Planning Healthy Cities: Privately-owned publicly-accessible spaces in Toronto

By Mallory Nievas

Supervised by Dr. P.E. Perkins

A Major Project Report 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

July 11th, 2019

Abstract

Privately-owned publicly-accessible spaces (POPS) are a common feature of the urban landscape in major North American cities, including Toronto, Ontario. These spaces typically accompany urban developments that have requested modifications in planning regulations and represent a type of private-public partnership that is typical of neoliberal city planning policies. There have been limited studies on these spaces and how they may or may not contribute to urban health and wellbeing. There is a significant body of work suggesting that the built environment, especially of urban spaces, is a significant determinant of health and wellbeing of urban residents. Informed by the literature on green public space and health, I developed a framework to evaluate a random selection of 25 Toronto POPS. The three areas of POPS I chose to evaluate are: the level of green space and natural features, the use/functionality, and the accessibility of the space. I also explore what typologies of POPS are most common amongst the 25 spaces I examine. My findings suggest that Toronto POPS, at this time, do not meaningfully support the health and wellbeing of urban populations, as their level of greenery, use/functionality and accessibility is inconsistent and often of poor quality. However, in spite of these findings, there is abundant potential for POPS to become more conducive to urban health and wellbeing goals if the POPS Urban Design Guideline is sufficiently enforced and clarity is provided to whether or not POPS count as a "community benefit" under Section 37 negotiations. It is also recommended that the City of Toronto update their website on POPS, as the information is outdated, incomplete and inconsistent. Improving access to information about where POPS are located in the city may help these spaces be better utilized by members of the public.

Foreword

This major research project is the culmination of a two-year long process within the Faculty of Environmental Studies' Masters program in Planning. My Plan of Study comprises three areas which are represented within the following research project: green space, neoliberalism and community health planning. As the MES program is transdisciplinary in nature, I have approached my MRP in a similar nature. I challenged myself to approach this work in a way that accounts for the multidimensional role of Toronto's privately-owned publicly-accessible spaces in the urban landscape. All of the courses I took before embarking on my Major Research Project have informed my approach and my interest in the subject matter at hand. Furthermore, this research project is unique and necessary as it builds upon previous research on the Section 37 policy as well as the policies that make privately-owned publicly-accessible space possible. In this way, this research contributes important findings within the urban planning discourse and within the MES program, fulfilling the requirement of the MES Degree in Planning.

Acknowledgements

I wish to acknowledge the support of my supervisor Professor Ellie Perkins. Professor Perkins offered such clear critiques and suggestions while also providing consistent support and encouragement throughout this process. It is deeply appreciated. It was a joy working with her throughout the past six months.

I also wish to acknowledge the support of my friends and family. A huge thank you to my friend and one of the smartest people I know, Daniel Seleanu. Thanks also to my mother Lori Switzer for the encouragement all along the way. Thank you to my colleague Kim Outten for giving me the flexibility and encouragement to pursue my Masters degree. Lastly, a special thank you to my husband Carlos Nievas and stepson Ethan. I couldn't have juggled life if it was not for my husband cooking, running errands, picking me up from campus late at night and cheering me on along the way.

Table of Contents

Abstract	i
Foreword	ii
Acknowledgements	iii
Table of figures	v
List of Tables	vi
Introduction	
Literature Review	5
Public Space	5
Green Space	
Green Space and Health	10
Evaluating POPS	13
Level of Green	13
Use/Function	15
Accessibility	18
Policy Overview	21
Section 37	
POPS Urban Design Guidelines	24
Parkland Dedication	
Methodology	
Criteria for Selecting POPS	34
POPS Assessment	35
Methods to Evaluate Level of Greenery and Natural Features	36
Methods to Evaluate Types of Uses/Functionality	
Methods of Evaluate Level of Accessibility	
Findings	
Level of Greenery	42
Use/Functionality	45
Accessibility	
Missing POPS	
Misrepresented POPS	57
Discussion	
Conclusion of Findings	
Recommendations	71
Indicators of Spaces that Support Health and Wellbeing	
Section 37	
POPS Urban Design Guidelines	
Conclusion	75
Ribliography	76

Table of figures

Figure 1: City of Toronto's POPS logo (City of Toronto, 2014a)	8
Figure 2: 1910 Yonge Street POPS – April 22 Showing broken outdoor floor tiles	54
Figure 3: 1910 Yonge Street POPS – April 22 Showing garbage in planters	55
Figure 4: 403 Keele Street POPS – April 7 Showing long staircase from POPS to Keele Street	55
Figure 5: Rendering of 5 Kings Club by First Capital and CAP REIT, image provided to Urban Toronto,	
courtesy of Tact Architecture. http://urbantoronto.ca/database/projects/kings-club-was-king-highlin	e 57
Figure 6: 8 Eglinton Avenue East POPS Rendering. (City of Toronto, 2014a)	58
Figure 7: 8 Eglinton Avenue East POPS – April 22 Showing placement of trees and lack of seating	58
Figure 8: 8 Eglinton Avenue East POPS – April 22 Showing placement of trees and lack of seating	59
Figure 9: 8 Eglinton Avenue East POPS- April 22 Showing uneven surface tiles	59
Figure 10: 8 Eglinton Avenue East POPS- April 22 Showing uneven surface tiles	59
Figure 11: Rendering of 406 Adelaide Street East POPS	60
Figure 12: 406 Adelaide Street East POPS – April 4 Showing disconnection from street	60
Figure 13: 406 Adelaide Street East POPS – April 4 Showing surveillance camera near entrance	60
Figure 14: 5170 Yonge Street POPS – April 22	61
Figure 15: 5170 Yonge Street POPS – April 22	61
Figure 16: Former 55 Avenue Road POPS (City of Toronto, 2014a)	62
Figure 17: One of current POPS spaces at 55 Avenue Road – April 10 Showing indoor/outdoor POPS	
space	62
Figure 17: One of current POPS spaces at 55 Avenue Road – April 10 Showing indoor/outdoor POPS	
space	62
Figure 17: One of current POPS spaces at 55 Avenue Road – April 10 Showing indoor/outdoor POPS	
space	62
Figure 17: One of current POPS spaces at 55 Avenue Road – April 10 Showing indoor/outdoor POPS	
space	62
Figure 18: Yorkville/Scollard Streets POPS – April 1 Showing 'private' signs	66
Figure 19: Yorkville/Scollard Streets POPS – April 1 Showing 'private' signs	66
Figure 20: Yorkville/Scollard Streets POPS – April 1 Showing sign indicating surveillance	67
Figure 21: Yorkville/Scollard Streets POPS – April 1 Showing 'private' signs	67
Figure 22: 403 Keele Street, showing large wall limiting view of a POPS	69

List of Tables

Table 1: Level of Greenery	42
Table 2: Level of Use/Functionality	
Table 3: Level of Accessibility	51
Table 4: Urban Form and Developer of POPS	64

Introduction

Cities across the globe are unique settings for the interaction between humans and their environments; the natural and the built form. The forces that shape these interactions are varied and multiple, but one of the most intrinsic and powerful is the economic system that cities exist within. Economic systems such as capitalism can determine who holds power; who controls land use, distribution of goods and services and capital. Within a capitalist system, and more specifically a neoliberal framework and philosophy, the social determinants of health are shaped. These determinants include income, education, housing and access to green spaces, among others. Neoliberalism can be described as a set of beliefs and practices including privatization, capital accumulation, deregulation, and "retreat of government oversight in favour of market governance...restoring class power to elites whose shares of global economic output had dwindled during the mid-twentieth century due to rise of the Keynesian political-economics in the USA and Europe (Harvey, 2005, 7)" (Keul, 2015, pp.51). Neoliberal economic policies have permeated planning practices globally, which have implications for human health and wellbeing via the social determinants of health and promoting "individual responsibility and ownership of health" (Carter, 2015, pp.374).

I have selected privately-owned, publicly-accessible spaces (POPS) in Toronto to examine because they are a unique outcome of neoliberal city building policies and exemplify the "blurring" of private and public space. Furthermore, in cities such as Toronto that are rapidly developing, where even the smallest parcels of land are developed into major structures, the availability of public space and specifically public green space is under threat. Within media and public dialogues, the term "liveable" cities is discussed as a lofty descriptor of cities that are less congested, have access to parks and green space and are walkable (Kashef, 2016). While the term "livable city" is difficult to define and quantify, it speaks to a basic desire for a city that balances the needs of business, property owners and citizens and mitigates the pressures of rampant urban development, goals that are compatible with healthy urban environments that promote experiences that support residents' mental and physical health. The Australian Major Cities Unit defines liveability as: "...socially inclusive, affordable, accessible, healthy, safe, and resilient to the impacts of climate change. They have attractive built and natural environments. Liveable cities provide choice and opportunity for people to live their lives and raise their families to their fullest potential (2010)" (Badland et al., 2014, pp.65). In this way, the concept of liveable cities overlap significantly with positive social determinants of health (Villanueva et al., 2015).

Human health and wellbeing are critical and fundamental outcome of a host of determinants. Human health is important because without a minimum degree of positive health the ability to participate fully within private and public spheres of life is compromised. It can be difficult for people with poor mental and physical health to be employed, to parent, to participate in their communities and to have personal satisfaction and contentment. Poor health can cause premature death, high rates of disease, and accidents which are all costs to society in terms of financial and non-financial resources. Within the complexities of public health studies, "...increasing attention on 'social determinants of health' (Masuda et al., 2012), systematic research on 'place effects'...has begun to shed light on socio-environmental causes of obesity and other chronic health problems (Cummins et al., 2007)" (Carter, 2015, pp.374). In fact, as far back as 1855, it was recognised that urban form impacts health behaviours and outcomes (Snow, 1855 as cited in Badland et al., 2014).

The connection between health and planning has a long history, particularly within housing and sanitation policy and infrastructure (Sloane, 2006). The way that planning contributed to the public health agenda was determined by the major threats to public health, and in the 19th and early 20th centuries significant concern was communicable diseases such as tuberculosis due to crowding, poor sanitation and poverty (Carpenter, 2013). "Despite the efforts of city governments to cope with the rapid changes, streets, sidewalks, and homes were increasingly congested and disorderly" (Sloane, 2006, pp. 11). Planning for healthy communities was typically seen in housing and green space planning to promote less crowding, improved sanitation and park provisioning. Planning acts and by-laws still to this day reflect these early hygiene and waste management practices that were found to be successful in combating proliferation of disease (Sloane, 2006), in fact one U.S Planner, Rosenauer (1944) stated health "is and must be the background of planning" as cited in Sloane (2006, pp.12). More recently, there have been calls for the disciplines of urban planning and public health to reconnect to meet the challenges of 21st century cities (Badland et al., 2014, pp.70).

However, in the 21st century the health issues that are of primary concern are diseases associated with lifestyle and environment (Sloane, 2006). Physical health issues such as obesity, cardiovascular disease, respiratory ailments and mental health issues such as anxiety and depression are health concerns that dominate academic research and public discourse. While these health issues have numerous contributors such as genetics, diet, etc...there are some contributors such as stress, lack of physical

activity, low rate of social interaction, lack of access to green spaces that are associated with living in dense urban areas and access to open public space (Villaneuva et al., 2015). Our physical environment, such as green public space, has the potential to impact these factors for better or for worse (Villaneuva et al., 2015). Similarly, Völker et al. use the concept of therapeutic landscapes as a determinant of human health and well-being (2016). However, due to the multidimensional nature of urban environments it is a challenge to pin-point and isolate the factors that can influence multi-causal health concerns but researchers and academics have successfully made linkages between green space and health, through multiple pathways and methodologies. This connection lays the foundation of my research project.

The other foundation, to go back to my initial assertion, is that urban spaces are shaped by the economic system, in this case capitalism and more specifically the ideology of neoliberalism. If we can agree that neoliberal economic agendas and accompanying philosophies are a major determining factor for how power, and thus land and resources are distributed in society, it follows that neoliberalism shapes the conditions for human health by impacting the social determinants of health such as income, education, and green space provisioning, for example. This research project examines POPS in the City of Toronto, which are spaces that are owned and managed by a private firm but are open to public use. These spaces are typically created by negotiations between the municipality (in this case, the City of Toronto) and the real-estate developers. In exchange for creating a POPS, the developer is then allowed to build higher density and/or taller structures. POPS in Toronto vary dramatically in their appearances despite there being a Design Guideline for POPS, which I discuss in further detail within the policy review.

As POPS are more and more ubiquitous within Toronto, they permeate the urban fabric in a way that residents and visitors may not be aware of and in a very dense urban center, they may provide the only source of public greenery for very large area and population. POPS are considered to be a contribution to the public in return for exceptions on development limits. In fact, in Oslo a large exclusive POPS was presented as a "gift to the city" (Bjerkeset and Aspen, 2018, pp.119). If POPS are meant to be public and for the public good, they should be evaluated on the basis of whether they promote human health and wellbeing and also whether they are spaces that are even capable of putting the public interest first, considering they are designed and owned by private developers whose goals are to maximize profits, not necessarily to support public well-being. Furthermore, while a Design Guideline for Toronto POPS

exists, there is no threshold that the developer or landscape architect must meet. Also, a "recent audit of New York City's bonus spaces indicates that only a little more than half (55%) of the 333 bonus spaces inspected were in compliance with the city's requirements for such spaces (Stringer 2017)" (Huang and Franck, 2018, pp.501). Because POPS quality has been a concern in other cities, it is justified to investigate the quality of Toronto POPS by how they contribute to overall city liveability which includes some of the most important social determinants of health.

This research project is an exploratory endeavour to evaluate Toronto POPS, specifically: do/how Toronto POPS contribute to human health and well-being? This project is highly interdisciplinary, requiring the linking of several fields such as public health, environmental planning, landscape planning and sociology. In the next section, I review the literature on POPS and explain the framework of evaluation that I use to evaluate POPS as well as the significance of public space in relation to health and wellbeing. Following the literature review, a Policy Review surveys the various policies that facilitate POPS' creation in Toronto. Next comes an explanation of my Methodology, which describes the evaluative approach and framework for detailed field observations. Following field observations, the last section discusses my Findings and subsequent policy recommendations and implications, as well as directions for future research.

Literature Review

Public Space

To begin, it is important to recognize how POPS fit into the conversation regarding public space, as POPS are a specific subtype of public space; therefore, some of the literature about public space can inform an approach to evaluating POPS. Within the literature there are multiple ways to contextualize, define and evaluate public space from disciplines such as sociology, geography, political science, and more (Bodnar, 2015). Bodnar's essay on public space summarizes some of the historical approaches, including the surge in literature on public space amid the declaration that public space is dead, due to privatization (Bodnar, 2015). While POPS are one type of public space, they represent a point in the evolution of public space marking a period of privatization that makes POPS a phenomenon worthy of study. It is important to point out as well that green spaces such as parks, parkettes, courtyards, cemeteries and more are some of the most common and historic forms of public space within the modern city.

Central to a discussion regarding public space is the distinction between private and public, and the divergent conceptions of the terms. When discussing urban forms such as POPS it is common to refer to ownership simply as private, and the access as public yet this leaves out a nuanced understanding of the terms. For example, Wang explains how during the Occupy Wall Street movement some critics said that the usage of a park for protest amounted to a privatization by the protesters, limiting the general public's daily use while some stated that the occupation made it real public space because it presented conflict among opposing groups (Wang, 2018, pp.162). Wang discusses how 'public' and 'private' are increasingly blurred, and points to the work by Kilian (1998) who identifies two main historical approaches to publicness, one being by Jane Jacobs (1960) and William Whyte (1980) "who see public space as a site for personal 'contact'...[and] the other approach views public space as a site for social 'representation,' and is less concerned with contact..." (Wang, 2018, pp.167-168). Iveson (2007), though, says, that a 'public' place is constituted by different dimensions, and this complexity 'ought to be at the heart of investigations into the spatiality of publicness'" (Iveson as cited in Wang, 2018, pp. 168). Keul investigates publicness in publicly-owned beaches, saying that 'public' spaces can provide a guise of openness, giving the impression that state oversight allows for many uses, contrary to rigid rights to exclusion believed to occur in privately owned spaces (2015). In a similar but opposite example, Huang

and Frank (2018) describe the unexpected high degree of inclusivity regarding usage and users within some New York City POPS. They found that homeless people were often welcomed into the POPS, waving to security guards when they enter though they admit that this level of inclusivity is largely dependent upon the management style of the space, rather than the inherent qualities of POPS (Huang and Frank, 2018). However, these examples further illustrate the nuanced and inaccurate assumptions inherent in discussions of publicness and privateness and that it can be, as Voyce (2006) says, "increasingly difficult to distinguish between public and private space" (as cited in Francis et al., 2012, pp.402).

We see various ways of approaching public space, from authors who discuss public space broadly and those that focus on POPS and other similar types of private spaces. Several authors concern themselves with aspects such as management, ownership, usage, aesthetics and in some cases green space. Bjerkeset and Aspen evaluate a Nordic waterfront privately-owned public space from the perspective of "tight" or "loose" spaces (Bjerkeset and Aspen, 2018). They analyze the management, security, usage and aesthetic trends of the space to determine that the space exemplifies a "tight" space, that is, one that is inconsistent with unpredictable usage and low in diversity of visitors (Bjerkeset and Aspen, 2015). This idea of "loose" versus "tight" of course belongs on a continuum as do many other descriptors of public space, and it is relevant to my focus on Toronto POPS because it contributes a lens from which to think of how flexible a space is for multiple uses and user groups, speaking to the degree of inclusivity and accessibility a space has. Similarly, Németh and Schmidt introduce a way to model and measure publicness, focusing on use, behaviour and access concluding that privateness and publicness are either ends of a complex continuum (2011).

The Nordic case is also interesting because POPS are still relatively uncommon in Scandinavian countries, but spaces like this, inspired from US, UK and I would argue Canadian examples, are increasingly common (Bjerkeset and Aspen, 2015). Bjerkeset and Aspen describe some important points of consideration such as the assertion that public spaces controlled by private firms can enhance economic returns on property investment, speaking to the similar point made by Noble (2015), referencing Jerold Kayden's thorough examination of New York City POPS. He shows that sometimes POPS developers enclose and decorate POPS arcades, so they become elegant lobbies, expanding their claim over public space. While it is common within the literature to assert that POPS is a privatization of public space, we also see that through POPS publicness is also commodified, as Wang says: "The sense

of 'public' thus becomes a commodity that not only can be directly consumed but also can be used to promote consumption" (2018, pp.167). For example, in Toronto, a restaurant that was a tenant of a developer had placed a large patio on an outdoor courtyard that they did not know was a POPS. This creates a tension where the POPS owners may have been complicit with the patio placement since it satisfies their tenant, yet it goes against the agreement with the City to keep the space public. In this situation the publicness of POPS was taken advantage of by a private business owner, yet that "publicness" now was not able to be controlled or preserved in a traditional method by the municipality, in the form of issuing tickets or fines for taking over public space; the City then must hold the POPS owner accountable for not holding up their agreement (Vendeville, 2016).

