Growing Community

Strategies for Sustainability in Community Gardens.

Author: K. Berton
Supervisor: J. Agyeman
Submitted in Completion of the Requirements of the Master of Urban Planning Program at McGill University.

Abstract:

This Supervised Research Project, to be submitted in completion of the Maser of Urban Planning Program at McGill University, was undertaken to address the issues of stability and land security for community gardening initiatives in the City of Toronto. The research focuses on the impacts that land-ownership and tenure arrangements may have on community garden initiatives, as explored through four community garden case studies, the Christie Pits Community Garden, the Huron-Sussex Community Garden, the Milky Way Community Garden and the St. Saviour's Community Garden. The research found that community gardening activities that take place on land that is owned by Community Land Trusts or by organizations that serve community interests in terms of social and cultural services have a stronger sense of stability and are better able to respond to economic and development pressures. Perceptions of land security, community benefit, and potential for longevity are discussed in personal interviews, and the project concludes with recommendations for ensuring the sustainability of community gardening activities in the City of Toronto.

Ce projet de recherche dirigée, en accomplissement des exigences du Master of Urban Planning à l'Université McGill, a été entrepris pour aborder les questions de stabilité et de sécurité foncière des initiatives de jardinage communautaire dans la Ville de Toronto. Cette recherche se concentre sur les impacts potentiels des ententes de propriété foncières et des régimes fonciers sur les initiatives de jardins communautaires à travers quatre cas d'étude: le jardin communautaire Christie Pits, le jardin communautaire Huron-Sussex, le jardin communautaire Milky Way et le jardin communautaire St. Saviour's. La recherche a révélé que les activités de jardinage communautaire qui se déroulent sur des terres appartenant à des fiducies foncières communautaires ou à des organismes qui servent les intérêts communautaires en matière de services sociaux et culturels sont plus stables et mieux à même de répondre aux pressions économiques et de développement. Les perceptions de la sécurité foncière, des avantages communautaires et du potentiel de longévité sont discutées lors d'entrevues individuelles, et le projet se conclut par des recommandations pour assurer la durabilité des activités de jardinage communautaire dans la Ville de Toronto.

TABLE OF CONTENTS

List of Figures

Introduction

1.1   Context

Evaluations of community gardens consistently find that they provide multiple benefits to local populations. Community gardens not only provide communal areas for locals to interact with neighbours and the natural environment, but also help to reduce the localized effects of climate change. Currently, the focus of urban planning practice is increasingly represented by urban density and limiting sprawl (Haaland & Konijnendick van den Bosch, 2015). With these goals at the forefront of planning ideologies, provision of green space is an important factor in maintaining the health of cities and their inhabitants[1] (Haaland & Konijnendick van den Bosch, 2015). Urban green spaces have been shown to mitigate the negative effects of urban congestion and higher urban density. Though there are many possible variations in the forms these spaces may take, research and practice have demonstrated that the widest range of accrued potential benefits come as a result of community gardening activities. Research in the fields of planning, environmental justice, and

urban sustainability has shown that community gardens increase social inclusion, and improve feelings of responsibility and belonging in neighbourhoods (Firth et al., 2011). They also provide valuable ecosystem services; aid in fulfilling local sustainability targets; provide healthy, affordable, and sustainable food for low-income and vulnerable communities; and help address issues of access to both affordable fresh foods and green space (Baker, 2004; Ferris et al., 2001; Wakefield et al., 2007). However, due to the informal nature of community gardening activities and the unstable land tenures that are common for these spaces, community gardens tend to lack stability (Pudup, 2008; Schmelzkopf, 2002). Community gardens tend to be developed on lands that are ephemeral, transitional, and rarely owned by community gardeners (Jettner, 2017; Milburn & Vail, 2010). Most commonly, community gardens are built on publicly owned lands, or on privately owned lands that are under used or disused (Schmelzkopf, 2002). This results in an instability of place that may diminish their beneficial social impacts.

---

[1] This priority is expressed in the City of Toronto Official Plan (2015), as well as a focus of discussion with respect to community gardens in Wekerle (2004) and Wekerle & Classens (2015).

City Planners and community organizers have developed a series of tools and methods for facilitating community gardens[2]. In Canada the importance of community gardens has been formally recognized by municipal policies in multiple cities. Toronto has focused on the food justice and sustainability aspects of community gardening. The Toronto Food Policy Council has led the discourse on the importance of community gardening and its role in increasing access to fresh, affordable foods (Wekerle, 2004). The parks and recreation division of the municipal government has introduced siting and design regulations that legitimize and promote community gardening activities on municipally-owned lands (Toronto Parks and Recreation, 2, 2002; Toronto Food Animators, 2010). The city plan has recognized community gardening as an important tool for achieving the goals of sustainability and democracy; however, there is no formal land use policy exclusive to community gardening in the City of Toronto (Wekerle, 2004; Wekerle & Classens, 2015). The majority of land currently used for community gardening is municipally-owned parkland, utility corridors and land surrounding Toronto Community Housing apartment towers.

While these land use policies provide spaces for community gardens, they do not provide stability, as the land is not guaranteed for long-term use, and is usually re-evaluated on an annual basis (Toronto Parks and Recreation, 2, 2002).

This research investigates how community organizers and planners in the City of Toronto can improve the stability and longevity of community gardens in order to increase their beneficial impacts on communities.

1.2   Problem and Purpose

"Community gardens" include collective gardens and plot cultivation by individuals, and are not limited to spaces for food production alone. While the social benefits are apparent, these spaces lack longevity, as they often occupy vacant privately or municipally-owned land (Desimni, 2015; Pudup, 2008; Rosol, 2010; Schmelzkopf, 2002). When subject to the fluctuations of the private real estate market, these spaces tend to be transient. In an application of arguments made by Graham & Thrift (2007) on the importance of developing a politics of repair, maintenance, and care in the practice of sustainability, Firth et al. (2011) found that these emergent semi-public spaces can have

---

[2] These methods can include providing funding opportunities, tax-incentives, reserving land for urban agriculture through land banking, land trusts, zoning and land use regulation, and other policy endeavours to facilitate the establishment of community gardens (Horst et al. 2017; Thibert, 2012).

have lasting positive impacts on civic life if they enjoy stability of place, providing a focus for local community actors (cf. Brand & Gaffikin, 2007; Desimni, 2015; Meyer, 2008, 2015; Pudup, 2008). These spaces also compensate for state disinvestments in urban green spaces as part of the process of neoliberalisation and the wider trends of public space privatization[3] (McClintock, 2014; Perkins, 2010; Rosol, 2010). These important functions of community gardens may be negatively impacted by the instability of land ownership and tenure (Saldivar-Takana & Krasny, 2004; Schmeltzkopf, 1995; Wakefield et al., 2007). The central issue addressed by this research will revolve around the impacts of land ownership and tenure for community gardening spaces and activities. Given the well-documented benefits of community gardens to gardeners as well as the wider community and the suggested relationship between land ownership type and the degree of beneficial impact, the issue of land ownership should influence future approaches to planning for community gardening.

1.3   Research Question and Objectives

Although the benefits and importance of community gardening activities have been widely documented, few studies have focused on the impacts of land tenure on these benefits. There have been several practical discussions in the literature about the impacts of urban land scarcity on community gardens, as well as discussions about the amplification of benefits in communally-owned and controlled gardens. These discussions have been significant enough to provide a basis for this study, but none have performed a review of land ownership for community gardens and the impact on perceived benefits.

---

[3] The process of neoliberalization has been a gradual privatization of public resources, processes and space. As described by Low & Smith (2006): The 1980's neoliberal onslaught brought a "trenchant reregulation and redaction of public space".

In light of this, this SRP examined community gardens that exist on communally-, publicly- or privately-owned sites that were developed and used by non-profit groups and/or local residents in order to fulfill the following research objectives:

1. To explore the roles of community organizations in the provision of community gardens in city neighbourhoods;

2. To examine the impact of increased land security and sense of autonomy over community garden spaces in terms of creating useful public goods; and,

3. To develop recommendations that benefit community organizers, city planners, and community garden users in the development of community garden spaces.

Through this lens, this SRP explores the following research questions expressed increasingly in recent debates (McClintock, 2014; Mikadze, 2014; Rosol, 2009; Saldivar-Tanaka & Krasny, 2004; Zukin, 2010):

1. What, if any, are the perceived impacts of land tenure on the social benefits of community gardens?

2. What types of land ownership appear to amplify the benefits of community gardens?

3. How can community organizers and policy makers create a greater stability of place for community gardens?

The following research consisted of a review of relevant literature to situate and provide context for the general themes relevant to community gardening activities and land-ownership type and tenure. In addition to this literature scan, a policy review provides more precise context to the City of Toronto and highlights the most applicable and relevant planning and regulatory policy documents available at this time. These reviews provide a background and overview for the development of four case studies on the Christie Pits Community Garden, the Huron-Sussex Community Garden, the Milky Way Community Garden, and the St. Saviour's Community Garden. The case studies provide a detailed assessment of the unique land-ownership and tenure arrangements in each of the cases as well as an examination of the perceptions of stability and longevity with respect to each garden initiative. The discussion that follows is based on insight gained from case study analysis as well as personal interviews with city and community organizers. The discussion informs six recommendations for the development of stable community gardens.

Methodology

I focus on the case of Toronto, which has a history of supporting community garden development, as expressed by the Toronto Food Policy Council in "Grow-TO: an Urban Agriculture Action Plan for Toronto" (2012) and the City of Toronto in both the Toronto Community Garden Action Plan (Toronto Parks and Recreation, 2002) and the Toronto Official Plan (2015). My research investigates how community organizers can create sustainable public assets in urban contexts through the development of stable community gardens. The approach for this research project is both exploratory and qualitative in nature, leading to recommendations for effective strategies to cultivate community garden projects including recommendations for government policymakers, and local non-governmental actors for the development of sustainable community gardening projects.

The research was conducted in three phases:

Phase one entailed a literature scan that explored the historical context of community gardens in North America; the roles that community-based actors and policy makers play in the provision of community gardens; the impacts of community gardens on surrounding neighbourhoods and communities; the impacts different types of land-ownership have on the stability of community gardens; and develops a critical understanding of contemporary debates on the long-term stability of such spaces in urban areas. Phase 1 also included a review of the relevant policies at the City of Toronto that enable, regulate, or disallow the development of community gardening activities. The literature scan and policy review reveal the goals and strategies of community-based actors, as well as policy makers, while also serving as context for phases two and three.

Phase two involved primary research with key stakeholders in community organizations, such as planning officials and designers. Work in this phase was composed of semi-structured interviews to explore experiences surrounding community garden spaces. These interviews were designed to garner specific insight into whether some initiatives have had greater positive impacts than others. Interviews were conducted with two groups for primary qualitative research.

These interviews focused on collecting experiences and narratives about community gardens from (for full list see Appendix i):

- Community garden users (the gardeners at the Milky Way Community Garden, the Christie Pits Community Garden, the Huron-Sussex Community Garden and the St. Saviour's Community Garden in Toronto, ON);

- Relevant stakeholders in the provision of community gardens such as community organizers (Greenest City and the Parkdale Neighbourhood Land Trust), city officials, and landowners.

Overall 22 stakeholders were interviewed and approximately 30 potential participants were contacted. Due to the significant time restrictions on this research, it was not possible to interview all of the key stakeholders in the fields of urban agriculture and community garden development. Should this research be continued, a wider range of stakeholders should be consulted and a larger sample of community gardens would be beneficial.

Interviewees were contacted using the snowball method as well as by recruitment email to publicly available contacts. The interviews were loosely structured, allowing participants to volunteer as much information as possible but were also steered towards two sections: (1) The personal motivations of gardeners and the perceptions of benefits or impacts to the greater community; and

(2) The specific land tenure agreements that exist for the community garden in question, the perceived impacts this may have, and any concerns or comments the gardeners may have about it (for interview questions see appendix ii).

When possible, interviews were recorded and notes were made of relevant and important information shared. Direct quotations were also recorded for clarity; these form the basis of the research. Common themes among the interviews were highlighted and compared across the different case studies. These themes were also used to inform analysis of the differing land-ownership and land-tenure typologies in Phase three.

Phase three entailed the formation and analysis of case studies. This consisted of archival research, context analysis, and demographic analysis of the community gardeners that were interviewed in phase two. As described by Yin (1994), case study analysis is used when studying a specific phenomenon that is bounded by time and location in great detail. The case studies developed in this research are meant to investigate the specific attributes associated with differing land-ownership and tenure of four community garden initiatives. Limitations to the case study methodology result in the cases described being stand alone instances of the impacts of land-ownership and tenure on community gardens and cannot be used to generalize beyond the four cases presented (Yin, 1004).

Benefits to this methodology include a large amount of information being collected on the four case studies. This provides a clear and detailed account of the particular impacts of land-ownership and tenure on the cases reviewed.

The case studies include the four successful Toronto community garden initiatives (the Milky Way Garden in the Parkdale neighbourhood, the Christie Pits Community Garden in the Annex neighbourhood, the Saint Saviour's Community Garden in the Danforth Village neighbourhood and the Huron-Sussex Community Garden in the University neighbourhood) and provide insight into some effective approaches to cultivating such community projects. The case studies have been developed in accordance with the practice described by Yin (1994) through a variety of techniques including site observation, stakeholder interviews, media review, and review of municipal documents relevant to the garden sites (Yin, 1994).

This research followed the McGill University code of ethics for research involving human participants and received full approval from the Research Ethics Board II (see Appendix iii). As such all participants were asked to review and sign a consent form outlining their participation and potential risks and benefits, and permitting the electronic recording of their voices and the sharing of their names or affiliated organizations (see Appendix iv).

2.1 Scope

This analysis serves as a review of the existing situation of community gardens within the context of the City of Toronto. It does not provide an applicable argument to a wider sampling of cities. The sample of community gardens was limited due to the time frame for completion of the project, and due to the seasonal nature of the activity of community gardening. These restricting factors necessitated a limited sample size that may not be adequately representative of the reality of community gardens. The recommendations and conclusions of this paper bear these considerations in mind.

Literature Scan

3.1   Introduction

Examining the impacts of land tenure and ownership on community gardens in the recent, relevant scholarly work provides the necessary context to situate this research. The following literature scan is structured to highlight the impacts that community gardens can have on their surrounding neighbourhoods; notes the ideal conditions which foster the most positive impacts on communities; and analyzes the effects that different land ownership types may have on community gardens.

A broad and general search was undertaken for peer-reviewed journal articles from a range of related disciplines, as well as any planning or policy related 'grey literature' from organizations and institutions that are concerned with community gardening. Both peer-reviewed and other documents discuss major trends and themes in the study of community gardening through the lenses of food justice, urban sustainability, political economic study, as well as the strategies and tools that community members use to establish and develop community gardens. This review is organized into broad themes derived from the literature, and focused on the establishment of context.

3.2   Evolution of Community Gardening in the North American Context

In the past two decades community gardening, along with discourse over urban agriculture, has become increasingly important with regards to questions of urban sustainability, environmental equity, and food security. Community gardens in North America can be seen as a response to a variety of socio-economic and demographic fluctuations (Hannah & Oh, 2000; Saldivar-Takana & Krasny, 2004). Community gardening has, to varying degrees, responded to food insecurity, increases in poverty, and perceptions of blight in poor and racialized urban areas (Milbourne, 2012). Historically, for example, in the late 19th century, overwhelming urbanization and economic instability led municipal actors to offer city-owned vacant lots for the production of food (Saldivar-Takana & Krasny, 2004). 'Community Gardens' can be loosely defined as "any piece of land gardened by a group of people" (Milburn & Vail, 2010, p. 71). "Any piece of land" is extended to land that is "public, in terms of ownership, access and degree of democratic control" (Ferris et al, 2001, p. 560). This definition is intentionally broad, encompassing a wide variety of urban agriculture, green space activity, and liminal land use.

The difficulty of defining community gardens outside of a broad sense is that community gardening can be undertaken in a variety of ways and in a variety of spaces. These spaces can include: neighbourhood parks, institutional settings (on the grounds of public housing, universities, schools and hospitals), or on private property (such as church land and in yards and gardens that are privately-owned but made publicly accessible) (Firth et al., 2011; Milburn & Vail, 2010; Pudup, 2008). Community gardens also vary based on organizational structure, ranging from informal community groups at the neighbourhood level, to civic associations such as non-profit groups, social enterprises, and municipal agencies (McClintock, 2013; Jettner, 2017).

Community gardens are usually managed by volunteers and rely on volunteer labour for upkeep and recruitment. These volunteers can usually be divided into two groups: 'garden leaders' who organize and manage recruitment and waitlists, and 'garden members' who work the land, have a dedicated plot (where applicable) or participate in garden activities (Jettner, 2017). Community gardens frequently fall into niche categories, occupying interstitial space and relying on transitory support from policy makers and community members (DeZeeuw et al., 2011; Saldivar-Takana & Krasny, 2004). Though community gardens have evolved over time into a variety of food, community,

and amenity-based initiatives, the inherent function of community gardens, providing urban green space to a wide variety of users, remains the same. