# The Cooksville Creek Parkland Acquisition project: Planning a green space retrofit in Mississauga, Ontario

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# Abstract

The push to intensify in the GTA can put development pressures on community green spaces that provide vital public health and environmental services. As cities grow, planners will need to provide adequate green space for the growing population and to do so, they may need to re-arrange, or 'retrofit', land-uses to insert green spaces in the landscape. Following this, I examine the policy framework (including Provincial, Regional and municipal policies and plans) and tools that enable retrofits for green spaces in the GTA. I then investigate a case study, the Cooksville Creek Parkland Acquisition, a green space retrofit in Mississauga, Ontario to see how one municipality has approached a retrofit project. To better understand how the project is being implemented, I explore the role of four 'implementation factors': actors; values and visions; governance structures and decision-making processes; and policies and strategies. I found that while each of these factors interacted with each other, and that each was important in moving the Cooksville Project forward, the role of the actor (a city Councillor in this case) was especially pertinent—as well as two additional factors that were not included in the original framework: the economic and natural environment context.

# Foreword

A few years ago, I moved to a new neighbourhood in the Mississauga suburbs with my family. We are in love with this neighbourhood. There is an extensive trail system with two 'lakes', and we can access almost everything we need by walking on these green path ways: Schools, daycares, doctor, dentist, drug store, grocery store, library, community centre, pool, splash pad, playground, a city transit terminal and the GO station. The parks and trails are used heavily, and we often bump in to neighbours and friends. One night my husband and I were talking about how lucky we are to live in a neighbourhood like this, and I was comparing it to other subdivisions I have lived in where you can't walk to anything at all in a decent amount of time, and you rarely see other people walking around. I jokingly said, 'but how can you fix them if they are already built? You can't just go in and bulldoze a trail through there!' It sounded completely crazy to me, until, much to my excitement, I learned this is an actual planning approach called suburban retrofitting. Then, while researching for a paper in one of my courses, I learned about the Cooksville case study (the focus of this research) and I saw an opportunity to combine my long-time passion for green space, with my new-found desire to learn more about land-use retrofits.

In undertaking this research, I was able to fulfill many of my learning objectives. From my literature review I gained an understanding of the theories and practices that comprise sustainable development (including ecodesign and biophilic design) (learning objective 1.2), and the concept of sprawl repair and suburban retrofitting (learning objective 1.4), specifically as they apply to greenspaces and walkability. To write the policy framework section of this paper I read extensively on legislation, policy and tools related to planning for green spaces and parks, and as a result gained a solid understanding of this policy framework (learning objective 3.1). Finally, in investigating the Cooksville case study, analyzing its implementation, and comparing it to the implementation of other related projects, I was able to gain a strong understanding of the factors that affect implementation of these types of projects (learning objective 3.2), including the role of different actors (learning objective 3.3).

More than once while developing my POS I said to my advisor and supervisor Laura Taylor, 'I just want to understand how everything works!' A tall order for sure, and not quite specific enough for a POS. However, from a high-level view, the research for this paper really helped me understand how things work in planning and municipal governance, from an idea to inception, and this paper documents my journey. I hope you enjoy reading it as much as I enjoyed writing it.

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# 1. Introduction

How can green spaces be retrofitted into existing cities and suburbs? Sustainable development principles are entrenched in planning policies and practice in Ontario, and green spaces are a core aspect of sustainable cities. Sustainable development can be thought of as an umbrella term, comprising many practices, principles and designs including concepts related to natural heritage systems, parks and trails, green infrastructure, new urbanism, multi-modal transportation, and community planning (Connelly et al., 2009; Filion, 2003; Jabareen, 2006). The implementation of a variety of sustainable development practices has been studied in a Canadian context (e.g., Barnett & Beasley, 2015; Connelly et al., 2009; Filion, 2003; Grant, 2009; Stuart et al., 2016) however there is one specific aspect that has not been studied, and that is how to create green spaces in fully built-out cities. There is a growing body of work that focuses on green spaces in dense cities in Europe, Asia and Australia (see Haaland & Brosch, 2015; Lin et al., 2015), but not Canada or the Greater Toronto Area. My research addresses that gap through a study of Cooksville in Mississauga, Ontario, where suburban homes are planned to be demolished to make way for more park space. The Cooksville case, although a unique example of how one city is addressing their need for more parkland due to intensification, has provided me with the opportunity to better understand planning policy and implementation challenges of green space retrofits. Because green space creation (or what I will call 'green space retrofits', see below) does not feature in the literature, but falls under the umbrella of sustainable development and smart growth, I will draw on research from those fields throughout this research.

## Green space retrofits

The term 'retrofit' is most commonly used to refer to upgrades to buildings or infrastructure. For example, replacing old technology and building materials with newer, more efficient options in buildings to reduce energy use (Canada Green Building Council, n.d.), or replacing hard infrastructure with green infrastructure or low-impact development for stormwater management (e.g., see Despins et al., n.d.; ASLA, 2018). The term 'retrofit' has also been applied to suburban land-use in the sense of creating a finer grain street network with more connectivity, and introducing a mix of uses (Tachieva, 2010; Dunham-Jones & Williamson, 2011). However, in this paper the way I use the term is slightly different (though closely related) because my focus is on retrofitting for green spaces for the purpose of addressing park deficits. Similar to suburban land-use retrofits, I use 'green space retrofits' to refer to

rearranging the land-use of an area to insert a green space, which can be any type of park, garden, or pathway. It is useful to have a term for this because with growth occurring by intensification in the city centres of the GTA, the need for parks will grow to serve the increasing number of residents, just as space becomes scarcer and land values rise, creating a problem with growing urgency for planners.

## The importance of green spaces for human and environmental health

For this research, I consider green spaces to be large or small parks, wild or manicured, designed for active or passive use, flower or edible gardens, stormwater management ponds and human- made lakes, linear parks, trails or pathways.

The multitude of public health benefits associated with green spaces makes them a boon to planners to support planning for healthy, active communities. The benefits of green spaces to human health can be broadly divided into psychological and physical health benefits. Green features such as parks, trails, and even simply the view of trees or plants from a window have been shown to reduce stress, improve wellbeing (Ward Thompson et al., 2012), and even speed up healing (Park & Mattson, 1991). Studies of children and green space have found positive associations between wellbeing and increased species richness (Fuller et al., 2007), as well as reduced ADD symptoms in children with time spent in nature (Taylor et al., 2001). The stress-reducing effects of nature on people can translate into physical benefits as well, as stress is known to negatively affect physical health (Steptoe et al., 2005). Additional physical benefits are realized in green spaces such as parks and trails where one can be active. For example, people who live in close proximity to a park or trail tend to report higher levels of physical activity (Diez Roux et al., 2007). Interestingly, exercising while in nature has been shown to boost feelings of confidence in comparison with working out indoors—a double benefit for both physical and mental wellbeing (Barton & Pretty, 2010). These public health benefits create a strong case for the importance of planning for greenspace when retrofitting neighbourhoods.

Green spaces also offer ecosystem services such as air filtration and noise attenuation (both of which also directly impact human health), decreasing urban heat island effects, infiltration of stormwater, and replenishment of groundwater stores (Escobedo et al., 2011). Collectively, these features can provide resilience to climate change-related stresses, such as extreme weather events (e.g. tempering the effects of a flood or drought) and increasing temperatures. Green spaces can also provide an opportunity to grow food that is fresh, local and affordable.

## Intensification, park provision and the need for green retrofits in the GTA

My interest in retrofits stemmed from wondering how intensification will affect green spaces. Intensification means directing growth within the city/suburb as opposed to accommodating growth on greenfields at the periphery. Intensification can include redeveloping existing structures or parcels of land to accommodate a higher density (densification), or building new structures in underused spaces within the city (infill) (Ontario, n.d.). Density can refer to more people, more jobs, or more residential units in a given area. The Ontario *Growth Plan for the Greater Golden Horseshoe* (*Growth Plan*)(2017a) was created in response to the growth pressure being faced in the Greater Golden Horseshoe (GGH), and it sets out intensification and other sustainable planning measures as the prescribed course of action (Ontario, 2017a). While dense cities facilitate sustainable practices such as transit and walking, the process of densifying can cause ecological degradation due to decreased permeability, loss of wildlife habitat and loss of green space (Haaland & Brosch, 2015), and studies have confirmed the loss of green space due to densification in various cities (Haaland & Brosch, 2015; Lin et al., 2015). Intensification poses greater stress on existing stormwater infrastructure, and potentially increased automobile traffic, thus stormwater management and air quality are key concerns of planners (Ontario, 2017a). Greenspaces play a key role in mitigating negative effects of intensification, if planned for appropriately.

Guiding planning documents such as the *Growth Plan* (2017a), the *Greenbelt Plan* (2017), and most municipal Official Plans contain policies that paint pictures of idyllic cities and suburbs, where nature and the city are one, residents can walk to most of their destinations, and communities are laden with greenery. Recognizing the importance of adequate green space, many cities have policies that call for a certain amount of green space per resident or unit and/or that each resident must be within a set distance to a park. For example, the 2014 Mississauga Parks and Forestry Master Plan indicated that each resident should be within 800 metres of a park, and in the updated 2019 Plan that distance has been halved to within 400-800 metres for areas identified for residential growth, requiring the City to create more green spaces (Mississauga, 2019). As awareness of the impacts green spaces have on climate change mitigation and human health increases, I think it is reasonable to expect that more cities will enact similar policies and create even more ambitious goals.

At the same time, Mississauga has a policy that there must be 1.2 hectares of green space per 1000 residents for new developments in the growth area (Mississauga, 2019). As the city undergoes intensification, more residents will occupy the same area, meaning that either the park 400 metres away must get bigger and bigger, or the city must create multiple parks 400 metres away[1]. Here lies the problem. Two planning directives, intensification and green space provision, both of which came into play in order to improve human and environmental health (among other reasons), are competing with each other for land in cities. Given the importance of green spaces and the increasing growth by intensification in the GTA, successfully implementing green retrofits is crucial to ensure that while cities in the region grow and become more dense, the health of the environment and its inhabitants are not compromised. This challenge leads to the questions I explore with this research: How can municipalities, specifically Mississauga, successfully implement green retrofits in this context? What is the policy framework in place to support and enable green retrofit projects? What are the main factors leading to successful implementation? Notably, these questions have not yet been explored in the literature in a Canadian context. In response, I present in this paper a comprehensive policy framework that details what policies are in place to promote, guide and enable green spaces in the GTA, and in Mississauga in particular. Consolidating all the relevant policies and tools available can be a useful resource to other researchers and planners interested in green space retrofits.

Then, to gain a deeper understanding of how municipalities are creating green space in built-up areas, and the challenges to implementation, I will examine the Cooksville Parkland Long-Term Acquisition (the 'Cooksville case') in Mississauga, Ontario. In this case, the City has identified a parkland deficit in their urban growth area surrounding the downtown core (which includes the neighbourhood of Cooksville), and is retrofitting the area by acquiring residential properties to create a green space. As will become apparent in my analysis, in this case actors, values, governance structures, policies, economic, and environmental factors are all playing a role in the implementation of this project, which is ongoing. In analysing the implementation of this case, I present how one municipality has approached a green space retrofit, and what are the key factors that are enabling or challenging implementation in this project.

[1] The City has acknowledged the challenge of reconciling intensification and park provision targets in the downtown core, so they have altered the targets for this area to not '400 or 800 metres', instead creating a general quota for the area of 12%. (Mississauga, 2019). Regardless, I think my point stands.

# 2. Methods

This research explores the policy framework that enables municipalities to undertake green space retrofits in the GTA, specifically Mississauga, and the factors that affect implementation. I will address two questions, both in terms of the specific Cooksville case study, as well as considering them more generally for future similar projects:

- What policies and tools are available to GTA municipalities, specifically Mississauga, to retrofit for green space?
- What are the key factors that enable or challenge implementation of green space retrofits in Mississauga and the GTA?

The first question is explored primarily by conducting an analysis of relevant literature, provincial legislation, and municipal policy, plans and reports, which I will do in the *Policy Framework for Green Space Retrofitting* ('policy framework' section). The policy framework section provides an in-depth understanding of the 'rules of the game' – that is the 'rules' that enable, restrict, and guide greenspace creation and retrofits in Mississauga, the site of the case study.

The second question is explored using an analytical framework (described below) to assess what role different factors played in the implementation of a green space retrofit case study. To learn about the case, I reviewed secondary sources pertaining to the Cooksville case (including Council and flood task force minutes, corporate reports, newspaper articles, City plans and strategies and an environmental assessment), and two semi-structured interviews were conducted with people familiar with the project. The first was with the former City Councillor of Cooksville, Nando Iannicca, and the second was with the Manager of Parks Planning for the City of Mississauga, Sharon Chapman. Both interviews were conducted in person in June 2019. The purpose of the interviews was to gather information on what spurred the idea, how it evolved, who was involved, what conversations were had, and how the idea gained support—information that would not be found in publicly available secondary sources. I also conducted two site visits of the proposed park area in June and July 2019.

## Analytical Framework

The analysis of the case study is structured using a modified version of a framework borrowed from Sean Connelly, Sean Markey, and Mark Roseland from their paper *Strategic Sustainability: Addressing the community infrastructure deficit* (2009). The framework has five elements: Actors; Values and Visions; Governance Structures and Decision-Making Processes; Policies and Strategies; and Signals, Actions and Outcomes (see Table 1). In their paper they use the framework to analyse a number of sustainable community planning projects that face similar implementation challenges as green space retrofits such as larger up-front costs and difficulty in implementation due to fragmentation of responsibility (Barnett & Beasley, 2015). For these reasons, I thought that the framework used by Connelly et al. would be a good fit for analysing the present case study. I altered their framework slightly (Table 2) by changing some of the wording in the descriptions, and by removing the fifth factor, Signals, Actions and Outcomes, because the Cooksville case is not a completed project at this time. There is a future opportunity here to revisit this case when it is complete and round out the analysis by addressing this fifth factor.