It is also worth considering whether POPS are distinct from what Zhang calls mass private property (MPP). MPPs are similar to POPS in that they are privately- owned and publicly accessible; however, their distinctive feature is that they are spaces of consumption and retail. They are more "tight" spaces in terms of use, such as a shopping mall or an amusement park. The distinction between POPS and MPPs is relatively clear since purchasing goods and services is not typically part of POPS. However, can we say that POPS are truly not consumerist in their nature? As will be discussed further in the policy analysis, POPS are created by the developer in exchange for being allowed larger height/density metrics on their development. In this way, POPS are a tool for economic activity, namely increased land rents by the beneficiary, the developer and one could argue, the future owners of units within the development. In fact, urban planner Gil Meslin says, "'What is being presented as POPS are the types of spaces that would be included in any property as an amenity and selling point to existing and future tenants'" (Sharma, 2017).

While this is not an exhaustive literature review on public space, since public space is able to be examined through many different lenses, it is a brief summary of some of the considerations that should be applied to an evaluative project on POPS.

Green Space

Just as I have briefly looked at POPS within the discourse on public space from a health perspective, it is also important to understand how POPS fit into a discussion on green space. Of course when discussing green space we can be discussing any number of places such as parks, forests, private or public gardens, and more. However, because of the relatively small size of POPS, as compared to large parks or forests, I

am particularly interested in the literature that concerns itself with smaller urban parks, parkettes and street trees and vegetation, as well as general green space exposure. Within public discourse, POPS have been identified as a type of urban green space, to varying degrees. Noble explains the Toronto case, "The policy, picked up from New York City three years ago, is intended to create a network of plazas, pathways and other open spaces that can augment the dearth of conventional parks in an increasingly dense downtown" (2015). In fact, the City of Toronto-mandated symbol to publicly identify POPS is a tree (see Figure 1), clearly communicating that the idea of POPS is that they provide elements of



Figure 1: City of Toronto's POPS logo (City of Toronto, 2014a)

"nature."

The City of Toronto's urban design manager, James Parakh said in 2017, "They augment our Parks system by adding much needed additional green space in our urban areas...The way they are designed is reviewed by the planning department at the time of site plan application. They are often designed with added greenery and outdoor seating to be used by the general public" (Sharma, 2017). So while POPS are not large, wild green spaces, they are urban green spaces that can and should provide the small, important sources of greenery among dense, grey infrastructure.

While a large amount of literature has been devoted to green space and park distribution, this project is not concerned with examining POPS placement, but rather POPS quality. POPS placement clearly follows a loose pattern because POPS creation accompanies real estate and infrastructure development. Therefore, it does not make sense to advocate for more evenly distributed POPS creation for two reasons. Firstly, because there have been limited evaluations of POPS, it cannot be declared that they are a public good worthy of further proliferation; and secondly, because their creation is ultimately not decided by public decision makers alone, but by private negotiations between the municipality and the private developer, their distribution is not a matter of public policy in relation to green space needs. However, POPS can fit into a conversation regarding general green space distribution, access or quantifiable measures of nature such as tree canopy cover (TCC) within the City of Toronto.

Furthermore, it is important to understand how the settings for POPS are different from other types of urban landscapes. A quick look at the City of Toronto's POPS map is sufficient to show a clear pattern of placement. POPS are mostly found within the dense downtown core and throughout the Yonge Street corridor, where high density commercial and residential developments are rampant, typical of most large cities. "As Toronto grows, adding tens of thousands of newcomers every year, more pressure is being placed on the city's public spaces – especially its parks, which are becoming the de facto backyard for residents living in densely populated neighbourhoods where private outdoor sanctuaries are rare" (Kwan, 2013). Cities, in general, are becoming denser, with the UN Population Fund (2007) stating that by 2050, 70% of the global population will live in cities (Badland et al., 2014). Within these urban environments, parks and green space are the most widely available forms of "nature" and are often provided and maintained for public benefit (Wood et al., 2017).

Many of the studies on green space, though, do not adequately describe the surrounding setting that said green space is found within. In many cases, whether green space studies are examining proximity or quality, it is not always specified what sort of urban environment is the setting: urban, suburban, exurban or rural. Furthermore, the type of dominant housing type within an area could be a factor in how green spaces are used or perceived. It is important to consider this point, as small parkettes or other small-scale green spaces could serve different purposes, for example, within low-density suburban areas versus high-density urban areas. Fleischer and Tsur (2003) say "Different enjoyments can be obtained from different types of green spaces" (as cited in Zhou and Rana 2012, pp.175). Small green spaces such as POPS are important to evaluate since cities are growing increasingly dense and POPS are

a mode of public green space provisioning; thus, small urban pockets of green like POPS may represent the only available contact with green space for residents, workers and visitors.

Green Space and Health

There is a significant body of literature that demonstrates that contact with nature can lead to measurable psychological and physiological health benefits, as well as numerous other positive effects (Sandifer, 2015). Villanueva et al. (2012) cite several mechanisms by which green space contributes to health, such as physical activity (Giles-Corti et al., 2005) and fostering neighbourhood cohesion (Kaźmierczak, 2013; Peters, Eelands, and Buijs, 2010) as well as positively impacting chronic health conditions such as obesity (Lachowycz and Jones, 2011), cardiovascular disease (Pereira et al., 2012), diabetes (Maas et al., 2009), respiratory health (Maas et al., 2009), and mental health (Francis et al., 2012) (as cited in Villaneuva et al., 2012).

Diverse linkages between green space and health have been made, referencing several pathways, such as physical activity and mental relaxation from direct user experience (Villanueva, 2015) but also through ecosystem services such as air pollution purification, microclimate amelioration and rainwater containment as shown by Chen and Kim (2008), cited by Zhou and Rana (2012). Zhou and Rana point out that "physical benefits can be derived through frequent contacts with green environments (Hill, 2002) [and]...preferable green space affords restorative experiences and emotional relief (Korpela and Hartig, 1996)" (as cited in Zhou and Rana, 2012, pp.175-176). Wood et al. list several ways in which public green spaces are linked to mental health, such as: "restorative benefits of contact with nature (Maller et al., 2006), stress reduction (Ward Thompson et al., 2012) and the role of parks as a setting that facilitates social interaction and development of social ties (Bedimo-Rung et al., 2005; Kuo et al., 1998; Chiesura, 2004; Wolch et al., 2014)" (as cited by Wood et al., 2017, pp.64). Wood et al. also point out that the quality of parks is a significant determinant of whether a park is beneficial to mental health; more so than quantity and that "mere presence of parks and public open space within a neighbourhood may yield some mental health benefit" (2017, pp.64). Similarly, Koohsari et al. (2013) state that proximity is less important than attractiveness and POS (public open space) quality. Overall, many researchers have concluded that green space exposure is conducive to health and wellbeing, through many conduits that can occur simultaneously.

"There is an increasing focus on the value and benefits of small parks in a wide range of disciplines, including public health, urban design and planning (Madanipour 2004; McCormack et al. 2010; Watson and Kessler 2013; Dewaelheyns et al. 2014)" (as cited in Currie et al., 2018, pp. 76). While the literature does show that larger green open spaces are preferable for diverse forms of physical activity, Broomhall, (1996) "found that the impact of public open space attractiveness on park use and higher levels of walking was equivocal without the inclusion of park size in the model. However, larger POS generally have more attributes that make them more attractive" (as cited in Giles-Corti, et al., 2005, pp.174). This shows that while small parks, green spaces and pocket parks may not have the space to have many different attributes or amenities their quality can still promote healthy behaviours by "offering space for 'socialising' and 'mental restoration' (e.g. Nordh & Østby, 2013; Peschardt & Stigsdotter, 2013)" (as cited in Peschardt et al., 2016, pp.79-80). Furthermore, Currie says that small green spaces can serve as a basis for how city dwellers experience nature, thus they are important spaces within the urban fabric (2018) as activities are less dependent on 'shape' and 'size,' but more importantly, their spatial arrangement (Peschardt, 2016).

Pocket parks are defined as 1.2 acres or less, often as small as one-tenths of an acre (Currie, 2018) and can be public or in the case of POPS, private. In Currie's discussion of small urban parks, she is mainly focused on publicly-owned and managed land that is described as "urban green space" and describes privatization as leading to, what Minton (2016) calls "over-controlled, sterile' places that tend to look the same (as cited in Currie, 2018, pp.79) However, as discussed, the concepts of public and private exist on a spectrum and one must be wary of making assumptions or oversimplifications of spaces based on labels of private and public. Furthermore, in the case of POPS, which tend to vary widely in their appearance and other qualities, one must examine each quality such as level of green and accessibility independently, without the bias implied by the label of 'private' space. Currie compiles, from several authors, frameworks for evaluating green pocket parks. Some of these elements include naturalness, location and connection (Forsyth, Musacchio, and Fitzgerald, 2005); inclusiveness, pleasurability, safety/comfort (Mehta, 2014); and robust, balanced, and social (Carmona, 2015). Currie, informed by other approaches and the literature, lands on her own framework, defined by accessibility, specificity, authenticity, adaptability, and functionality (as cited in Currie, 2018, pp.91). As I discuss in the following sections, I have formed my own framework for evaluation of POPS, informed by the literature and the City of Toronto POPS Design Guidelines' stated goals.

The three areas I consider key to evaluate, as they relate to health, are 1) level of greenery, 2) use/functionality and 3) accessibility. I decided on using these three indicators because throughout the literature on how public space impacts health and wellbeing, these are the three major areas that determine whether a space is conducive to those goals. There are other ways public space can be assessed, such as whether a space is safe for example but within the context of wanting to look at health and wellbeing specifically, looking at these three areas provides a comprehensive but also narrow enough lens through which to assess these spaces. In the following section, I elaborate on the connection of each element to health and well-being. The operationalization of each term is described within the Methodology section.

Evaluating POPS

Level of Green

Level of greenery in urban environments is critical to human health and well-being (Peschardt et al., 2016) through the following pathways:

- Regulating ecosystem services
- Mental restoration and relaxation
- Physical activity (eg. walking)

Costanza et al. (2017) provide a comprehensive account of ecosystem services. They are defined essentially as benefits from natural systems that support human wellbeing (Costanza, 2017). Regulating ecosystem services include many different functions, such as: "flood control, storm protection, water regulation, human disease regulation, water purification, air quality maintenance, pollination, pest control, and climate control" (Costanza et al., 2017, pp.5). Though of course, the small size of most POPS limit how many regulating ecosystem services are provided by POPS. Some of the regulating services can include shade provisioning, noise reduction, water attenuation (dependent on design), and contribution to tree canopy cover. Several authors contribute to this base of knowledge regarding ecosystem services from urban green space. Zhou and Rana (2012) state that green space and green infrastructure can improve a space's comfort level through regulating ecosystem services such as shade, water attenuation and noise mitigation and Villaneuva et al. explain how urban green spaces are important for mitigating heat stress and reducing heat island effect (Aniello et al., 1995; Jonsson, 2004) (as cited in Villanueva et al., 2015). However, it is important to provide a caveat that many benefits from regulating ecosystem services will not be significant on a per POPS basis, but rather as a contributor to aggregate ecosystem services on a neighbourhood or city-wide level. Keeping in mind that POPS are increasingly common in Toronto, whether they contribute meaningfully to city-wide regulating ecosystem services is critical since they may cover a significant proportion of the urban landscape. Another classification of ecosystem services that are relevant to a discussion of POPS are cultural services, which "combine with built, human, and social capital to create recreation, aesthetic, scientific, cultural identity [and] sense of place" (Constanza et al., 2017, pp.5). Example of these cultural services are explored further below.

Greenery can also contribute to the aesthetic quality of a space, eliciting relaxation, enjoyment and reducing mental fatigue (Kaplan, 1995) (as cited in Peschardt et al., 206; Currie, 2018), therefore positively impacting mental health (Villaneuva et al., 2015). Research by Stigsdotter (2004), cited by Peschardt (2016), showed that increasing the amount of 'greenness' in an environment leads to less stress and Nordh (2010) and Nordh et al. (2009, 2013) found that more 'green ground cover;' 'bushes,' 'trees,' and 'water' were positively associated with mental restoration in small urban parks, while the more 'hardscape' was negatively correlated (as cited in Peschardt, 2016). Peschardt et al. also indicates the importance of not just green cover, but layers of greenness, referring to 'green ground cover' (lawns, flower beds), 'eye-level green' (bushes, hedges) and 'tree canopies,' which they show to be important for rest and restitution (2016). Wood et al.'s study shows that providing a range of green spaces and infrastructure through parks of different sizes and functions contributes to the greenness of a neighbourhood and the mental wellbeing of residents (2017). Specifically, they show that number of smaller pocket parks is influential on mental health as they can provide benefits of proximity to nature (Hartig et al., 1991) and a way to 'get out of the house' and be in an attractive public realm (as cited in Wood et al., 2017, pp.69). Furthermore, several studies have shown that green space is beneficial to mental health regardless of whether not it is actually used, as views of nature or proximity alone have shown to be important to mental health (Kaplan, 1985, 1992; Kaplan and Kaplan, 1989; Cordell., 1998) as cited in Wood et al., 2017). For example, Pereira et al. (2012) found that odds of hospitalization due to cardiovascular disease was 37% lower for those that lived in highly variable greenness around their home, compared to those in low greenness. And lastly, both perceived and objective measures of green space have shown to be predictive of mental health, in studies by Sugiyama et al., (2008) focusing on subjective and Van Den Berg et al. (2003) examining objective measures (as cited in Wood et al., 2017).

Physical activity, namely walking, in the case of POPS is a pathway by which green space contributes to health. Due to size limitations of POPS, the type of physical activities that take place in these areas are not team sports or activities that require amenities such as basketball or tennis courts but rather activities like running, walking, and sometimes skateboarding, as shown by Bjerkeset and Aspen, (2015). "In addition to obvious environmental benefits compared to driving, walking has also been linked to numerous health benefits, ranging from lower body mass index (Frank et al., 2006), particularly in children (Rosenberg et al., 2006), and improved cardiovascular health (Manson et al., 2002). Among older adults, research has shown links between walking and improved longevity (Hakim et al., 1998), cognitive function (Weuve et al., 2004) and quality of life (Strawbridge et al., 1996; Leveille et al., 1999)"

(as cited in Adkins et al., 2012). The idea that walking in nature is beneficial to health is not new. Carpenter explains that in 19th century Britain, urban parks were seen as a way of preventing the spread of infectious disease and that exercise in clear air was a form of 'hygiene' that encouraged family life (2013). Carpenter, while examining the politics of green spaces and walking for health, states that there "is indeed an emerging body of evidence supporting a green exercise effect (eg. Maas, Verheij and Groenewegen, 2006)," that reflects a 'mind-body-nature' discourse. (2013, pp.126-127). A study by Takano et al. (2002) has shown that walkable green streets in proximity to seniors showed a positive association with longevity. Also, Adkins showed that high-quality, mid-level green street installations were associated with higher attractiveness scores, suggesting that in addition to retaining and filtering stormwater, well-designed green streets can contribute to more attractive walking environments and that an attractive mix of ground-level and vertical plants is key (2012).

Use/Function

While the previous section looked at the ways in which level of green space within the urban landscape has the potential to impact health and wellbeing, there are more elements to POPS design that can determine how the spaces are experienced and used by visitors. Design/layout decisions affect use and/or function of POPS, as design features can prohibit certain activities while encouraging others. As Kohhsari et al. states, "Within the socioecological framework, there has been an emphasis on the 'built environment', which can operate as an enabler or barrier for healthier behaviours. The built environment refers to "the human-made space in which people live, work, and recreate on a day-to-day basis" (Roof, 2008, p. 24)" (2018, pp. 120). Furthermore, much of the literature has focused on the functionality of green spaces for residents but several authors including Currie, and Irvine et al., identify that users also include workers and commuters (Currie, 2018; Irvine et al., 2013; Koohsari et al., 2015) which within the Toronto context is especially relevant. The type of activities that have ties to health and that can take place within a POPS include: recreational activities such as walking or running; alternative transportation modes like cycling or skateboarding; physical restoration like eating, resting, and relaxing; nature enjoyment of the outdoors; enjoying park amenities or unique features; and appreciating place identity and attachment (Irvine et al., 2013). All of these behavioural elements are influenced by the built environment and several authors have paid attention to what design and management techniques encourage and discourage certain urban space uses. "The design of space subscribes to the theory of 'form as well as of function'...[and] the tight relationship between form and function is certainly true in a

small park that often accommodates multiple uses upon a modest plot of ground," (Currie, 2018, pp.83) such as the aforementioned activities.

Regular physical activity such as walking has "substantial health benefits including reduced risk of several of the most common chronic diseases, including type 2 diabetes, cardiovascular disease and some common cancers", says the U.S Department of Health and Human Services (2008) (as cited in Koohsari et al., 2017, pp.2017). Blair et al. (1989) say physical activity, especially walking, is the most common activity within urban green spaces and is an easy activity to combat sedentary lifestyles, which is a key factor in overall morbidity and mortality (as cited in Takano et al., 2002). Badland et al. identify public open space as a determinant of level of walking, which they call an intermediary outcomes that leads to improved health and wellbeing (2014). Carter also references Corburn (2009) and Herrick (2009), pointing to an academic and public policy trend of designing healthy cities by promoting walkability and other physical activity through design (2015). They point to street connectivity to and from public open a space as one conduit among many to promote positive health behaviours (Badland et al., 2014). How a space encourages walking is typically defined as a space's degree of 'walkability' which is a concept that has been used successfully in a wide variety of settings (Badland, 2014). Specifically, "walkability is a multi-faceted concept that includes several elements of the built environment. Moudon et al. (2006) operationalized walkability as comprising three elements: origin/destination, area and route...At the micro-scale, then, the relevant built environment elements of walkability are route characteristics relating to safety, quality and context" (as cited in Adkins et al., 2012, pp.500). Badland also says that 'walkability' is comprised of street connectivity, land use mix, and residential density and is found to be associated with walking outcomes (2014). Additionally, Rigolon and Németh found that New Urbanist communities that have POPS tend to have better walkability and raised this as a concern for inequitable environmental privilege. Their research also shows that POPS can provide above-average park service in terms of "proximity, design, and maintenance" (Rigolon and Németh, 2018, pp.554). Clearly, the connection between urban open space design and walking, whether for active travel or recreation, is strong and is relevant to an assessment of Toronto POPS.

POPS have the potential to encourage walking within urban environments by facilitating connectivity between streets and to other green spaces, but they also can serve as a destination in themselves which Koohsari et al. (2017) and Currie (2018) identify as another factor in determining urban walking levels. Koohsari et al. (2013) elaborate on this point, "Within space syntax theory, two aspects of human

movement include the selection of a destination ("to-movement") and the selection of spaces that should be traversed to reach the destination ("through-movement") (Hillier and IIda, 2005)" (as cited in Koohsari et al., 2013, pp.93). Also, there are different reasons for using green space for walking which, for example, can include dog walking, passing through to avoid cars and fumes and/or more picturesque landscapes (Irvine et al., 2013). Furthermore, "Traffic is one of the frequently cited barriers to residents' walking (Sallis et al., 2012)...thus, traffic safety concerns might discourage use by preventing people from walking to or within public open space (POS) in areas where POS located on the most integrated streets (Kacynski et al., in press)" (as cited in Koohsari, Kaczynski, et al., 2013, pp.97), thus well-designed public open space such as POPS should provide a destination, connectivity, respite from traffic and also avoid requiring travel on busy streets to access.

Moving on from physical activity, I now turn to the functionality of small urban spaces such as POPS as they relate to social interaction. Several authors have indicated the strong connection between public open space and social interaction. As mentioned previously, when we combine the social determinants of health and urban liveability lenses we can conceptualize the role of social interaction being influenced by the built environment in clear and concrete ways. In Villanueva's comprehensive reporting on the indicators of public space, it is stated that public open space provides a venue for people to socialise, interact, and gather (Maas et al., 2009; Wood et al., 2010) and that public open space provides social benefits by fostering neighbourhood social cohesion (Kaźmierczak, 2013) (as cited in Villanueva et al., 2015). Forsyth, Musacchio, and Fitzgerald (2005) says, "Small parks [such as POPS] in particular provide for a 'positive sense of intimacy' that stimulates human interaction" (as cited in Currie, 2018, pp.80). Furthermore, Wood et al. state that while there are several pathways by which public green space is linked to mental health, one way is through facilitation of "social interaction and development of social ties" as shown by Bedimo-Rung et al. (2005); Kuo et al. (1998); Chiesura (2004); and Wolch et al. (2014) (as cited in Wood et al., 2017, pp.64). Furthermore, in a 2012 study Peschardt et al., investigated the use of urban green spaces, specifically pocket parks, and showed that they are mainly used for socializing, meaning meeting for social purposes and health (Peschardt et al., 2016). Specifically, they found that the features of the built environment that promoted socialization were: seating other than benches (seating that allows visitors to face each other), tables, paved trails, and cafés (Peschardt et al., 2016). Huang and Franck (2018) also found that seating and tables with seats that face each other were associated with highly used POPS. Additionally, because access to POPS do not rely on a ability to pay to access, they can serve as venues for meet-up groups who try to avoid costs to members, reducing

barriers to inclusion (Huang and Franck, 2018). Kwan says, they nature of how we use urban green spaces has changed. "Today, many urban residents are actively using public spaces for daily activities – hanging out with friends, eating dinner, exercising, reading a book. The public realm has essentially become an extension of their homes" (2013). Functionality of small urban spaces such as POPS contribute to health and wellbeing by influencing the level and types of social interaction that can take place.

However, functionality by design is only one perspective on usage of small urban spaces. The other factor intrinsic, especially to POPS, is management styles and practices. Many POPS have signage outlawing certain behaviours such as skateboarding or rules on smoking (Bjerkeset and Aspen, 2018). While specific activities and behaviours can be banned within POPS, and publicly-owned spaces for that matter, I will be speaking to management practices of POPS within the following section concerning Accessibility. This is because while specific behaviours can be banned, banning activities can result in de facto limitation of access to certain groups of people, such as the homeless or youth. For example, "Miller (2007) argues that the rules of conduct and their enforcement at Sony Plaza, [a large indoor POPS in New York City] serve to exclude homeless persons or poor people and cites recent cases against Sony for discriminating against such users" (Huang and Franck, 2018, pp.503).

Accessibility

In the previous sections, I have provided an overview of the literature of the relationship between green space and health and functionality and health. Lastly, I present an overview of accessibility and health. Accessibility as it relates to POPS and spaces like them is especially unique and relevant given the concerns over privatization. Accessibility can entail several points of consideration for POPS:

- Spatial accessibility (eg. visible from street?)
- Temporal accessibility (eg. Visitation limits?)
- Physical accessibility (eg. Physical barriers to people of diverse abilities?)
- Public/private (eg. Does the space present as open to the public or closed to the public?)
- Effect of security and surveillance measures

Because we are concerned primarily with POPS' impact on health behaviour and wellbeing, poor access to POPS can only be considered detrimental to health *if* we can establish that POPS are places that do

promote healthy behaviours. However, that being said, it is also possible that fragmentation of the urban landscape and lack of access to *any* spaces, either health promoting or not, can be detrimental to well-being. The sections above reference several empirical studies showing connections between green space and functionality to health, while a discussion of accessibility, health and POPS involves a higher degree of theory-based discussion. This is because throughout the literature on POPS and the tension between private and public, there is an underlying current of the potentiality for enforcement of the primacy of property-owner rights. For example, Huang and Franck's research on Manhattan indoor POPS demonstrates fairly inclusive management practices that allows members from the public to use the POPS for diverse purposes, such as gathering places for meetup.com groups. However, they acknowledge that inclusivity and access can be quickly ended by closing POPS, placing security guards, or taking away seating at given times (2018). Essentially, as Bodnar says, "Public space is inherently political and potentially subversive; it is seen as both the manifestation of reigning political power but also as that of a more inclusive power that can reclaim it temporarily by occupying it for political purposes" (2015, pp. 2095). This balancing act can affect the accessibility of POPS, through subtle and less subtle management and design choices, which are predominantly determined by developers.

An important aspect of accessibility is whether a space is open to the public around the clock, or has limited hours to visit. Huang and Franck describe a wide variety in POPS' hours of operation. They acknowledge some that are always open and some that are quite restrictive, for example, being closed at 5:30pm every evening and weekends (2018). There is a balancing act between access and safety, as sometimes a high degree of access can be accompanied by a reduction in actual safety or perceived feeling of safety, as Bodnar points out (2015). Similarly, Bjerkeset and Aspen explain that while "loose" spaces imply values associated with diversity and possibility, these qualities may oppose values that many people desire in a built environment, such as order and certainty (Franck and Stevens, 2006) (2018).

Physical accessibility refers to whether a space is universally accessible. For example, can people of all physical abilities use a space, including those in mobility devices? A space can only be considered accessible if people who have limitations in their mobility, such as the elderly can visit. Features such as fences, hidden entrances and stairs can clearly be detrimental to universal access as well.

Spatial accessibility refers to whether a POPS is easily seen and found from major streets and pedestrian arteries. A space cannot be accessible if people do not know it exists, which Stringer (2017) points out (as cited in Huang and Frank, 2018, pp.504). Whyte (1980) noted that POPS that have a close relationship to the street tend to have the highest number of visitors (as cited in Huang and Franck, 2018), likely due to POPS being seen and connected to travel routes. Bjerkeset and Aspen, citing Davis (1990), Loukaitou-Sideris and Banerjee (1998), Low and Smith (2006), and Németh (2009), support the assertion that physical enclosure, inward orientation and disconnection from the street negatively impact accessibility (as cited by Bjerkeset & Aspen, 2017).

Whether a space presents itself as private or public space can influence how accessible it is. For example, if a space presents itself as a private space, members of the public may not go there for fear of trespassing. A space can present itself as private by mirroring aesthetics of a neighbouring development or featuring brand logos. An absence of a Toronto POPS sign may also give the impression a space is private and not open to visitors. Furthermore, in Smithsimon's (2006, 2008) research, cited by Huang and Franck (2018) he reports that private developers purposely made their bonus spaces [POPS] uninviting to discourage their use. "He quotes one city planning staff member: 'The client (i.e the developer) wanted the space to be private, as private looking as possible, as private feeling as possible' (2008, 335)" (Huang and Franck, 2018, pp.504). Furthermore, Huang and Frank cite Carr et al. (1992), pointing out that even high-end furnishings and decorations are believed to be a form of 'symbolic inaccessibility' (2018, pp.504). In the Oslo example presented by Bjerkeset and Aspen, a highly coordinated and coherent aesthetic regime creates a unified, singular and exclusive identity for the area to convey it is clearly not an area for political, religion or other public agitation (2018).

Additionally, and related to the private/public point, the presence of security guards or surveillance can impact accessibility. Obvious signs of being monitored and watched may deter people, and perhaps some more than others, from visiting a POPS. Huang and Franck identify that one of the most restrictive practices is to have security guards outside the entrances who forbid or deter entrance (2018). Security guards can ban people based on behaviours, such as sleeping and items, such as bags and shopping carts. Even game playing can be banned, as it may appear as gambling; however, some guards may tolerate these behaviours at their discretion (Huang and Franck, 2018). Bjerkeset and Aspen identify control and surveillance of the POPS in Oslo as contributing to the space's "tightness;" ultimately limiting inclusiveness and accessibility. Ultimately, they show that there are restrictions on use beyond

what is common in public spaces that are publicly owned (2018). Huang and Franck summarize that inclusion is partly a result of management practices and for this reason management practices are highly significant to POPS accessibility (2018), and thus, on urban health and well-being.

Policy Overview

Several policies are relevant to a discussion of POPS, from the Provincial Policy Statement to municipal Zoning-Bylaws. However, the two most important pieces of policy that pertain to POPS are Section 37 of the Ontario Planning Act and the POPS Urban Design Guidelines that was established in 2014 by the City of Toronto. These policies are discussed and critiqued below.

The issue of creating POPS in Toronto was brought before Toronto City Council in 2012. The initiative to identify the City's POPS and create design guidelines, including a POPS signage template and logo, was a result of the November 2012 City Council Member Motion "MM28.13: Privately Owned Public Spaces (POPS): Protecting and increasing access to publicly secured open spaces" – by Councillor Josh Matlow (Ward 22 – StreetPaul's), seconded by Councillor Adam Vaughan (Ward 20 – Trinity-Spadina) (City of Toronto, 2014a). On July 8, 9, 10 and 11, 2014, City Council adopted the POPS Draft Urban Design Guidelines that are meant to guide the creation of high quality public open space. According to the City, as of 2014, over one hundred POPS have been built, varying in their forms and functions (City of Toronto, 2014b), however a Toronto NOW article says, "there could be as many as 400 POPS throughout Toronto, and this summer the city started marking and mapping them to make them more visible to residents" (Spurr, 2014). In other words, as noted above, the 2014 regulation simply named, normalized and set guidelines for POPS practices which were already in use.

Section 37

As mentioned, POPS are technically created by a developer as a benefit to the public in return for some sort of easement on prescribed planning regulation, such as density, height or re-zoning. This process is covered by Section 37 within the Planning Act:

37 (1) The council of a local municipality may, in a by-law passed under section 34, authorize increases in the height and density of development otherwise permitted by the by-law that will be permitted in return for the provision of such facilities, services or matters as are set out in the by-law.

Section 37 is quite a controversial planning tool, as some people consider it to be 'legalized bribery' (Pantalone, 2014, pp.84), while others believe it is a common sense method to generate benefits for a community where development could be causing some sort of negative impact such as population density increase, excessive shade, or reducing green space (Keenan, 2015). Some of the benefits that developers agree to provide include affordable housing, community assets like community centers, public art, or POPS. Community benefits are supposed to be needs-based, meaning facilities or amenities that the community actually needs or desires. Pantalone (2014) explains that in most section 37 negotiations, the main arbiter from the City is typically the councillor for the ward in which the development is occurring. In theory, a councillor would be able to distill the voices from the community and accurately decipher what benefit would be most helpful to his or her ward. For example, Pantalone describes how Councillor Kristyn Wong-Tam held several meetings in Ward 27 to hear what residents wanted. The residents predominately desired green space, so when development firm Lanterra was developing a condo in her ward she was able to successfully leverage this development for additional green space (Pantalone 2014). However, this practice is not always typical. In fact, Ricker says, POPS creation is not always suggested by a community planner or Ward Councillor at all, but from the Urban Design department or developer, depending on the site's condition (Ricker, 2016). Pantalone argues that the City's Planning division should have more influence on what section 37 benefits are secured, based on needs assessments, sound planning practices and community consultation, rather than councillors who may be politically motivated to satisfy certain groups from their communities. Furthermore, councillors may deviate from the dollar figure that the Planning Department has established as the appropriate value of Section 37 benefits, which is generally 10-20% of the uplift value of the proposed zoning-bylaw amendments (Pantalone, 2014).

However, while Section 37 is used to secure POPS, Ricker explains that Section 37 is only the mechanism by which the agreement can be made legal and that planning for a POPS can happen much earlier than when Section 37 benefits are typically discussed (Ricker, 2016). Often a POPS will be requested by the City even as early as the Pre-Application meeting between developers and the City. However, Councillor Matlow, one of the advocates for the POPS Guidelines and inventory, has said that he "became interested in protecting Toronto's POPS after seeing an increase in the number of development applications requesting permission to build over private-public spaces" (Kwan, 2013). The Urban Design team at the City will make recommendations on where the POPS should be and what features should be

incorporated, but ultimately it is up to the developer (Ricker, 2016). In fact, Ricker quotes a stakeholder from the private sector saying,

"I think that creative decision needs to stay in the developer's hands because ultimately it's not the City's business to tell us what to actually build on our individual properties, they have input on it but they shouldn't be encumbering people's land with mandate, like this is essentially a de facto work around a parks system..." (Ricker, 2016, pp.50)

Ricker demonstrates that POPS is not considered a community benefit in exchange for zoning easements or density increases but rather is part of what the City considers to be good planning practice of the built form (2016). She says, "The absence of transparency and clarity in reference to a POPS role and purpose in the Section 37 review and the intentions of policy makers and elected officials impact the successful implementation of this urban design tool" (Ricker, 2016, pp.72). This detail is just one of many aspects of POPS design and creation that is obscure and not transparent, because as we see in Pantalone's report on Section 37, publicly accessible open spaces are clearly listed as part of the Section 37 bundle of benefits. Also, Pantalone describes the prescribed value percentage of the bundle of community benefits under Section 37 and includes POPS in these bundles. However, if POPS are not actually considered by private and public stakeholders to be real community benefits through Section 37 negotiations, why should their value be included within the Section 37 bundle? This further confuses the question of whether POPS are implemented truly for the public benefit or as an economic benefit to the developer or perhaps just a common-sense element of good planning?

Lack of transparency on Section 37 negotiations is a major critique and one that is relevant to POPS. Pantalone says, "...community members are not typically party to Section 37 negotiations, which usually take place behind closed doors between Planning staff, the ward councillor, and the developer" (Pantalone 2014, pp.71). This limits transparency and can result in section 37 benefits that are ill-fitted to the community and could go unused. It seems from Pantalone's research that there are benefits that developers are more amenable to, such as green space provisioning like POPS, rather than supplying, for example, social housing. He references a case, Sterling Silver Development Corp v City of Toronto, [2005] O.M.B.D. No. 1313 (OMB), where the City requested social housing and green space in s.37 negotiations. The developer agreed to green space provisioning but refused to provide social housing so the question went to the Ontario Municipal Board. There it was decided that the developer did not have to provide the social housing and could go ahead to provide the green space. Pantalone references several other examples where public green space is part of the Section 37 benefits (Pantalone, 2014). It

is worthwhile to consider that, in light of the criticisms on POPS within the literature review, POPS may be a benefit that developers are much more amenable to provide as opposed to others because POPS can provide additional value and appeal to their developments. For example, on page 8 of the POPS Urban Design Guideline, there is a photo of a POPS directly outside of an exclusive-looking building, featuring an elaborate fountain (City of Toronto, 2014b). It is clear that the main users of this lobby-like space will be the people who live and work there, not people looking for a throughway or a space to eat their lunch. This is an example of a POPS that has minimal benefit to the public. Also, the fact that POPS are formally within private ownership and management is appealing to developers, since they can control management practices directly. It is reasonable to conclude based on the evidence that POPS are a Section 37 benefit that developers are more amenable to provide. Moore shows that, in fact, the majority of Section 37 benefits that are provided in Toronto are visual amenities, as roads, streetscapes and parks account for 40% of benefits provided (2013).

As mentioned, the section 37 negotiations are not public; therefore it is not always known that POPS will be a part of a development until the site plans and development proposal are accepted and considered final. Because of this point, it is unknown whether the City of Toronto had to spend time negotiating back and forth with the developer on the design of the POPS and to what degree the POPS design is determined by the developer (or the developer's chosen landscape architect) or by the City. This points to a larger issue of a lack of a unified planning approach to POPS throughout downtown, which Ricker also acknowledges (Ricker, 2016). Because councillors and the City's Urban Design department can negotiate directly with developers for Section 37 benefits, the standard to which these benefits meet certain standards in terms of value or aesthetics can vary widely from ward to ward. This can lead to POPS that vary widely in their functionality and appearance, since "negotiated settlements are frequently rubberstamped by Council with no debate whatsoever" (Pantalone, 2014, pp.86). This brings me to the next policy essential to Toronto POPS.

POPS Urban Design Guidelines

The City of Toronto Development Application Support Material website lists approximately 50 assessments, studies or guidelines that must be part of development application. Many are mandatory, but some are only needed if applicable to the development. One of the policies is the Urban Design Guidelines. The City says

Urban Design Guidelines are a written and graphic text that describes how the streets, parks, open space, buildings, built form and landscape elements of a new development will work together to create a new neighbourhood that supports the over all goals defined by the Official Plan and through the public planning process...The Guidelines will be flexible to accommodate change as it occurs while maintaining intact the essential ideas" (City of Toronto, 2019b).

The POPS Urban Design Guideline is a specific guideline created to address the unique entity that is POPS. Therefore, the developer is expected to follow the POPS Urban Design Guidelines as part of a Development Proposal if their development includes a POPS. However, "there's no consensus on the effectiveness of POPS policies" (Noble, 2015).

Readers are encouraged to familiarize themselves with the POPS Urban Design Guideline, but here I will provide a brief summary of the main points of the Guideline (from here, referred to as the Guideline). The Guideline is organized by: Introduction, the Role of POPS in the Open Space Network, Open Space Classifications, Design, Elements, and ending with POPS Signage. Within the Introduction, POPS are contextualized within the wider network of open space within the City, and it is specified that they are created by negotiation with private developers. The Guideline makes clear that, "POPS are intended to complement the City's public parks, open space and natural areas, not replace them" (City of Toronto, 2014b, pp.1). The guideline goes on to discuss the wider role that open spaces have within our city, and says they are "places of retreat, relaxation and recreation that contribute to the health and well-being of City residents, workers and visitors...[and] become a setting for a variety of uses... [where] our civic life takes place" (City of Toronto, 2014b, pp.2). It also states that POPS can be seven different types of urban forms. They include courtyards, plazas, gardens, walkways/mid-block connections, forecourts, landscaped setbacks and interior pedestrian connections. Furthermore, the Guideline references the Toronto Official Plan several times throughout, demonstrating consistency and conformity to the City's authoritative plan. The Guideline also references the Provincial Policy Statement 2014 (PPS), quoting Section 1.5 Public Spaces, Recreation, Parks, Trails and Open Space, which says that "healthy, active communities should be promoted by:

- a) Planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity;
- b) Planning and providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and where practical, water-based resources" (from section 1.5.1 of the PPS) (City of Toronto, 2014b)

The Official Plan also identifies the need for new development to integrate different types of open space (City of Toronto, 2014b). The guideline continues, stating that the Guidelines "assist in the interpretation of the Official Plan's Public Realm and Built Form policies and will play a critical role in shaping these open spaces through the development application and review process" (City of Toronto, 2014b, pp.4).

Lastly, the introduction concludes by stating that the Guidelines are "an evolving document which may be revised, from time to time, to reflect new findings or recommendations made by area specific studies and/or guidelines or through the on-going review of development applications...[The guidelines] are intended to provide a degree of certainty and clarity of common interpretation, however, as guidelines, they should also be afforded some flexibility in application, particularly when looked at cumulatively" (Ibid). The stated "flexibility" of the guidelines is reasonable cause for concern, especially in light of the fact that a POPS is supposed to be a public good to offset negative consequences of intense development. The stated "flexibility" of the Guideline may be taken advantage of by private developers whose goals for the POPS may differ from the Guideline. For developers, whose main goal is profits and capital accumulation, considerations of aesthetics or maintenance costs may be more relevant. I will return to this point in a more comprehensive critique of the Guidelines, but I wish to also touch on the nature of the rest of the Guidelines.

Overall, the Guideline does reflect current research on public open space and green space quite well, much of which I covered in the literature review. It is clear that the authors spent time considering and researching many different features of open space, and how it is instrumental to public life. They acknowledge that POPS can take many forms, from courtyards to gardens, and they serve pedestrian comfort, access and circulation. They account for setbacks, public safety, and even where POPS are constructed in relation to building services. Preferable seating, public art, soft landscaping, paving and surface materials, lighting, and weather protection are described as well. The last section does briefly touch on how and why POPS must be labelled as a public space. While this is clearly a comprehensive guide on high quality open space, there are several oversights that I will describe below.

The Guideline is generally transferable to any public open space. It does not spend a lot of time talking about how POPS differ from other public spaces. For example, in the section on Safety, the Guidelines mention clear sightlines, lighting, and that active ground uses "will contribute to informal surveillance and perception of safety" (Ibid). Crime Prevention through Environmental Design (CPTED) is mentioned

as a suggested option, but nowhere does it specify that this planning should or must be used. It makes general recommendations on the spatial layout of the space but neglects to mention that because POPS are privately-owned and managed video surveillance and private guards are commonplace within POPS. It has been shown throughout the research on POPS that these security elements are typical and even in Toronto there have been incidents of private security overstepping bounds, like when private security of Brookfield Place cut a bike off a TTC pole that they mistakenly believed was on private property (Spurr, 2014). Garrett also described being on a Jane's Walk in Toronto, when he and a City of Toronto staff member were approached by two security guards while they were simply standing and talking about POPS (Garrett, 2016). Also, Clement says, "Based on current practices elsewhere, it is very likely that POPS owners will install extensive video surveillance systems, but these will not meet legal standards," (Sharma, 2017). While it is true that the Guideline is specifically about design, it also is a public document that informs the public on the intended nature and purpose of POPS, so whether it reflects the real and intended nature of these spaces or not is critical. Furthermore, the Guidelines could serve as a reference for developers on what type of surveillance or guard enforcement is appropriate given the implications how public space may be experienced by users. Ultimately, the Guidelines do not adequately address the distinctions that make POPS unique and do not address the ways in which the space will possibly function or be perceived differently by the public.

There are a few sections of the POPS Design Guidelines that are reason for concern. The Guideline mentions in a few sections that POPS can be entrances to buildings and can have amenities on them such as cafes. For example, Section 2.2 of the Guideline states, "Animate the street with active uses and allow for sufficient setbacks for these to function. Examples may include patios, retail display areas or community markets." This is cause for concern, because in the Guideline's introduction POPS are described as entirely public spaces that are part of the wider public space network of the City, and as such have impacts on liveability and urban wellbeing. While putting a cafe or a patio on a POPS be a legitimate way of activating a space, private retail on a POPS potentially makes a space only accessible by purchasing goods. If a POPS has a patio or cafe directly on it, members of the public cannot access this space without becoming customers of a private business, therefore this betrays the intended nature of POPS. Furthermore, entrances of buildings are only used by residents and visitors so to assert that condo entrances contribute to the public good is dubious. These suggestions within the Guideline only provide more confusion on the true nature of POPS, amidst the confusion that was described earlier

regarding how POPS are created (i.e established through Section 37 benefits formally but not considered a community benefit).

Additionally, as mentioned above, there is a discrepancy on how many POPS there actually are within the City of Toronto. In 2014, the City said there were around 100 but the 2013 Toronto NOW article says there could be as many as 400. On the POPS website, the map does not indicate when it was last updated. As a part of my research I emailed James Parakh, the Urban Design Manager, City Planning of Toronto & East York. He indicated that the POPS map was indeed not up to date, but that it would be updated soon. I also asked Parakh why, on the POPS map within the City of Toronto's POPS website, some spaces had the square footage included in the description and some did not. Some also had pictures of the space, while others didn't. I thought perhaps there was a minimum below which they decided not to list the square footage. He responded that it was decided to include the square footage of the POPS only if the area was clear in the agreement. This information then leads one to assume that there are some agreements between the developer and the City where the POPS square footage is not clearly demarcated, which seems potentially problematic. If the square footage of the POPS is not clear, then it could allow for modifications of agreed-upon dimensions with no recourse for the City if the POPS ends up being very small or compromised in some way. More information is needed from the City on this point, and it should be clearly and transparently provided to stakeholders and the public.

Also, the point made about POPS not being a replacement for our public park system can be challenged. While the policy does not support the idea that POPS should be considered a new urban park system, in reality it is hard to say that POPS are not supplying that need. It is acknowledged that acquiring new parkland with Parkland Dedication fees is difficult given the cost of urban land and the scarcity of available space in Toronto (Kwan, 2013). This reality, combined with the City's desire for developers to supply POPS that feature many elements that parks traditionally supply, results in what some might rightly consider a replacement for public park systems. Based on interviews conducted by Ricker, "The relationship between parks and POPS is unclear. Conversations with participants revealed that the distinction between POPS and parks might actually be greyer than what policies communicate to be black and white" (2016, pp.59).

Furthermore, The POPS Design Guideline does not make clear how and/or if the guideline is enforced in two separate, but related ways:

- 1) The guideline does not make clear the threshold or minimum of design elements that the developer is expected to implement. The Guideline mentions a multitude of design features and elements that can be a part of POPS, but it does not set a base level of quality of POPS that the developer must meet for the space to be considered satisfactory in its level of greenery, functionality or accessibility. Even on such a clear metric as hours of operation, the guide does not set a minimum on number of hours a POPS must be open to the public per week. In fact, the City of Toronto POPS website states, "Access to some POPS locations may be refused in certain circumstances" (City of Toronto, 2014a), without any further explanation. Also fundamentally, nowhere in the Guideline does it mention what the minimum size a POPS can be.
- 2) Neither the guideline, nor any other policy related to POPS, mentions what the consequence for the developer is if they create an unsatisfactory POPS. This is related to the above point, since it is hard for the City to hold the developer to design standards if there is no standard set and also the guideline is "flexible." Given a scenario in which standards are established, the City could implement potential consequences for a developer who submits plans for a poor POPS or ends up constructing one that does not incorporate the Guideline to a sufficient degree. What needs to be kept front of mind while developing POPS policy for all members of the planning community, including the public, is that technically POPS are being provided as a public good to the residents, workers, and visitors of the City in exchange for allowed extensions on standard planning regulations, in order for the developer to essentially gain larger profits.

As discussed above in the literature review, it is not an uncommon assertion within the research literature that POPS can be considered an economic benefit to the developer for several reasons. Some reasons include controlling access to space outside development and extending their brand outside their development in an effort to imply exclusivity. Németh and Rigolon offer several examples of this. They discuss the trend of New Urbanist developments that feature mixed-use, high walkability and private green spaces. Citing Dong (2015) and Mapes and Wolch (2011), they say POPS "contribute to home value increases in a major way and can be an advantageous marketing strategy for developers espousing the merits of their projects" (as cited by Rigolon and Németh, 2018, pp.545).

On the other hand, one must not be too quick to demonize developers. POPS that are beneficial to the public could be beneficial to the developer as well. We need to be careful not to assume that 'privately-

developed' and 'for the public good' are mutually exclusive. Many within the planning and development sector defend POPS and feel they are an important and positive part of open urban space in urban major cities (Noble, 2015). However, looking at the research and the theory behind public space from thinkers such as Lefebrve and Harvey, it does follow that it would be wise to take a critical lens on POPS, as they are a direct result of negotiations that are geared to attracting investment and development. For example, Harvey (1990) "claims that money, power, or capital results in the commodification of space and the production of 'new but equally oppressive geographical systems for the containerization of power"" (Harvey as cited by Wang, 2018, pp.166). Politics and geography commingle to produce spaces of tension between actors with varied level of power. Wang says, "...in the urban process under capitalism, urban space, as a mixture of 'life space' and 'economic space' plays a dual role as both the public sphere and an arena of capital accumulation...This dual role has...blurred boundaries between 'public' and 'private' in cities (2018, pp.162). POPS are an example of urban space that is 'life space' and 'economic space' and what Brenner and Theodore (2002) call "actually existing neoliberalisms" cited in Carter (2015, pp.375).

Implementing safeguards on POPS quality is necessary because there have been examples of POPS access and quality being compromised. For example, Kayden found that about half of New York's landlords were not in compliance with their POPS agreements. Some of the violations ranged from allowing garbage to pile up, to limiting access or seating, and even enclosing the POPS so that they appear to be private lobbies (Noble, 2015). Noble and her team at *Spacing* conclude: "at this juncture, Toronto's 100-plus POPS fall short of establishing a network of high quality open spaces, and certainly don't compensate for the inability of the city to use existing resources and regulations to create new park space in high-growth areas" (2015). Noble also points out that Cheryl Atkinson, Toronto architect and scholar, says POPS "are generally often perfunctory responses to an ever-diminishing, truly public realm in quantity, connectivity, and collective consciousness" (as cited in Noble, 2015). Rigolon and Németh also point out that POPS have been "criticized for being more concerned with increased profits than with protecting a broader public good (Kaysen, 2013; Kohn, 2004; Loukaitou-Sideris and Banerjee, 1998, Németh, 2009)" (as cited in Rigolon & Nemeth, 2018, pp.545). This is even more reason to justify the in-depth evaluation of Toronto POPS that I am conducting. However, Ricker does point out in her assessment of the POPS creation process, that

"The argument was made by an interviewee that a POPS is the condominiums' property so if the owner or board doesn't do anything, in terms of maintenance and management,

in the end it's their property that will be affected. That being said, the private sector does not face the space operational constraints that the City might face in terms of maintenance, which allows the properties to be kept up to the standard that they want it to be according to one interviewee."

This point illustrates that perhaps incentive for developers in maintenance is not the public benefit, but rather that a poorly managed POPS would reflect badly on them.

While POPS can be spaces that facilitate the goals of developers, they also are useful to the City for practical, budget related reasons. Provisioning of POPS has been well-received in "cash-strapped municipalities" (Rigolon and Németh, 2018, pp.544). It is beneficial to the City to have private developers implement POPS. Noble says, "POPS, in theory, provide some of the benefits of public parks without requiring the city to maintain lawns, trees, gardens or infrastructure. What's more, POPS can be built without depleting the city's parkland reserve" (2015). Researchers have also made similar points, in that maintenance of small parks and green spaces is often not cost-effective (Rigolon and Németh, 2018), so the prospect of private entities providing and maintaining these important spaces is appealing. However, this trend within neoliberal city building and planning is not without criticisms. One major criticism is that this causes a reduction in the democratization of space. The president of the advocacy group Toronto Public Space Initiative said, "Private-public space at the end of the day is not democratically controlled and democratically open to the community" (Kwan, 2013).

Reliance on POPS can also have a negative impact on a broader conception of democracy and inclusivity because of a lack of accountability or transparency in making rules around access and permitted activities. As the New York City Department of City Planning et al. (2000) suggest, the fact that private interests control POPS introduces an 'axiomatic tension' for developers grappling with both profit motives and imperatives of social inclusion (as cited in Rigolon and Németh, 2018, pp.546).

Similarly, Habermas (1989) argues that public participation makes the public sphere: "In city settings, urban space, especially public space, becomes the public sphere where people come and form a public." (as cited by Wang, 2018, pp.164)

Other policies are applicable to POPS besides Section 37 and the POPS Urban Design Guideline. Policies that can impact POPS creation include Secondary Plans, Zoning By-Laws, Toronto Green Standard and

Heritage Conservation District Plans. Whether these policies apply depends on the case at hand. For example, if a POPS is planned for a location that is subject to a Secondary Plan, such as the North York Secondary Plan, the POPS must comply with it as well. However, the Parkland Dedication section of the Planning Act is also relevant to a conversation about POPS and Section 37.

Parkland Dedication

Parkland Dedication is outlined in Section 42 of the Planning Act:

Conveyance

(1) As a condition of development or redevelopment of land, the council of a local municipality may, by by-law applicable to the whole municipality or to any defined area or areas thereof, require that land in an amount not exceeding, in the case of land proposed for development or redevelopment for commercial or industrial purposes, 2 per cent and in all other cases 5 percent of the land be conveyed to the municipality for park or other public recreational purposes. R.S.O. 1990, c. P.13, s. 42 (1).

(2) Repealed: 2015, c. 26, s. 28 (2).

Alternative requirement

(3) Subject to subsection (4), as an alternative to requiring the conveyance provided for in subsection (1), in the case of land proposed for development or redevelopment for residential purposes, the by-law may require that land be conveyed to the municipality for park or other public recreational purposes at a rate of one hectare for each 300 dwelling units proposed or at such lesser rate as may be specified in the by-law. R.S.O. 1990, c. P.13, s. 42 (3).

More qualifying details follow in the Act, but this policy known as Parkland Dedication applies to new developments and redevelopments. Because it is not always possible to provide parkland directly to the municipalities, developers usually contribute cash in lieu of land. However, when developers are providing a POPS they sometimes argue that they should have their Parkland Dedication fee waived since they are providing a green space. If developers are providing the full Parkland Dedication and then are being asked to provide a POPS, separate from Section 37 benefits, they may view it as "contributing community benefits twice, receiving credit for one contribution" (Ricker, 2016, pp.64). In fact, "POPS may result in an "over dedication" of parkland" (Ricker, 2016, pp.64). From the developers' perspective, they could tackle the issues of both Section 37 benefit and Parkland Dedication with one solution; which is akin to a two birds, one stone scenario. However, these are two separate policies born out of two separate cases. Basically, Parkland Dedication applies to all developments, while Section 37 applies only to those developments that are requesting a modification in the zoning by-law, so there is no logical

basis to combine the two policies to justify accepting a POPS as a solution to both requirement unless we take the stance that we shouldn't consider POPS to be Section 37 benefit. But, as we have seen, negotiations are not transparent and take place between developers and the city councilor for the most part. This begs the question of whether developers are being held accountable to provide the correct Parkland Dedication levies if they are amenable to providing POPS from the onset of the Application process? Furthermore, going back to Ricker's assertion that POPS are not actually Section 37 negotiated benefits, does it perhaps make sense to reduce the Parkland Dedication fee if a developer is providing a POPS? She says it could, and may incentivize developers to provide high-quality POPS based on the understanding that they should be park-like spaces for that public rather than extensions of their developments (Ricker, 2016).

The policies that apply to POPS are less clear than they appear from the onset. What seems to be at the heart of the confusion around POPS creation is whether they are, or aren't Section 37 benefits. In technicality they are, but their creation can be established much before the Section 37 negotiations take place by many parties. They can be suggested by the developer, the City's planning division or via a Ward Councillor. It matters who calls for POPS and who creates them because it speaks to who they are designed for. Based on the evidence it seems like POPS creation is a case-by-case, ad hoc process (Ricker, 2016). However, what is clear though is that POPS creation is not democratic. Ricker delivers an in-depth examination of POPS creation and at no point does she indicate that POPS creation is intended to impact public health or wellbeing. But, as a part of the public realm and open green space, it matters how these spaces are produced and what the outcome is for the public.

Methodology

Criteria for Selecting POPS

There are a number of ways in which to approach an assessment of POPS in Toronto. My particular lens, health and wellbeing, necessitates an in-depth assessment of POPS on aspects of green and natural features, functionality and accessibility. Because each evaluation will be lengthy, it is not reasonable, given time and resource constraints, to assess every POPS in Toronto. Since the City's POPS map is not update to date there is currently no accurate compilation of Toronto POPS by location. I emailed James Parakh to request a meeting and access to up to date POPS data, but my request was not taken up. I also went through the City of Toronto Open Data database to find if a POPS dataset exists, but I could not find one. I contacted Open Data Toronto to request the data but did not receive a response.

Therefore, since I am not able to select the POPS I assess from an up-to-date comprehensive list, I am limited to the pin-drops that are on the POPS website, which the date of last updating is unknown. This is less than ideal. However, this may give me a unique perspective in that I will be looking at less recent POPS. However, I will also choose to include pin-points that have been labelled as future POPS sites, so I will hopefully be able to find some POPS that have been recently completed. Looking at older POPS gives me an interesting angle, as it was pointed out within the literature that sometimes POPS usage changes over time, or maintenance degrades. For example, a POPS may fulfill its original purpose soon after completion but after some time, starts to have other non-public uses put on it.

With only the City of Toronto POPS website to rely on for POPS locations, I compiled the 96 addresses on the map and randomly selected 25. I decided on a randomized selection since there was no other fair basis upon which to decide. It crossed my mind to look by ward but since POPS are so concentrated in the downtown core and Yonge Street corridor it did not make sense to look by ward.

Furthermore, I contemplated looking at the POPS by size. While it would be interesting to see how POPS over a certain size compare to each other in the aspects I am examining, it is also worthwhile to assess the wide range of urban forms that POPS take within the City. Because the literature and the POPS Guideline's have shown that POPS can also include very small parcels of land and building entrances, I

want to also understand how many of POPS are in fact useful, public spaces and which are tokenistic "public" spaces that are simply part of normal building set-backs and buffer zones.

I have created a POPS Assessment form that I will fill out during POPS visits and will take through pictures of the POPS.

POPS Assessment

To do an exploratory research study on how Toronto POPS may impact health and wellbeing, I must make clear how I will be evaluating each aspect of public open space that I outlined in my literature review. To reiterate, the connections between urban green spaces like POPS and healthy behaviours and outcomes that I have chosen to focus on include level of greenery, functionality, and accessibility. It is on these grounds that I will be assessing POPS. While this is a fairly comprehensive assessment of POPS, it is not intended to be exhaustive and there are design and programming elements of POPS that may not be accounted for. I visited 25 random POPS in Toronto, during the month of April. One POPS had to be re-visited in June. I stayed at each POPS for approximately 15 minutes each, using the assessment form. My Findings beginning on page 42 are based on those observations.

Lindholst et al. support a comprehensive approach to evaluate green spaces. They declare that traditional qualities such as recreation opportunities and healthy environments (Conway, 1991; Sandström, 2002, Zieleniec, 2010) have been merged with contemporary values such as climate change adaptation, promoting city attractiveness, public health agendas and outdoor education (Walker, 2004; CABE Space, 2004b; Konijnendijk et al., 2013) (as cited in Lindholst et al., 2016). They also point out that contemporary assessments of green space also rely on the understanding that small parks are part of larger green infrastructures (Sandström, 2002; Tzoulas et al., 2007) (as cited in Lindholst et al., 2016). While acknowledging that what counts as "good" urban green space "is up for debates and relates to discussions and tensions between professionals, politicians and the public", Lindholst et al. assess several Nordic green space awards (Lindholst et al., 2015)" (as cited in Lindholst, 2016, pp.166). The tension of what counts as good urban green space is at the heart of an assessment of POPS for the reasons mentioned above. While the POPS Urban Design Guideline does state that POPS are intentionally created with the public's best interest in mind, in terms of the process of POPS creation there is not much evidence that POPS are consistently created with the needs of the local community in mind. Therefore, while a POPS may be "good" according to some stakeholders, whether they contribute

to the health and well-being of the general public is what I am primarily concerned with and in light of the fact that they are a public good, in my opinion, this should be the foremost consideration.

Lindholst's coverage of various urban green space awards provides a reference upon which to establish an original evaluative framework of POPS (2016). They cover six different awards found within the Nordic region and list all the elements upon which the green spaces are evaluated. While no two frameworks are the same, what is common between all of these evaluative frameworks is that they all include aspects related to green or natural elements, functionality, and accessibility. While this is a Nordic example, the evaluative frameworks used for these awards does align with the North American body of knowledge regarding high quality green spaces and the way that I have chosen to evaluate POPS.

This shows that while there is an abundance of ways in which to evaluate urban green spaces, some of which Lindholst et al. (2016) mention (e.g. user involvement, activity place for youth, unique cultural environment...), the core features of urban green spaces are in fact, related to amount of green and natural features, functionality and accessibility.

Methods to Evaluate Level of Greenery and Natural Features

The Toronto Urban Design Guidelines mention many benchmarks for green space provisioning. These are found within several sections of the Guidelines, such as Open Space Classification, Gardens (3.3) (p.14) and within Elements, Soft Landscaping (p.25). These are the goals that the Guidelines list that relate to green and natural features:

- Use architectural and landscape elements (e.g. canopies, pergolas, trees, plantings) for definition and enclosure of the gardens (3.3)
- Predominantly soft landscaping or a balance of soft and hard landscaping (3.3)
- Plant materials should be tolerant of urban conditions (3.3)
- Trees and soft landscaping should be featured in the landscaped setback (3.6)
- Where planter walls are intended to provide seating opportunities, the design of the planter and the plant materials must allow for this use (5.0)
- Retain and incorporate existing trees and other natural features, where possible (5.3)
- Use trees and other plantings to create a comfortable microclimate, by providing shade and mitigating wind impacts (5.3)
- Ensure that trees and other planting do not obstruct sightlines or impede perceptions of safety (5.3)

- Arrange trees and other plantings to provide maximum effect and efficiencies in maintenance and watering and consider methods to capture stormwater (e.g. sloping paved areas towards planters) (5.3)
- Select trees and plant materials that (5.3)
 - Are low maintenance, drought tolerant, and pest and disease resistant. Refer to the City's Drought Tolerant Landscaping document
 - Vary in colour, texture, and scale, and form and provide interest year-round.
- Refer to the City's Urban Forestry website for tree planting options Tree Details and Drawings (5.3)
- Refer to the City's Toronto Green Standard for information on tree planting, soil volumes and other related information (5.3)
- Give preference to natural weather protection such as trees, or landscaping, before relying on built structures for weather protections (5.6)
- Provide areas of shade through tree planting or other high-quality structures (5.6) (City of Toronto, 2014b, pp.14-27)

More details on the literature as it relates to level of greenery and natural features of small urban green spaces to health and well-being are found in the Literature Review.

Based in my review of the literature, I assess the level of greenery and natural features in the POPS I examine by means of the following:

- 1) Presence of low, mid, and high-level green spaces and variety of vegetation.
 - a) Low level greenery is defined as grass¹ or vegetation beds.
 - b) Mid-level greenery is defined as shrubbery, flower and/or plant pots.
 - c) High-level is defined as trees.
- 2) Presence of natural irrigation systems
- 3) Presence of shade
- 4) Presence of water features such as fountains

Methods to Evaluate Types of Uses/Functionality

The POPS Urban Design Guideline mentions use and functionality aspects several times throughout the Guideline. Regarding usage/functionality and programming of POPS, the Guidelines says:

¹ Artificial grass will not be considered as low level green space since its absorption and drainage capability differ from natural grass

- Ensure access and visibility to POPS from adjacent public streets, parks or other public spaces. This legibility of the public nature of POPS will enhance usability. (2.1, 2.3, 3.1)
- Optimize the siting and design of open space in new developments to enhance views or visual corridors to public streets, open spaces, heritage sites and landmarks. (2.1)
- Utilize mid-block pedestrian walkways to connect POPS with nearby public open spaces.
 (2.1)
- Avoid fragmentation of open spaces where possible. Larger areas provide more flexibility to accommodate a range of social functions as well as more usable space. (2.2)
- Consider pedestrian movement through the site...nearby public uses such as open spaces, schools, community centers might inform where and how pedestrian circulation networks should be provided...(2.2)

Courtyards

- Uses include walking, sitting, and gathering (3.1)
- Ample seating should be provided (3.1)
- Provide at least two points of access to a courtyard...they must be clearly identifiable as public (3.1)

Plazas

- Casual use, passing through, secondary pedestrian routes, building entrances and small gathering spaces (3.2)
- Large plazas may include fountains and water features, concession stands or washrooms as appropriate (3.2)
- At least one edge is open to the sidewalk (3.2)
- Provide ample seating (3.2)

Gardens

- The garden should be designed as a series of clearly designed landscaped "rooms" each with a memorable sense of place (3.3)
- Each "Room" should have a focal point, such as a water feature, public art installation or children's play facilities (3.3)

Walkways/Mid-Block Pedestrian Connections

- Must provide a clear pedestrian pathway with high-quality, durable paving materials (3.4)
- Should provide direct access to public destinations, including public sidewalks, building, parks, open spaces and natural areas. (3.4)
- Seating should be provided and may be integrated into building facades or planting areas. (3.4)

Forecourts

• Depending on the scale, the space may function as either an extension of the public sidewalk or an amenity space (3.5).

- Where a forecourt is intended to function as an amenity space, the depth of the forecourt must allow for this function (e.g. seating). Generally, a minimum depth for this would be 4 meters (3.5).
- Designed as an extension of the building, or of the public sidewalk, but always as an integral part of the sequence of building entry (3.5).
- Casual gathering in small groups may be appropriate depending on the scale of the forecourt (3.5)
- Forecourts should be publicly-accessible at all times (3.5).
- Landscaped Setbacks
 - Casual public use, sitting, displays, cafes (3.6)
- Design pedestrian routes so that they do not conflict with servicing or vehicular access routes. Where this is unavoidable, ensure that potential conflict points are clearly marked, giving pedestrians priority (4.5).
- Provide comfortable seating options (5.0)
 - A variety of configurations, including for small groups to encourage social interaction as well individuals (5.0)
 - Options to sit in either the sun or the shade (5.0)
 - A variety of seating types, including both fixed and movable furniture, and seating with backs (5.0)
 - Multi-functional elements that can accommodate seating such as steps, raised planters, grassy landforms (5.0) (City of Toronto, 2014b, pp.2-23)

Based on my review of the literature and the POPS Urban Design Guidelines, I assess the functionality of POPS that I examine by means of the following:

- 1) Types of seating and tables
 - a) Facing away or towards?
 - b) Moveable?
- Nearby cafés or kiosks
- 3) Width of pathways
 - a) Pedestrian only or welcoming to cyclists
- 4) Number of pedestrian connections to main streets
- 5) Presence of activities in open space
- 6) Observations on what visitors are doing and how they are using the space

Methods of Evaluate Level of Accessibility

Within the POPS Urban Design Guideline, guidelines concerning accessibility are the following:

- Ensure access and visibility to POPS from adjacent public streets, parks or other public spaces. This legibility of the public nature of POPS will enhance usability. (2.1)
- Provide appropriate signage to indicate the location of POPS when not adjacent to the public street, for example a courtyard space. (2.1)
- Optimize the siting and design of open space in new developments to enhance views or visual corridors to public streets, open spaces, heritage sites, and landmarks. (2.1)
- The location and design of entrances to a courtyard and accesses must be clearly identifiable as public to promote public use. (3.1)
- Organize circulation to provide direct visual and physical links to adjacent streets. (3.1)
- Provide pedestrian scale lighting...as well as along connections to the courtyard (3.1)
- Utilize POPS signage to identify courtyard locations from surrounding public sidewalks
 (3.1)
- The edges of plazas should be lined with active uses at-grade, including building entrances, to animate and support the open space. Spill-out spaces, such as patios should be encouraged. (3.2)
- Provide clear sightlines at all access points to increase public safety. (3.4)
- Encourage safety and comfort by lining walkways and mid-block pedestrian connections with active uses that are accessible from the walkway to increase activity, as well as windows for overlook and visual permeability. (3.4)
- Locate elements such as vents or large grates away from pedestrian walkways or routes as they can both detract from the aesthetic quality of the space and provide tripping hazards.
- Promote universal accessibility. (4.2)
- Avoid the creation of entrapment spots, such as dead ends, that are not highly visible.
 (4.3)
- Signage Design² (6.0)
 - Consider both the location and scale of the open space to determine the form and size of signage.
 - City of Toronto logo
 - POPS logo and phrase "Creative Place Making to Enhance Urban Life"
 - QR code directing users to the City Planning website
 - Hours the space is publicly-accessible
 - Developer name/logo

² The Guideline states, "There may be instances where POPS signage is not warranted...however, the inclusion of signage will be considered on a site by site basis."

- Any additional information required for public enjoyment of the space may be considered on a site by site basis and will be included in the Site Plan Agreement
- As POPS are intended for use by the public, additional signage that restricts access or limits activities should not be located in POPS.
- Ensure signage is integrated into the design of the open space.
- O Locate signage:
 - In highly visible locations, preferably adjacent to the public sidewalk or other public spaces.
 - Where the highest level of pedestrian traffic is anticipated.
- Ensure signage is not obstructed by landscaping or other free-standing elements in the open space.
- Coordinate signage with lighting to allow for visibility in the evening. (City of Toronto, 2014b, pp.5-31)

Based in my review of the literature, I assess the level of accessibility in the POPS I examine by means of the following:

- 1) Visibility from street
 - a) Visible from how many streets
- 2) Physically accessible (eg. presence of stairs or other tripping hazards)
- 3) Visibility of POPS signage
- 4) Hours of operation
- 5) Presence of security cameras
- 6) Presence of security guards
- 7) Lighting at night

Findings

In the following sections, I will summarize the findings of my field research in tables, section by section. I will reference the data going forward within the Discussion and Recommendations.

Level of Greenery

The level of greenery varied considerably between all POPS, however it was notable that none of the POPS had no green elements. This speaks to one of the main purposes of POPS and that is to provide natural elements to the urban landscape, although many POPS had very minimal amounts of green as shown below. Most POPS had one or two types of green, and eight had all 3 levels of greenery. However, it is important to point out that I counted a level of greenery, such as high-level greenery (i.e trees), as being present even if the POPS only had one tree. As an example, the POPS at 532-570 Bay Street only had one tree. Similarly, even if there was only one area of grass I would count that as low-level greenery being present. I indicated that shade was provided whether the shade was provided by buildings or by trees. The following are the results for level of greenery and natural features:

Table 1: Level of Greenery

	High-Level Greenery?	Mid-Level Greenery?	Low-Level Greenery?	Irriga- tion?	Shade?	Water feature?
21 Carlton Street	N	Y (two small shrubs)	N	N	N	N
108-118 George St.; 234 Adelaide Street E.	Υ	Υ	Υ	Υ	Y (building)	N
55 Avenue	N	Υ	N	N	Y (semi-indoor)	N
403 Keele Street	Y (several trees)	Y (shrubs and planters)	Y (grass patches)	Υ	Y (pergola-like structures)	N
5435 Yonge Street	Y (many, and evergreens)	Y, shrubs	Y, grass	Υ	Υ	N
8 Eglinton	Yes (very minimal, a couple trees)	N	N	N	Y (buildin-g)	N
1910 Yonge Street	Υ	Υ	N	Υ	N	N

1100 King Street W.	N/A	N/A	N/A	N/A	N/A	N/A
1001 Queen Street W.	Υ	N	Υ	N	Υ	N
100 Yorkville St., 95, 115, 119, 121 Scollard Street	Υ	Y	N	Y	Υ	N
2500 Bloor Street W.	Y (minimal)	Y (planters)	Y (large grassy area)	N	N	N
406 Adelaide Street E.	Υ	Υ	Υ	Υ	Υ	N
2230 Lakeshore Blvd. W.	Υ	Υ	Y	N	N	N
532-570 Bay Street	Y (minimal)	Υ	N	N	N	N
200 King Street W.	N	N	N	N	Y (building)	N
300 Front Street W.	Y (several trees)	Y (many shrubs)	Y (patches of grass)	Y	Υ	N
320 Front Street W.	Y (minimal)	Υ	N	N	Υ	N
352 Front Street W.	Y (minimal)	N	N	N	N	N
100 Wellington Street W.	Υ	N	γ3	N	Υ	N
199 Bay Street	N	Υ	N	N	Y (building)	N
740 Progress Avenue	Υ	Υ	Υ	N	Υ	N
5170 Yonge Street	Υ	Υ	Υ	Υ	Y (building)	N
30 Bay Street/60 Harbour/33 Bay Street	Y (minimal)	Υ	N	Y	N	Y
832 Bay Street	Υ	Y (minimal)	N	N	Υ	N
5233 Dundas Street West	Υ	Υ	Y	N	N	N

As shown, the most common type of greenery was mid-level, usually comprising shrubs and other greenery within planters. Typically, planters were long, concrete features that also incorporated seating.

2 -

³ Patches of grass, one large one with cow sculptures.

Occasionally medium sized planters were the only source of mid-level greenery, like at 21 Carlton. Just two small planters were found directly outside the condo entrance. Irrigation systems typically accompanied POPS where the level of green was higher and low and mid-level greenery was present. I suspect mid-level shrubs and planters were most common because they are easy to maintain and double as seating locations. Long planters can also be used to delineate pathways and movement of pedestrian traffic. Grass was uncommon in POPS, however when it was present it did produce a welcoming feel and provided vibrancy to the level of green in the area. While this is a small study, and there is no statistical significance implied, it was an interesting that in most cases where grass was found, the seating and amenities of the space were of better quality and configuration. While at least one tree was found in most POPS, most of the trees found were small. Large trees were not common as they either had not reached maturity or small trees were preferred so to reduce likelihood of maintenance issues, like breaking branches. It has also been shown that street trees in general often struggle to thrive (Lorinc, 2017) so it is unsurprising that trees within POPS generally appear small. However, POPS that had a lot of trees had more shade and provided a more park-like feel.

Going back to shade provision, sometimes shade was derived from tree canopy cover, but in many cases, shade came from shadow cast by large buildings. While shade during the summers can be welcome, during the spring, when I conducted the fieldwork, the shade created vast differences in temperature within the same area as shaded spots were several degrees cooler than sunny areas. The POPS Urban Design Guidelines says that shade from trees should be the preferred source of shade (City of Toronto, 2014b), but that was not the case in most of the POPS I examined.

