to the waterfront, and these complete street revitalization projects aim to correct that. It is important that Waterfront Toronto has maintained its connection to Queens Quay West, continuing to research conflicts in the street and attempting to resolve the problems that have arisen. As a result of a dynamic and evolving populous, streets also need to alter to meet these needs. With

the help of Waterfront Toronto and its stakeholders, Queens Quay West has transformed into a gorgeous waterfront boulevard.

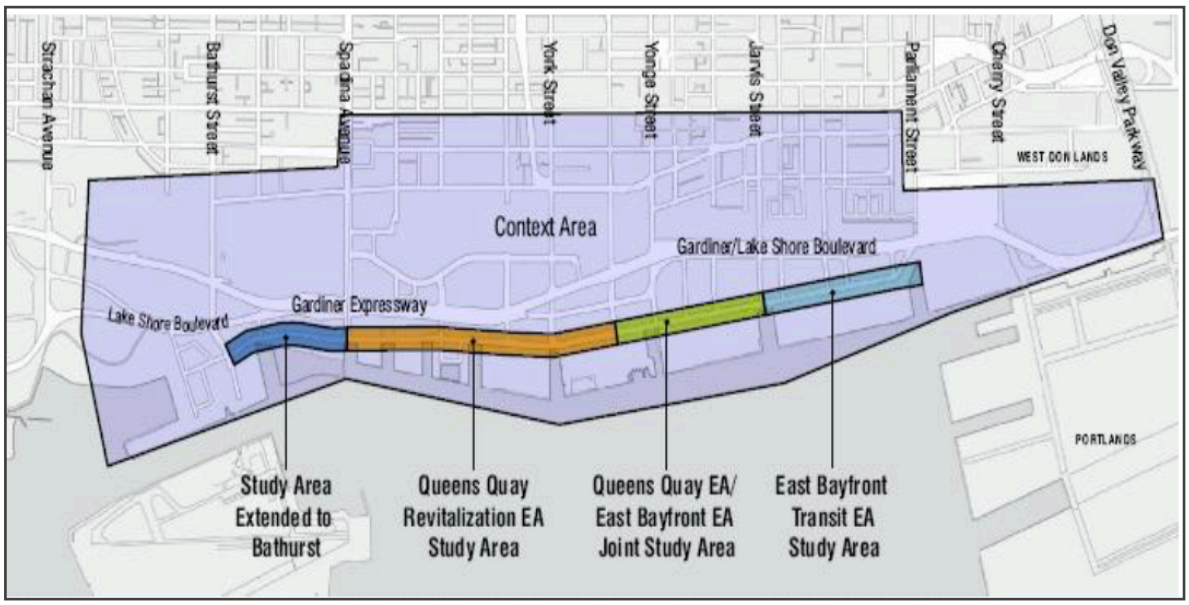

Figure 18: Context of Queens Quay West and Future Developments
Source: Waterfront Toronto, 2014

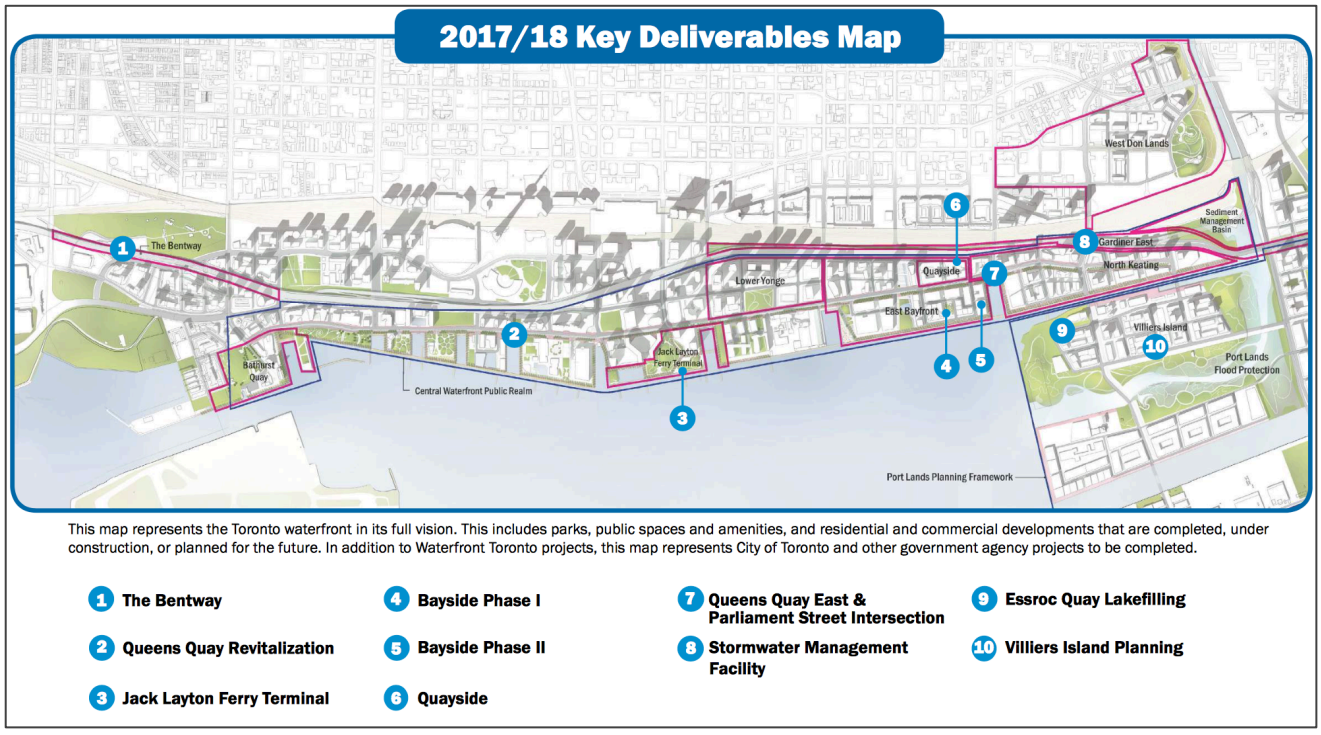

Figure 19: Waterfront Toronto 2017/2018 Project Map
Source: Waterfront Toronto, 2016

CHAPTER 4: UNPACKING STAKEHOLDER ENGAGEMENT IN THE QUEENS QUAY WEST REVITALIZATION PROJECT

This chapter unpacks the stakeholder engagement process throughout the Queens Quay West revitalization process. The chapter begins by introducing essential theoretical perspectives on the public engagement process. These perspectives guide the remainder of the chapter, which consists of a chronological walkthrough of the public engagement process, and the importance of the committees that assist with the engagement. Respectively, the chapter focuses on two main engagement stages that include engagement throughout the Environmental Assessment Study and the construction process.

4.0 Theoretical Perspectives on Public Involvement in the Planning Process

Public consultation in the planning of Queens Quay West worked to affirm that the public's voices would be heard in the decision-making process (Parker, 2002). This consultation was seen as essential to Waterfront Toronto, as the project was 1.7 kilometres in length and the revitalization aimed to enhance the experience of the street's users. It is often challenging to know the extent of public influence on the planning process, as participation could be minimal and not reflect the views of the entire community (Lane, 2005). Campbell & Marshall (2002) challenge the statutory process of public engagement, stating the requirements are too minimal, thus causing the public's influence to not be represented in the finished product. This has caused some contemporary theorists to reject public involvement, as the outcomes are often unclear

and it is regularly restricted to upper-class citizens (Campbell & Marshall, 2002). These uncertain outcomes have caused some industry professionals to put minimal effort into the public engagement process, as they feel those efforts will not be ratified in the final product (Campbell & Marshall, 2002). This stakeholder engagement theory can also be applied to the public. If the public feels that minimal efforts are being put forth to engage them, they are not only less likely to participate, but also believe they no longer have a valid voice in the decision-making process. In addition, Friedmann (1987) concludes that professionals in the field often maintain a sense of superiority towards other methods of learning (such as learning from experience rather than formal education) resulting in a barrier between the planners and the public. It is a challenge to successfully engage the public to acquire a diversity of views, as each stakeholder and process is unique.

To help relieve this problem and the lack of diversity in public participation in urban planning, citizens were granted the right to be heard objectively and equally (Campbell & Marshall, 2002). Despite the right to be heard being open to all citizens, only a select few of influential and wealthy stakeholders tend to participate in the planning process, thus requiring extensive attempts to get proper representation of the public interests (Campbell & Marshall, 2002). A diversity of voices are key to accurately representing the public that the project effects. The engagement process for Queens Quay West will be examined throughout this chapter to conclude if a diversity of voices were truly heard.

In the case of Queens Quay West, the area was exceptionally large, both geographically and in population size. Queens Quay West, as a result, needed to create an extensive public engagement plan. The street, moreover, also differs from most, as it is a tourist destination that contains many infrequent users. The tourists' needs and desires

also had to be considered in the public engagement process, despite not actively participating in the process themselves. Overall, public participation is a dynamic process that has multiple methodologies to engage stakeholders in a variety of situations. The best approach is to use a variation of methods dependent of the level of stakeholder engagement and the number of stakeholders. Due to this dynamic field of research, methods in which to properly engage the public in the planning process has no definitive answer. As a result, Waterfront Toronto created an extensive engagement strategy. If the Waterfront Toronto strategy was deemed successful, it could be used as a mould in similar projects around the country.