*Table 1: Analytical framework used by Connelly et al. (2009).*

| Framework Element | Description |
|---|---|
| Actors | Community actors influence policy development and community outcomes in a variety of ways. Each actor's values inform a vision for its future which it implements through its own set of strategies, tools and activities and through its motivations and mandates for engaging in sustainability initiatives (Minnery 2007). |
| Values and Visions | Community members interact through formal policy and planning processes, and informally through their everyday interactions. This element represents how values and visions are expressed through formal planning processes (such as Official Community Plans) and informally through action and how these in turn inform decision-making and policy development. The way that the tensions and conflicts are mediated often plays a role in determining implementation activities (Healey 2006). |
| Governance Structures and Decision-making Processes | This element captures the processes and opportunities for actors to engage in decision-making processes and the structures and principles that govern that engagement. |
| Policies and Strategies | This element explores the formal policy processes used to guide activities of various community actors towards expressed sustainability outcomes. |
| Signals, Actions and Outcomes | This element explores the linkages between how sustainability outcomes result from the combination of the other framework elements and how they in turn influence and shape the other elements of the community decision-making system. |

The first factor, Actors, considers the people involved in the case and how they were able to influence policy development, implementation and outcomes in different ways depending on their own values,

visions, role and relative power and numbers. The second factor, Values and Visions, considers the values and visions of the municipality, community, and society (and how they are reflected in the economy) and how they influence what projects are undertaken and how well they are supported with resources. The third factor, Governance Structure and Decision Making Processes, considers the governance structures and processes involved in the case, and the opportunities and constraints for implementation built in to these structures and processes. The fourth factor, Policies and Strategies, considers if there are policies and strategies in place that enable, guide or restrict actions that support green retrofit projects. Through my research, I identified a fifth factor relevant to implementation that was not included in the original framework, which I will call the Natural Environment. I found that the characteristics of the natural environment of place can influence the outcome of the green retrofit if, for example, the land is hazardous (e.g. floodplain, like the Cooksville Case), or there was a recent natural disaster, or if the land holds significant meaning for the community. Table 2 describes this framework with my modifications.

*Table 2: Modified Analytical Framework to be used for this research*

| **Implementation Factor** | **Description** |
|---|---|
| Actors | The actors in a case influence policy development, implementation and outcomes in different ways depending on their own values, visions, role in the case, and relative power and numbers. |
| Values and Visions | The values and visions of the municipality, community, and society (reflected in the economy) influence what projects are undertaken and how well they are supported with resources. |
| Governance Structures and Decision-making Processes | The governance structures and processes involved in the case create opportunities and constraints for implementation |
| Policies and Strategies | The policies and strategies in place in a municipality can enable, guide or restrict actions that support green retrofit projects |
| Natural Environment | The characteristics of the natural environment of place can influence the outcome of a project if for example, the land is hazardous, or there was a recent natural disaster, or if the land holds significant meaning for the community. |

Using a framework such as this is helpful to organize the analysis in an integrated manner, and make clear the key factors affecting implementation in case. From this, I can make recommendations and key takeaways for other future green space projects (Connelly et al., 2009).

# 3. Case Study Introduction: Cooksville Parkland Long-term Acquisition (the 'Cooksville case')

To aid in the exploration of how municipalities can create green spaces in cities undergoing intensification, I need look no further than my own city, Mississauga, for a case study. As a developed city with no unplanned for green fields left, Mississauga must create new green spaces on land that is already currently in some way developed (residential, industrial, infrastructure etc.) (Mississauga, 2019). That there are no greenfields left is in itself is a barrier to creating green space, but in addition, Mississauga is growing through intensification, meaning it needs to create more jobs and residential units in the same amount of space it already has. This means that any land suitable for residential or commercial development would most likely stay just that, and creating green spaces could be even more difficult (Mississauga, 2019). However, against this back drop the City is undertaking the Cooksville project to create a large park in its downtown core, which is its urban growth area per the *Growth Plan.* Through analyzing this case study, I will explore what factors are at play that have resulted in the City taking the step to create the park. First, this section will give the background of the place, Cooksville, Mississauga, then will introduce the park project, the Cooksville Parkland Long-term Acquisition (Cooksville case) and the key players involved.

## The Geography of Cooksville, Mississauga

The City of Mississauga is Toronto's next-door neighbour to the west. Having no more unassigned greenfields for development, Mississauga is growing by intensification, particularly in the downtown core including Cooksville (Mississauga, 2018). Currently, Cooksville is home to about 11,000 residents, and 600 small-to medium sized businesses (Mississauga, 2016b). By 2031, it is expected to add 7,000 residents, and 1,000 new jobs (Mississauga, 2016b).

Cooksville is a highly diverse and educated community: Over 60 languages are spoken, 35% of the residents have a bachelor's degree or higher, and new immigrants make up 67% of the population (Mississauga, 2015). The community is also made up of many young families, with 94% of residents residing in apartments, 5% residing in townhouses, and only 1% residing in detached houses (Mississauga, 2015). As a result, Cooksville has a higher rate of renters versus owners than the rest of Mississauga; in Cooksville, 57% rent and 43% own, compared to the rest of the city at 25% and 75% respectively (Mississauga, 2015).

### Development History of Cooksville

Cooksville today (known as Ward 7) is bordered by Burnhamthorpe Road and Dundas Street to the north, Cawthra Road to the east, the QEW highway to the south and the Credit River to the west (Mississauga, n.d.(a)). A portion of Cooksville occupies the downtown core (see Figure 2), which surrounds Square One Shopping Centre at Hurontario Street and Burnhamthorpe Road (Mississauga, 2016b). It has mostly apartment residences, strip malls, busy multi-lane roads, and frequent transportation service (Mississauga, 2015) (Figure 1). At a planning meeting in the area, community members described it as walkable, highly urban, having good transit and unique retail (Mississauga, 2016c). On the other hand, respondents from an online survey and a planning meeting geared to older adults felt their community needed beautification, safer streets, better parks and spaces for programming (Mississauga, 2015).

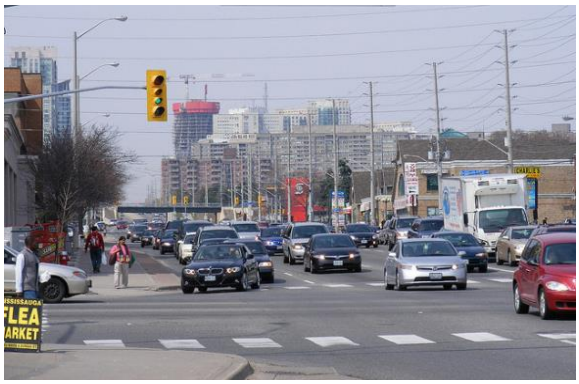

*Figure 1: Cooksville: Looking North up Hurontario St. from Dundas St. (Marshall, 2011)*

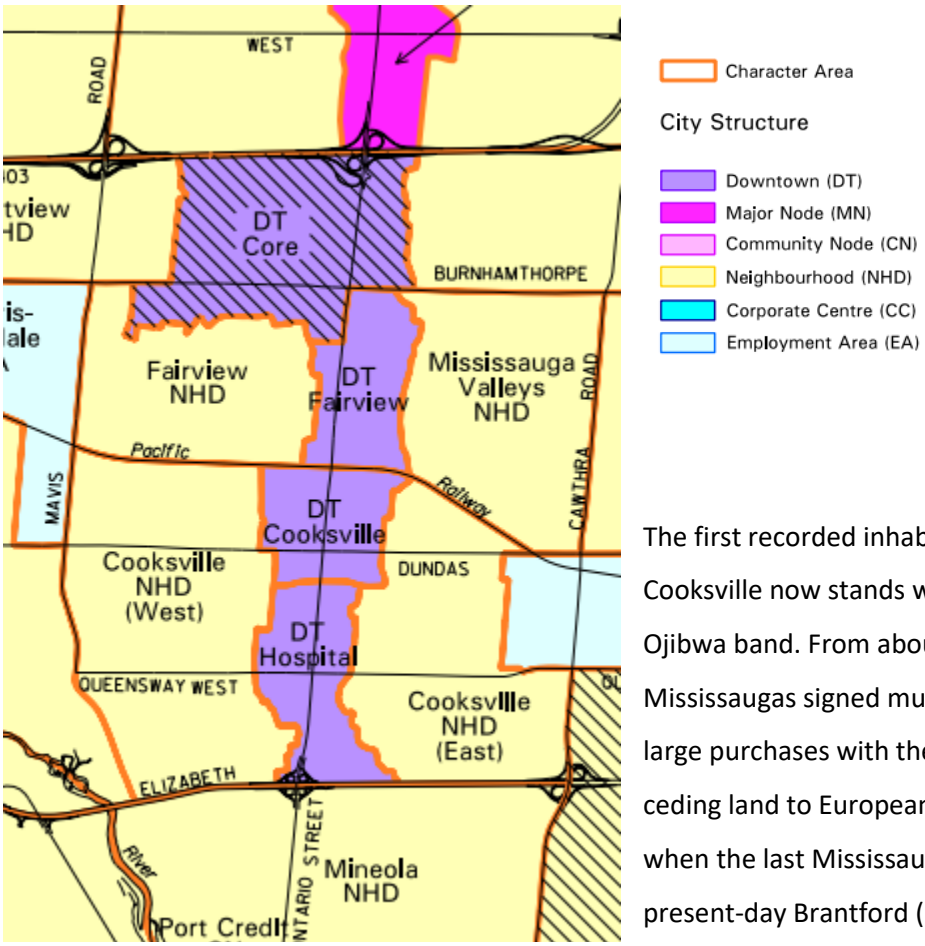


*Figure 2: Map displaying the portion of Cooksville that is part of the Downtown Character Area (in purple) per the Mississauga Official Plan. The area is centred on the intersection of Dundas Street and Hurontario Street (Mississauga, 2018)*

The first recorded inhabitants of the land where Cooksville now stands were the Mississaugas, an Ojibwa band. From about 1805 onwards the Mississaugas signed multiple treaties and two large purchases with the British crown, slowly ceding land to European settlers, until about 1847 when the last Mississaugas relocated near present-day Brantford (Heritage Mississauga, 2018b). Based on my research, I do not believe the Cooksville area is part of a current treaty dispute.

Cooksville began to develop at the intersection of Dundas Street and Hurontario Street, and by 1836 the village had grown and was renamed after the influential entrepreneur Jacob Cook as Cooksville (it was previously Harrisville) (Heritage Mississauga, 2018a). Until the 1940s the area was predominantly agricultural and woodlands, and afterwards development began to shift to residential, commercial and industrial (Aquafor Beech Ltd., 2012). Cooksville and several surrounding villages joined to become the Town of Mississauga in 1968, and in 1974, the town of Mississauga joined with several more villages and incorporated to become the City of Mississauga (Heritage Mississauga, 2018a,b) and at the same time became part of the newly formed Regional Municipality of Peel.

Cooksville is located within the Cooksville Creek watershed, which drains an area of about 33.9 $km^2$ to Lake Ontario (Aquafor Beech Ltd., 2012) (see Figure 3). Flood management in Cooksville has historically hinged on a hard infrastructure approach; a stormwater system with three stormwater management facilities to store water and release it slowly to the creek (Aquafor Beech Ltd., 2012). Cooksville suffers from two past planning mistakes. The first is an inadequate amount of park land, noted by residents during community consultations (Mississauga, 2016). Indeed, the Cooksville Watershed as a whole has only 9.6% of natural areas remaining, less than a third of the Environment Canada Habitat Guidelines recommended 30% forest coverage to protect species within a watershed (Aquafor Beech Ltd., 2012). The second planning error is that far too much development has occurred on the floodplains of Cooksville Creek, meaning there are extensive impermeable areas, resulting in increased surface runoff and increased risk of floods (Aquafor Beech Ltd., 2012). In turn, the City has been compensating for the lack of permeability in the area by investing heavily in hard infrastructure upstream to avoid floods (Aquafor Beech Ltd., 2012). Even still, houses close to the creek have faced serious floods (Mississauga, 2012). Figure 4 demonstrates the high level of urbanization in the Cooksville creek watershed.

*Figure 3: Cooksville Creek (Cooksville Creek EA, 2012)*

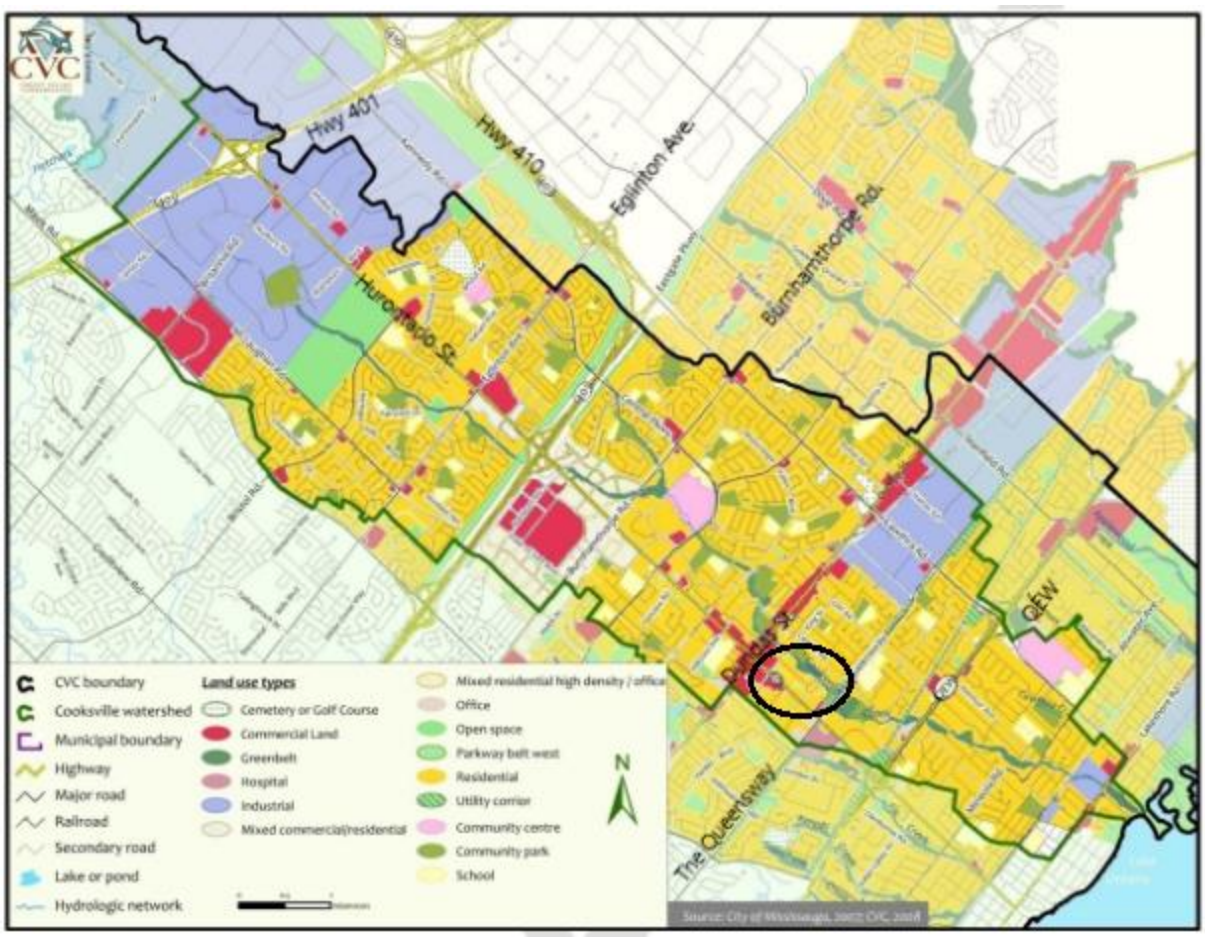


*Figure 4: The boundary and urbanization of the Cooksville creek Watershed. The land-uses are represented by yellow for residential, red for commercial, pink for community use, blue for industrial and green for open space. The black oval shows the approximate location of the proposed green space retrofit (Aquafor Beech, 2011).*

## What is the Cooksville Parkland Long-term Acquisition?

Seeking to address the lack of parks in the area, the City has identified an area around Cooksville Creek from Dundas Street to North Service Road as an ideal location to create an extensive greenspace. The hitch is that the City will need to buy the homes from the people living there, and the hope is that the residents will sell willingly. This endeavour has been termed the Cooksville Parkland Long-Term Acquisition project.


*Figure 5: The form of the proposed park will be determined by which properties the City can acquire, but will likely connect Cooksville and Camilla Parks. Some properties on Shepard Ave., Paisley Blvd. and Camilla Rd. have already been acquired. Image: Google, 2019.*

The project as it has been approved by Council is to acquire 31 properties that cover a total site of 25 acres (Mississauga, n.d.). The addresses of the properties have not been released. The homes in the area are medium to large sized, on large lots, and are almost obscured by the many mature trees and plants in the area (figure 6). Council approval did not authorize expropriation—they will only purchase from willing sellers (up to $2 million per home), and the final form of the park will be based on what lands they are able to buy (Mississauga, n.d.)(Figure 5). While the city has purchased approximately 50% of the identified properties (Chapman, S., Personal communication, June 19, 2019) there is a group of residents who are refusing to sell and who are outraged at what they feel is a complete lack of public consultation. The City's position is that public consultation regarding parks in the area was undertaken over several years during the development of several plans in the area, including the Vision Cooksville, Dundas Connects, and 2014 Future Directions for Parks and Forestry Master Plan (Mississauga, n.d.). This project is ongoing and is still in the stages of the City's Realty Department actively acquiring properties (Chapman, S. Personal communication, June 19, 2019).

*Figure 6: 90 Paisley Boulevard East, a home adjacent to the Cooksville Creek that has been purchased by the City for the Cooksville project (Google Earth, 2019).*

I selected this case because I was intrigued by the fact that the City is going forward with a large-scale green space retrofit in the down town, and that they are purchasing homes to do it. I wanted to understand the rationale behind it that gained enough support to move it forward. Also, I had heard anecdotally of municipalities acquiring land for infrastructure purposes, but never to create a park. In this sense, I thought it could provide a unique perspective, and also contribute to the literature as a case study in a Canadian policy text. In analysing this case and comparing it to what has been learned through the implementation of other sustainable community development projects, I hope to provide insight on how to improve implementation of green space retrofits in other built-out cities.

# 4. Policy Framework for Green Space Retrofitting

This section describes the key policies that are in place to support and guide the creation of green space generally in the GTA, and more specifically in the case study city, Mississauga. For the sake of brevity, it is not an exhaustive list of every policy related to greenspaces, only those that more directly call for or enable green space. By consolidating all the green space related policies in one place, this section can serve as a valuable resource to planners and academics in this field, given the scant research done on green space creation in the GTA. First, I clarify some basic policy terms and concepts and describe how

the responsibility of green space provision is divided among jurisdictions in Ontario. Secondly, I will zoom in to our case study area and identify what specific policies guide green space provision and what tools are available for its creation, in Ontario, the Region of Peel, and Mississauga. I conclude that there is a robust policy framework in place to support green space retrofits, but that the most useful policies are those from the Province that provide tools to municipalities for generating funding to support retrofits, and municipal policies that specify required green space provision minimums.

## Clarification of terms and concepts: Policy Framework, Policy Tools, and Jurisdiction

Before delving into the specifics of the policy framework, I define and clarify my use of certain policy terms and concepts:

### Policy Framework

I take 'policy framework' to mean the legislation, plans, strategies, and policies that govern and guide a topic in a specific context (Feldstein, 2011). In this paper, the topic is green space, and the context is Mississauga, Ontario—so the policy framework is describing all of the legislation, plans, strategies, and policies that govern green space in Mississauga. In my research I found that support for green space is a matter of interest for multiple governmental departments and policy focus areas as it supports their own overlapping mandates. For example, I found policies that support green space in documents covering the topics of planning, complete communities, transportation (multi-modal transport), recreation, conservation and public health.

This means that green space creation is cross-departmental; it is not only the task of the planning department. Jill Grant (2009) and Paul Langlois (2010) have pointed to the lack of inter-departmental collaboration as a barrier to implementation of sustainable design projects, although their research focused on the development of sustainable communities and new urbanism, not the creation of parks. In the analysis section I will revisit this issue of cross-departmental collaboration, and how it may help or hinder the Cooksville case and other green retrofits.

In this policy framework section, I will detail the policies that direct or help municipalities to create green spaces. The actual provision of green space in cities is usually in the mandate of the Planning and Parks and Forestry departments. As indicated above, there are connections to other departments such

as public health, recreation, and transportation, and indeed it falls to the planning department to bring together the needs and interests of different groups in to a coherent whole in order to build well-functioning cities.

## Policy Tools

Policy tools (sometimes called 'instruments'), are policies that enable a municipality to implement their plans (Feldstein, 2011; Hodge & Gordon, 2007). They are of particular interest to this research because in order for a municipality to create green space in a developed area, they must have some robust tools at their disposal to acquire land or rearrange land-uses. I have assembled a list of policy tools available to municipalities for green space creation in Appendix A based on my research of policies and planning in Ontario. Some examples included in the appendix are zoning, taxes, section 37 benefits, conveyance of parkland or cash in lieu (sections 42 and 51 of the *Planning Act*), and Local Improvement Charges. The tools work by either generating revenue for the municipality to put toward its objective, for example, imposing a cost on residents, businesses or developers to discourage a behaviour, or relieving costs to encourage behaviours. Later in this section, when I describe the policy framework in Mississauga, I will discuss the specific tools that are used or could be used in the case study.

## Jurisdiction: Green space provision in Ontario

In Canada, there are five bodies of government who have a part in green space provision, albeit with differing levels of involvement: The Federal, Provincial, Regional, and Municipal governments and the Conservation Authorities. Below I will briefly describe the role each of these levels of government plays in the creation of green space in cities.

### *Federal*

The federal government's jurisdiction is limited to large National parks (and any other federally owned land) (Feldstein, 2011) and does not extend to the types of green spaces this research is concerned with, such as smaller urban parks and trails, although the Rouge National Urban Park is an example of how the Federal government could become a bigger player in the provision of urban green spaces.

The Federal Government of Canada, through Parks Canada, has jurisdiction over National Parks. In Canada, National Parks tend not to be in the midst of urban centres, so in that way, the Federal government is not generally involved in urban green space provision – with one notable exception in the GTA – Rouge National Urban Park. From 2015 to 2017, Transport Canada (a department of the Federal

Government), the City of Pickering, and the Toronto and Region Conservation Authority transferred parcels of land to Parks Canada to create the Rouge National Urban Park (Parks Canada, 2019). The main drivers for the creation of National Parks are conservation related, and they also provide substantial revenues by way of tourism and recreation (Lemieux et al., 2012). They are 'destinations' one makes a trip to visit – aside from the small communities living on the outskirts, they are not the type of green space that is a part of daily life for most suburban and urbanites (Lemieux et al., 2012).

### *Provincial*

The Provincial government plays a crucial role in urban green spaces, as it gives municipalities and Conservation Authorities the powers and tools they need to function (Heinmiller & Pirak, 2017). In enacting legislation such as the *Planning Act* (implemented by the *Provincial Policy Statement*), *Places to Grow Act* (which authorizes the *Growth Plan for the Greater Golden Horseshoe*), the *Greenbelt Plan*, and the *Conservation Authorities Act,* the Province gave municipalities specific instructions and powers relating to land-use planning and greenspaces (Heinmiller & Pirak, 2017), for example the ability to collect parkland dedications (section 51 of the *Planning Act*, 1990), and direction to create cities that are healthy and livable and include adequate park space (Section 1 of the *Provincial Policy Statement,* 2014). In the next section I will explore the specific legislation and policies that relate to green spaces in further detail.

### *Conservation Authorities*

The purpose of conservation authorities is to deliver "programs and services that further the conservation, restoration, development and management of natural resources in watersheds in Ontario" (Ontario, 2019). Managing water quality and ecosystems by watershed is known as Integrated Watershed Management (IWM), and Ontario is unique in that it has been implementing IWM since 1946 with the approval of the *Conservation Authorities Act,* although other provinces are beginning to implement IWM in their own ways (Environment and Climate Change Canada, n.d.; Mitchell, 2008). By the principles of IWM, jurisdiction of Conservation Authorities is allocated by watershed, not by municipal boundaries. For example, the jurisdictions of both the Credit Valley Conservation Authority (CVC) and the Toronto and Region Conservation Authority (TRCA) overlap within Mississauga's municipal boundaries, so the City works with them both. Authorities may own and manage lands within a municipality that are of particular environmental significance such as major water bodies, forests and drinking water source protection areas (*Conservation Authorities Act,* 2017, s.21 and 29). The Cooksville

Creek is part of the Credit Valley watershed, and in turn the CVC monitors its water levels, alerts the City of possible flooding risks, and partners with the City in management of erosion, fallen trees and other hazards along the creek's banks (Cooksville Creek EA, 2012).

### *Municipalities*

While the Province sets the rules of land-use planning through legislation, and gives municipalities their powers, in practice, municipalities make the daily decisions on planning and city building and as such, have the most direct control over green space provision (Feldstein, 2011; Heinmiller & Pirak, 2017). They mould city development to the vision they created (Heinmiller & Pirak, 2017) by first solidifying their visions and strategies, and then set about creating a variety of plans (Official Plans, Local Area Plans, Master Plans etc.), and using the tools available to them (By-laws and development permit systems etc.). As mentioned previously, the imperative to provide adequate green space for residents is stated in plans and strategies related to general planning, recreation, public health, conservation, transportation and complete communities. Specific examples of these policies will follow in the next section on the policy framework supporting the Cooksville case.

One final thing to note is that municipalities may be 'single-tier' meaning they consist of one level of government (e.g., City of Toronto), or they may be split in two levels, an 'upper-tier' and 'lower-tier'. Upper-tier governments are regional governments as they cover a larger area, and they may have any number of lower-tier municipalities in their jurisdiction. For example, the Region of Peel governs three lower-tier municipalities: City of Mississauga, City of Brampton, and Town of Caledon. Upper-tier municipalities have delegated authority from the Province to create their own planning strategies, plans and policies, and their lower-tier municipalities must be in compliance with these in their own plans (Ontario, 2019a). Regional governments are concerned with the good planning of large areas, and bringing numerous municipalities together to ensure they are growing in a way that considers environmental, social and economic factors on a regional scale (Hodge & Gordon, 2007).

## The Policy Framework of the Cooksville Case

With the basic policy terms and governance structure relevant to the Cooksville case now explained, I present in detail what policies are in place that direct and enable green space creation in Mississauga.

## Provincial Policies

At the Provincial level, legislation is in place that directs municipalities to create green spaces, and gives them the tools to do so. Below are key policies in this regard.

### *The Planning Act*

The Planning Act is a key piece of legislation that provides municipalities with tools that could be used to create green spaces. The following is a brief description of these tools:

**Community Improvement Project Area (Section 28):** Council may designate an area a community improvement project (CIP) area by passing a by-law (s.28(2)) "due to age, dilapidation, overcrowding, faulty arrangement, unsuitability of buildings or for any other environmental, social or community economic development reason" (s.28(1)). Subsection 3 states that once the by-law has been passed, the municipality may acquire lands to use at it sees fit for community improvement. Subsection 7 then permits that municipalities may make grants or loans to private owners and other levels of government (an upper -tier to a lower tier and vice versa) to pay for costs associated with the community improvement plan. In designating an area a CIP, a city could be empowered (with funds made available through subsection 7) to acquire lands for the purpose of creating green space, if lack of parks or aesthetics are concerns laid out in the by-law.

**Conveyance of land for park purposes (Sections 42 and 51):** This policy allows municipalities to apply an approval condition to new developments or redevelopments, whereby the developer must convey up to 2% (for commercial and industrial) or 5% (for all other uses) of the land to the municipality for parks purposes (s.42.1), or as an alternative, one hectare for each 300 dwelling units proposed (s.42.3). In order for the municipality to make use of this tool, it must have a park plan in place (s.42.4.1). The section contains two clauses that would allow the municipality to sell the land (s.42.5), or to accept a payment in-lieu of the land (s.42.6), however, subsection 15 clarifies that any funds generated from either sale or payment in lieu must be spent on acquisition of land that must be used for parks or other public recreation (s.42(15)). Section 51 is largely the same but refers to approvals for plans of subdivision. In the case of Mississauga, where there is a lot of intensification happening in the downtown core, the City has been able to accumulate substantial funding for parks through the conveyance of parkland and cash-in-lieu, and the City is using these funds to purchase the properties for the Cooksville project (Iannicca, N., Personal Communication, June 18, 2019).

**Zoning By-Laws (Section 34):** City Council may enact zoning by-laws essentially to impose restrictions on the use of or buildings on a parcel of land (34.1). Section 34.1.3 specifically allows for prohibiting the erection of any buildings on environmentally sensitive or hazardous land: "land that is subject to flooding or on land with steep slopes, or that is rocky, low-lying, marshy, unstable, hazardous, subject to erosion or to natural or artificial perils" (34(1)3). In the case of the Cooksville project, the City could be justified in re-zoning the land around the Cooksville Creek from 'Residential' to 'Parkland' on account of s34(1)3 due to the risk of flooding. Land that is considered a significant corridor, habitat or feature may also have by-laws passed to prevent building on those sites (34(1)3.2). The wording in that section is noteworthy for its vagueness. The terms 'significant' and 'feature' are not defined in the *Planning Act*, and would allow a municipality to protect an area that has meaning to the local community or that is hazardous.

Subsection 8 endows Council with the power to acquire any land, building or structure that is not in compliance with the by-law (34(8)). This does not mean that Council can re-zone an area, then come in and seize the properties, as clarified in subsection 9: If an area is rezoned, then the existing uses become legal non-conforming uses. However, if an owner is to sell their land, or otherwise change the use, the new use must in compliance with the by-law (34(9)). In the Cooksville case, the City could theoretically re-zone the residential properties it wants to acquire as a "Open space", so that when the owners are ready to sell, there is no other option but to sell to the City as it is very unlikely (but not unheard of) that a private buyer would want to purchase those properties knowing they have to be converted to a park (philanthropists do sometimes play a part in green space provision (for example the Music Garden in Yorkville, Toronto (De Sousa, 2003), though their role is outside the scope of this paper). However, this option of rezoning the land while people are living there would come across as heavy-handed and would likely result in resident backlash, so it is not something Mississauga considered (Iannicca, N., Personal Communication, June 18, 2019). The City has instead designated the land around the creek as 'greenland' which is an overlay on top of existing zoning. This means that although the area was previously zoned as residential and people are living in dwellings in this area, the City has imposed additional restrictions on what may be built on those plots, with special consideration to flooding and erosion (Zoning By-Law 0225-2007, section 10). As mentioned above in the *Planning Act*, section 10.2.2.6.1 (1) of Mississauga's Zoning By-law protects "Detached dwelling[s] legally existing on the date of passing of this By-law" as acceptable land-uses (Mississauga, 2019b).

**Increased density, etc. provision by-law (Section 37):** Section 37 authorizes municipalities to create a by-law that allows a developer to request greater height and density of a development than is otherwise permitted, in exchange for facilities, services, land etc. as is set out in the by-law. As in section 42 (and 51) Conveyance for Park purposes, the funds received from section 37 must be put towards the uses described in the by-law (s.31.1), which could include among other things, publicly accessible green space.

### *The Provincial Policy Statement (the PPS)*

Section 1.1.1 of the PPS directs municipalities to create communities that are healthy, livable, and safe by:

a. promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;
b. accommodating an appropriate range and mix of residential (including second units, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;
c. avoiding development and land use patterns which may cause environmental or public health and safety concerns;
d. promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate.

Section 1.1.1b above supports actions taken by Mississauga to improve its land-use mix, by addressing the lack of adequate park space in the Downtown Core. Section 1.1.1c can be considered in light of the negative public health outcomes associated with inadequate green space. Section 1.1.1d also supports the Cooksville case, as introducing a large park in the downtown will increase the biodiversity in the area, and the park's role in absorbing flood waters considers the potential impacts of climate change. Section 1.5 addresses public spaces, recreation, parks, trails and open space, and states that healthy communities should be promoted by, "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" (s. 1.5.1c). Again, this policy would support actions taken for green space retrofits such as the Cooksville case.

### *The Growth Plan for the Greater Golden Horseshoe (the 'Growth Plan')*

The focus of the *Growth Plan* is to build 'complete communities' as defined in section 2 as communities that "support quality of life and human health by encouraging the use of *active transportation* and providing high quality public open space, adequate parkland, opportunities for recreation, and access to

local and healthy food" (s2.1, italics in original indicating a defined term). This wording is important because it makes clear that green spaces (in the form of encouraging active transportation, open space, parkland and recreation) are a central component of a complete community. For Municipalities to be in compliance with this plan, they must create their own policies that demonstrate they are working to build complete communities, as it is described here, with adequate green space.

Section 4 of the *Growth Plan*, 'Protecting what is Valuable', directs municipalities to create policies in their Official Plans to protect, restore, and enhance the diversity, connectivity and function of Water Resource Systems (s. 4.2.1) and Natural Heritage Systems (s. 4.2.2). These policies support decisions by municipalities to acquire new land to be converted to green space if the land is considered to be part of a water resource or natural heritage system (such as the Cooksville Creek). Section 4.2.5 Public Open Spaces states that municipalities are *encouraged* to develop an open space system that *can* include urban agriculture, rooftop gardens, communal courtyards, and public parks (italics added).

Section 4.2.10 addresses climate change, and it directs municipalities to "develop policies in their official plans to identify actions that will reduce greenhouse gas emissions and address climate change adaptation goals" (s. 4.2.1.1), and that those actions may include "undertaking stormwater management planning in a manner that assesses the impacts of extreme weather events and incorporates appropriate *green infrastructure* and *low impact development"* (s. 4.2.10.1d, italics from original). This section is supportive the Cooksville case in particular because of the flooding issue. The city is addressing flooding in the Cooksville Creek flood plain using hard infrastructure upstream, but creating an open green space in the floodplain would act to balance water flows, and it would increase the area's resiliency against future extreme flood (Aquafor Beech Ltd., 2012).

### *The Greenbelt Plan*

The Greenbelt is a large swath of protected land around the Greater Golden Horseshoe, that acts as a boundary for urban growth (Ontario, 2017). The *Growth Plan* and the *Greenbelt Plan* work together, as the *Greenbelt Plan* sets the limits of urbanization to stop sprawl, and the *Growth Plan* helps guide development and growth within those boundaries (s1.1). However, the Greenbelt is not just on the perimeter, it weaves in and out and extends in to the growth area in different locations. Urban River Valleys are of particular interest here, as they offer an opportunity to expand and protect green space in cities. Section 5.6.1.1 states that the Province will actively seek opportunities to grow the Greenbelt, and section 5.6.1.3 describes Urban River Valleys as foundational to adding public lands to the Greenbelt by

future amendment. A municipality can request to the Province that a river valley corridor be designated as an Urban River Valley, becoming a protected part of the Greenbelt (s.5.6.1.4). The municipality must demonstrate how the river valley connects physically or functionally to the Greenbelt, and how the proposal complements other Provincial plans such as the *Growth Plan* (s.5.6.1.4). An Urban River Valley applies to rivers that connect the Greenbelt to the Great Lakes and other inland lakes, and can include the surrounding lands that contain hydrologic features, and lands designated in an Official Plan as parks, open space, recreation, conservation and environmental protection (s.6.1). The Cooksville Creek could have been designated an Urban River Valley, but the City did not pursue this route. One possible reason is that by designating an area Greenbelt, the value of the land decreases dramatically, a difficult side effect experienced by many farmers when the Greenbelt was first enacted (Heinmiller & Pirak, 2017). Being conscientious of providing a good deal to affected residents (Iannicca, N., Personal communication, June 18, 2019), this is not a route the City would have supported for the Cooksville case.

### *The Conservation Authorities Act*

Under this act, municipalities are able to call a meeting to consider the enlargement of a Conservation Authority (CA)'s jurisdiction (s.10.1). The authority in turn has the power to acquire by purchase, lease or otherwise expropriate any land that it may require (s.21.1c), to purchase or acquire any personal property that it may require (s.21.1e), to enter in agreements with private landowners (s.21.1g) and other governments, boards and organizations (s.21.1.n), and very broadly, has the power to "generally to do all such acts as are necessary for the due carrying out of any project or as may be desirable to further the objects of the authority" (s.21.1.q). Under section 29, Authorities are given the power to make regulations on lands they own, to restrict activities on the land and collect fees from users (s.29.1a-h). As cities collaborate with CAs, and CAs are given these powers to acquire and restrict uses on land, I think a city could theoretically leverage the CA powers by partnering with them to acquire and/or convert land to a park use. However, this would only be an option if the land in question is part of a shoreline, watercourse, or wetland as per the responsibilities of a CA (Credit Valley Conservation, 2010).

### *The #CycleON Cycling Strategy*

The #CycleON Cycling Strategy is a Provincial initiative to improve cycling infrastructure, which includes multi-use trails and greenways (Ontario, 2013). It was first implemented in 2014 and provided $3.5

million to municipalities for trail development through its first action plan, however with the Provincial cap and trade program being cancelled, a significant funding source for this strategy has dissolved for the second action plan spanning 2018-2023 (Ontario, 2018). This program was used by municipalities to relieve some of the financial costs to buy land to create greenways, however it is unclear if this will be offered in the future (Ontario, 2018).

## Region of Peel Policies

The Region of Peel is an upper-tier municipality comprised of three lower-tier municipalities, Mississauga, Brampton and Caledon. In essence the Regional government is a federation of the lower-tier municipalities within it (Association of Municipalities Ontario, n.d.). Regional governments are responsible for drinking water, waste collection, recycling, policing, certain roads, land-use and public health (Association of Municipalities Ontario, n.d.), though these responsibilities are shared with the lower-tier municipalities. The plans and policies of the Region provide more guidance and specifics to lower-tier municipalities on how they should go about implementing Provincial plans, and lower-tier municipal plans must be in compliance with the plans of the Region of which it is a part (*Planning Act*, s.16).

### *Regional Municipality of Peel Official Plan*

In the Region of Peel's Official Plan, Chapter 2: The Natural Environment, policies encourage lower-tier municipalities to develop their own plans to provide adequate park, open space and trails in keeping with Regional and Provincial environmental goals and strategies (2.2.10.4.30). Policy 2.4.2.1 directs lower-tier municipalities to regulate land uses within and adjacent to floodplains, and policy 2.4.5.2.4 encourages lower-tier municipalities to assess areas of existing development that are flood vulnerable and to implement remediation to reduce the risk – both policies could be seen to support projects like the Cooksville case.

### *Changing Course: Creating Supportive Environments for Healthy Living in Peel*

Region of Peel's Public Health department has acknowledged the link between obesity and physical activity—and in turn the link between physical activity and green space—and has built their strategy, *Changing Course*, around this understanding (Region of Peel, 2012). They also put forth an Official Plan Amendment to include health criteria in development application reviews (Region of Peel, 2012).

While the strategy acknowledges that walking and cycling infrastructure has been demonstrated to be associated with physical activity and lower rates of obesity, the Region contends in their strategy that the potential contribution of paths to active transport is limited due to the fact that destinations (schools, stores etc.) are too far apart (Region of Peel, 2012). However, with intensification happening in certain areas such as Cooksville, new infill developments will most likely be mixed-use to comply with City of Mississauga policies (outlined below), so creating trails and parks (like the Cooksville case) in these areas could be seen as an effective way to increase physical activity and walking. Trails and paths may also be more feasible options for greenspace retrofits as it may be easier to purchase the smaller parcels or portions of private land compared to large swaths required by parks (Iannicca, N., Personal Communication, June 18, 2019).

## City of Mississauga Policies

### *City of Mississauga Strategic plan*

Mississauga's Strategic Plan, *Our Future Mississauga,* sets the high-level aspirations of the City, and guides the City's priorities, processes, short-term and long-term plans, budgets, resource allocation, and planning decisions (Mississauga, 2009). The plan is organized in to five 'pillars': Move, Belong, Prosper, Connect, and Green, which aims to "conserve, enhance and connect natural environments – to be responsible stewards of the land by conserving, enhancing and connecting natural environments". The City spells out how these goals will be achieved through the different plans that are described below.

### *Downtown 21 Master Plan*

Chapter 4 of the Downtown21 plan covers Parks and Open Spaces, and describes the City's vision for the downtown as having "grand and extensive" green network, and seeks to create this by building on existing parks and adding new ones (4.1). Section 4.5 is dedicated to Cooksville Creek. There is an existing Cooksville Creek trail that can be further expanded to link the downtown to the neighbouring Mississauga Valley Community Centre (4.5), and this same trail could be linked to the Cooksville project site, creating an extensive green network, as desired.

### *Downtown Growth Area Parkland Acquisition Strategy*

The *Downtown Growth Area Parkland Acquisition Strategy* examines park needs and opportunities in downtown Cooksville and includes evaluation criteria for determining land suitability for parks (Mississauga, 2019). Supported by and mentioned in the Parks and Forestry Master Plan, this study was

prepared by the City prior to 2015 as a requirement to request funding from the Province for the Metrolinx-led Hurontario Light Rail Transit project (Iannicca, N., Personal Communication, June 18, 2019). Through my interviews with former Councillor Nando Iannicca, and Manager of Parks Planning Sharon Chapman, both confirmed that producing this strategy was the key event that led to the Cooksville project because of updated demographic information produced through the study. Using the parkland requirements set out in the Official Plan, staff calculated park land needs based on the projected growth in the area and learned that they need about 7% more parkland to comply (Chapman, S., Personal Communication, June 19, 2019). Thus it was this need, set out in their own policies, that led to the Cooksville project as the way to create parkland in a dense area.

### *Vision Cooksville*

Vision Cooksville is an initiative undertaken by the City to engage with residents and create a long term vision for the growth of Cooksville (Mississauga, 2016b). The second principle in the vision statement is 'Connected and Engaging Parks and Open Spaces':

> Principle 2: Connected and Engaging Parks and Open Spaces
>
> 1. Improve Existing Parks
> 2. Create New Parks in Strategic Locations
> 3. Encourage Publicly Accessible Private Open Spaces
> 4. Create a Dynamic Square at the Four Corners

This principle was created by consulting with residents and collecting their ideas and feedback. The results of the consultations are presented as a set of Community Recommendations, two of which are directly supportive of creating a park in the same location as the Cooksville project:

> 2.1 Community Recommendation: Improve Existing Parks:…Cooksville Creek will be improved so that it is more accessible to the public.
>
> 2.2 Community Recommendation: Create New Parks In Strategic Locations: New parkland will be created to meet the needs of Downtown Cooksville's growing population... Sites on the north and south sides of Dundas adjacent to Cooksville Creek present ripe opportunities for new open spaces that reach out to the main street and improve the entrance to the creek system, while at

> the same time addressing flooding issues… Similarly, there is an opportunity to create new park land adjacent to the Cooksville Creek that could serve as a large central park.

The City created an interdepartmental project team to identify implementation actions based on the *Vision Cooksville* report, and reviewed how the Vision complements or validates current City business plans, master plans and future directions or where updates may be required (Mississauga, 2016a). Implementation is to be carried out through the creation of a multi-year action plan, and allocating actions to internal departments, Provincial and Regional partners, private property owners, the Hurontario Light Rail team, or community organizations (Mississauga, 2016a). The Action Plan converts the 'Community Recommendations' detailed above in to 'Staff Actions'. Staff Action 2.2 is delegated to the Mississauga Parks and Forestry Department, and supports the Cooksville project:

> Staff Action 2.2: Create New Parks in Strategic Locations
>
> - Increase parkland and the Cooksville greenbelt which would allow for more trail connectivity and access to additional parkland through the Cooksville Parkland and Greenbelt Securement Strategy
> - Acquire additional parkland through the variety of planning and financial tools outlined in the Mississauga Downtown Growth Area Park Provision Strategy.

The Vision Cooksville report is important because it demonstrates public support for a project like the one in Cooksville although as will be discussed in the analysis, the homeowners of the properties the City wishes to buy are not supportive.

### *Official Plan*

Chapter 6 of Mississauga's Official Plan, *Value the Environment* contains policies to protect, enhance, restore and expand the city's natural heritage system (6.1.1, 6.3.1). The policies include taking actions to increase resilience to climate change (6.1.11, 6.1.12), and to expand the system through land acquisition to meet an accessibility measure of 800 metres from each dwelling in non-growth areas (6.3.68, 6.3.73, 6.3.85). Appendix B lists these policies in detail.

Like Region of Peel, the City makes the connection between public health and land uses that support active recreation, in *Chapter 7: Complete Communitie*s. Interestingly, they do not use specific words like

'parks', 'trails', or 'greenspaces' in this chapter, but when reading the policy, I concluded that parks, trails and other greenspaces – along with 'complete street' design would fulfill the policy directive. For example, policy 7.1.13 reads:


*Figure 7: A timeline of the key policy documents that enable and direct the Cooksville Project. The updated Official Plan and Parks and Forestry Master Plan that came out after the start of the Cooksville project contain policies specifically addressing park land in Cooksville.*

In order to create a complete community and develop a built environment supportive of
public health, the City will:

a. encourage compact, mixed use development that reduces travel needs by integrating residential, commercial, employment, community, and recreational land uses;
b. design streets that facilitate alternative modes of transportation such as public transit, cycling, and walking;
c. encourage environments that foster incidental and recreational activity; and
d. encourage land use planning practices conducive to good public health.

Embedding parks that are connected by path ways would be effective in addressing all four of these goals.

*Chapter 8: Create a Multi-modal City* includes policies to integrate multi-modal transit needs with the acquisition of land for greenspace (in this case trails). This includes policies to create a transit network (8.2.2.2), the conveyance and acquisition of land where needed to do so (8.2.1.1e, 8.2.4.2), and prioritizes Intensification Areas, like Cooksville (8.2.4.7). Appendix B lists the relevant policies in detail.

*Chapter 19: Implementation*, discusses the suite of tools the City will use to implement the Official Plan. In Appendix B I have summarized which tools provided in the plan can be used to create greenspace, including development applications (19.4), zoning (19.5), Parkland designations (19.19), conveyance of greenlands (19.18), and community improvement policies (19.22).

As part of the Official Plan, Mississauga has several Local Area Plans that go into more specific detail on areas of interest and value in the City.

For example, the *Downtown Core Local Area Plan* is specific to the Cooksville Creek:

3.3.10 Cooksville Creek Corridor

a. Urban Design Vision: The Cooksville Creek Corridor is recognized as a public amenity and resource. To preserve and enhance this natural feature, the design of the built environment should encourage:

- appropriate setback of buildings from corridor (landscaping only);
- improved visibility, access and linkage to the corridor from development parcels and public streets;
- views/informal surveillance to the corridor;
- integration of public/private open space and landscape areas;

In moving forward with the Cooksville case, the city is enhancing the public amenity of the Cooksville Creek, in direct support of the policy 3.3.10.

### *Parks and Forestry Master Plan*

The Parks and Forestry Master Plan (PFMP) comprehensively reviews the current and forecast state of parks in Mississauga, and the downtown core is identified as an area that is in need of parks but faces even greater challenges to park creation due to competing interests for the economically valuable land (Mississauga, 2019). The PFMP suggests ongoing communication and collaboration between the City and the development industry to incorporate play sites as part of developments in intensification areas (4.1.2).

The plan also recommends that the City continue to plan intensification on a precinct basis in order to better coordinate and connect green spaces in redevelopment areas. It is also noted that as parks created in intensification areas and infill developments will likely be small, they will serve to improve quality of life rather than to provide active recreation opportunities. As a result, it recommends that there should be an emphasis on trails, cycling routes, and transit to connect residents to other community recreation facilities (Recommendation #24). The Plan describes trails and pathways as options with the best value for dollars invested in terms of their appeal to a wide range of users, and high returns of personal enjoyment and health benefits at a relatively low cost (Mississauga, 2019). For this reason, I think trails and pathways will be preferred choices for other green space retrofits in the future.

Recommendation #9 halves the previously accepted criteria for park access and says that residents should each live within 400 metres of a park. Recommendation #12 says that all development proposals greater than 1000 square metres should include an addition to public space at grade, and recommendation #13 says that for primarily residential developments between 7 and 25% of the site area should be for a park component. Recommendation #16 is that publicly accessible privately-owned open space should be encouraged in new urban infill and redevelopment areas, but that this should not be a replacement for publicly-provided spaces. As discussed in the introduction, these are examples of policies that encourage green space in areas undergoing intensification.

The PFMP also describes how the City implements the parkland dedication and cash-in-lieu funds. By corporate decision, the City directs 60% of cash-in-lieu funds to land acquisition and 40% to facilities and equipment. The cash-in-lieu funds are being used to purchase properties for the Cooksville project, and the park targets laid out were direct drivers for undertaking the project. In these ways, the PFMP is critical in enabling and directing this green space retrofit project.

After compiling and reviewing these policies, it is clear that there is a robust policy framework in place that supports green spaces, and that there are plenty of policies that a municipality can take directions from to support their case for funding and approving green space retrofit projects like the Cooksville case. Of the plans, policies and tools described, two policy tools the Cooksville case hinged on were the collection of cash-in-lieu for parkland dedication (from sections 42 and 51 of the *Planning Act*), and the parkland requirements they set out in their own *Official Plan, Parks and Forestry Master Plan,* and *Downtown Growth Area Parkland Acquisition Strategy*.

# 5. The Cooksville case: A closer look at the process

In section 3, I introduced the Cooksville case in brief, describing the project in simple terms and giving some context of Cooksville, Mississauga. In section 4, I presented the policy framework that governs greenspaces in Mississauga, and now, armed with a greater understanding of the policies and tools available for greenspace creation, I will explore the case study more deeply to understand how it began and what process it followed. Figure 5 illustrates the timeline as described below through my interview with former Cooksville Councillor Nando Iannicca (now Chair of the Region of Peel). During our

interview, he was able to explain the internal process that occurred from the inception of this idea to where it currently stands. As he tells it, there are two main threads that came together to make this project happen: The flooding problems in Cooksville, and the intensification of the downtown core, spurred by the *Growth Plan* and the development of the Hurontario LRT (Iannicca, N., Personal Communication, June 18, 2019).

After the great floods of August 4 and 9, 2009, a flood task force was set up that included Councillors, the Mayor, residents, and staff from the City, Region, Credit Valley Conservation Authority, and Ministry of Natural Resources, to help residents recover from the flood, to analyze how the flood occurred, and to develop actions to improve outcomes for any future floods (Powell, 2010). A corporate report released by the task force less than a month after the flood events made reference to the existence of numerous properties on the floodplain due to historic development when no policies or regulations were in place regarding floodplain management (Powell, 2009). It also indicates that the CVC determined that conventional flood warning systems would be ineffective for the residents in this watershed due to the Cooksville Creek reaching peak flow conditions relatively quickly (15-20 minutes) at the onset of heavy rain (Powell, 2009) – meaning it would be impossible to warn residents quickly enough before the flooding occurred.

The documents produced by the task force between 2009 and 2011 focus on the Matheson stormwater pond, located upstream of the proposed Cooksville project site and other hard infrastructure measures to mediate flooding, as well as engaging with citizens to make changes on their own properties such as a downspout disconnection campaign (Mississauga, 2012), projects which were estimated by Iannicca to be in the realm of $200 million (Iannicca, N., Personal Communication, June 18, 2019). However, in task force minutes Mayor McCallion hinted at wanting a more significant action to address this problem, for example, saying she wanted to "dream big" (Mississauga, 2010a) and "think outside of the box" of solutions that have been presented thus far (Mississauga, 2012). The task force commissioned the consultants Aquafor Beech and

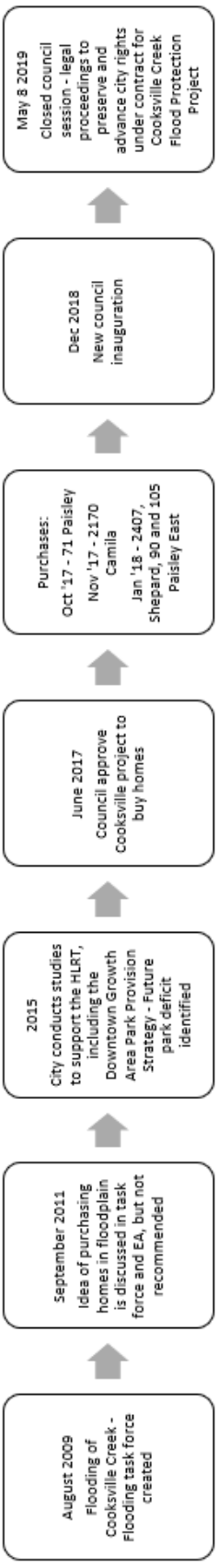


*Figure 8: Timeline of major events contributing to the development of the Cooksville Parkland Acquisition*

LimnoTech to complete a comprehensive floodplain evaluation of the Cooksville creek, which became the Cooksville Creek Flood Evaluation Master Plan – Environmental Assessment (2012). While the Mayor encouraged creative measures, and the report does mention housing acquisitions in the flood plain (Aquafor Beech Ltd., 2012), in the end the 'preferred alternatives' were more traditional hard infrastructure: Flood storage to reduce flow in Cooksville creek, and the construction of two berms (Mississauga, 2012a).

The task force discussed removing houses from the floodplain in September 2010 when Mayor McCallion gave an update on a meeting with residents where the City had attempted to get easements from property owners along the banks of the Cooksville Creek and the residents had refused (but it does not say when this happened, or which properties exactly)(Mississauga, 2010b). It is not clear from the minutes if these properties are the same ones that they are now trying to acquire in the Cooksville case. A year later, at the September 21, 2011 task force meeting, in discussing a presentation by Aquafor Beech on the Cooksville Creek Flood Evaluation work thus far the report mentions support in earlier studies for removing houses from the flood plain (Mississauga, 2011). While they discussed this option, the City did not decide to go ahead with it at that time and take note: this discussion was in the context of flood mitigation. The reasoning for acquiring the houses in the Cooksville case, even though they are in the flood plain, is because of a park deficit.

The task force held their last meeting in January 2012, and Aquafor Beech completed the report (the Cooksville Creek EA) in July 2012. The report systematically evaluated flood mitigation options by considering natural environment, economic, social/cultural and implementation criteria (Aquafor Beech Ltd., 2012). Using these criteria, land acquisition was ranked as a "least preferred alternative", most likely due to landowner disapproval, and limited impact on flooding (the river would still flood, only there would be no houses in the path) (Aquafor Beech Ltd., 2012). What happened over the next five years, between July 2012 and June 2017 was not recorded in the public domain, as far as I was able to determine, but at the June 21, 2017 Council meeting, Council authorized the Realty Services Department to "enter into negotiations with various landowners for parkland acquisition in the Downtown Growth Area, and report back to Council should these negotiations be successful" (Mississauga, 2017a). This was the official approval and commencement of the Cooksville project. Five residents affected by the project gave deputations against the project two months later at the September 13, 2017 Council meeting (Mississauga, 2017b).

I asked Chair Iannicca what happened in those five years to make the City change direction, and the simple answer is that a park deficit in the downtown core became apparent, and acquiring the houses for park land was the cheapest solution. In fact, according to Iannicca, the City Manager said the Cooksville project might be the most cost-saving initiative in the history of the City of Mississauga, saving tax payers upwards of half a billion dollars (Iannicca, N., Personal Communication, June 18, 2019). After all my research on this project, this comment on the economic aspect came as a shock, as nothing I found publicly available would suggest these cost savings, something Iannicca acknowledged, and pointed to those five 'dead' years where nothing can be found on the project (Iannicca, N., Personal Communication, June 18 2019). Paraphrasing Iannicca, this is how the idea and approval of the Cooksville project came to be:

*He (Iannicca) had been well aware of the flood issues, being ward Councillor, a member of the flood task force and Chairman of the Conservation Board. However, as noted previously, the flooding was not the impetus of the project. He was also on the committee working on the HLRT, and in doing the analysis to substantiate an argument to the Province for funding, they had considered how most forms of infrastructure would handle population growth, but when they turned to parkland they realized that with the policies that are in place they will be short about 117 acres of parkland if the population grows to occupy the predicted 20 000 units [by 2031]. Now, this is a reason to act, because the policies say they must. The problem is, where to find 117 acres in the city centre, where it is all built up? Land values are of course very high, and there are many businesses, which drive up the price further, because the City would also have to buy the businesses on the land. In this case, the cheaper option was to buy the houses at market value - which is a benefit to the homeowners. Further, by purchasing the houses now and keeping them as land banks, the city is saving money by acquiring them before land values inflate due to the HLRT.*

He explained that what made the Cooksville case such a strong proposal was actually that it results in huge cost savings for the City and tax payers:

*Note, while the plots are in the floodplain, they are being purchased as parkland, not flood land for the following reasons:*

- *Flood land is very cheap, and it would not allow for paying homeowners fair market value - it would amount to expropriating the value of the home*
- *If the justification for the project is that the City is buying these plots because they flood, that opens up the floodgates of other homeowners saying the City should also buy their floodplain land*
- *Buying the land as parkland allows the city to buy at market value*

*The result is cost savings to the City of about half a billion dollars: $300 – 440 million are realized to the City by buying homes as opposed to the businesses along Hurontario Street (which he mentioned would be the only likely alternative to buying the houses), plus the $200 million of flood mitigation measures that are no longer needed because the park will be allowed to flood.*

Once he conceived of the idea, he put it into action by going first to the City Manager and CAO Janice Baker.

*When he developed the idea, he went directly to the City Manager, who was immediately supportive, calling the idea 'brilliant' and good business sense. The City Manager then got the ball rolling, creating a proposal to be debated at Council. Other council members argued against such a large expenditure in one ward, but in the end all came to support the project.*

After the project was approved by Council, the responsibility was passed on to Parks Planning who determined which plots are desirable and suitable for a park, and is now working closely with Realty to acquire them (Chapman, S., Personal Communication, June 19, 2019). In October and November 2017, the City purchased two properties in Cooksville (71 Paisley Boulevard East and 2170 Camilla Road) (Missisauga, November 11, 2017c and d) and in January 2018 completed the purchase of three more Cooksville properties (2407 Shepard Avenue and 90 and 105 Paisley Boulevard East) (Mississauga, 2018a) (Figure 8).

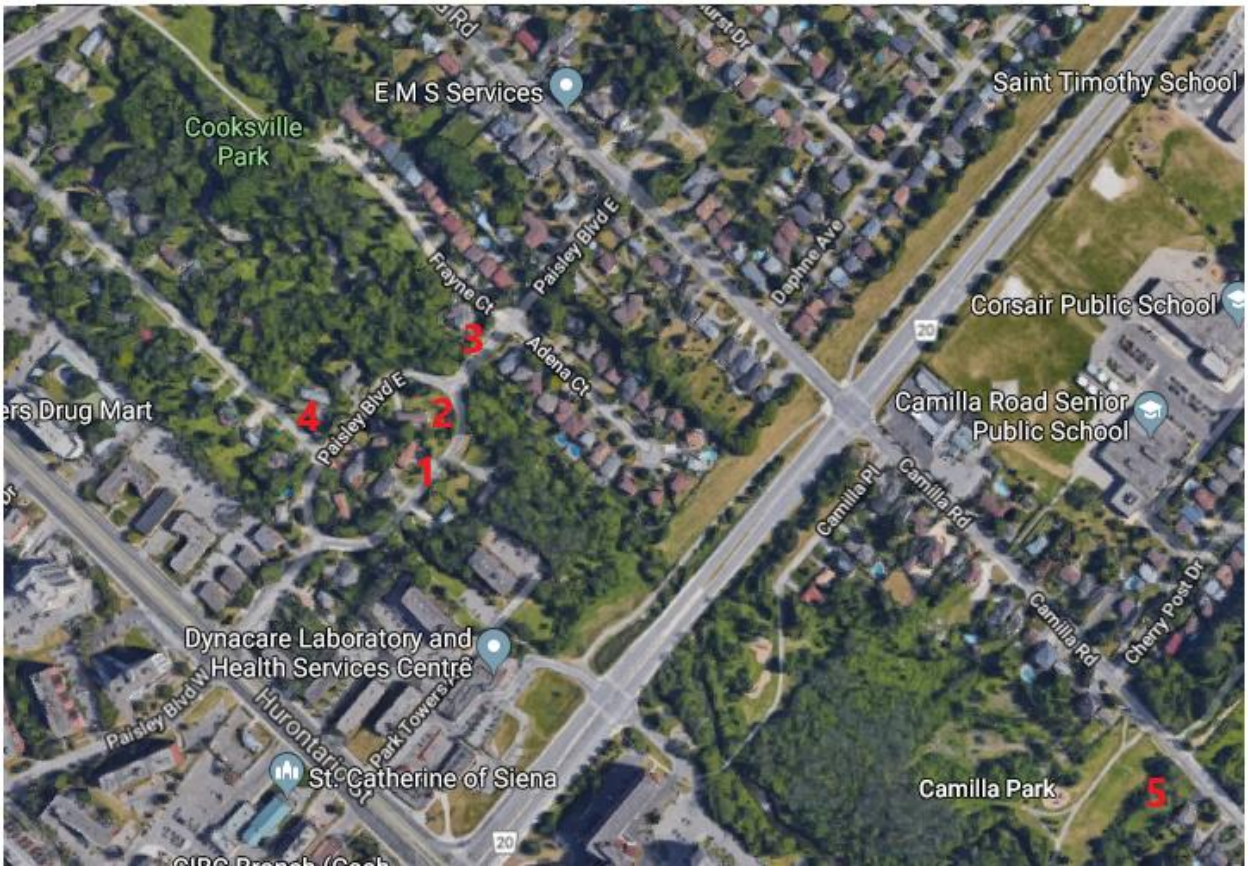


*Figure 9:As of this writing, Council has authorized the purchase of these five properties for the Cooksville Creek Parkland Long-Term Acquisition Project: 1. 71 Paisley Blvd E., 2. 90 Paisley Blvd E., 3. 105 Paisley Blvd E., 4. 2407 Shepard Ave., and 5. 2170 Camilla Rd. (Google maps, 2019a).*

Cash-in-lieu funds are used for these purchases, and once the city has all the land they want or need, they will move on to the next stage, which will be the park design and development stage, and this will require capital funding (Chapman, S., Personal Communication, June 19, 2019). Park planning will develop the project, request the funds from Council, and is responsible for public engagement for the park design (Chapman, S., Personal Communication, June 19, 2019). As of this writing, the city has acquired approximately 50% of the land they proposed with more pending (Chapman, S. Personal Communication, June 19, 2019).

In December 2018, a new Council was sworn in, and Iannicca left Mississauga Council to become Chair of the Region of Peel Council. Since then, there have been no more mentions of the Cooksville project or home acquisitions at Council, but the new Cooksville Councillor Dipika Damerla has been vocally supportive of this project and of parks in general (Clay, 2018; Chapman, S., Personal Communication, June 19, 2019).

Finally, on May 8, 2019, Council had a closed session to discuss “Litigation or potential litigation, including matters before administrative tribunals, affecting the municipality or local board: Cooksville Creek Flood Protection Project – Litigation and Performance Bond”. As it was a closed session, the details of this conversation are not available, but the resulting motion stated that the “City Solicitor or her designate be authorized to initiate legal proceedings and/or take any necessary steps to preserve and advance the City’s rights under the contract for the Cooksville Creek Flood Protection project and report back to Council” (Mississauga, 2019a). While it is not possible to know for sure what this means, in my conversations with Chair Iannicca and Sharon Chapman, Manager of Parks Planning at the City of Mississauga, both confirmed that it does not mean the City is looking to expropriate (Personal Communications, June 18 and 19, 2019, respectively). I asked if it could mean that the residents who are opposed to the project are suing the City, but neither was not able to confirm or deny this was occurring.

# 6. Analysis

Having now established a firm understanding of the Cooksville case, and of the policy framework surrounding green space retrofitting in Mississauga, I will turn to the final question of this research: What are the key factors that enable or challenge implementation of green space retrofits in Mississauga and the GTA?

Recalling the analytical framework described in the methods section, I explore this question by analysing the role that the five following implementation factors played in the case study, and how that compares to their role in implementation more generally.

To substantiate this analysis, I will look to literature on the implementation of sustainable development projects that face similar implementation challenges including conversion of brownfields, green infrastructure, and sustainable community design, because as established earlier, green space retrofits in Canada specifically do not appear in great detail in the literature.

## Actors

### Who are the actors in this case, and what role did they play? Which actors have been most critical to green retrofit projects in general?

The main actors in this case include the former Cooksville City Councillor Nando Iannicca and the local community. The Mayor, City Manager, Parks Planning and Realty Departments and Credit Valley Conservation Authority also played active roles in the project.

#### *Former Councillor Nando Iannicca*

Cooksville's former Councillor Nando Iannicca was the first person to bring forward the idea of creating a large park in Cooksville. While City Councillor, he was outspoken about grand visions for Mississauga, for example, saying of future development goals, "we have to make [Mississauga] fun so we can become a Barcelona or a Nice. We've got to be a place where people want to be" (Stewart, 2018). With apparent passion and high hopes for Mississauga's future, Iannicca conceived of the idea to buy people's homes to create a large park in the downtown area to combat the area's park deficit, and presumably, to make his future vision of Mississauga a reality. In addition to solving the area's park problem, Iannicca pitched the plan as the perfect solution to ongoing flooding problems in the Cooksville floodplain (McKeen, 2017; Stewart, 2015). He framed this as a win-win for the residents who are having a hard time insuring or selling their homes due to the flood risk: "We have a bit of a problem at the city, we need parkland. You folks have a real problem here in terms of the flooding that we're trying to mitigate. Have I got a solution that works for both of us" (Carnegie, 2017).

*Figure 10: Former Cooksville Councillor Nando Iannicca (Marychuk, 2018)*

As a City Councillor, Iannicca was in a unique position of power to help move the project forward. He was able to act as a champion for this project, which may be considered to be 'against the grain' because he had a stable role (as Councillor for approximately 30 years), and that role came with influence (Filion & Sanderson, 2011). This influence is clearly demonstrated in that his first step upon conceiving the idea was to speak directly with the City Manager, where most individuals would have to go through many layers of management before ever reaching the City Manager if at all. As a Councillor,

he was accountable primarily to his constituents, most of whom would support a new park (according to community consultations discussed earlier), and on top of that he had plans to retire and thus did not have to weigh the risk of losing re-election.

The role of actors, or champions, in pushing forward sustainability initiatives cannot be overstated. MES alumni Sabrina Spencer came to this conclusion as well in her major research, noting that champions were critical in two of her case studies, and came up repeatedly in interviews (Spencer, 2013). In Timothy Beatley's book *Biophilic Cities* (2011) he includes numerous examples of projects geared to making cities more biophilic, and he concludes that most would not have succeeded if not for one or two critical leaders to champion them, particularly mayors. For a GTA example, I will add Mayor John Tory in his role championing the Toronto Rail Deck Park, another proposed green space retrofit project. Mississauga Mayor Bonnie Crombie also played a critical role in the Cooksville case in supporting the idea from the beginning (Iannicca, N., Personal Communication, June 18, 2019).

City Councillors are another important group of actors. Jill Grant (2009) identified Councillors as playing a "a pivotal role in setting municipal direction, and in determining whether staff members have the political support and the implementation tools needed to shape growth" (p27). In Christopher De Sousa's (2003) research on the conversion of brownfields to green spaces in Toronto, interviewees also identified actors, including political representatives as playing central roles in implementation. These actors were critical "to help justify the merit of these projects, to overcome risk and cost barriers, and to bring disparate stakeholders together" (p.191).

Iannicca's role in this case is a perfect example of the actors that Grant and Desousa described. He had influence, power, was able to justify the merit of the project and brought various stakeholders together, something that was helped by his involvement on various committees with the stakeholders such as the CVC board, Cooksville Creek Flood Task Force, the HLRT committee and others. That Councillors have such wide networks, direct lines of communication to other powerful actors (such as the Mayor or City Manager) and that their work is to please their constituents, they are uniquely suited to advocating and pushing forward green space retrofit projects.

### *Community*

Community consultation concerning planning in Cooksville took place during the development of the Vision Cooksville, Dundas Connects and Downtown21 plans. Community consultation was quite

extensive and the desire for more and improved parks was a clear priority voiced by residents who attended or contributed to these consultations (Mississauga, 2015; Mississauga, 2016b; Mississauga, n.d.(a)).

However, in terms of the Cooksville case, so far there has been no vocal support from residents. On the contrary, a small but very loud opposition group has formed consisting of the owners of the houses that the City wishes to purchase. This group has captured all the local media attention (none of the media articles quote any residents who support the idea) and also host a public Facebook page called Hands Off Our Homes Cooksville (HOOHC), which has 23 members. Most of the posts are links to articles they have been featured in, the most recent being from September 22, 2017. In addition to the articles and pictures of the area, they share a link to a petition which states:

> Many of us have lived here a long time and we are a community that does not wish to be forced out of our homes. We love our houses and are very happy here, The City of Mississauga would like to replace fifty homes for a park, yet we are surrounded by parks. Please show them you care by signing this petition so we can fight to keep our homes! Thank you in advance Cooksville Creek residents (Alexander, n.d.).

As of March 17, 2018, 150 people signed the petition, according to site. Five of them gave deputations at the September 13, 2017 Council meeting to share their concerns as well.

They appear to be a tight-knit group of residents who love their neighbourhood. They do not fit the average (non-white, young) demographic of the area, as they are mostly white and older in age based on the photograph of the group in the local news (McKeen, 2017) (Figure 9).


*Figure 11: Residents of some of the homes the City wishes to purchase. They have organized together to try to fight the project (McKeen, 2017).*

Aside from the objection to leaving their homes, a primary complaint is the lack of consultation and prior notice from the City. Resident Michele Alexander told the *Toronto Star*, "The first thing that upset all of us is that there was no conversation ahead of time...None of us saw this coming" (McKeen, 2017, para. 6). Another resident, Olivia Chubey, used the online commenting platform of Insauga news to rebut Iannicca's claims about helping out the residents by avoiding flooding and insurance woes, while affirming the residents' attachment to the area and unwillingness to leave:

> We've only been flooded twice in 20 years one of which was deemed due to storms that exceeded average expectations and hasn't happened in 100 years. We have insurance. We all paid to renovate our houses and stay even after the flood because this area is sentimental, quiet, green, central for a lot of our older residents to get around without much driving and close to schools. Nando is pushing out the people he is supposed to be representing...The downtowns lack of parks shouldn't be Cooksville's citizens detriment when they are forced to move out so the downtown can have it's cake and eat it too (Kan, 2017).

This case represents the difficulty in achieving consensus among competing interests, especially between groups who share strong place attachments, demonstrated by the HOOHC members and Iannicca. Having a strong emotional bond to a place increases the likelihood of getting involved in the planning process, and it also increases the resistance to developments that may threaten that bond by changing the physical place (Manzo & Perkins, 2006); in the case of the Cooksville area residents by

demolishing your home and forcing you to relocate. Conversely, strong place attachment has been linked to revitalization efforts (Manzo & Perkins, 2006), exemplified by Iannicca's drive to beautify and improve Cooksville by creating the park. Here we have two groups of actors with competing interests, and the city has taken the majority-rule democratic route of choosing the best option for the highest number of people.

While beyond the scope of this paper, the fact that the residents who would benefit from the park have been totally absent from media articles and Council meetings, deserves some attention. Diane Day (1997) reminds us that participation is a luxury that many cannot afford making powerful voices the loudest. Recalling that only 1% of Cooksville residents live in single detached homes like those owned by HOOHC, and the rest live mostly in apartment buildings, with 57% being renters, the power and privilege of this small group is clear in how they were able to monopolize the media. As far as I can see, not a single mention, let alone a quote, was featured in the media by any person living in the area who would benefit from the park. This is not to say that HOOHC has had a disproportionate effect on the project – they have not managed to stop it – it is merely interesting to note how the case has been portrayed in the media.

When attempting a greenspace retrofit in a city that is already completely built out, it is almost inevitable that some residents will be adversely affected by it, either from the loss of their home, business, or disruption from demolition and construction. In this case, the City is compensating the homeowners for their loss by offering them at minimum market value for their homes approximately up to $1.5 million (Iannicca, N., Personal Communication, June 18, 2019). The most studied adverse effect of a green space retrofit is the gentrification that can occur as a result of the increased desirability of the neighbourhood after the addition of green space (Curran & Hamilton, 2012; Wolch et al.; 2014). Again, while not the focus of this paper, it would be very interesting to analyse gentrification and the Cooksville case as the project progresses. This case study provides a unique opportunity because those who are being immediately negatively affected are those who appear to be more privileged in the neighbourhood, at least in terms of being homeowners. If they are forced to sell, what will happen to them? Will the project cause gentrification in Cooksville? To what extent will renters be protected from gentrification by rent control? Will they be forced to either keep renting or leave the neighbourhood to buy? When the City starts consultations for the design of the park, will local residents who rent become

more involved, and how will that affect the direction of the project? Perhaps in the end it would be possible to evaluate how community involvement (or lack of) prevented or resulted in gentrification?

### *Other Actors for Green Space Retrofits*

There are other actors involved in the implementation of the Cooksville case, namely Parks, Planning, and Realty staff as well as the CVC, though at this point in the project their roles are just beginning. Up until this point, Iannicca and the rest of Council were the main actors in getting the project off the ground, and now it is in the hands of Realty and Park Planning from here (though again, they must have land purchases and park design approved by Council).

While not having a prominent role in the Cooksville case, other actors can play major roles in facilitating green space retrofits including private residents, institutions, clubs, organizations, non-profits (Beatley, 2011) and developers (Grant, 2009). Private residents who are able and motivated to contribute to their community can donate land or funds to acquire land and develop green space. The Music Garden in Yorkville, Toronto is one example partially funded by the violinist Yo-Yo Ma and local philanthropist James Flick (De Sousa, 2003). Another example is the New York Restoration Project, created by actor Bette Midler when then-Mayor of New York Rudy Giuliani planned to sell off city-owned community gardens (Beatley, 2011). The organization saved the community gardens and continues to support gardening and greening work in New York. In the Cooksville case, there was enough funds in the cash-in-lieu reserves, but for another project that lacks this funding, private funding may be one viable option. Developers also play a role in implementation because they are a huge source of funding for green retrofit projects through their section 37, 42 or 51 contributions – either by donating land for parks or by cash-in-lieu to be put towards parks. On the other hand, developers can hinder green space retrofit efforts as they can be powerful lobbyists, especially in areas where land value is high. Again, the Cooksville case was unique in this regard because although the land in question is close to the Hurontario Street corridor and is surrounded in high value land, the plots themselves are not attractive to developers because of them being in the flood plain.

## Values and Visions

### How do the values and visions of the municipality, community and private sector support or not support the implementation of green retrofit projects like the Cooksville case?

Values and visions are fundamental as there first has to be a desire for more green space and/or related forms (e.g. green infrastructure, trails and pathways, improved aesthetics) before any action can happen. In that sense it is the first step, so it is important, but in the context of Mississauga, and the GTA, we are well beyond this step.

In the *Policy Framework* section I explored in detail the many plans, strategies and policies that the City of Mississauga, Region of Peel, and Province of Ontario have in place that support the environment and public health. From the Provincial Policy Statement to the Peel and Mississauga Official Plans to Vision Cooksville, the importance of green spaces is featured prominently in these documents. Together, these demonstrate that the *values and visions* of the governing bodies in the policy framework support green spaces.

Looking at Values and Visions more generally, in another community context, where concerns for the environment and health are not as mainstream as they have become here in the GTA, putting in writing and ratifying shared environmental values and visions would be the crucial factor in the path toward implementation.

As was mentioned previously, the Cooksville case is unique in that it served as both an environmental and economic win, so project proponents did not have to contend with conflicting environmental versus economic values. However, in considering green retrofit projects more generally, that may not have the benefit of saving their city half a billion dollars, I think that there is a related 'sub-factor' of *values and visions* that could still act as a barrier to implementation in the GTA. No matter how mainstream concern for the environment and public health has become, there are still socio-cultural barriers at play namely, prioritizing profit or cost minimization (the 'single bottom line' as opposed to the 'triple bottom line'), and what I will call *green embarrassment.* These values are still firmly entrenched in the GTA, and they conflict with the environmental values so prominent in planning documents, hindering implementation. Pierre Filion echoed this sentiment, saying that the only municipal visions that are

likely to be implemented are ones that minimize conflict with “major interest groups and values underpinning present types of development'' (Filion, 2003, p.50).

### *The single bottom line*

It is still the assumption by city staff that projects have to be as low budget as possible, or else they will not be approved, and I have witnessed this myself anecdotally during my time working at two different GTA municipalities. Curiously, while those with the most power, like Councillors and Commissioners, will say they want to be innovative and take risks, lower and middle level staff still do not feel empowered enough to bring visionary ideas forward, if they cost more than the status quo, again, in my experience. Of course, this is only compounded in the case of developers, who have to consider profit margins. Jill Grant’s interviews also confirmed this conflict of values, with one planner Interviewed describing it as, “you do a plan and then you hit reality” (Grant, 2009, p.18).

Research by Grant (2009), Filion (2003) and Langlois (2010) found that economics, rather than policy, had a bigger impact on the form of the built environment. Generally, parks are created in cities because a developer has either given land or funds to build the park, in exchange for some benefit to them such as increased density. Green space retrofits may differ from that model in that, like the Cooksville case, they may be undertaken by the City independent of a new development. If that is the case, how can planners build the case to invest in a green space retrofit, a land use that provides little if any direct, short-term monetary pay back to developers or the City? Some in the City may see it as a worthy investment as it may increase land values around the retrofit, and encourage visitors. That may be true, if balanced against the potential negative effects of gentrification. Others may argue it is a worthy investment from a ‘green infrastructure’ perspective (for example, how the proposed Cooksville project will be able to absorb flood waters), and this would be true as substantial research has been done on the benefits of green infrastructure, but is too lengthy to go into here (e.g. Baptiste et al., 2015; Young, 2011). However, green infrastructure also faces the challenge of higher up-front costs and benefits paid out over the long term (Young, 2011).

It may seem odd to my reader to discuss the impact of economics on implementation under the *Values and Visions* factor, but there is a very simple reason for that. If the implementation really is contingent on economics - land economics, demand of consumers, profit margins for developers etc. - rather than policy, then this is a matter of values and visions because the market is driven by people’s preferences,

which are reflective of their values (Filion, 2003). For green retrofits (and related sustainable development like ecodesign and biophilic design) to succeed, a shift in values is needed where more people (everyone: planners, developers, community members etc.) place a high value on green space as something critical to city building and worth the effort to implement and fund (Barnett & Beasley, 2015; Beatley, 2011; Filion, 2003).

### *Green Embarrassment*

Consideration for the environment, climate change, public health and related concerns may be common place in certain planning circles, such as in policy planning, but in my experience, this is not the case across city departments where many decisions are made without any consideration to environmental issues (partly owing to path dependence). A green retrofit project would typically involve multiple departments including environmental services, community services, recreation, public works, development services and others depending on how the city bureaucracy and decision-making processes are organized. Outside of environmentally focused circles, I believe there is still a stigma attached to those who speak up for environmental or sustainability concerns, based on extensive personal experiences.

In sum, while the values and visions that support green retrofits are there in ratified print, and helped the Cooksville case move forward, other green retrofit projects may struggle to gain support due to socio-cultural barriers like profit maximization /cost reduction still being valued more than long term environmental thinking in many municipal departments (the Cooksville case avoided this conflict by providing an economic win). This socio-cultural barrier, along with 'green embarrassment', or the difficulty in speaking up for greening projects, must be overcome in the GTA in order to strengthen this factor of implementation.

## Governance Structures and Decision-making Processes:

### What are the Governance structures and decision-making processes involved in green retrofit projects? What are the opportunities and constraints for implementation built in to these structures and processes?

The Cooksville project has multiple teams involved: Realty is negotiating with the homeowners for the property sales. They then go to Council for approval of the purchases. If Council approves, they then pass a bylaw(s) to purchase the home using funds from the Cash-in-Lieu Parkland Reserve. Following

what is considered good practice based on the literature described below, the Cooksville project also has a multidisciplinary team that will work together on the park design and building, including Park Panning, Realty, Communications, Transportation and Works, Planning and Building, and the CVC (Chapman, S., Personal Communication, June 19, 2019).

Not many studies have been undertaken on the processes of retrofitting for publicly-owned green space in the city, such as for parks and trails. However, some research has been done on related issues like the implementation of sustainable design and green infrastructure, and so I can look to what was learned there and apply it to greenspace retrofits due to their similarity.

The key impact that governance structures and decision-making processes has on implementation comes from how well they bring people together across departments and fields. This conclusion is well established in the literature. Researching implementation of green infrastructure (which can include parks), Tony Matthews et al. (2015) found that agency and institutional dimensions are limiting factors in implementation. In analysing the new urbanist development plans for Markham, ON, Langlois had similar findings:

> To sum up, the attempt to implement an unconventional development approach in Markham occurred in an environment in which a number of circumstances often implicated in implementation failure were of much reduced salience. Interdepartment conflict was reduced through the use of multidisciplinary teams. Adversarial relations with stakeholders were mitigated through an inclusive model that provided them with meaningful input. Council members and mayors supported the implementation (Grant, 2009). Economic and societal conditions were favorable, and Markham's planning department showed signs of being a competent organization (Langlois, 2010, p.452).

He writes that part of Markham's success was due to the creation of new internal structures such as multidisciplinary teams (see also Spencer, 2013 and Filion & Sanderson, 2011). In Jonathan Barnett and Larry Beasley's book *Ecodesign for Cities and Suburb*s (2015), they also point to what they call separation of responsibilities as being counterproductive to implementation of ecodesign. This not only includes the silos within the municipality, but the separation of interests, financing and focus between the government, private sector and community; "Neither side alone can build the livable and environmentally compatible city that we have outlined in this book. We need a system and processes that can bring these essential combinations together into a workable arrangement" (Barnett & Beasley, 2015, p.210).

In her Major Paper, Sabrina Spencer looked at three case studies of sustainable community development in Canada and also found that implementation failures were a result of departmental silos in each municipality studied (Spencer, 2013). Further, she also pointed to the importance of champions (from the Actors factor) in being able to bridge divides and bring teams together (Spencer, 2013).

It is too early to tell if the multidisciplinary team for the Cooksville project will work well together and lead to successful implementation, but based on previous research, it increases the chances of successful implementation. Future researchers may wish to revisit this once the park is complete.

## Policies and strategies

### What are the policies and strategies that enable, guide or restrict green retrofit projects? What are the barriers and challenges to implementing the policies and strategies?

In the *Policy Framework* section of this paper, I outlined the many policies and strategies in place that enable a green space retrofit like the Cooksville case, such as for example Mississauga's Parks and Forestry Master Plan (PFMP). For the Cooksville case, we see how the creation of these different documents - reports, strategies, policies, plans - fed in to each other over time, ultimately culminating in this project: The OP and Downtown 21 plans in 2010, the Cooksville EA report 2012, the PFMP in 2014 (just recently updated this year), and Vision Cooksville in 2016. Planning being an iterative process, it is not a linear path from one plan to another, they all inform and affect each other through subsequent updates. In the most recent PFMP endorsed in January 2019, the history of the Cooksville Creek area has been taken into account and it suggested that a "Cooksville Parkland Securement Strategy" be completed (reflecting that the securement of land for the project in Cooksville has already begun). From this we can see the importance of policies as they guide the activities and projects of the city - such as instructing them to undergo a greenspace retrofit. In this way we see that policies and strategies were integral to supporting the implementation of the Cooksville project, and incented the project through creating policies regarding parkland provision.

Of the planning tools described in the *Policy Framework* section, the Cooksville case uses the cash-in-lieu reserve to fund the acquisition of the land (money paid over time by developers in other areas of the city in exchange for not dedicating park land (s.42 and 51 of the planning act). Capital funds will be used for the park design and development (Chapman, S., Personal Communication, June 19, 2019). The recent

Provincial Bill 108 proposes changes in the way that municipalities can collect funds such as s.42 or s.37 benefits from developers. As new as the bill is, it is unclear how it will affect the amount that can be collected from developers, and in turn how it will affect a municipalities ability to undertake green retrofit projects.

Consideration of funding leads me back to the force of values in implementation. The city appears to have achieved most of the factors: The values and visions are in place, actors are working together with powerful actors on board, the policies and strategies are in place, but if the money is not there, the project cannot happen. It is crucial that the tools that allow municipalities to collect funds for green space projects remain in place, through successive governments. Therefore, the connection between values (of political parties in this case), economics, and implementation of green retrofits (along with other environmental actions) is once again demonstrated.

One final note is that the extent to which policies affect implementation also lies in who owns the land. For example, in Langlois' study of Markham, which has strong new urbanist policies in place to guide the growth of the city, there is a main street that was zoned for retail, but 10 years later still has no retail (Langlois, 2010). He owes this to the fact that market preferences and trends conflicted with that design, and won out in the end (Langlois, 2010). It is important to note that policies on land that are in the hands of the private sector (like the Markham example) are much more susceptible to the market, whereas policies on land that is owned by the city are not as susceptible market forces (Langlois, 2010; Spencer, 2013).

All of this leads me to conclude that while policies are crucial for directing municipalities to undertake green space retrofits, and indeed were the catalyst for the Cooksville project, policies alone are not enough to guarantee implementation, a conclusion supported in the works by both Langlois and Spencer. In acquiring the land for the Cooksville project, this increases the likelihood the project will go forward as long as funding sources do not dry up.

## Another factor important in this case: The floods

Finally, while not an implementation factor included in the analytical framework I am using here, there is one more factor that was important in the Cooksville case, and that is the floods. A disaster or hazardous land characteristics can spurn green space retrofits, for example the rise in green space

planning in Toronto after hurricane Hazel (De Sousa, 2003). A planner interviewed by Matthews et al. said that green elements should have 'multiple rationales - the more the better', as they will be 'taken more seriously' (Matthews et al., 2015, p.159). This has indeed been the case with the Cooksville project, with Iannicca using the floods as additional rationale for his idea, framing the park as helping the city with their park land deficit, and helping homeowners by giving them a fair price for their flood-risk homes. Without the flood hazard it is hard to imagine that this project would have been conceived in the first place due to the potential controversy, and I think the city would have taken a different approach to creating greenspace, for example, by buying up portions of properties to create a trail system, or retrofitting parking lots for greenspace. For this reason, I think the analytical framework should include a factor that addresses what role, if any, the natural environment of a place plays in a given project.

Through this analysis, it appears to me that the implementation factors, Actors, Values and Visions, and Policies and Strategies complemented and enabled each other to bring the Cooksville case to this point. As the project moves forward, the Governance Structures and Decision-Making Processes (factor) at the City will play a larger role in its successful implementation. There are two factors in particular that I think were critical to the implementation of this project. The first is Policies and Strategies, owing to the parkland target policies outlined in the Parks and Forestry Master Plan. Without these policies, parkland in the Urban Growth Area might not have been considered something that needed to be addressed in the first place. The second critical factor in my opinion, was having a strong Actor, by way of Nando Iannicca. This is because it was his idea, and he was able to use his influence (as a Councillor and in having the ear of the City Manager) to propose and argue for the project. With Iannicca no longer a part of the project, it will be interesting to see if someone steps in to the role of project champion (perhaps the incumbent Councillor Dipika Damerla?), or if not, how that affects the implementation of the Cooksville case. I think that policies and actors will play equally important roles in future green space retrofits for the same reasons; policies to incent the project, and actors to champion it.

# 7. Conclusion

The first question I posed in this paper, 'what policies and tools are available to GTA municipalities, specifically Mississauga, to create or retrofit for green space?' was answered in the policy framework section where I identified key legislation, plans and strategies that support green spaces. I found that the Provincial and Regional policies were high-level; they direct municipalities to provide adequate green space for residents, but they do not get in to specifics on how or where municipalities must provide it. However, it is the Province that provides the tools to municipalities for green space creation through the Planning Act, namely allowing municipalities to collect funds and zone for green space.

Policies at the municipal level put in to action the directives from the Provincial and Regional levels. They take the general requirement for providing adequate green space, and specify what 'adequate' means for their own context, what types of parks are needed and where they should be. In creating policies with more specific direction, it allows planners and staff to take concerted actions for green space provision, including retrofits.

The second question I posed in this paper, 'what are the key factors that enable or challenge implementation of green space retrofits in Mississauga and the GTA?', was addressed through the Cooksville case study using the analytical framework I adapted from Connelly et al. (2009). On reflection, I do think that the framework was useful to help guide my analysis and was mostly correct in identifying the key factors that affect implementation. However, in using the framework I identified two factors that were not accounted for: The economic context of the project, and the environmental context. In the Cooksville case, both played a critical role, the former because of the strong economic argument for the project, and the latter because the floods made the choice to buy those particular homes make sense. If I were to use a framework like this again to analyse the implementation of a green retrofit (or other sustainable development project) I would add these two categories, as based on the literature reviewed these two factors regularly played a role in other cases as well.

The Cooksville case represents a unique example of how one city is addressing their need for more parkland due to intensification, and I expect that other green space retrofits will each have their own unique circumstances as well, and that there will be no one-sized-fits-all approach. The factors affecting implementation in this case (Actors, Values and Visions, Policies and Strategies, Governance Structures and Decision-Making Processes), plus the flooding factor, all came together, and importantly, the project

is said to make sense economically. As Chair Iannicca put it, “Public policy, a clever idea if you will, timing, and opportunity, all came together” (Iannicca, N., Personal Communication, June 18, 2019).

What makes this case hard to replicate is that it actually *saved* the city money, rather than costing it, and this is unlikely to occur in many other cases of green retrofits, especially as land values increase in cities making land purchases or expropriation much costlier (De Sousa, 2003).

Compounding these economic considerations is the new Provincial Bill 108 - More Homes More Choice, which makes changes to how cities can raise funds for so-called ‘soft-infrastructure’ such as parks. It is too soon to tell if the changes will result in less funds for municipalities, but there is a general feeling among planners that it will (Baker et al., 2019). There is precedence for this: with the provincial Conservative Party victory in 1995, implementation of smart growth plans stagnated as the Provincial Government never allocated previously anticipated funds that were needed for the plans (Filion, 2003).

It appears then, that cities may have little choice but to dip further in to their capital reserves (considering possibly shrinking cash-in-lieu funds and inflating real estate values) for green space retrofit projects, and in this case, the role of actors becomes even more important, as someone (or group) will have to advocate for those expenditures.

It will be interesting to follow the progress of the Cooksville case and other green retrofits in the GTA (such as the proposed Rail Deck Park in Toronto and the Riverwalk in Brampton) to gauge the effect of Bill 108 on these projects. Future researchers may also want to apply the same analytical framework used here to these other two projects for a comparative analysis as all three projects are occurring in each city’s downtown core.

For planners working in municipalities that are facing the problem of intensification and green spaces competing for land, this research demonstrates the importance of addressing all of the implementation factors in a favourable way in order to move a green retrofit project forward successfully. For the mature municipalities of the GTA like Mississauga, that have robust policies, visions and governance processes in place already, the challenges will lie in having effective actors, and strong economic arguments for the projects, which may take some creativity. Indeed, creativity will be needed more than

ever as cities faces the simultaneous challenge of growing, intensifying, addressing climate change, and building cities that benefit public health.

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# Appendix A

This table is informed by The OECD's Policy Instrument Database (LINK), Gerald Hodge and David L.A. Gordon's book *Planning Canadian Communities (LINK)* and a report titled *Integrated Community Energy Solutions (ICES) Municipal Policy Framework* jointly authored by the Canadian Urban Institute, the Ontario Power Authority, and the Canadian Environmental Law Association. The tools presented here work by either generating revenue for the municipality to put toward its objective, imposing a cost on residents, business or developers to discourage a behaviour, relieving costs to encourage behaviours, or providing information to discourage or encourage a behaviour. The table lists what the tool is, how it works, and how it could be applied by a municipality to facilitate green space creation.

| **Policy Tool** | **How it works** | **Example of how it could be used to support green space creation** |
|---|---|---|
| Fiscal tools | | |
| Tax | A tax is an unrequited payment that fluctuates depending on the price/amount (OECD, 2017) | Assigning tax revenues to a fund designated for purchasing land for green spaces, or otherwise retrofitting areas for green space. Factoring in presence or absence of trees/greenspace when assessing property tax (Beatley, 2011) |
| Tax relief | Offer of tax reduction to incentivize an action, or reduce the burden of a given tax on a | Offering a tax relief to a developer who sets aside a set amount of land for green space |

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| | particular sector of society (OECD, 2017) | |
| Fees/tolls/charges | Something you must pay in order to get a service, usually of equal value (OECD, 2017) | Assigning revenues to a fund designated for purchasing land for green spaces, or otherwise retrofitting areas for green space |
| Subsidies and Grants | Use of public funds to reduce the cost of a service to residents or businesses. Can include tax exemptions or credits (OECD, 2017) | Offer a program where organizations can apply for funding to help them retrofit their land to provide publicly accessible green space |
| Bonds | | See explanation on page 135 in biophilic...try to understand. |
| Regulation | | |
| By-Laws | a law made by local government that only relates to its particular region | A by-law that requires developers to provide a certain amount of greenspace per unit |
| Planning tools | | |
| Site plan control | Considered part of the development permit system; a site plan must be submitted to the municipality to be scrutinized for consistency with community plans (Hodge & Gordon, 2007) | Gives planners an opportunity to impose special conditions on parcels of land. |
| Height/density bonusing (Section 37) | Council may authorize the increased height and density of a development not otherwise permitted in return for the provision of facilities, services or other matters (Ontario, 2019a) | Council can approve increased height or density in exchange for publicly accessible green space |
| Conveyance of land for park purposes (Section 42 and 51) | A condition where a developer must convey 2-5% of their land to the municipality for park purposes | Allows municipalities to acquire land for park use |
| Development permit system | A set of requirements property owners must satisfy in order for their development proposal to be approved (Hodge & Gordon, 2007; CELA, 2010)) | Gives planners an opportunity to deny or request alterations to development proposals that would contravene green space requirements |
| Local improvement charges (LIC) | LIC are used when a city makes improvements to services or infrastructure, and charges back | LICs are usually applied for improvements likes sidewalks and curbs (CELA, 2010), but |

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| | some of the cost to the properties that benefit from the change. The charge is usually added to the usual municipal tax and paid back over a number of years. (CELA, 2010) | could potentially be used the same way to help fund green space retrofits. |
| Community Improvement Area | In designating an area a CIA, the community can intervene on private land, acquire land, remove and replace buildings (Hodge & Gordon, 2007) | Could be used on a particularly park deprived area, to give the City extra powers to retrofit for green space |
| Zoning | A set of standards that control the use of a parcel of land, and what size, type, and placement of buildings may be put on the parcel (Hodge & Gordon, 2007) | If a City identifies an area it wishes to convert to a public park, it could re-zone the area as park land. When the current owners eventually want to sell, they will have little choice but to sell to the City, as no other buyer would likely be willing to purchase the land to convert it to a park. |

# Appendix B

Policies that encourage green space creation in Mississauga's Official Plan, Chapter 6: *Value the Environment* and Chapter 8: *Create a Multi-Modal City*

| **Reference Number** | **Policy** |
|---|---|
| 6.1.1 | Mississauga will:<br>a. protect, enhance, restore and expand the Natural Heritage System |
| 6.3.1 | Mississauga will give priority to actions that protect, enhance, restore and expand the Green System for the benefit of existing and future generations. |

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| 6.1.11 | Mississauga will consider the impacts of climate change that may increase risks to the city. Mississauga will develop policies on climate change that will:<br>a. promote development and land use patterns that conserve and enhance biodiversity and consider the impacts of a changing climate;<br>b. promote and protect green infrastructure; and<br>c. minimize adverse impacts from a changing climate and consider the ecological benefits provided by nature. |
| 6.1.12 | Mississauga will consider the potential impacts of climate change that may increase the risk associated with natural hazard lands. |
| 6.3.68 | Parks should generally be accessible for residents within 800 metres of their dwelling and be located as centrally as possible within a residential area.<br>6.3.69 The minimum city wide parkland provision is 1.2 hectares per 1 000 population. |
| 6.3.73 | In addition to the parkland identified on Schedules 4: Parks and Open Spaces and 10: Land Use Designations, additional public parkland may be acquired through the processing of development applications or through purchase. |
| 6.3.85 | Where lands are designated Private Open Space, it is not intended that they be free and open to the general public nor that they will be necessarily acquired by the City or any other public agency. Consideration will be given however, to public acquisition of these lands through the development approval process or through the City's land securement program. |
| 8.2.1.1 | The City's multi-modal transportation network will be maintained and developed to support the policies of this Plan by:<br>e. requiring the conveyance of lands of abutting properties for widening as a condition of subdivision, severance, minor variance, condominium or site plan approvals, for nominal consideration; |
| 8.2.2.2 | Mississauga will create a multi-modal road network through: a. a transportation system that provides mobility and accessibility to all users; b. opportunities for transit priorities; c. pedestrian and cycling access and routes; |

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| 8.2.4.2 | Mississauga will protect and may acquire the lands required for the cycling facilities shown on Schedule 7: Long Term Cycling Routes, through the development approval process and capital works program. |
| 8.2.4.7 | Sidewalks or multi-use trails and pedestrian amenities will be a priority in Intensification Areas. |
| 19.4.7 | All applications will have regard for:<br>b. promotion of cycling and walking;<br>e. quality and quantity of stormwater management;<br>g. habitat protection and enhancement;<br>h. erosion and sediment control;<br>i. tree preservation;<br>j. land form conservation;<br>l. soil and groundwater quality; and<br>m. public health. |
| 19.18.4 | Greenlands lands will be conveyed to the City or other public agency. Such lands will not be accepted as part of the dedication of land for park or other public recreational purposes contribution or credited against any cash in lieu for park or other public recreational purposes or be included in the calculation of density for building coverage. |
| 19.18.5 | Development adjacent to Greenlands lands will be subject to the delineation of natural hazards, natural areas, buffers and setbacks by the City in consultation with the appropriate conservation authority. Dedication and/or restrictive zoning of buffers to Greenlands may also be required by the City in consultation with the appropriate conservation authority. |
| 19.18.6 | Prior to conveyance of Greenlands lands, the proponent may be requested to conduct a Phase 1 Environmental Site Assessment (ESA) |
| 19.18.17 | The Greenlands designation applies to both public and privately owned lands. Where Greenlands land is privately owned, this Plan does not imply that it is free and open to the general public or that it will be acquired by the City or any other public agency. Consideration will be given, however, to public acquisition of these areas. |

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| 19.19.1 | Mississauga will provide for public open space and/or recreational facilities in accordance with the following means: a. dedication of land for park or other public recreational purposes, or cash-in-lieu for park or other public recreational purposes, under the provisions of the Planning Act; b. receipt of levies, under the provisions of the Development Charges Act; or c. other sources. |
| 19.19.2 | As a condition of development of land, the City may require that a portion of the land proposed to be developed or redeveloped be conveyed to the City for park or other public recreational purposes |
| 19.19.3 | As a condition of approval of a plan of subdivision, Mississauga will require that a portion of the land in the plan be conveyed to the City for park or other public recreational purpose |
| 19.19.10 | Mississauga will encourage the Conservation Authorities to acquire lands for conservation and recreation purposes beyond that required for flood control purposes. |
| 19.19.11 | Mississauga will encourage the Conservation Authorities to formulate acquisition and development strategies for conservation areas within the city |
| 19.19.12 | Where lands owned by conservation authorities have value for recreation and conservation, and are not required for flood control purposes, the City will seek the cooperation of the conservation authorities to lease or convey such lands to the City for park purposes |
| 19.19.14 | Mississauga may request that the Provincial Government lease or convey to the City for public open space purposes any lands contained within the Parkway Belt West that are residual to the essential functions of the Parkway Belt West Plan or within areas designated for Public Open Space, within this Plan. |
| 19.22.4 | Mississauga may acquire lands or buildings in order to undertake community improvement initiatives. |

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| 19.22.6 | Community Improvement Plans may consider the following, among other matters:<br>a. deficiencies in the physical infrastructure of the area including sanitary sewers, water or storm sewer systems, roads, sidewalks, curbs, street lighting, and electrical facilities;<br>c. inadequate park space, open space, recreation, and other community facilities; |