Use/Functionality

Table 2: Level of Use/Functionality

	Seating	Seating Moveable	Tables	Tables moveable	Cafe/ kiosk?	Walking path?	Number of pedestrian connections to main street	Observed activities
21 Carlton Street	N	N	N	N	N	Υ	1	One person walking through
108-118 George St.; 234 Adelaide Street E.	Υ	N	Z	N	N	Υ	2	People walking from George to Jarvis. Not just condo residents.
55 Avenue	Y	Υ	Y	Y	Y	Υ	2 (Hazelton to Avenue through the mall 'Yorkville Village')	People walking to and from mall. A couple people sitting and having coffee
403 Keele Street	Y (benches)	N (but face towards and away)	N	N	N	Υ	2 (1 connection to main street and 1 to inside street)	Condo residents and visitors coming to and from condo. Resident gathering space. Signs indicate no pets allowed.
5435 Yonge Street	Y (benches)	N	N	N	N	Υ	2 (Byng and Doris- not visible from Yonge)	Did not see anyone using space during visit. Has a playground and soft turf.

8 Eglinton	N	N	N	N	N	Υ	2 (open to corner)	Many pedestrians walking across space. No one spending time.
1910 Yonge Street	Y (benches)	N	N	N	N	Υ	2 (open to corner)	People sitting and smoking.
1100 King Street W.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1001 Queen Street W.	N	N	N	N	N	Υ	4 (but not evident due to construction and visual barriers)	There was construction happening near by during visit. Saw only 2 people walking through. The area is large, with 4 connections to main streets, however stone walls and narrow entrances/exits make them hard to find. Area appears to be private, for CAMH visitors and staff only.
100 Yorkville St., 95, 115, 119, 121 Scollard Street	Υ	N	N	N	N	Y	2 (but not evident)	Did not see anyone using space. There were several signs saying private property. Space felt very private and not welcoming to people who wanted to walk through.
2500 Bloor Street W.	N	N	N	N	N	N (but beside City trail)	2 (on corner lot)	Did not see anyone using at the time. This space was an open green space that appears as a continuation of a City park.
406 Adelaide Street E.	Υ	N	N	N	N	N	1 (entrance to sidewalk)	Only people coming to and from condo. Felt very private. Barrier between sidewalk and POPS. Very enclosed.
2230 Lakeshore Blvd. W.	Y (very few benches)	N	N	N	N	N	1 (open to main street)	Residents and visitors coming to and from condo.

532-570 Bay Street	Y (benches- concrete planters)	N	N	N	N	N	2 (but difficult to tell as a pedestrian b/c it is L shaped)	Observed residents and visitors coming to and from condo. Did not see anyone use it as a mid-block throughway.
200 King Street W.	Y (benches)	N	N	N	N	Υ	2 (open to whole corner)	People walking through. Did not observe anyone sitting.
300 Front Street W.	Y	Υ	N	N	Y (Starbucks nearby)	Υ	2 (open to corner-Front and John)	Observed people walking through pathways.
320 Front Street W.	Y	N	N	N	N	N	1 (open to Front Street)	People smoking, talking on phones, and sitting. Appeared to be mostly workers on break.
352 Front Street W.	Y (benches)	N	N	N	N	N	1	Appeared to be a place where people who live in the condo keep their bikes.
100 Wellington Street W.	Y (benches)	N	N	N	N	Υ	3 (Wellington, York and Front)	Smoking (receptacles for butts), sitting, talking, on phones, sitting in sunny parts.
199 Bay Street	Y (benches)	N	N	N	N (but cafe in lobby)	N (open to street)	1 (open to street)	Some people walking through, but not much. Most people still stay on sidewalk. Even if they can cut through, they don't.
740 Progress Avenue	Y	Υ	Y	Y	N	Y	2	Just one person walking from adjacent building. The building has no name, no business name. No idea what happens there at all. Gives impression that it's very private.

5170 Yonge Street	Y (3 types of benches and chairs)	Y	Y	Υ	Y (coffee shop adjacent)	Υ	2 (open to corner)	Observed people sitting and having coffee. Space much more destination oriented compared to others.
30 Bay Street/60 Harbour/33 Bay Street	Y	N	N	N	N	Υ	1 (open to street)	People coming and going from condo. A couple people sitting.
832 Bay Street	Υ	N	Υ	N	Υ	N	1	Someone sitting with beverage from café.
5233 Dundas Street West	N	N	N	N	N	Υ	2	People walking to and from condo.

Most POPS had some type of seating, typically benches. Most benches I observed had features that can be described as "hostile architecture." Benches would typically have raised, metal partitions between sections and/or arm rests breaking up the length of the bench to prevent lying down. Some benches were also sloped to make them uncomfortable and less functional. While many POPS had some type of seating, most of the seating was not moveable. Also, most POPS did not have any type of table available. Cafes and kiosks were mostly absent, but many POPS had them nearby. POPS with ample seating served as destination spaces, and not simply as a space to travel through. The POPS that had tables and seats very strongly conveyed that they were open as a destination; where one could open a laptop and do work or read. For example, the POPS at 5170 that had several different kinds of seating, moveable chairs and tables and a coffee shop nearby. Here I witnessed several people sitting at tables reading, on their phone, and not using the space to get from A to B. The large secondary POPS at 55 Avenue served this function as well.

Most POPS had some type of walking or recreation paths. POPS on corner lots typically had most if not all their area designed to be walkable, so I considered this a walking path since it allows and encourages walking. I also included the number of connections to main streets. It is important to note that even if there were a high number of connections to main streets, this did not necessarily correlate to high level of accessibility as we will see in the following section.

In terms of the activities observed during POPS visits, there was not a lot of variety, although there were some interesting observances. The most common activity observed was people walking through POPS, or using them as a space to take breaks presumably from work. POPS that were a part of commercial buildings were used typically by visitors and employees. Many office workers used them to go use their phone, smoke or just sit outside. The spaces that had the least number of visitors were residential developments. This could have been due to the time of day that I was visiting, but I generally found the POPS connected to large commercial buildings were extremely busy. In POPS connected to residential buildings, generally, the only people seen were people going to and from the condo buildings, as in the case of 403 Keele Street, 100 Yorkville Street/Scollard Street, 406 Adelaide Street, 2230 Lakeshore Boulevard West, 532-570 Bay Street.

Lastly, The POPS at 100 Wellington Street West is very big, and had three connections to main streets which may cause one to assume that this POPS would be quite popular with pedestrians; however,

because this POPS is elevated above ground level it was much less populated with pedestrians than I anticipated. Most of the people within this POPS were people coming to and from the TD Towers surrounding it. This illustrates the points made within the literature that functionality and use of the space is based on a multitude of factors, and the same can be said for what makes the urban landscape walkable for pedestrians.

Accessibility

Table 3: Level of Accessibility

	Visible from main streets?	Physically accessible?	Visible POPS signage?	Hours of operation posted?	Security cameras?	Security personnel?	Lighting?
21 Carlton Street	N ⁴	Υ	N	N	Υ	N	N
108-118 George St.; 234 Adelaide Street E.	Y (from Jarvis and George)	Y	N	N	Υ	N	Y
55 Avenue	Y (only from Hazelton, easy to miss though and unsure at first that it is an entrance to the mall)	Υ	N	N	Υ	N	Y
403 Keele Street	N	N (large flight of stairs from main street)	N	N	Υ	N	Υ
5435 Yonge Street	N	N	N	N	Υ	N	Υ
8 Eglinton	Υ	Y (but tiles look like there may be issues in the future, see pics)	N	N	Υ	N	N

⁴ While a pedestrian may be able to see the entrance way from the street, it is impossible to tell if the entrance way is private or public. It is also impossible to tell from the street that the throughway leads to another street or public space. Because this throughway is only accessible by going by the condo's outdoor lobby space it doesn't appear at first to be a POPS.

1910 Yonge Street	Υ	N (Damaged tiles major tripping hazard)	N	N	Υ	N	Υ
1100 King Street W.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1001 Queen Street W.	N	Υ	N	N	Υ	N	Υ
100 Yorkville St., 95, 115, 119, 121 Scollard Street	N	Υ	N	N	Υ	N	Υ
2500 Bloor Street W.	N	Υ	N	N	Υ	N	Υ
406 Adelaide Street E.	Υ	Υ	N	N	Y	N	Υ
2230 Lakeshore Blvd. W.	Υ	Υ	N	N	Y	N	Υ
532-570 Bay Street	N	Υ	N	N	Υ	N	Υ
200 King Street W.	Υ	Υ	N	N	Υ	N	N
300 Front Street W.	Υ	Υ	Υ	N	Υ	N	Υ
320 Front Street W.	Υ	N	N	N	Υ	N	N
352 Front Street W.	Υ	Υ	N	N	Υ	N	N
100 Wellington Street W.	N	N (stairs)	N	N	Υ	N	Y (minimal)
199 Bay Street	Y	Υ	N	N	Υ	N	N
740 Progress Avenue	Y	Υ	N	N	Υ	N	N

5170 Yonge Street	Y	Υ	N	N	Υ	N	Y (also spot lighting on ground)
30 Bay Street/60 Harbour/33 Bay Street	Y	Y	N	N	N (none visible)	N	Y
832 Bay Street	Υ	Υ	N	N	Υ	N	Υ
5233 Dundas Street West	N	Υ	N	N	Υ	N	Υ

As evident, there was only one POPS where I could locate the City of Toronto POPS Signage. 300 Front Street West residential development has a POPS outside that has all three levels of greenery, moveable seating and features that encourage visitors to use it for walking and relaxing. This development was completed in 2014, the same year that the POPS Guidelines were put into effect. This could explain why the POPS signage was present; however, 406 Adelaide Street East development, as an example, was completed the same year and no POPS signage is present. This is a very significant finding, as one of the cornerstones of the POPS guidelines is clearly labelling the space as public. Albeit, at 300 Front Street, where I could find a POPS sign, it was quite small and positioned far below sightline, on the side of a concrete bench. Interestingly, this POPS was one of the best overall POPS that I found, as it had all three levels of greenery, trees that provide shade, had moveable and ample seating, generous lighting and open to streets on all sides.

Visibility of connections and clear sightlines seem to make the biggest impact on level of true accessibility and use of pedestrians. For example, the POPS at 532-570 Bay Street has two connections to main streets which can be used as a pedestrian throughway in theory. However, since it is shaped as an L, when looking through one entrance it is impossible to know that the POPS has another entrance/exit. From each main street it appears that the entrance/exit is simply a space for coming and going for condo residents. Furthermore, I did not see any pedestrians using the throughway. However, in the case of 108-118 George St.; 234 Adelaide Street East there is a clear sightline from one end of the POPS to the other so it's functionality as a throughway is clear. Furthermore, either ends of this space are large and open, which makes the space feel safer and welcoming, rather than small and enclosed, such as the space at 21 Carlton. I witnessed several pedestrians using the space as a throughway, to get from George Street to Jarvis Street, and not only condo residents and visitors.



Figure 2: 1910 Yonge Street POPS – April 22 Showing broken outdoor floor tiles

Most of the POPS were physically accessible but there were some that had obvious barriers. One of the most egregious examples was at 1910 Yonge Street. As you can see from the pictures below, there were several areas of the POPS that had tripping hazards from damaged floor tiles. This POPS also had a lot of bird waste build up in areas and litter and cigarette butts accumulating in planters.

While most POPS seemed to be decently maintained, this speaks to a potential for POPS to be inadequately maintained by owners/managers and left to become dirty and unwelcoming spaces that certainly do not support the public's wellbeing.

The 403 Keele Street POPS, which is part of a residential development, is also unsatisfactory when it comes to accessibility because there is a very large



Figure 3: 1910 Yonge Street POPS – April 22 Showing garbage in planters

staircase to access the POPS from Keele Street, not to mention that the POPS can't even be seen from the major street. Unlike 1910 Yonge Street this 403 Keele Street POPS is very green, very clean but unfortunately it is so inaccessible to the public, that it can't really be said that this POPS supports the health and wellbeing of the public; only the condo residents and visitors.



Figure 4: 403 Keele Street POPS – April 7 Showing long staircase from POPS to Keele Street

As discussed within the literature review and mentioned within the POPS Design Guidelines, POPS can vary substantially in their size and functionality, presenting as plazas, gardens, or narrow throughways. This can present some challenges in a) determining where on the site the POPS is located and b) comparing POPS to other POPS. While I, to some extent, compared the POPS I have visited to each other, I am cognizant of comparing POPS of similar styles. It would not be logical to compare a very small midblock throughway to a very large corner-lot POPS. However, the indicators of greenery, functionality

and accessibility are relevant to all manifestations of POPS, in assessing them for their impact on health and wellbeing of urban dwellers. For example, while the amount of greenery expected in a large corner lot POPS would be higher than that of a mid-block throughway, it is still reasonable to expect an adequate amount of green features in a throughway, such as the space at 108-118 George St/234 Adelaide Street East Street

There were a few challenges with conducting this fieldwork. One of the biggest challenges, in some cases, was finding the actual POPS or being sure that the listed address from the City website corresponded with the correct space. For example, 5435 Yonge Street did not correspond to an actual building but rather where that POPS would approximately be found in relation to surrounding addresses. The POPS that corresponds to 5435 Yonge Street more accurately belongs to the condo at 500 Doris Avenue. As another example, the POPS at 403 Keele Street actually belongs to a development on Heintzman Street. The City's POPS website does say that the POPS locations are approximate, but I do find it perplexing why the address for the POPS were not more accurate and tied directly to the adjoining development's address rather than approximate street address locations. The way the City has chosen to list the addresses makes the POPS more difficult to locate.

Missing POPS

In one case, 1100 King Street W., I could not find a space that resembled any configuration of a POPS since the recent development was built right up to allotted setbacks on both faces of the building (see Figure 5). The Toronto POPS website states that the site has a 'publicly-accessible bicycle path and pedestrian walkway' which can't be seen either in person or in the pre-construction images provided below. Because this was a site of a future POPS, it is possible that the plan for the POPS was removed and site plans modified without an update to the City's POPS website. However, in the interest of transparency, there should be a change made to the website and possibly an explanation why no POPS will be on the site, contrary to what was planned.

As it was made clear within my discussion of the policies that are used to create POPS, POPS can be planned as part of a development from the onset of pre-application meetings; therefore, it is conceivable that the POPS was part of the original plan for 1100 King Street but was changed sometime along the way. However, this needs to be rectified on the POPS website and in terms of section 37, it should be made clear if the developer had a POPS included in the Section 37 bundle that was agreed to be provided, or not.



Figure 5: Rendering of 5 Kings Club by First Capital and CAP REIT, image provided to Urban Toronto, courtesy of Tact Architecture. http://urbantoronto.ca/database/projects/kings-club-was-king-highline

Misrepresented POPS

Another issue with locating and assessing the POPS was seeing a clear difference from how the POPS was planned to look and how it appears in the present day. There were two POPS that differed substantially from the images provided on the City's POPS website that presumably were supplied by the developer. The POPS at 8 Eglinton Street East., while not completely finished, does already differ from the image supplied to the city in where trees are placed. In the rendering supplied to the City, the trees are closer to the street and within the middle of the POPS are structures that seem to provide seating. Yet, where the trees have actually been placed, makes it impossible for the seating structures shown to be placed in the area planned, suggesting that they may be omitted completely, or an alternate placement must be found. When visiting the space, I did not see any pre-construction plans or other infrastructure indicating that further amenities were being constructed in the space.



Figure 6: 8 Eglinton Avenue East POPS Rendering. (City of Toronto, 2014a)

As you can see from the pictures that I took of the area, the placement of the trees prevents the placement of the seating seen above.



Figure 7: 8 Eglinton Avenue East POPS – April 22 Showing placement of trees and lack of seating

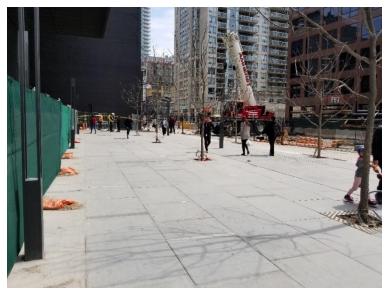


Figure 8: 8 Eglinton Avenue East POPS – April 22 Showing placement of trees and lack of seating

As you can see, the seating that is proposed in the pre-construction images is missing from the area. For many pedestrians, such as the elderly, those with disabilities or families, seating is a crucial feature of the urban landscape that can provide rest, and one that is mentioned explicitly within the POPS Urban Design Guidelines. Considering the present state of this POPS, compared to what the space is supposed to look like according to the

renderings and compared to what the Urban Design Guidelines say about activation of the space, this space is disappointing. Furthermore, this space already has some issues concerning safety and accessibility.

Seen here, this POPS' surface material already has large gaps and raised edges that may become a tripping hazard, as we have seen in other POPS. While the harsh winters are often to blame for warping building materials, considering this is such a new POPS, it is quite early for there to be issues already.

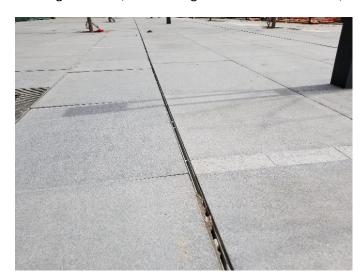


Figure 9: 8 Eglinton Avenue East POPS- April 22 Showing uneven surface tiles

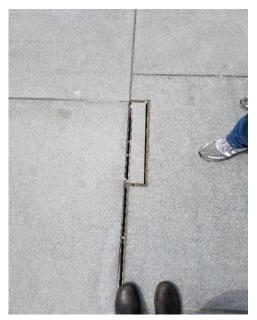


Figure 10: 8 Eglinton Avenue East POPS- April 22 Showing uneven surface tiles



Figure 11: Rendering of 406 Adelaide Street East POPS

Now as you can see, the pictures I took of the space show a POPS much more disconnected from the street. There is the addition of a fence and the planters along the front of the POPS appear higher and the use of taller trees makes the POPS less visible to pedestrians. This also provides an insight into the use of trees as a barrier, used to promote privacy of POPS which is not unlike what conventional single-use dwelling owners may do to enhance privacy from neighbours. Also, the space in which people can come into the POPS is much

Also, the address at 406 Adelaide Street East, 55
Avenue Road and 5170 Yonge Street differed quite substantially from the provided images on the City's POPS website as well. 406 Adelaide is an interesting example, as the provided images makes the POPS looks quite welcoming and open to the street but upon visiting the POPS I discovered that it was quite different. Below is the rendering, pre-construction of 406 Adelaide. As you can see, there is no barrier between the street and the POPS.



Figure 12: 406 Adelaide Street East POPS – April 4 Showing disconnection from street.

more enclosed and narrower, limiting the feeling of openness to the street. Furthermore, on the structure overhead of the entrance there is obvious surveillance camera, which adds to the feeling of privacy.

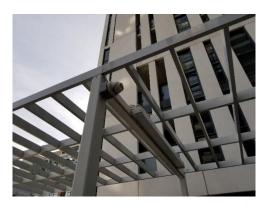


Figure 13: 406 Adelaide Street East POPS – April 4 Showing surveillance camera near entrance

In the case of 5170 Yonge Street and 55 Avenue the differences made it hard to determine if I had correctly identified the POPS. In the case of 5170 Yonge, a very distinct tree at the center of the space confirmed it was the same space; however, the POPS had been substantially redesigned. The POPS shown on the City of Toronto website looked much different from the images below, however the space was still maintained as more park-like space compared to some other POPS.



Figure 14: 5170 Yonge Street POPS - April 22



Figure 15: 5170 Yonge Street POPS – April 22

The case of 55 Avenue Road is especially interesting, since the development has been completely renovated. 55 Avenue Road POPS is a throughway leading to what is now Yorkville Village, shown in the outdated image provided by the City POPS website, shown in Figure 14. This particular throughway has remained mostly unchanged, except that the sign has now changed to reflect the new name. Hazelton Lanes was revamped into Yorkville Village, a large shopping facility within the high-scale neighbourhood (https://www.fcr.ca/property/yorkville-village). What makes this development interesting is that a secondary POPS seems to have been created on the other side of the shopping mall. The space is mainly enclosed, but completely open to the street by way of large sliding doors. It has many hallmarks of a POPS, as it is clearly privately-owned, is seemingly public, surveillance cameras are present, and it has amenities such as seating, tables and a coffee kiosk. It does also look quite exclusive, matching the aesthetic of the whole shopping mall.



Figure 16: Former 55 Avenue Road POPS (City of Toronto, 2014a)

The space does have a few of the qualities that indicate that it is conducive to health and wellbeing, such as seating and tables that move to provide a spot to socialize, shade as a respite from the heat during summer and a few green features. It is very clean and serves not just as an entrance to Yorkville Village but as a throughway to Avenue Road. So 55 Avenue Road POPS has actually managed to grow in a sense, in that the original POPS is still

there but since the renovation, another usable space has emerged but is absent from the POPS database even though it meets all of the criteria of what a POPS is.

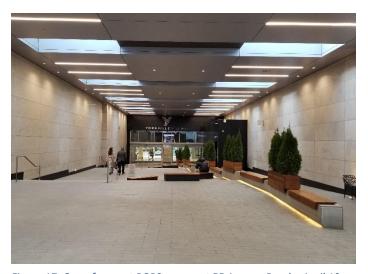


Figure 17: One of current POPS spaces at 55 Avenue Road – April 10 Showing indoor/outdoor POPS space

This does bring up the issue of how POPS may change over time, and to what extent. As far as any policy seems to indicate, a developer has the freedom to redesign their POPS; however, it speaks to the concerns that have been brought up by other authors and researchers that POPS may lose their publicness or become encroached by private interests. This point will be expanded on further within the discussion. Nonetheless, what made finding and assessing these

POPS challenging was also what provided deeper insights and conclusions into my research.

Discussion

After compiling results and reflecting on the results, I was curious if there was a variable responsible for why some POPS felt more private than others. I decided to look at which POPS were commercial developments, residential (condo) developments or mixed-use development. I also classified each POPS by the type of urban form they were.

Table 4: Urban Form and Developer of POPS

POPS Address	POPS Urban Form Type	Residential/Commercial/Mixed Development?	Owner/Developer	
21 Carlton Street	Walkway/Mid-Block Connection	Residential	Edilcan Development	
108-118 George St.; 234 Adelaide Street E.	Walkway/Mid-Block Connection	Residential	Aspen Ridge Homes	
55 Avenue	Walkway & Plaza	Commercial (formerly Hazelton Lanes)	First Capital	
403 Keele Street	Plaza	Residential	Lanterra Developments	
5435 Yonge Street	Courtyard	Residential	Tridel	
8 Eglinton	Forecourt	Residential	Bazis International	
1910 Yonge Street	Forecourt	Mixed use	Davpart	
1100 King Street West ⁵	N/A	Mixed-Use	First Capital	
1001 Queen Street W.	Walkway/Mid-Block Connection	Health facility	N/A	
100 Yorkville St., 95, 115, 119, 121 Scollard Street	Walkway/Mid-Block Connection	Mixed-use	Invar Building Corporation, Tricon Capital Group Inc.	
2500 Bloor Street W.	Garden	Residential	Tridel	
406 Adelaide Stree tE.	Forecourt	Residential	Plaza	
2230 Lakeshore Blvd. W.	Forecourt	Mixed used	Empire Communities	

⁵ There was no POPS found at this address.

532-570 Bay Street	Walkway/Mid-Block Connection	Mixed-use (includes rentals)	Concert Properties
200 King Street W.	Forecourt	Commercial	QuadReal Property Group
300 Front Street W.	Forecourt	Residential	Tridel
320 Front Street W.	Forecourt (POPS Website says plaza)	Commercial	H&R REIT
352 Front Street W.	Walkway/Mid-Block Connection	Residential	Empire Communities
100 Wellington Street W.	Plaza	Commercial	Owned by Cadillac Fairview
199 Bay Street	Forecourt	Commercial	QuadReal
740 Progress Avenue	Walkway	Commercial	Toronto Dominion
5170 Yonge Street	Same	Mixed-use	Menkes
30 Bay Street/60 Harbour/33 Bay Street	Plaza	Residential	Pinnacle
832 Bay Street	Forecourt	Mixed-Use	Lanterra
5233 Dundas Street West	Walkway	Residential	Tridel

Of the seven different types of POPS that the Urban Design Guideline lists, the most common were Walkway/Mid-Block Connection and Forecourts. There was only one POPS that I considered to be a garden but even this green garden-like space was devoid of any plants or flowers. This space was comprised of only grass that extended from the back of the condo building into the City maintained parkette nearby. Here we can see that from the random sample of POPS that I examined, it seems that the form of POPS that are least popular to implement are gardens, courtyards and landscaped setbacks. However, while walking around the city there does appear to be a lot of landscaped set-backs that could technically qualify as a POPS but were not listed within the database.



Figure 21: Yorkville/Scollard Streets POPS – April 1 Showing 'private' signs

There were 11 residential, 6 commercial and 7 mixed-use developments and 1 that is a health care facility. There were some POPS I visited that felt quite private compared to others. I've already discussed how 406 Adelaide was created to feel more private than the renderings suggest. Another example of a very private POPS is 100 Yorkville Street/95, 115, 119, 121 Scollard Street. This POPS was completely invisible from the street, was difficult to find and had several signs indicating private property and that the space was under surveillance, as you can see by the pictures here.

The number of signs saying 'private property' was, in my opinion, truly excessive and made the space completely unwelcoming to people who do not live there, in effect completely contrary to what the ethos of POPS policy in Toronto states. This space is a throughway but upon entering the signs discourage using the space as such. Also, this POPS had the same issues as other throughways, in that it is impossible to tell that it is a throughway as the other entrance is impossible to see since it is



Figure 22: Yorkville/Scollard Streets POPS – April 1 Showing 'private' signs

narrow and enclosed. Within this POPS and others like 406 Adelaide, I felt very worried that

management or security would come out and ask me what I was doing and to leave. After visiting all the POPS I found that some of POPS that felt most private also happened to be residential. It is also important to point out that most of the POPS I looked at were residential though, so it is possibly coincidence. Also, one residential POPS, 300 Front Street West has a lot of the features I was looking for to suggest that the space is supportive of health and wellbeing, such as three types of green space, seating, lighting, lots of trees, and more. This high-quality POPS was a residential POPS, therefore I could not go so far as to declare that residential development's POPS are necessarily more private per se, but that this observation that some residential POPS appear very private, can contribute to dialogue on why residential developers may not be as compelled to create POPS that feel public, as compared to commercial developers.



Figure 23: Yorkville/Scollard Streets POPS – April 1 Showing sign indicating surveillance

As part of my field work, I noticed some interesting behaviour from pedestrians which led me to consider further how spaces that are commercial as opposed to residential welcome or discourage interaction from the public. While downtown assessing POPS, I noticed that at least a dozen people were waiting for the streetcar inside the Grant Thornton building lobby (where 200 King Street West POPS is located). It was not a rainy or terribly cold day to suggest that it was just a rare occurrence of people ducking in from inclement weather so it seems to be a commonplace occurrence.

Also, building staff did not seem to mind at all that people were waiting inside for the streetcar. But, would this happen within residential condo building lobbies? Surely not. This observation leads me back to Zhang's article about MPP (mass private property) as she points out some distinctions between the way we engage in commercial/retail space. Already we have looked at the factors that lead to spaces appearing private or public,



Figure 24: Yorkville/Scollard Streets POPS – April 1 Showing 'private' signs

but we have not paid as much attention to how the public interacts with spaces that are commercial or mixed-use, versus residential. This is not implying that commercial, mixed-use spaces are what Bjerkset and Aspen call "loose" spaces, available to the public for expression and reclamation, but perhaps there is nuanced effect on how the public interacts with their surroundings based on if the space is residential in nature, or commercial or mixed-use. Just as it is part of the social contract to not trespass on someone's lawn, the public may have intrinsic avoidance of spaces that appear residential, just as I felt uncomfortable visiting the POPS that appeared very private and were obviously residential.

Furthermore, as we discussed previously, some POPS appear different in their final form compared to the renderings that developers provided. In both cases, 8 Eglinton and 406 Adelaide, which are both residential, the final spaces were less welcoming to the public. As mentioned in my literature review, sometimes developers want the POPS to be as private looking as possible, to discourage use from the public (Huang and Frank, 2018) such as not providing planned seating (8 Eglinton) or limiting visibility (406 Adelaide). The difference between the renderings and the final product seems to clearly support what Huang and Franck demonstrate, and support my assertion above that residential developments have minimal incentives to provide POPS that are supportive of the *public's* health and wellbeing, despite the Urban Design Guidelines suggestions.

There has been a condo boom in the City of Toronto over the past nearly two decades (Lehrer et al., 2010). Condo developers want to built high to produce the highest number of units they can in order to build profits. Lehrer (2008), citing herself, says, "Many developers of contested high-rise condominium developments use the [City of Toronto Official Plan's] quest for intensification as a justification for increasing density that go well beyond height and density limitations" (Lehrer et al., 2010, pp.83). Like the condo adjacent to 403 Keele Street POPS, condo developers will provide a POPS amongst other community benefits if zoning regulations can be modified or exceptions granted. On the consumer side, condos are a preferred housing type for many people for several reasons, having to do with amenities, cost, location and more (Lehrer et al., 2010). First and foremost, condos owners, just like any other property owner want to protect their investment and expect that building amenities are only used by condo residents. A POPS that encourages uses from the whole public, and not just condo owners, may not be a positive selling point to potential buyers. Therefore, developers may be glad to make a POPS as part of section 37 negotiations but have no real desire or incentive to make them truly for the public

realm since they may not reflect desires of potential buyers. In actuality, these spaces are often cut off from the public realm as we have seen and serve no one except for residents and visitors.

Furthermore, I wish to discuss one POPS in particular in some more detail. I have already mentioned that the POPS at 403 Keele is a high-quality POPS that has all three levels of green space, shade, ample seating and is very clean. However, it is also very private. It is invisible from Keele Street and only accessible by way of a large staircase from Keele and on the other side of the POPS, it is connected to a small, tucked away side street. The POPS is directly outside one section of the residential development and on the far side of the POPS there is a massive wall that prevents the POPS from being seen.

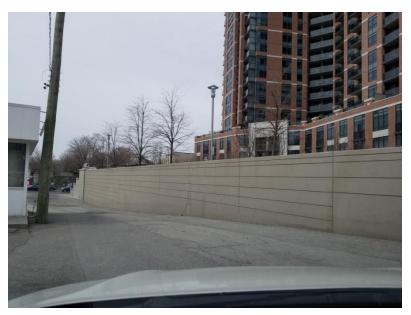


Figure 25: 403 Keele Street, showing large wall limiting view of a POPS

As I mentioned in the policy review,
POPS are often suggested by the
developer early in the development
process, rather than being
requested by the City in Section 37
negotiations. This POPS is an
example of that. The City of Toronto
issued a report on June 24th, 2003
recommending an amendment to
the Official Plan and the Zoning ByLaw to permit the 403 Keele Street
development which would comprise
three residential towers. The report

also says, "The proposal also incorporates a 0.25 hectare privately-owed and publicly accessible park space with a water feature and extensive landscaping which fronts on Keele and Heintzman Street" (City of Toronto, 2003, pp.2). The report goes on to say that the applicant has not yet filed a Site Plan application and also that community consultation took place. The report states that the City received 26 letters, written comments and two petitions from area residents and owners regarding this development. The report also states, "The main focus on the park is between Keele Street and Heitzman Street, where carefully designed landscape features, with a water element, will create a gathering place for unit owners and the larger community. The edge of this park space is lined by retail, café space and walk up residential units" (City of Toronto, 2003). As you can see, this development's evolution from

conception to fruition reflects the findings that POPS are often part of preliminary site plans and meetings between developers and City staff. While the language in the staff report seems to suggest the space will be for the "larger community" in actuality, the space doesn't live up to the original vision in quite the way that perhaps members of the public hoped for.

Conclusion of Findings

It is impossible to generalize on the quality of the 25 POPS that I looked at or ascribe a passing or failing grade. Some POPS had many of the features I was looking for, indicating that they were spaces that were conducive to urban health and wellbeing and some had very few. However, those POPS that had a lot of the features to make them useful, such as space for socializing, respite from traffic and urban congestion and high levels of greenery were not accessible to the general public, only Toronto condominium residents and visitors. In this way, while one cannot declare that Toronto POPS are satisfactory, I do think it is fair, based off my results, to say that there is substantial room for improvement. In this way, my findings are somewhat similar to what Kayden, who examined New York City POPS in 2000, found. He discovered that the overall quality of NYC POPS was poor in design and operation (Kayden, 2001). There are Toronto POPS, that with some changes, could be higher quality spaces that could contribute to a network of public space that supports the wellbeing of urban populations. In the following section, I make some specific recommendations.

Recommendations

Indicators of Spaces that Support Health and Wellbeing

I believe that POPS within the City of Toronto can contribute more to urban health and wellbeing if some of the indicators I used in this research were improved. That is, the level of green within POPS should be as high as possible, given the configuration. While most of the POPS had green features, I would challenge developers to create more interesting spaces that integrate greenery in new and unexpected ways, such as green walls or even integrating greenery into development facades. We have seen within the literature that aesthetically pleasing public spaces with ample green space is more conducive to health and wellbeing than uninteresting, grey spaces. Some of the POPS that I assessed, such as 5170 Yonge Street, 100 Wellington Street West and 300 Front Street West had sufficient green space, but some such as 21 Carlton Street and 532-570 Bay Street had limited amounts. Based on my field observations and the literature, I believe that creating liveable cities that support the social determinants of health requires producing engaging, green spaces for all.

Furthermore, more POPS should strive to serve as destination spaces for downtown residents, and not only those who may work or live in adjacent buildings. The POPS at 5170 Yonge Street was a perfect example of this. As mentioned in the literature, third spaces such as POPS for urban dwellers can be particularly needed as living spaces are small, and access to green space can be limited. Therefore, along with more greenery, more moveable seating and tables are a key addition to POPS that can greatly enhance their functionality and relevance for urban populations. This is one area that I believe strongly that POPS owners and managers should improve quickly as investing in tables and chairs is a very low-cost way of improving these spaces.

Also, while having connections to main streets are important, POPS designers must ensure that connections are visible, have a clear sightline from end-to-end, and are not small and enclosed, and are at grade. These factors make POPS truly more functional, as pedestrians can locate them and understand their functionality as throughways; a way to get to point A to point B faster, safer and more enjoyably.

Lastly, improvements should be made to POPS accessibility, in several ways. As mentioned, the POPS signage was absent in all but one POPS. This is quite disappointing. The Urban Design Guidelines also say that there should be signage that shows pedestrians where to go to access POPS, but I never saw anything like this. If anything, the opposite was true; that most POPS were difficult to find. POPS signage should be much more visible to let people know where to access these spaces, and that they are publicly accessible.

Section 37

Section 37 negotiations, which are the conduit by which POPS are created and secured by the City and developer, need more transparency as it relates to POPS. As we have seen, Section 37 benefits are meant to be amenities that developers must provide to the public, in exchange for modifications in planning regulations. Based on previous research and the example of the POPS at 403 Keele, we can see that often POPS are not asked for by the City but are part of the developer's preliminary site plans. While it is possible that developers may want to create high-quality, green and accessible spaces for the community in which they are building, there are certainly some cases where developers benefit from creating these privately-owned and controlled spaces close to their developments for their own fiscal reasons. Creating POPS that developers are willing to provide, and that the City is able to hold to a high standard is possible. This can be addressed by better planning and stronger policies that can enable the City to hold developers to specific standards in the types of POPS they produce and the quality. I also think a reorientation about what 'public' means as it applied to POPS are needed. 'Public' cannot mean for condo residents and guests. Based on my observations, it seems as though some POPS are built to be primarily for the residents of condominiums, which is expected considering that owner/occupiers are potentially paying a premium for having an outside space which may or may not include amenities. However, while the practice of POPS development may deviate from the stated intention, ultimately POPS are provided to the public at large as a benefit to offset negative consequences of rampant development of mostly urban spaces. They provide much needed room in an intensely urban landscape and as such, developers should not be allowed to provide these spaces only to unit dwellers. Developers could choose to provide private, resident-only parks on site; however, from the perspective of environmental justice this is intensely problematic. To recap, the City of Toronto needs to be held to a higher degree of accountability than the developers in this situation because of several reasons:

- The City is ultimately responsible for establishing guidelines and processes around Section 37 benefits. If POPS do not count as a public benefit, perhaps a different, unique planning tool can be created that achieves the goal of providing high-quality public space alongside development. Furthermore, since POPS have always been negotiated under Section 37, it is assumed that POPS were only created when the developer was requesting a modification of some planning regulation. Perhaps the City can rethink ways of enticing developers into providing public space for all new developments, and not just when planning regulations are being modified in the creation of a new development.
- The City has invested time and thought into the POPS Urban Design Guideline, and it is a living document that could conceivably be modified to include penalties or consequences if a developer creates a sub-par POPS. The guideline even states that it is open to being modified in the face of new information.

POPS Urban Design Guidelines

The POPS Urban Design Guideline, in my opinion, is satisfactory overall. However, as I mentioned in the more thorough discussion of the Guideline, there is missing a much-needed section on acceptable standards and how the Guideline will be enforced.

The City of Toronto POPS Website also badly needs updating. Some of the "future POPS" sites are now complete and this should be reflected. Furthermore, the pinpoints on the map are not up to date which means there could be many POPS that are not accounted for. Also, there are POPS that are featured in the Urban Design Guideline but are missing from the map. These updates should be made as soon as possible, as this website is the only publicly-accessible inventory of Toronto POPS and their locations. If this website is incomplete and dated, it exacerbates the already poor level of accessibility of many Toronto POPS.

Moreover, there is one significant portion of the Guideline that I believe should be changed. I believe some of the typologies of built form that are accepted as POPS need modification. As mentioned, POPS can be courtyards, plazas, throughways/walkways, gardens, forecourts, landscaped setbacks and interior pedestrian connections. I think it should be reconsidered by planners at the City and other stakeholders, whether forecourts should be able to be a POPS. Some of the forecourts that I assessed,

especially mid-block forecourts, were quite limited in their functionality and in practice they did not contribute a considerable amount of extra public space. They presented more as extravagant building entrances, not a useful public space. I believe if developers want to create mid-block forecourts they must be of a minimum size and absolutely have elements like seating, tables, lighting, and plentiful greenery.

Furthermore, I was not able to find any POPS that resembles a true garden with diverse plant types. I would suggest then that the City be mindful of the types of POPS they are facilitating to be built in the city. If the most common types of POPS are the only type of POPS that are built, like forecourts and walkways, this limits the variety in the built form and may forgo better uses of space such as gardens or courtyards which may provide more greenery and more opportunities for socialization and restoration. I strongly recommend the City work with developers to provide POPS of all urban forms to provide a rich, varied and more interesting urban landscape.

Conclusion

As I mentioned in the introduction, privately-owned, publicly-accessible spaces, a type of public-private partnership, are a unique feature of major cities that utilize neoliberal city planning tactics. My research question, to reiterate, was do/how Toronto POPS contribute to human health and well-being? I set out to answer this question by assessing 25 random POPS in Toronto by three indicators: level of greenery, use/functionality and accessibility. Based on my research, at this point in time, Toronto POPS do not seem to contribute to health and wellbeing of urban residents in meaningful ways. However, there is a potential that with some consistent changes and better enforcement of the POPS Urban Design Guidelines, they definitely could.

Bibliography

- Adkins, A., Dill, J., Luhr, G., & Neal, M. (2012). Unpacking Walkability: Testing the Influence of Urban Design Features on Perceptions of Walking Environment Attractiveness. *Journal of Urban Design*, *17*(4), 499–510. https://doi.org/10.1080/13574809.2012.706365
- Alcock, I., White, M. P., Wheeler, B. W., Fleming, L. E., & Depledge, M. H. (2014). Longitudinal effects on mental health of moving to greener and less green urban areas. *Environmental Science & Technology*, 48(2), 1247–1255.
- Badland, H., Whitzman, C., Lowe, M., Davern, M., Aye, L., Butterworth, I., Hes, D., Giles-Corti, B. (2014). Urban liveability: Emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health. *Social Science and Medicine*, *111*, 64-73.
- Bixby, H., Hodgson, S., Fortunato, L., Hansell, A., & Fecht, D. (2015). Associations between green space and health in English cities: an ecological, cross-sectional study. *PloS One*, *10*(3), e0119495. https://doi.org/10.1371/journal.pone.0119495
- Bjerkeset, S., Aspen, J. (2017). *Private-public space in a Nordic context: the Tjuvholmen waterfront development in Oslo*. 22(1), 116–132.
- Bodnar, J. (2015) Reclaiming public space. Urban Studies, 52 (12), pp. 2090-2104.
- Bowler, D., Buying-Ali, L., Knight, T., & Pullin, A. (2010). The importance of nature for health: is there a specific benefit of contact with green space? *Systematic Review-Collaboration for Environmental Evidence*, (40). Retrieved from http://www.cabdirect.org/abstracts/20103229510.html
- Bratman, G. N., Hamilton, J. P., & Daily, G. C. (2012). The impacts of nature experience on human cognitive function and mental health: Nature experience, cognitive function, and mental health. *Annals of the New York Academy of Sciences*, *1249*(1), 118–136. https://doi.org/10.1111/j.1749-6632.2011.06400.x
- Bratman, G. N., Hamilton, J. P., Hahn, K. S., Daily, G. C., & Gross, J. J. (2015). Nature experience reduces rumination and subgenual prefrontal cortex activation. *Proceedings of the National Academy of Sciences*, *112*(28), 8567–8572.
- Carpenter, M. (2013). From 'healthful exercise' to 'nature on prescription': The politics of urban green spaces and walking for health. *Landscape and Urban Planning*, 118, 120–127. https://doi.org/10.1016/j.landurbplan.2013.02.009
- Carter, E. D. (2015). Making the Blue Zones: Neoliberalism and nudges in public health promotion. *Social Science & Medicine*, *133*(Complete), 374–382. https://doi.org/10.1016/j.socscimed.2015.01.019

- City of Toronto (2003) Final Report Application to amend the Official Plan and Zoning By-law of the (former) City of Toronto: 403 Keele Street.
 - https://www.toronto.ca/legdocs/2003/agendas/committees/yk/yk030708/it015.pdf
- City of Toronto (2013) Protecting and Increasing Access to Privately Owned Publicly Accessible Open Space (POPS) Status Update.
 - https://www.toronto.ca/legdocs/mmis/2013/pg/bgrd/backgroundfile-59381.pdf
- City of Toronto (2014a) Privately-Owned Publicly Accessible Spaces (POPS). Toronto. https://www.toronto.ca/city-government/planning-development/official-planguidelines/design-guidelines/privately-owned-publicly-accessible-spaces-pops/
- City of Toronto (2014b) POPS: Creative Place Making to Enhance Urban Life. Toronto. https://www.toronto.ca/legdocs/mmis/2014/pg/bgrd/backgroundfile-70177.pdf
- City of Toronto (2019) Parkland Dedication. https://www.toronto.ca/city-government/planning-development-guide/parkland-dedication/
- City of Toronto (2019b) Application Support Material: Terms of Reference. Toronto. https://www.toronto.ca/city-government/planning-development/application-forms-fees/building-toronto-together-a-development-guide/application-support-material-terms-of-reference/
- Costanza, R., de Groot, R., Braat, L., Kubiszewski, I., Fioromonti, L., Sutton, P., Farber, S., Grasso, M. (2017) Twenty years of ecosystem services: how far have we come and how far do we still need to go? *Ecosystem Services*, *28*, 1-16.
- Currie, M. A. (2018). A design framework for small parks in ultra-urban, metropolitan, suburban and small town settings. *Journal of Urban Design*, *22*(1), 76–95. https://doi.org/10.1080/13574809.2016.1234334
- Deka, D., Brown, C. T., & Sinclair, J. (2018). Exploration of the effect of violent crime on recreational and transportation walking by path and structural equation models. *Health & Place*, *52*(Complete), 34–45. https://doi.org/10.1016/j.healthplace.2018.05.004
- Ferguson, M. (n.d.). Contrasting distributions of urban green infrastructure across social and ethno-racial groups. 175(Complete), 136–148.
- Flowers, E.P., Freeman, P., Gladwell, V.F. A cross-sectional study examining predictors of visit frequency to local green space and the impact this has on physical activity levels. *BMC Public Health*, *16* (420),1-8.
- Francis, J., Giles-Corti, B., Wood, L., Knuiman, M. (2012) Creating sense of community: the role of public space. *Journal of Environmental Psychology*, *32*, 401-409.
- Giles-Corti, B., Broomhall, M. H., Knuiman, M., Collins, C., Douglas, K., Ng, K., ... Donovan, R. J. (2005). Increasing walking. *American Journal of Preventive Medicine*, 28(2), 169–176. https://doi.org/10.1016/j.amepre.2004.10.018

- Haluza, D., Schönbauer, R., & Cervinka, R. (2014). Green Perspectives for Public Health: A Narrative Review on the Physiological Effects of Experiencing Outdoor Nature. International Journal of Environmental Research and Public Health, 11(5), 5445–5461. https://doi.org/10.3390/ijerph110505445
- Han, K.-T. (2017). The effect of nature and physical activity on emotions and attention while engaging in green exercise. *Urban Forestry & Urban Greening*, *24*, 5–13. https://doi.org/10.1016/j.ufug.2017.03.012
- Hogan, M. J. (n.d.). *Happiness and health across the lifespan in five major cities: The impact of place and government performance.* 162(Complete), 168–176.
- Huang, T.-S., Franck, K.A. (2018). Let's meet at Citicorp: can privately owned public spaces be inclusive? *Journal of Urban Design*, 23(4), 499–517.
- Irvine, K.N., Warber, S.L., Devine-Wright, P., Gaston, K.J. (2013) Understanding urban green space as a health resource: a qualitative comparison of visit motivation and derived effects among park users in Sheffield, UK. *International Journal of Environmental Research and Public Health*, 10, 417-442.
- Kayden, J. S. (2001). Using and misusing zoning law to design cities: An empirical study of new york city's privately owned public spaces (part 1). *Land use Law & Zoning Digest*, *53*(2), 3-10. doi:10.1080/00947598.2001.10394506
- Kashef, M. (2016). Urban livability across disciplinary and professional boundaries. *Frontiers of Architectural Research*, 5(2), 239–253. https://doi.org/10.1016/j.foar.2016.03.003
- Keenan, E. (January 2015) Section 37 What it is, and why everybody's fighting about it.

 Toronto Star. https://www.thestar.com/news/gta/2015/01/16/section-37-what-it-is-and-why-everybodys-fighting-about-it-keenan.html
- Keul, A. (2015) The fantasy of access: Neoliberal ordering of a public beach. *Political Geography*, 48, 49–59. https://doi.org/10.1016/j.polgeo.2015.05.005
- Koohsari, M.J., Badland, H., Giles-Corti, B. (2013) (Re)Designing the built environment to support physical activity: Brining public health back into urban design and planning. *Cities*, 35, 294-298.
- Koohsari, M.J., Kaczynski, A.T., Giles-Corti, B., Karakiewicz, J.A. (2013) Effects of access to public open spaces on walking: Is proximity enough? *Landscape and Urban Planning*, *117*, 92-99.
- Koohsari, M.J., Mavoa, S., Villanueva, K., Sugiyama, T., Badland, H., Kaczynski, A.T., Giles-Corti, B. (2015) Public open space, physical activity, urban design and public health: Concepts, methods and research agenda. *Health and Place*, *33*, 75-82.
- Koohsari, M.J., Owen, N., Cole, R., Mavoa, S., Oka, K., Hanibuchi, T., Sugiyama, T. (2017) Built environmental factors and adults' travel behaviours: role of street layout and local destinations. *Preventative Medicine*, *96*, pp.124-128.

- Kayden, J. S. (2001). Using and misusing zoning law to design cities: An empirical study of new york city's privately owned public spaces (part 1). *Land use Law & Zoning Digest*, 53(2), 3-10.
- Kwan, A. (2013) Private space or public park? Revealing Toronto's in-between spots. *The Globe and Mail*, Toronto. https://www.theglobeandmail.com/news/toronto/private-space-or-public-park-revealing-torontos-in-between-spots/article14315725/
- Larsen, E. L., & Manderson, L. (2009). "A good spot": Health promotion discourse, healthy cities and heterogeneity in contemporary Denmark. *Health & Place*, *15*(2), 606–613. https://doi.org/10.1016/j.healthplace.2008.10.001
- Lehrer, U., Keil, R., & Kipfer, S. (2010). Reurbanization in toronto: Condominium boom and social housing revitalization. *DisP the Planning Review, 46*(180), 81-90. doi:10.1080/02513625.2010.10557065
- Lewis, S., Willis, K., & Collyer, F. (2018). Navigating and making choices about healthcare: The role of place. *Health & Place*, *52*(Complete), 215–220. https://doi.org/10.1016/j.healthplace.2018.06.009
- Lindholst, A.C., van den Bosch, C.C.K., Kjøller, C.P., Sullivan, S., Kristoffersson, A., Fors, H., Nilsson, K. (2016) Urban green space qualities reframed toward a public value management paradigm: the case of the Nordic Green Space Award. *Urban Forestry and Urban Greening*, 17, pp.166-176.
- Lorinc, J. (June 2017) *The trials and tribulations of Toronto's street trees*. The Globe and Mail. https://www.theglobeandmail.com/news/toronto/the-trials-and-tribulations-of-torontos-street-trees/article35467433/
- Maas, J., & Verheij, R. A. (2007). Are health benefits of physical activity in natural environments used in primary care by general practitioners in The Netherlands? *Urban Forestry & Urban Greening*, 6(4), 227–233. https://doi.org/10.1016/j.ufug.2007.03.003
- <u>Makarewicz</u>, C., <u>Németh</u>, J. (2018) Are multimodal travelers more satisfied with their lives? A study of accessibility and wellbeing in the Denver, Colorado metropolitan area. *Cities*, *74*, pp.179-187.
- Marsh, P., Gartrell, G., Egg, G., Nolan, A., & Cross, M. (2017). End-of-Life care in a community garden: Findings from a Participatory Action Research project in regional Australia. *Health & Place*, 45(Complete), 110–116. https://doi.org/10.1016/j.healthplace.2017.03.006
- Mintz, C. (August 2016) Do busy restaurants have the right to take up public space? TVO. https://www.tvo.org/article/do-busy-restaurants-have-the-right-to-take-up-public-space
- Moore, A.A. (2013) *Trading Density for Benefits: Toronto and Vancouver Compared*. Munk School of Global Affairs, University of Toronto.
 - https://munkschool.utoronto.ca/imfg/uploads/220/imfg no 13 moorer3 online final.pdf
- Mowen, A. J., Barrett, A. G., Graefe, A. R., Kraschnewski, J. L., & Sciamanna, C. N. (2017). "Take in two parks and call me in the morning" Perception of parks as an essential component

- of our healthcare system. *Preventive Medicine Reports*, *6*, 63–65. https://doi.org/10.1016/j.pmedr.2017.02.006
- Nemeth, J. (2012) Controlling the commons: how public is public space? *Urban Affairs Review,* 48(6), 811-835.
- Nemeth, J. (2006) Conflict, exclusion, relocation: skateboarding and public space. *Journal of Urban Design*, 11(3), 297-318.
- Németh, J., and Schmidt, S. (2011) The privatization of public space: modeling and measuring publicness. *Environment and Planning B: Planning and Design, 38,* 5-23.
- Németh, J., and Schmidt, S. (2007) Toward a methodology for measuring the security of publicly accessible spaces. *Journal of the American Planning Association*, 73 (3), 283-297.
- Noble, K. (2015) *Parks in Crisis, Part 6: Are privately owned public spaces the answer to parks deficit?* Spacing Toronto. http://spacing.ca/toronto/2015/04/21/parks-crisis-part-6-privately-owned-public-spaces-answer-parks-deficit/
- Pantalone, P. (2014) Density Bonusing and Development in Toronto. York University. https://www.scribd.com/doc/305295151/Peter-Pantalone-Density-Bonusing-and-Development-in-Toronto-2014
- Peschardt, K. K., Stigsdotter, U. K., & Schipperrijn, J. (2016). Identifying Features of Pocket Parks that May Be Related to Health Promoting Use. *Landscape Research*, *41*(1), 79–94. https://doi.org/10.1080/01426397.2014.894006
- Ricker, C. (2014) An exploration into the creation of 'privately-owened publicly-accessible spaces' in Toronto, Ontario. *Ryerson University*, Toronto. https://digital.library.ryerson.ca/islandora/object/RULA%3A4922
- Rigolon, A., Németh, J. (2018) Privately owned parks in New Urbanist communities: a study of environmental privilege, equity and inclusion. *Journal of Urban Affairs*, 40 (4), 543-559.
- Sandifer, P. A., Sutton-Grier, A. E., & Ward, B. P. (2015). Exploring connections among nature, biodiversity, ecosystem services, and human health and well-being: Opportunities to enhance health and biodiversity conservation. *Ecosystem Services*, 12, 1–15.
- Sharma, N. (August 2017) *Private Parkettes Are No Substitute for Real Public Space*. Torontoist https://torontoist.com/2017/08/private-parkettes-no-substitute-real-public-space/
- Sloane, D. C. (2006). Longer View: From Congestion to Sprawl: Planning and Health in Historical Context. *Journal of the American Planning Association*, 72(1), 10–18. https://doi.org/10.1080/01944360608976720
- Spurr, B. (August 2014) Council backs property line markers following bike-snatching controversy. *Toronto NOW*, Toronto. https://nowtoronto.com/news/council-backs-property-line-markers-following-bike-snatching-controversy/
- Takano, T., Nakamura., Watanabe, M. (2002) Urban residential environments and senior citizens' longevity in megacity areas: the importance of walkable green spaces. *Journal of Epidemiol Community Health*, *56*, 913-918.

- Vendeville, G. (August 2016) *La Carnita's private patio on public space angers condo owners.*Toronto Star. https://www.thestar.com/business/2016/08/16/la-carnitas-private-patio-on-public-space-angers-condo-owners.html
- Villanueva, K., Badland, H., Hooper, P., Koohsari, M.J., Mavoa, S., Davern, M., Roberts, R., Goldfield, S., Giles-Corti, B. (2015) Developing indicators of public open space to promote health and wellbeing in communities. *Applied Geography*, *57*, 112-119.
- Volker, S., Matros, J., Claβen, T. (2016) Determining urban open spaces for health-related appropriations: a qualitative analysis on the significance of blue space. *Environmental Earth Science*, 75(1067), 1-18.
- Wang, Y. (2018) A critique of the socio-spatial debate and the publicness of urban space. *Norwegian Journal of Geography*, 72 (3), 161-175.
- Wood, L., Hooper, P., Foster, S., Bull, F. (2017) Public green spaces and positive mental health-investigating the relationship between access, quantity and types of parks and mental wellbeing. *Health and Place*, 48, 63-71.
- Zhang, X. (2017). Identifying consumerist privately owned public spaces: The ideal type of mass private property. *Urban Studies*, *54*(15), 3464–3479.
- Zhou, X., Rana, M.P. (2012) Social benefits of urban green space: a conceptual framework of valuation and accessibility measurements. *Management of Environmental Quality: An International Journal*, 23(2), 173-189.