4.1 Public Consultation During the Environmental Assessment Study

In the case of the Queens Quay West revitalization, the public involvement process was extensively documented and meaningfully engaged a variety of people. The first question that needs to be addressed when discussing public engagement, is questioning whom the public consists of, and whom this project will directly impact. These stakeholders need to be provided with all the correct information to make informed decisions in the public engagement process (Wheeler, 2008). The planning of the new Queens Quay West was meant to serve the public by balancing public and private interests and protecting the local population from adverse effects (Wheeler, 2008). It is important that planners and organizations go above the statutory requirements to ensure adequate public engagement, as the statutory requirements are minimal (Wheeler, 2008). Overall, the public sector must represent the common good and maintain objectivity to implement what would best benefit an area (Wheeler, 2008). This gave rise to the idea of planning 'with' people instead of 'for' people (Frieden & Morris, 1968). Planning with people assumes that individuals would be interested in planning for the greater good and

would be willing to cooperate and participate to achieve that goal (Frieden & Morris, 1968). However, this is virtually never the case, as each individual would have his or her own personal interest at the forefront (Frieden & Morris, 1968). Public consultation is a requirement during an Environmental Assessment (EA) process but the extent of public involvement during the Queens Quay West EA is much more extensive.

The first stage of public engagement was through the EA process between 2007 and 2009. LURA Consulting was hired to document and organize the public involvement process throughout this time, which they detailed into a document containing emails and comments received throughout the process (LURA Consulting, 2009). The documents include: notices for public meetings, meeting notes, questions and comments from the three public forums, and notes from the Stakeholder Advisory Committee meetings (LURA Consulting, 2009). The Stakeholder Advisory Committee, referred to as SAC, provided feedback on the EA process, strategies for the revitalization of Queens Quay West, and determined how the information was presented to the public (LURA Consulting, 2009). SAC attempted to give a voice to a diversity of interests that adequately represented the public. Overall, LURA Consulting and Waterfront Toronto conducted over 50 public forums, exhibitions, community meetings, landowner meetings and SAC meetings between 2007 and 2009 to complete the EA process.

4.1.1 Stakeholder Advisory Committee (SAC) Meetings

SAC consisted of various members of neighbourhood associations, condominium board members, advocates of various interests (such as cycling and transit), members of the BIA, and Waterfront Toronto. SAC meetings were conducted prior to public meeting presentations focusing on revisions to current public statements and public presentations. With these revisions, the SAC was able to provide feedback, which in turn, altered the

way the information was perceived and presented to the public. A SAC member stated she thought the committee was a fantastic learning process, as it was the first time this type of street was being implemented in Toronto. She further added that the committee discussed all the information in detail, communicating with developers and designers to assist with the decisions. It was evident the committee felt strongly about a walkable street focused on the public realm.

4.1.1.1 The Stakeholders of SAC

According to a member of SAC, SAC consisted of association members and various advanced professionals, such as architects and planners, who had a strong knowledge of street planning. Neighbourhood associations, is an example of an association created as a method of representing residents in the area bridging the gap between the city and the community. SAC was educated on the subject matter to help make informed decisions. The public's concerns were reflected in SAC and were addressed throughout the process to resolve them. These concerns will be explored in greater detail when discussing the public meetings. A member of SAC stated SAC had a tremendous influence on the outcome of Queens Quay West. SAC was able to have an impact in development proposals via their role in the project and the connections they had gained. As the SAC was not a government organization, they had the ability to complete tasks outside the jurisdiction of the City of Toronto and Waterfront Toronto. The committee was connected to influential people, which exerted authority over the area, allowing them to maintain a strong impact in the process. However, a representative of Waterfront Toronto #2 thought that the BIA (which made up a portion of SAC) was more sceptical of the street design, as they were concerned for their businesses and fought Waterfront Toronto throughout the process. Representative #2 maintains that this

pullback from the BIA made the design richer by improving the overall standards of the design.

4.1.1.2 The Waterfront BIA's Role in SAC

The Waterfront BIA comprises of all the retail and restaurant owners in the area. Although a few members of the Waterfront BIA were also a part of SAC, there was still a disparity of views. A common problem in public participation is an inequality in those who participate (Frieden & Morris, 1968). Often, lower income populations have less available time, are not as involved in neighbourhood organizations, and are less familiar with municipal engagement processes (Frieden & Morris, 1968). With this in mind, the lower income population is often discussed as 'objects' in a public engagement setting as opposed to actively participating (Frieden & Morris, 1968). Queens Quay West, in contrast to many areas, does not have a strong disparity of incomes but this theory still applies to the Waterfront BIA. According to the chair of the BIA, although the BIA maintained significant involvement during the process, members did not have similar availability to put forth into the committee. Many committee members consisted of an older population engaged in civic projects that were able to put a significant time commitment towards the frequent committee meetings. This resulted in the street more heavily representing the residential interests over the business interests. These committee members did not garner the complete communities perspective despite their strong efforts. The Chair of the BIA felt that the final design only reflected the desires of the BIA in minor ways. It was a challenge for these business owners, working full-time, to put forth the time commitment to become an influential member of the committee. This ultimately put them at a disadvantage of getting represented in the final product. However, the influence of the BIA was still demonstrated, which the Chair of the BIA

believes to be impossible without the formation of the BIA. He believes that without the BIA, the business involvement would have consisted of ad hoc businesses, challenged to have an impact because of their unique individual interests. Despite these deficiencies, the Chair of the BIA felt the BIA's concerns were addressed to the highest degree, as advocacy takes on a variety of perspectives. The BIA was a group of people that were tenacious at having their objectives integrated into the final product, which took significant effort and persistence. A considerable portion of the process was weighted towards engaging the public as a whole, resulting in SAC having an exceptional influence on the outcome.

SAC was extremely well informed and organized and was a fantastic community resource to relay information. Overall, SAC ensured the redesign of Queens Quay West was a smooth process. They maintained a powerful influence over the Environmental Assessment of the street and helped design Queens Quay West, with the assistance of the public, into the complete street it is today. With the assistance of SAC, the public meetings during the Environmental Assessment process were extremely comprehensive.

4.1.2 Public Meetings for the Environmental Assessment

As part of the EA, four public meetings were conducted: on January 10, 2008, January 24, 2008, December 8, 2008, and March 25, 2009 (LURA Consulting, 2009). The EA was conducted in order to create a plan for Queens Quay West that would beautify the public realm, and comfortably accommodate all users.

The first public meeting provided background on the problems Queens Quay West had, planning solutions to the problems, and how solutions would be evaluated (LURA Consulting, 2009). Waterfront Toronto then put forth four planning solutions, followed by an evaluation of those solutions and questions of clarification from the

audience (LURA Consulting, 2009). These questions were then followed by a roundtable debate centered on a discussion of three questions, focusing on how the public felt about Queens Quay West (LURA Consulting, 2009). This prompted the public to highlight what they liked about the area so those could be preserved and expanded upon in the future. The public also wanted a significant number of improvements for the area. Themes of improvements that persisted throughout the meetings included: bike lanes, additional green-space, increased connections, reduced congestion, and the creation of an environment for year-round activities (LURA Consulting, 2009). Overall, the public desired improvements to the public realm that safely accommodated all uses and increased the economic vitality of the area, while eliminating road conflicts.

The second public meeting was small and less documented, and consisted of a discussion on the Martin Goodman Trail, multi-purpose trail that was missing a segment along Queens Quay West (LURA Consulting, 2009). Waterfront Toronto then worked extensively with the feedback received to prepare for the next public meeting.

The third public meeting commenced 11 months later with approximately 200 people attending (LURA Consulting, 2009). The public was presented with five sample designs; they could state their opinions about each. The opinions were organized into questions, asking what they liked about each design, what they disliked and what their concerns were. The public strongly preferred Design 4 and Design 5, both of which closely resemble the finished Queens Quay West (LURA Consulting, 2009). The public showed discontent towards the auto-centered models and had a strong distaste for them, as they did not fulfill the needs of the public realm (LURA Consulting, 2009). Below, Design 4 in Figure 20 and Design 5 in Figure 21 both reduced the traffic lanes to two lanes, with sections of widened street for turn lanes. They both contained a pedestrian

boulevard, increased green-space, and a dedicated streetcar lane on the south side. The difference is that Design 4 contains two-way traffic, with one lane going each way, whereas Design 5 includes one-way traffic with two lanes (LURA Consulting, 2009).

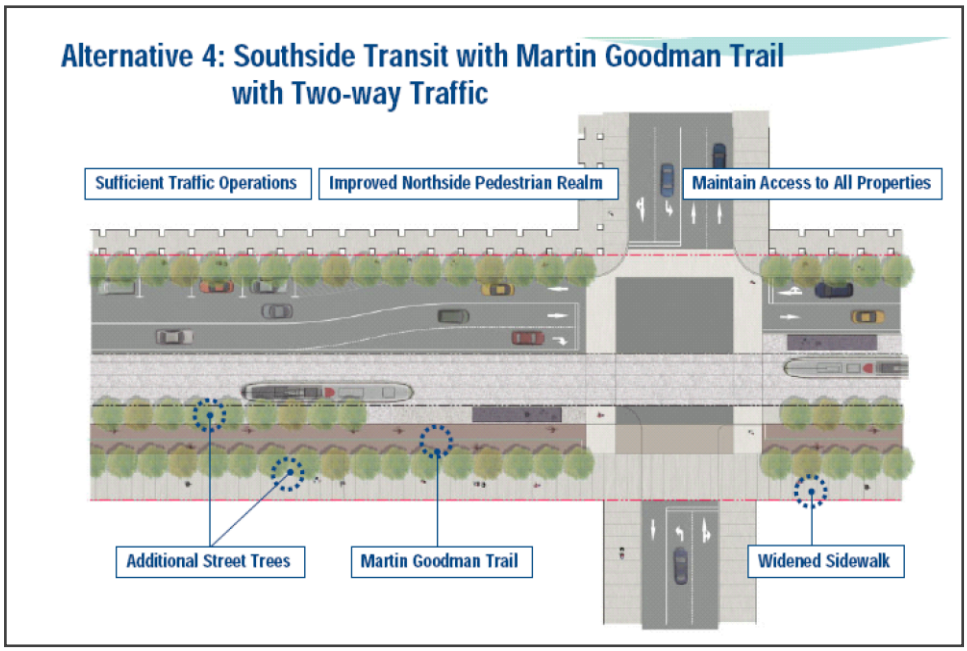

Figure 20: Design 4 Showing a Rendering of Queens Quay West with Two Lanes
Source: LURA Consulting, 2009

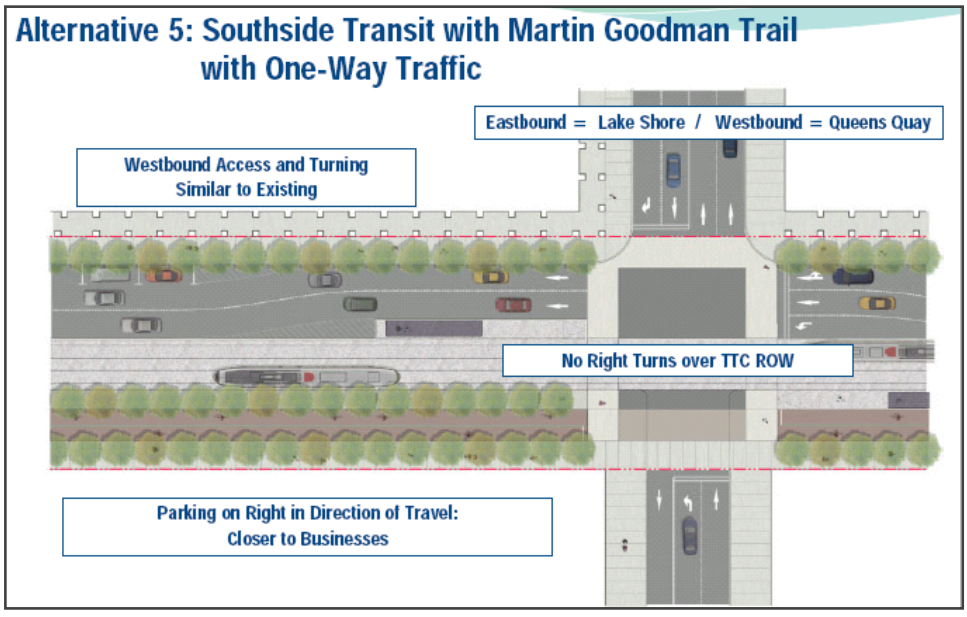

Figure 21: Design 5 Showing a Rendering of Queens Quay West with One-Way Traffic
Source: LURA Consulting, 2009

Many concerns centered on issues that were later resolved, such as illegal parking activity and lack of signage (LURA Consulting, 2009). The signage issue was resolved with wayfinding signage and separate traffic signals for pedestrians, cyclists, streetcars, and vehicles. There was a strong concern with congestion, as the street would likely be reduced to one lane each way (LURA Consulting, 2009). However, a member of SAC stated that Queens Quay West, prior to revitalization, had a parking lane on each side with considerable illegal parking which left only two functional lanes on the street.

The public also wanted to see public art included in future designs (LURA Consulting, 2009), which resulted in a myriad of art pieces, such as the Wave Deck seen below. Overall, the feedback recorded was mainly positive towards Designs 4 and 5, both of which centered on all users of the street. Both designs were well received with critiques that would be executed in the final design.

Figure 22: The Wave Deck
Source: Alexa Aiken taken on April 28th, 2017

The fourth and final public meeting for the Queens Quay EA was a two-part meeting. The first part used the same format as the other two meetings and the second part consisted of a drop-in open house for three hours (LURA Consulting, 2009). The goal of this meeting was to gather more feedback on the design options for the street and to provide more detailed information (LURA Consulting, 2009). In the meeting, the same design alternatives were presented and Design 4, containing the two-way street was highly favoured (LURA Consulting, 2009). Although the current Queens Quay West does not directly reflect Design 4, it closely echoes it. Evidently, Design 4 prevailed, in part, due to the public's favouritism towards it. There were fewer concerns during this public meeting, and many concerns voiced were outside the scope of the EA. An example of these concerns is the many comments on the unattractiveness and inefficiency of the Jack Layton Ferry Terminal, which according to a member of SAC, is currently being redesigned and replaced.

4.1.3 Concerns from the EA Public Meetings

There were many concerns throughout the public engagement process. The following will highlight the most significant reoccurring concerns throughout the process. The first major concern was traffic and parking that was remedied in the final product. This concern was alleviated by the introduction of various underground parking lots and the discouragement of automobiles on Queens Quay West. Users were given the option to take different routes, such as Lake Shore Boulevard, or opt for alterative modes of transportation. The remaining concerns that were not clearly addressed in the final product were the lack of public washrooms, no connection to the PATH, and the need for seasonal design (LURA Consulting, 2009). According to a member of the SAC, public washrooms were not implemented, and the one that currently exists will soon be

demolished as a result of a new development. Additionally, the PATH connection was widely coveted in the final Queens Quay West, along with a few other costly concepts. However, due to the underground difficulties and budget, it was not feasible in the final product.

Finally, in reference to seasonal design, there was concern that the design would only attract people in summer and the street would lack tourism and business in the winter (LURA Consulting, 2009). A citizen stated that they thought there were two versions of Queens Quay West, one in the summer that is swarmed with tourists and one in the winter, which consists of local residents and employees (LURA Consulting, 2009). There was hope that the new design would promote year-round use. I conducted many site visits to Queens Quay West, two of which were in winter, on January 23rd and February 11th, 2017. During those two visits, the street was populated, but not anywhere close to summer capacity, as seen on the June 10th, 2017 site visit. In the winter, the joggers used the trail extensively, as the cyclists were minimal. Many pedestrians seemed to be locals in the area, walking their dogs and entering or exiting condominiums. Seasonal variation in the number of people visiting Queens Quay West is still visible. A representative of Waterfront Toronto #2 stated that she felt this is one of the items that Queens Quay West did not fully achieve. The street still has room to evolve, mature, and its use will continue to rise.

Many other areas of the city have attempted to mitigate this seasonal variation in visitors through festivals, such as the Toronto Christmas Market in the Distillery District. Currently in Queens Quay West, there needs to be a reason for people to come in winter. However, due to the street's strict division of people, cyclists, transit, and vehicles, there is not much potential for these programs to happen directly on the street. It is challenging

to fit festival tents and people on the street resulting in these programs traveling north and south of the street. On my site visit on June 10th, 2017, I witnessed the Waterfront BIA host the "Waterfront Artisan Market" in HTO Park. The event is operating every Saturday from May 20th to October 7th, 2017 and appeared highly successful, attracting large crowds. Unfortunately, the event reinforces the problem, that events such as these cannot be hosted directly on Queens Quay West. Small adjustments are being considered to allow these programs to come directly to Queens Quay West.

Figure 23: The Waterfront Artisan Market
Source: Alexa Aiken on June 10th, 2017

Overall, the feedback from the EA public meetings was extraordinarily positive, with many people commending Waterfront Toronto and the team on their excellent work (LURA Consulting, 2009). One participant stated that "[t]his is an incredible process, and I am very excited about the proposal for Queens Quay" (LURA Consulting, 2009, p. 12). The public thought it was important to improve the safety of the street, which was done through the separation of pedestrian, cycling, transit and vehicular activity. Queens Quay West was to be transformed into a prime location, breathing a new life into the

community. In retrospect, the EA public involvement process was a success and embodied the public desires in the final product.

4.2 Queens Quay Construction Liaison Committee

After the EA was completed, the Stakeholder Advisory Committee dissolved and was replaced with the Queens Quay Working Group. The group was formed by an open call to the community, allowing anyone to join (Waterfront Toronto, 2014). Advertisements for the Working Group were posted on the Waterfront Toronto website, in a newsletter, during public meetings and through community organizations (Waterfront Toronto, 2014). This group assisted with the public engagement until the construction process began.

As construction began, the Queens Quay Working Group dissolved and was replaced by the Queens Quay Construction Liaison Committee, referred to as the CLC. There were 35 CLC meetings throughout the construction process; unfortunately only half of the meetings are currently easily accessible online. The CLC met approximately every month for two hours and incorporated a range of stakeholders (Waterfront Toronto, 2014). The main groups of stakeholders included representatives from neighbourhood associations, businesses, residents, city councillors, and advocacy associations, such as the Toronto Cyclist Union (Waterfront Toronto, 2014). A member of the CLC stated that each condominium was asked for at least one representative from the building to relay information to the remainder of the building. She stated that the purpose of the CLC was to discuss the construction process and any issues that had arisen. The CLC would then relay the information discussed to their representative groups and the greater community. CLC members would also convey questions and concerns from the group they represented, becoming the beacon of contact for various stakeholder groups. The CLC

also helped Waterfront Toronto communicate updates to the public. This was partly done through the creation of a detailed webpage for the construction process. The webpage included presentations from each CLC meeting so the public could ensure their interests were being represented.

Waterfront Toronto also maintained an open-door policy throughout the construction period. According to representative #2, if anyone had issues or concerns, Waterfront Toronto listened and adapted accordingly. Construction was undoubtedly difficult, but Waterfront Toronto tried to minimize the impact on the businesses in a number of ways. First, a construction liaison officer was hired to go door to door on a regular basis to gain information about the businesses and any questions or problems they were having. Every business would also be advised when there was going to be construction in their area. According to the Chair of the BIA, the BIA also initiated an open for business campaign, a marketing campaign for the area's businesses. In addition, when fencing on the sidewalk was necessary (which ultimately divided the users of the street from the shops) signs were added with arrows pointing to the stores to maintain business. Although these signs were added to the best of their ability, sometimes an excessive amount was added, which became overwhelming to consumers. A representative of Waterfront Toronto #2 stated that many other accommodations were given to people who were more seriously affected by the construction, based on request. According to representative #1, many of the businesses along Queens Quay West were struggling prior to the revitalization; thus, the construction affected them more profoundly. However, many businesses knew that the construction would revitalize the street and bring more business and opportunity to the area. Overall, Waterfront Toronto

attempted to be exceptionally responsive throughout the construction process to lessen the impact on businesses.

Although Waterfront Toronto attempted to mitigate the impact of construction, it resulted in unanticipated outcomes. Recollections from Waterfront Toronto and the businesses that experienced the hardships of construction differ in perspective. A representative of Waterfront Toronto #1 stated that one attempt to keep the revitalization finished on schedule was the implementation of the phasing system. If one area caused conflict, construction would proceed to the next excavation while they waited for a resolution. According to the Chair of the BIA, this idea resulted in the entire street being enveloped by construction for about two years. This outcome was a result of the underground conflicts and the challenges of working with inter-departmental land. The resolutions to these problems were not time sensitive, causing a massive amount of excavations left empty for months. As a result, there was an abundance of excavations occurring simultaneously, waiting for a resolution from civic engineers. This had a dramatic impact on the local businesses and should have been managed in a time-sensitive manor.

Despite the hardships endured by these businesses, the Chair of the BIA upholds that Waterfront Toronto maintained their proactivity throughout this process. Construction was inevitably a challenge. Despite the efforts of Waterfront Toronto, businesses were still required to be barricaded behind fences, which ultimately impacted their customer base. In light of the responsiveness of Waterfront Toronto, the effects of construction could not be completely avoided but the negative impacts were greatly reduced as a result.

4.3 The Completion of Queens Quay West

Queens Quay West was a mammoth project, with an overwhelming amount of public engagement in various forms. This revitalization process established an excellent model for public engagement for future complete streets within the city. The street was a new idea for Toronto that is always met with opposition. Due to this opposition, a representative of Waterfront Toronto #2 stated that the organization worked to collaborate on the issues individuals had regarding the street. The reason people were dissatisfied with the design was due to the uncertainty of the impact it would have on their lives. Confronting the issues directly is indeed the one of the key factors contributing to the success of Queens Quay West's public engagement process.

Following the project's completion, the City of Toronto was given the legal ownership of the project. However, despite this new ownership, a representative of Waterfront Toronto #1 highlights that there continues to be an unwritten policy that the organization never truly leaves their projects. Waterfront Toronto holds the backseat position regarding ongoing conflict resolutions. Waterfront Toronto remains a relatively new organization and they continue to improve and discover their advocacy role. Ultimately, Waterfront Toronto maintains a strong sense of pride over the projects and they want their projects to succeed. This is evident through the extensive public involvement and the strong sense of ownership many stakeholders still maintain. Queens Quay West has a low-level of consistent users, as many people visit from other areas of the city. Stakeholders have taken it upon themselves to help less-informed people who might be putting themselves in danger and educate them on the street. Overall, Queens Quay West can be used as a model for future complete street projects within the city. There are evidently problems with the street but ultimately; Queens Quay West was a

success effectively engaging the public. A survey was distributed after Queens Quay West was completed resulting in 79 percent of individuals stating that the street design enriched their experience (Smith et al., 2016).

There is a consensus among interviewees that despite the deficiencies along Queens Quay West, the street is truly magnificent. The street is attractive and delivers on promises to its users to create a safer environment for all types of street users. The design of the street was praised, creating a great public realm. In addition, all interviewees felt that the stakeholder outreach was done exceptionally well, capturing as much information as possible from a diverse group of people. Representative #2 of Waterfront Toronto stated, "I see it as a right for everyone to have great design in the public realm. I am happy we were able to deliver a street that aspires to do that. It gives everyone space on the street, and from that perspective, it is an amazing street." Moreover, stakeholder desires have been adequately represented in the final product of the street, enhancing the public realm and making Queens Quay West a true complete street.

CHAPTER 5: TORONTO COMPLETE STREET POLICY ANALYSIS

Now that I have given a background into the foundation of complete streets, assessed the implementation of the complete street paradigm into Queens Quay West, and discussed these topics with various stakeholders, I examined the planning policy context and new guidelines, as these will support complete street implementation within Toronto. The chapter with begin by examining supporting documents for complete street implementation within Toronto. This chapter will then conclude with a comprehensive policy review of the *Toronto Complete Street Guidelines*, which were developed in December 2016 to provide a framework for complete street implementation within the city.

5.0 Introduction

Many cities throughout the world have successfully adapted complete street policy or guidelines into their overall city design. Toronto implemented the *Toronto Complete Streets Guidelines* in December 2016. The question that is posed with the release of the guidelines is: why did Toronto implement complete street guidelines, but not policy. Policy formalizes ideas to make them enforceable and regulatory. However, according to a representative of Waterfront Toronto #1, the City of Toronto uses guidelines to first introduce ideas. Guidelines are often endorsed by city council as opposed to being approved like policy. They allow for flexibility and easy modification if certain guidelines are inadequate. Often, a change in guidelines or policy results in unforeseen complications. In addition, sometimes certain guidelines are successful in one location, but fail in another, leading to modifications. Overall, guidelines are widely used

in the City of Toronto when first introducing new ideas, and can potentially be formatted into policy if they do not contain enough enforcement. There is hope that the guidelines, adopted by the City of Toronto, will better assist with the implementation of complete streets in Toronto than the previous supporting policy documents.

Prior to the guidelines being implemented, principles of complete streets were referenced in various policy documents including the *Provincial Policy Statement*, the *Toronto Official Plan*, and various supporting guidelines in Toronto, such as the *City of Toronto Bike Plan* and *Vision Zero*. These documents made it imperative to create complete street guidelines to carry out the visions in these policies. These policy documents will be examined in order, from the broadest legislation to the most focused.

5.1 Ontario Policy Context- *The Provincial Policy Statement* (2014)

The most encompassing legislation set forth to guide land-use planning practices in Ontario is the *Planning Act*. The *Planning Act* is the basis for legal obligations in land use planning and directs the development of municipal official plans and the Provincial Policy Statement. The *Provincial Policy Statement* is a tool used to carry out the *Planning Act* by providing ways to execute policy on land-use planning matters that require provincial attention.

The *Provincial Policy Statement* makes reference to policies that can support complete street implementation in two sections. First, principles of compete streets are mentioned in section 1.5.1. This section states that streets that are planned to increase safety, communication, connectivity and foster active transportation will result in a healthy and active community (Ontario, 2014). The *Provincial Policy Statement* supports this policy by referring to the importance of mixed-use development and multimodal transportation:

"A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and *active transportation*. "(Ontario, 2014, s. 1.6.7.4)

These elements can be applied to creating an effective and comprehensive complete street policy and can be incorporated into the *Official Plan* and other municipal documents to set out visions for municipalities.

5.2 Toronto Policy Context- *Toronto Official Plan* (2015)

An Official Plan is a municipal document required by the *Planning Act* to give a vision of a municipality's future. It sets goals and policies to guide development and change in the municipality. The latest version of the *Toronto Official Plan* was adopted in 2015 and sets a vision to create a vibrant city with a diversity of people who feel safe while maintaining a high quality of life. A large portion of this vision includes greening the city, improving the connectivity of transit, and creating a spectacular city (Toronto, 2015). This vision sets the stage for the implementation of complete streets. Although explicitly mentioned in only a few sections throughout the *Official Plan*, principles of complete streets echo throughout the vision guiding the entire document. Section 3.3 of the *Toronto Official Plan* directs existing and future streets to integrate a complete streets approach into the design by allowing all users to have balanced and comfortable access to the street, especially focusing on people using public transportation and active modes of transportation, to maintain safety, greenery, amenities, and proper space for necessary street elements (Toronto, 2015). Section 3.5 of the *Toronto Official Plan* also requests that new streets are well connected to the surrounding area, creating a network to incorporate all users (Toronto, 2015). These policies embody the principals of creating a

complete street, as they should encourage the use of various modes of transportation to give everyone the opportunity to use and experience the street. According to a member of the York Quay Neighbourhood Association (YQNA), a good street is not just a street that takes you from one place to another. A good street is an experience and a place to socialize. There was a consensus from both representatives from Waterfront Toronto stating that a good street needs to meet the needs of all people, as everyone has a right to a great public realm. The *Toronto Official Plan* embodies the elements and principles that would make the street enjoyable for all users. The problem is that the *Official Plan* is vague on methods to create these streets within the city. This is why these principles have been embodied in various municipal guideline documents to attempt to provide clarity.

5.3 Supporting Documents

Principles of complete streets have been mentioned through various municipal guidelines and documents, but it was not until the end of 2016, when they were expressed in a document of their own. The supporting documents are still significant as they provide the foundation for complete street ideals within the city. A few of these documents that require special attention are the *Toronto Bike Plan* and *Vision Zero*.

5.3.1 The *City of Toronto Bike Plan* (2001)

The *City of Toronto Bike Plan* is a 10-year visioning plan to create a more liveable city by expanding the cycling network (Toronto, 2001). This aims to ensure cycling as a practical mode of transportation and warrants cycling safety by the separating of bikes from vehicular traffic (Toronto, 2001). Bike lanes need to be safe, convenient and connected. The plan is guided by six principles: (1) the promotion of cycling as a viable mode of transportation; (2) creating a 1,000 kilometre bike network;

(3) creating safe cycling facilities; (4) the integration of cycling in streets; (5) producing safe streets to bike on; and (6) expanding bicycle parking (Toronto, 2001). This plan will connect bikers to most areas of the city, allowing them to cycle without worry of safety or disconnection from their destination. Proper cycling facilities are also associated with higher rates of cycling across many North American cities (Moller, 2010). The ability for all users, including cyclists, to safely and efficiently use the street is imperative in a great street. This plan laid the foundation for *Vision Zero: Toronto's Road Safety Plan*.

5.3.2 *Vision Zero* (2017)

Vision Zero: Toronto's Road Safety Plan was recently developed in January 2017 and builds upon the *Toronto Safer City Guidelines* to create a comprehensive road safety strategy to shield vulnerable users (Transportation Services, 2017). Vulnerable road users include cyclists, pedestrians, school children, elders, and motorcyclists, who comprise 74 percent of the people killed or severely injured in an accident (Transportation Services, 2017). The Vision Zero strategy aims at reducing and eventually eliminating collisions causing severe injuries and death (Transportation Services, 2017). *Vision Zero* emphasizes vulnerable users and discusses measures to increase their safety through street design (Transportation Services, 2017). Proper facilities for vulnerable users lower the risk for collision and injury and promote "safety in numbers" (Moller, 2010, p. 17). An increased number of people walking or cycling reduces risk of injury (Moller, 2010). Other techniques to increase safety have been used in the *Toronto Complete Streets Guidelines* and were discussed in Chapter 3 on how to increase safety in complete streets.

5.4 The *Toronto Complete Streets Guidelines* (2016)

With the *Official Plan* explicitly referencing complete streets and a number of documents aiming to achieve similar objectives as those of complete streets, it became evident that complete streets needed its own municipal document to facilitate implementation. As requested by City Council in 2013, motion PW22.10 was adopted to develop the *Toronto Complete Streets Guidelines* by using the expertise of numerous municipal divisions (Public Realm, Transportation Services & City Planning, 2014). In 2014, the *Approach to Developing Compete Streets Guidelines* was released, which functioned like an outline, stating the goals, precedents, and how they will apply to the city. The document also discusses the next phase of complete streets, which will involve municipal training, evaluation and analysis of complete street projects, and updating of engineering and construction benchmarks (Public Realm et al., 2014). This document guided the creation of the *Toronto Complete Streets Guidelines*, which was released two years later.

The *Toronto Complete Streets Guidelines* was released in December 2016 and was created to assist with the competing demands of the street and right-of-way. The guidelines are to be used for new streets and the revitalization of existing streets. The guideline document consists of nine chapters: Chapter 1 discusses the overall vision of complete streets; Chapter 2 classifies streets into distinct types; and Chapter 3 demonstrates the steps that need to be taken to properly design a street (Toronto, 2017). The remaining chapters discuss how to design streets for pedestrians (Chapter 4); cyclists (Chapter 5); transit (Chapter 6); green infrastructure (Chapter 7); roadways (Chapter 8); and intersections (Chapter 9) (Toronto, 2017). Each of these street designs are divided

into separate chapters as they each have an equally important design considerations and challenge to incorporate into complete streets.

Although the guideline document is not a policy, it integrates existing policy to reinforce its objectives. Having guidelines instead of a policy allows for more flexibility. These guidelines can be applied to municipal plans and studies such as Secondary Plans, Transportation Master Plans, Avenue Studies, Business Improvement Area (BIA) projects, and Area Plans, to name a few (Toronto, 2017). The guidelines also emphasize that the projects may also be small, such as single development applications and lighting improvements on streets (Toronto, 2017).

The *Toronto Complete Street Guidelines* has nine goals of complete streets. Many of these goals reflect my own principles on motivating me to study complete streets. The overlapping goals and principles include enhancing the safety of the street; making environmental improvements; improving quality of life; enhancing human health through design; and improving the economic vitality of an area, which were all expressed in detail in Chapters 2 and 3. Elaborating on quality of life, my principle stated how the focus of street design in the past has been auto-centric, which has caused discomfort for people using other modes of transportation. The *Toronto Complete Street Guidelines* express how to improve quality of life through designing public spaces to encourage their usage while improving the attractiveness of those places (Toronto, 2017). Four of the guideline document's goals did not overlap with my principles: improving connectivity of streets, being realistic with design goals (such as designing for durability) while factoring in its lifetime cost, enriching social equity, and recognizing the neighbourhood context to create appropriate design (Toronto, 2017). These goals are not actively envisioned by the

user of the street, but still are of equal importance in the street's functionality and were addressed throughout my paper.

The guidelines also contain an in-depth review of how to approach street design, seen throughout Chapter 3. This chapter outlines five steps to complete street design. Each step contains an extensive checklist to assist with the process. Step 1 involves identifying the type of street, which can be done with the assistance of Chapter 2, and classifying the context of the street through research of policies and plans (Toronto, 2017). Step 2 is identifying design goals and significant factors in the design by collaborating with stakeholders while maintaining consistency with municipal documents such as the *Toronto Official Plan* (Toronto, 2017). Step 3 discusses the importance of measuring outcomes to identify the impact a complete street has made and track how decisions were made, which can be seen on Queens Quay West (Toronto, 2017). Step 4 refines the designs and the process, further engaging the public by presenting design options (Toronto, 2017). Finally, Step 5 involves the selection of the final design with supporting documentation (Toronto, 2017). These steps were used to frame the following chapters, which discuss designing for specific users and areas, such as designing for pedestrians and designing for intersections (Toronto, 2017).

5.5 *Toronto Complete Street Guidelines* Analysis

To analyze the Toronto Complete Street Guidelines, I researched complete street policy analysis tools. These tools have been applied to other policies throughout North America; I modified them to better apply to guidelines. Although some of these elements were conceived by me, many were conceived with the assistance of the policy guidelines from Clean Air Partnership (2012) in the publication *Complete Streets Gap Analysis: Opportunities and Barriers in Ontario* and McCann and Rynne's book *Complete Streets:*

Best Policy and Implementation Practices (2010). Through this approach, I have evaluated the Toronto Complete Street Guidelines based on the following 12 elements:

- **Strength of language —** The complete street guidelines should use strong language such as 'will' (Clean Air Partnership, 2012)
- **Vision —** Includes a vision for the future of the community's streets
- **All Users —** Discusses the importance of all users of the street **—** The guidelines should explicitly mention who these users are and how they will be incorporated into the street. A complete street should ensure that users of all types of transportation of all ages and levels of mobility could confortable utilize and experience the street. The street should not only function but also enhance the user's experience.
- **Connectivity —** Emphasizes the connectivity of the street and its amenities to help build a comprehensive and cohesive street network promoting all users. By created an interconnected street network, the value of these facilities would rise. The significance of connectivity is referenced in Chapter 3 in section 3.5.
- **Flexibility —** Streets are unique and complete street policy should be able to apply to both new and existing streets while being able to be adapted to all kinds of roads. The policy could also apply to smaller street projects such as simply the implementation of cycling lanes or the growth of a transit network.
- **Exceptions —** Allows specific and reasonable exceptions with clear guidelines for the process to apply (Clean Air Partnership, 2012; McCann & Rynne, 2010).
- **Design —** Complete streets should have new and attractive design criteria to help meet their goals

- **Safety —** Design for safety for all users. Indicate a plan for the implementation of safety measures, such as barriers for cycle tracks, frequency of crosswalks, lighting, etc.
- **Neighbourhood Context —** The complete street should echo the community needs and desires and should be consistent with the neighbourhood design (Clean Air Partnership, 2012; McCann & Rynne, 2010). Streets should be designed accordingly.
- **Engagement with the public —** The policy should mention ways in which stakeholders will engage with the public throughout the process.
- **Measurement of Outcomes —** The guidelines should have reference to how outcomes of these complete streets will be measured (Clean Air Partnership, 2012; McCann & Rynne, 2010). The measurement of outcomes is significant as it allows one to see the impact the implementation of a complete street has on the surrounding community and various uses of transportation.
- **Implementation —** Guides the implementation of complete streets to ensure the guidelines are implemented properly (Clean Air Partnership, 2012; McCann & Rynne, 2010)

5.6 Analysis Results

Table 2: An Analysis of the *Toronto Complete Street Guidelines*

Evaluation Element	Section/ Page Reference	Score	Reason/ Example from Text
Strength of language	S. 1.4 p. 7	3.5/5	The *Toronto Complete Street Guidelines* include the language 'should' instead of using stronger language. The guidelines show a clear objective, but the instruction is softened. However, guidelines contain less enforcement than policy, lacking the ability to ability to use language like 'must'.
Include a vision	S. 1.4 & S. 1.5	5/5	**Chapter 1** is excellent at expressing a vision for the future of Toronto and how complete streets can achieve that vision by reaching nine goals, which were referenced on page 71.
Discuss all users	S. 4.4, p. 81 & S. 7.1 p. 111	4/5	**S. 7.1** considers that the materials used in building streets must enhance the street's accessibility for all users, and discusses where amenities should be placed (p. 111). The policy does a good job of considering these users and uses by dedicating selected chapters to design for vulnerable populations.
Connectivity	S. 1.5.1 p. 12, Ch 4 & 5	5/5	**S. 1.5.1** discusses the importance of choice in road design and not confining people to one route. The goal of this road design is to move people as efficiently as possible **S. 1.5.3 —** Connectivity is one of the overall goals of complete streets. **Chapters 4 & 5 —** Connectivity is also mentioned throughout these chapters, expressing how sidewalks should form a network to attract more physical activity and add to the network of already existing sidewalks and bike lanes (p. 75, 93). Overall, connectivity is a significant theme throughout the guidelines and is mentioned a number of times.

Flexibility	S. 1.4 p. 7 & Ch 3	4/5	**S. 1.4** discusses the need for flexibility in streets, as they are constantly shifting and need to properly adjust to those new demands. The guidelines also refer to both new streets and streets undergoing maintenance. However, in **Chapter 3**, the design guidelines refer only to larger projects and there is a lack of guidelines for smaller complete street projects.
.Exceptions	S. 3.3 p. 71	4/5	**S. 3.3** states a clear process on how exceptions can be granted. It includes what the application should contain and what is likely to be accepted as an exception. However, it would be beneficial for the guidelines to give some examples of when exceptions can be approved.
Design	Ch 2, 3, 4, 5, 6, 7, 8, 9	5/5	**Chapter 2 —** Categorizes each type of street and states unique design objectives. **Chapter 3 —** Offers five steps to street design (particularly focusing on large projects) and provides checklists for each of those five steps in the design process.

Safety	S. 1.5.1 p. 12, S. 5.2, 8.1/3 p.121, 125 & S. 9.1 p. 145	5/5	The policy prioritizes vulnerable users, as defined on p. 40, and aims to reduce exposure to dangerous elements of the street. **S. 5.2** states how cyclists are vulnerable road users and should be protected through buffers while **S. 6.1** discusses the need for safe transit stops that protect pedestrians from oncoming traffic (p. 103). **S. 8.1** emphasizes again the importance of reducing vulnerable road users' contact with dangerous uses while **S. 8.3** describes those risks and gives tactics to minimize them (p. 121, 125). **S. 9.1** discusses intersection design and the importance of safety and the need for simplification of complicated intersections to increase predictability and visibility (p. 145, 152). **S. 9.4** also discusses ways to make intersection markings and designs as safe as possible. Overall, safety is discussed throughout the guidelines along with tactics to reduce exposure to risks by giving design suggestions to make a safer environment.
Neighbourhood Context	S. 1.5.3 & S. 5.1, p. 91	4/5	**S. 1.5.3 —** Neighbourhood context is one of the overall goals of complete streets. **S. 5.1** states how bike lanes must be context appropriate as they may not be in demand or needed on smaller streets with a low vehicular volume. Although neighbourhood context is one of the overall goals, there is lack of direction on how to properly abide by that.

Engagement with the public	S. 1.5.1 p. 12 & S. 3.1.2/3/4 p. 64-69	3.5/5	**S. 1.5.1** mentions how the municipality should engage with the community to recognise priority networks and design accordingly. **S. 3.1.2/3/4** discusses the importance of getting a consensus from stakeholders and the public, throughout the process, when designing a complete street, as it will help advise decision-making. The guidelines could have made further suggestions on how to engage with the public and create a complete street consistent with community desires.
Measurement of Outcomes	S. 3.1.3 p.65 & S. 3.2 p. 70	5/5	**S. 3.1.3 —** In Step 3 of complete street design, it emphasizes the importance of collecting baseline data to result in "before" and "after" data on a street's success to monitor the success of the street. **S. 3.2** unpacks this "before" and "after" data that will be collected to evaluate the street and gives suggestions for the evaluation process.
Implementation	C.1 p. 166	3/5	The guidelines summarize the steps taken to reach complete street implementation and guide the municipality on what city division undertakes the project next. The engineering division is instructed to consult numerous plans before moving onto physical implementation of the project, where many municipal divisions would have to collaborate to create a complete street (p. 166). The guidelines state that they focus on the planning and design of complete streets but do not integrate building and managing a street (p. 166). The guidelines should give a list of supporting documents in this section that can help with the next steps.
Total	**51/55**		

5.7 Summary of Results

According to representatives from Waterfront Toronto, approximately a decade ago, when the revitalized Queens Quay West was first conceptualized, complete streets did not exist in Toronto. The vision for Queens Quay West was to create a street that could appropriately integrate all its users. The street was heavily focused on vehicular travel, but with a majority of its users using alternate modes of transportation. Queens Quay West needed to be rebalanced. This began a new typology and understanding of what a street is in the city. When designing the street, Waterfront Toronto and its supporting stakeholders needed to chart new territory to create Toronto's first complete street.

The *Toronto Complete Street Guidelines* have simplified the process for future implementation and have allowed the complete street concept to become a part of our understanding of how to create a fantastic street. The *Toronto Complete Street Guidelines* did an excellent job at satisfying the criteria to facilitate complete street implementation. As the city keeps building complete streets, the quality of the streets will improve, the guidelines can change to reflect better practices, and users of the street will become more aware on how to use these kinds of streets.

CHAPTER 6: CONCLUSION

6.0 Introduction

The goal of this major research paper was to assess the Queens Quay West revitalization strategy and evaluate the stakeholder involvement tactics to determine the impact these stakeholders had on the finished project. I began this study by analyzing what makes a successful street, and the benefits extended to its users. The analysis morphed into an investigation of complete streets, as they embody many concepts of a successful street. I then set out to uncover how to properly engage the public in a civic project, followed by an analysis of the public engagement process on Queens Quay West. This was to test if the public engagement had an impact on the outcome of the street, creating a street truly designed by its stakeholders. My research has shown that Queens Quay West successfully incorporated the stakeholder desires into the street outcome, creating a true civic street.

In this chapter, I start by providing an overview of the findings, their significance to the research field and the greater research community. Next, I provide a list of recommendations in light of the outcomes for the future of Toronto complete street implementation. Following, I propose areas of further research for Queens Quay West specifically, and further research in the complete street paradigm. Finally, I will conclude this paper by reinforcing the importance of these findings as well as providing insights on the topic at hand.

6.1 Key Findings

My key findings have been organized under five main points, which will be examined in greater detail below.

1. The complete street paradigm reflects numerous theoretical perspectives on what makes a successful street and benefits to street users. There was also a consensus among interview subjects of the concepts that create a successful street and public realm. The concept reflects the five principles of why I initially wanted to study complete streets, which include the increased quality of life as well as benefits for the environment, health, safety and economy.
2. There is a gap in the understanding of the long-term effects of complete streets. The concept is still relatively new in North America – according to McCann (2013) the concept was coined in 2003 by American Bikes – and has rapidly spread. Focusing on Toronto, complete streets have only officially become introduced December 2016, when the *Toronto Complete Streets Guidelines* were released. This has made it challenging to critique complete street policy, as the full extent of the implications of specific projects cannot be measured yet.
3. A comprehensive public engagement strategy is a necessity for a complete street project, as the street is being built for those who live, work, visit, and use the area and should reflect their desires.
4. The Queens Quay West engagement strategy was a huge success, with most concerns being adequately addressed and resolved. Extensive effort was made to engage the public, gathering a variety of perspectives, through SAC and representatives hired for the specific purpose of keeping the public informed. This

resulted in efficient and quick communication between the public and the contractors.

5. The *Toronto Complete Street Guidelines* have simplified the complete street creation and implementation process and have promoted the paradigm to individuals capable of influencing implementation, such as municipal workers. Complete street implementation has been considered vague in many instances as a result of the dynamic nature of streets, but the guidelines attempt to classify various street types to provide the foundation for implementation.

6.2 Overview of Literature – A dive into the key findings

A review of the literature on what makes a successful street was undertaken prior to primary research. It became evident through the literature that qualities of a successful street are strongly reflected in the complete street paradigm (Moller, 2010; Toronto, 2017; ITDP, 2011; Litman, 2015; ARUP, 2016; Saelens et al., 2003; Dumbaugh, 2005; New York Department of Transportation, 2013). There was also a consensus among interview subjects that a good street should reflect the needs of all users, while being aesthetically pleasing by the integration of green space and public art. I also believe that complete streets contain many benefits and should reflect a better quality of life by improving the environment, health, economic vitality and safety of the area.

On Queens Quay West, environmental benefits have not been conclusive. However, the revitalization was only completed in summer 2015, and the long-term environmental effects are yet to be studied and evaluated. It is evident that the pedestrian, cycling and transportation volumes have definitely increased following revitalization. A representative of YQNA and Burden and Litman (2011) argue that complete streets also discourage vehicular use by encouraging other modes of transportation. In addition, a

walkable environment heightens physical activity within an area (Saelens et al., 2003), thus resulting in complete streets encouraging higher rates of physical activity triggering a decreased risk for illnesses related to inactivity. Smith et al. (2016) concludes that the revitalized Queens Quay West results in an increased cycling volume on weekends of 888 percent from 2007. The separation of different modes of transportation encourages this higher cycling volume and reduces conflict between transportation modes, thus improving the safety of the area. In addition, the increased cycling and pedestrian volumes are argued by ARUP (2016) and the New York Department of Transportation (2013) to improve economic activity in the area. However, this increase in economic vitality has not been observed in Queens Quay West due to the period of construction and with insufficient time for recovery having passed since completion. The New York Department of Transportation (2013) conducted their economic growth study of various complete street transformations over a three-year period and many other studies are finalized years after revitalization. Overall, I found it challenging to directly identify these benefits of complete streets in Queens Quay West because of the recent project completion date, making it only possible to see the immediate impacts. However, it is clear that complete streets, and Queens Quay West in particular, embody the concepts of a successful street. This recent completion is also a problem, as the economic effects of complete streets are not adequately critiqued in creditable literature.

By conducting an extensive literature review, I have concluded that with complete streets being a relatively new paradigm, most reputable research on the subject is largely positive, with little critique. Complete streets have been argued by a member of YQNA, to be based on European constructs of the street. It is common in Europe to find a vibrant public realm, which has inspired a different mentality on how the streets are used. It is a

challenge to compare Canadian compete streets to those in Europe, as the cultures in many central cities, especially, have historically emphasized different values in balancing the diversity of social uses. It will take a significant amount of time for the overall mentality of the street users to move towards a less car-centric society. I feel there is no adequate measurement for success of the complete street. There are countless components that can contribute towards the success of a street, and many have not been explored yet. This results in a gap in understanding the long-term benefits of complete streets.

Critiques of complete streets are not readily available. Most critiques about complete streets were found from sources lacking creditability, such as blogs and local newspapers, each representing an opinionated view of complete streets. The most comprehensive critique of complete streets was found in Zavestoski and Agyman's book *Incomplete Streets* (2015), where they outlined the potential for complete streets to cause ecological gentrification and to hinder equity of economic classes. The critique reinforced how careful one needs to be when revitalizing a street and fortified the significance of a comprehensive public engagement strategy.

Successful public engagement encourages all members of the public to participate in the process equally and objectively (Campbell & Marshall, 2002). A diversity of voices, representing various stakeholder interests should adequately represent the entirety of the community (Campbell & Marshall, 2002). The creation of the Stakeholder Engagement Committee (SAC) and its transformation into the Construction Liaison Committee (CLC) was imperative to the success of the stakeholder engagement strategy on the street. The committees comprised of, but were not limited to, representatives from various neighbourhood organizations, business improvement areas (BIA), and

condominium owners in the area. The committee was a method used to organize and unite the stakeholders, thus putting them in a position of power. The unionized opinions of the committees carry more voice than individual actors. The committee acted as beacons of communication to the general public representing the interest of various stakeholder groups. This added to the typical engagement strategies of public meetings, as the committees helped shape the street and ensured the public concerns were addressed and ratified. The committee also forced individual members to not only represent their own interests, but the interests of their respective groups, and thus reaching a compromise with the committee at large.

The Chair of the BIA stated that without the BIA's formation, their voice in the revitalization process would have been minimal (with ad hoc businesses each pushing their individual agendas as opposed to what is better for the community). The committees helped address the concerns and benefits for the community as a whole, and not solely the individual. Despite the various engagement tactics comprehensively outlined in Chapter 4, some members of the community still felt the final design did not reflect the entire community's perspective. This reflects Frieden & Morris' (1968) theory that those with greater resources and time are more actively engaged in municipal affairs. The businesses had a disproportionately smaller influence on the outcome of the street, as a result of decreased availability, when compared to the residents. Nonetheless, the Queens Quay West revitalization project successfully incorporates stakeholder feedback in the outcome, resulting in a revitalization project that reflects the needs and desires of the entire community.

A goal of this paper was to uncover if the Queens Quay West revitalization public engagement strategy could be mimicked in the implementation of more complete streets

throughout the city. This serves as a challenge, as each community improvement project and complete street project is unique, and the techniques that were successful in the Queens Quay West revitalization cannot be replicated in all communities. SAC and CLC were imperative to the success of Queens Quay West, representing stakeholder views from the wider community. Yet in other communities, these committees may not have achieved the same level of success if they could not encompass the broader spectrum of the community. The Queens Quay West project was also managed by Waterfront Toronto and on a mammoth scale, and thus, had a large budget toward public engagement. This was shown through their comprehensive engagement strategy and the number of people hired on to act as beacons of communication to the public. Many complete street projects would not have such an extensive budget to include a high level of public engagement. I believe Queens Quay West can act as a model to future waterfront projects and those of a similar scale. However, I do not believe these engagement tactics would be appropriate in every complete street project. As stated numerous times throughout this paper, streets have a dynamic nature and each street must be handled accordingly.

The *Toronto Complete Street Guidelines* have done an exquisite job at promoting complete street policy within the city. I conducted an analysis of the guidelines in Chapter 5 to identify the potential limitations and benefits to complete street implementation. The result of the analysis concluded that the guidelines have simplified the creation and implementation process for complete streets within the city. As complete streets continue to be built and knowledge on the paradigm grows, the guidelines will be refined to better facilitate complete street implementation within the city. This street typology could redefine Toronto by transforming its streets into a more walkable and

enjoyable experience. Moreover, this typology could further discourage automobile use resulting in a completely altered streetscape and environment.

6.3 Recommendations

Below is a list of recommendations in light of the Queens Quay West revitalization process for public engagement in large scale projects and the future implementation of complete streets within Toronto.

6.3.1 Public Engagement Recommendations

- Stakeholders should be informed thoroughly of their rights in municipal planning. Techniques should be implemented into the minimal statutory criteria to further engage stakeholders. Stakeholders should feel they have rights and power to bring about change, and that their voice could be represented in the final product. Extensive participant involvement humanizes a project, increasing the personal investment of the workers. From my experience and observations, this encourages the workers to put more effort into the project.
- The mobilization of community members into organizations (such as but not limited to neighbourhood associations) should be encouraged to allow individuals to be a part of a collective voice. An organization of people is more likely to bring about change than an individual.

6.3.2 Complete Street Recommendations

- The *Toronto Complete Street Guidelines* will become an integral instrument at implementing complete street projects within the city. I recommend that the use of the guidelines be extended to all street projects. They do not need to be followed to the same intensity, but should be used to inspire good street design.

- Everyone has the right to a good public realm. Toronto is lacking a sufficient public realm in many areas throughout the city (Dufferin Street and Eglinton Avenue West, Avenue Road and Wilson, Bathurst Street and Lawrence Avenue West, etc.). Municipal bodies must work together to improve these streetscapes by implementing principles of complete streets.
- Work on Queens Quay West must continue to remedy ongoing issues and to inform users how the street works.
- Municipal workers, particularly community planners and transportation planners, must be trained on how to properly use the guidelines and implement complete streets.
- Complete streets need to be implemented appropriately throughout Toronto, taking a variety of forms, to improve the public realm and the overall health and enjoyment of the street users and the surrounding community.

6.4 Areas for Further Research

As previously stated in the literature, although the concept of a good pedestrian realm has been present in North America for a significant amount of time, it only started to gain momentum when the concept of complete streets was coined in 2003 (McCann, 2013). Due to this paradigm being relatively recent, there is still a vast amount of areas for further research on the subject. The long-term impacts of complete streets should be studied to understand the full impact they have on the surrounding community. This research could bridge the gap in knowledge of critiques and limitations of complete streets.

On Queens Quay West, a major limitation of my study was that the street is only two years old. Since Queens Quay West is the first complete street within the city, many

studies should be done to ensure the success of complete streets in further projects. It is imperative that mistakes are not repeated in further projects, as it could have a tremendous socioeconomic cost. Although my study has examined the short-term impacts of Queens Quay West and the stakeholder involvement in the project, the project is still overwhelming and more areas of research can be explored.

An example of a way to further conduct research is an economic impact study of the area, as according to the Chair of the BIA, the area has not seen a significant difference of economic activity. The street is still recovering from construction. An economic impact study could determine if there is a steady rise in economic activity in the future, as research on complete streets suggests (ARUP, 2016; New York Department of Transportation, 2013). The economic impact study should also work towards isolating the cause of the economic change, as the area's resident population is growing rapidly due to various condominium developments. Overall, there is a strong need for further complete street impact research in Canada, especially the long-term effects due to the infancy of the concept in Canadian cities.

In addition, research on the demographics of Queens Quay West is out-dated. The most extensive source for the demographics for the area is Census Canada, which at the time of this paper had not released most of their 2016 census data. In addition to the 2011 census being less accurate due to the optional long-form census, the revitalization was not completed until 2015, allowing the impacts of the revitalization to not be seen in this study except by observation and interviews. Overall, research in complete streets struggles from the recent emergence of the concept, thus resulting in a lack of long-term data to determine the success of the paradigm.

6.5 Concluding Remarks

After becoming immersed in research on complete streets, stakeholder engagement, and the Queens Quay West revitalization, I feel inspired to participate in further examination to address gaps and refine understandings of these areas. This research allowed me to expand my understanding of not only complete streets and effective stakeholder engagement, but also how to effectively plan within Toronto. By researching complete streets, I enhanced my own understanding of the subject and provided the tools to advance implementation of complete street plans within our community. The Queens Quay West revitalization is an inspiration and a model for stakeholder engagement strategies. It provides inspiration for more stakeholders to mobilize and take action within the planning community, as it is possible for their voices to be heard. I undertook an investigation of the complete street paradigm, particularly focusing on Queens Quay West. The goal was to identify if the public's expectations and desires of the revitalization were reflected in the outcome, testing theories of public engagement and successful public realms. My research illustrates that it is unsustainable to keep building streets with an auto-centric mindset, and giving active transportation options by means of complete streets to communities could redefine how we interact with our city. Queens Quay West exemplifies how we should be designing streets with people and for people, in order to achieve the most positive and transformative results.

BIBLIOGRAPHY

Anderson, G., & Searfoss, L. (2015). *Safer Streets, Stronger Economies: Complete Streets project outcomes from across the country*. Retrieved from http://www.smartgrowthamerica.org/documents/safer-streets-stronger-economies.pdf

ARUP. (2016). *Cities Alive: Towards a Walking World*. Retrieved from http://publications.arup.com/publications/c/cities_alive_towards_a_walking_world

Burden, D., & Litman, T. (2011). America Needs Complete Streets. *ITE Journal,* 36-43.

Campbell, H., & Marshall, R. (2002). Utilitarianism's Bad Breath? A Re-Evaluation of the Public Interest Justification for Planning. *Planning Theory, 1*(2), 163-187. doi:10.1177/147309520200100205

Chester, M., Horvath, A., UC Berkeley Center for Future Urban Transport., & University of California, Berkeley. (2009). *Life-Cycle energy and emissions inventories for motorcycles, diesel automobiles, school buses, electric buses, Chicago rail, and New York City rail.* Berkeley, Calif: Institute of Transportation Studies, University of California, Berkeley.

Clean Air Partnership. (2012). *Complete Streets Gap Analysis: Opportunities and Barriers in Ontario*. Retrieved from http://www.tcat.ca/wp-content/uploads/2014/10/Complete-Streets-Gap-Analysis-Opportunities-and-Barriers-in-Ontario.pdf

Çelik, Z., Favro, D. G., & Ingersoll, R. (1996). *Streets: critical perspectives on public space*. Berkeley: University of California Press.

Dumbaugh, E. (2005). Safe Streets, Livable Streets. *Journal of the American Planning Association*, 71(3), 283-300.

Frieden, B. J., & Morris, R. (1968). *Urban Planning and Social Policy*. New York: Basic Books.

Friedmann, J. (1987). *Planning in the public domain: From knowledge to action*. Princeton, NJ: Princeton University Press.

Haffner, J. (2015). The dangers of eco-gentrification: What's the best way to make a city greener? *The Guardian*. Retrieved from http://www.theguardian.com/cities/2015/may/06/dangers-ecogentrification-best-way-make-city-greener

Hamilton-Baillie, B. (2008). Shared Space: Reconciling People, Places and Traffic. *Built Environment*, 34(2), 161-181.

IDEA, & GOBike Buffalo. (2014). *Evaluating Complete Street Initiatives* (Rep.). Retrieved from http://gobikebuffalo.org/wp-content/uploads/2014/06/Evaluating_ImpactsofCompleteStreets.pdf

ITDP. (2011). *Better streets, better cities: A guide to street design in urban India*. Retrieved from www.itdp.org/betterstreets

Janssen , I. (2012). Health Care Costs of Physical Inactivity in Canadian Adults. *Appl. Physiol. Nutr. Metab., 37*, 803-806. doi:10.1139/H2012-061

Kipfer, S. (2015). Neocolonial Urbanism? La Rénovation Urbaine Paris. *Antipode, 48*(3), 603-625. doi:10.1111/anti.12193

Lane, M. B. (2005). Public Participation in Planning: an intellectual history. *Australian Geographer, 36*(3), 283-299. doi:10.1080/00049180500325694

Litman, T. (2013). *Evaluating Complete Streets: The Value of Designing Roads for Diverse Modes, Users and Activities.* Victoria, BC: Victoria Transport Policy Institute.

Litman, T. (2015). *Evaluating Complete Streets: The Value of Designing Roads For Diverse Modes, Users and Activities*. Victoria, BC: Victoria Transport Policy Institute.

LURA Consulting. (2009). *Appendix A – Queens Quay EA Consultation Report Appendices*. Retrieved from http://www.waterfrontoronto.ca/nbe/wcm/connect/waterfront/b53a3283-a5e5-4d06-b1c0-173927cc57b3/4b44d2cb56c83.pdf?MOD=AJPERES

McCann, B. A., & Rynne, S. (2010). *Complete Streets: Best Policy and Implementation Practices*. Chicago: American Planning Association.

McCann, B. (2013). *Completing Our Streets: The Transition to Safe and Inclusive Transportation Networks.* Washington, DC: Island Press.

Moller, H. (2010). *Complete Streets for Toronto: Promoting Health Through Active Transportation* (Rep.). Toronto, ON: University of Toronto.

New York City Department of Transportation, (2013). *The Economic Benefits of Sustainainable Streets*. Retrieved from http://www.nyc.gov/html/dot/downloads/pdf/dot-economic-benefits-of-sustainable-streets.pdf

Ontario, Ministry of Municipal Affairs and Housing. (2014). *Provincial Policy Statement*. Retrieved http://www.mah.gov.on.ca/AssetFactory.aspx?did=10463

Parker, B. (2002). *The Theory of Citizen Involvement*. Retrieved from http://pages.uoregon.edu/rgp/PPPM613/class10theory.htm

Public Realm, Transportation Services, & City Planning. (2009). *Approach to Developing Complete Streets Guidelines*. Retrieved https://www1.toronto.ca/City%20Of%20Toronto/Policy,%20Planning,%20Finance%20&%20Administration/Public%20Consultation%20Unit/Studies/Transportation/Complete%20Streets/Files/14-04-09%20Complete%20Streets%20Overview.pdf

Saelens, B., Sallis, J., Frank, L., (2003). Environmental Correlates of Walking and Cycling. *Environment and Physical Activity*. 25(2), 80-91.

Schlossberg, M., Rowell, J., Amos, D., & Sanford, K. (2015). *Rethinking streets: An evidence-based guide to 25 complete street transformations*. In Transportation Research Board 94th Annual Meeting (No. 15-0940).

Smith Lea, N., Mitra, R., Hess, P., Quigley, B. & Loewen, N. (2016). *Complete Street Transformations in the Greater Golden Horseshoe Region.* Toronto: Clean Air Partnership.

Toronto, City of. (2001). *Toronto Bike Plan*. Retrieved from http://www1.toronto.ca/City%20Of%20Toronto/Transportation%20Services/Cycling/Files/pdf/B/bike_plan_full.pdf

Toronto, City of. (2014). City of Toronto Ward Profiles: Ward 20- Trinity-Spadina. Retrieved from http://www1.toronto.ca/City%20Of%20Toronto/City%20Planning/Wards/Files/pdf/W/Ward%2020%20NHS%20Profile%202011.pdf

Toronto, City of. (2015). *Toronto Official Plan*. Retrieved from http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=03eda07443f36410VgnVCM10000071d60f89RCRD

Toronto, City of (2016). Toronto 10-Year Cycling Plan. Retrieved from http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=981f88b7b32e9410VgnVCM10000071d60f89RCRD

Toronto, City of. (2017). *Toronto Complete Streets Guidelines* (1st ed., Vol. 1, pp. 1-169, Rep.). Toronto, ON: City of Toronto.

Transportation Services. (2017). *Vision Zero: Toronto's Road Safety Plan*. Retrieved https://www1.toronto.ca/City%20Of%20Toronto/Transportation%20Services/VisionZero/Links/2017%20Vision%20Zero%20Road%20Safety%20Plan.pdf

TTC. (2017). TTC Systems Map. Retrieved from kttp://www.ttc.ca/PDF/Maps/TTC_SystemMap.pdf

Waterfront Toronto. (2014). *Queens Quay Construction Questions and Answers*. Retrieved from http://www.waterfrontoronto.ca/nbe/wcm/connect/waterfront/7424b2e0-fbba-4d5d-86f8f2dbb4c6f842/qq___faq_oct_2014_external_1.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=7424b2e0-fbba-4d5d-86f8-f2dbb4c6f842

Waterfront Toronto. (2016, December 12). *2017/18 Corperate Plan*. Retrieved from http://waterfrontoronto.ca/nbe/wcm/connect/waterfront/84806697-100d-4a4e-aaccfb875bfac798/corporate_report_2017_18_final_website_postingcompressed_1.pdf?MOD=AJPERES

Waterfront Toronto. (2017). Queens Quay (West). Retrieved February, 2017, from http://www.waterfrontoronto.ca/nbe/portal/waterfront/Home/waterfronthome/projects/queens quay west/queens quay west

Wheeler, S. (2008). Planning for Sustainability. *Contemporary Concerns of Planning*. 111-117. Retrieved from http://ldachair.ucdavis.edu/LDA-faculty-docs/SW/Local%20 Planning%20LP%20111-117%20Wheeler.pdf

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough'. *Landscape and Urban Planning, 125*, 234-244.

Zavestoski, S., & Agyeman, J. (Eds.) (2015). *Incomplete Streets: Processes, Practices and Possibilities*. New York City, NY: Routledge.

APPENDIX A: INTERVIEW QUESTIONS

A.0 Introduction

I am a student completing my Masters of Planning at York University.
My research seeks to understand planning of complete streets (particularly Queens Quay West) by analyzing the stakeholders' influence on the implementation process and considering whether complete streets deliver on the promises to their users.

I was wondering if you would be able to meet up for a quick interview (about 30 minutes) to discuss this for my major paper at a date and time convenient for you.
I have attached my ethics approval form to this email for you to look over, which states my thesis in greater detail and details about confidentiality/benefits etc. I would really appreciate any insight you have into the project. Thank you.

A.1 Interview Questions

Each stakeholder group received a slightly different set of interview questions reflective of their expertise.

A.1.1 York Quay Neighbourhoods Association (YQNA) Questions

1. What was your role in the Queens Quay West redevelopment project?

2. When did you become involved in the process?

3. What did you like/dislike about the public engagement process? Is there anything you think was done exceptionally well or you feel could have been improved upon?

4. Do you feel the public engagement process directly influenced the outcome?

5. What do you feel makes a good street?

6. What do you think of the finished product? Do you think there is anything to be improved upon? What surprised you?

7. How has the new Queens Quay affected how you and others use the street?

8. How do you feel the walkability may affect the future of the area?

9. Is there anything else you want to tell me?

A.1.2 Waterfront Toronto Questions

1. What was your role in the Queens Quay West redevelopment project?

2. When did you become involved in the process?

3. How do you feel about the new Toronto complete street guidelines? Do you think it will benefit or hinder the process of creating complete streets?

4. From your perspective, what do you feel makes a good street?

5. What challenges do you foresee with further implementation of complete streets throughout the city? Do you have any suggestions to help alleviate these tensions?

6. How did the municipal government, citizens and private developers collaborate in the process of creating Queens Quay West?

7. How do you feel about the public engagement process for the development of Queens Quay West? What was done well? What needed improvement?

8. What do you think of the finished product? Do you think there is anything to be improved upon? What surprised you?

9. Why did the City of Toronto design complete street guidelines as opposed to policy? Do you ever think a policy will be implemented?

10. What do you think can be improved upon in the complete street guidelines?

11. Is there anything else you want to tell me?

A.1.3 Waterfront BIA Questions

1. What was your role in the Queens Quay West redevelopment project?

2. When did you become involved in the process?

3. What did you like/dislike about the public engagement process? Is there anything you think was done exceptionally well or you feel could have been improved upon? Did you feel like you and the BIA's concerns were addressed in this process?

4. How was the construction process? How did it impact the businesses in the area and what was done to ratify that?

5. Do you feel the public engagement process directly influenced the outcome?

6. What do you feel makes a good street?

7. What do you think of the finished product? How has it impacted the BIA?
8. Do you think there is anything to be improved upon? What surprised you?
9. How has the new Queens Quay affected how you and others use the street?
10. How do you feel the walkability may affect the future of the area?
11. Is there anything else you want to tell me?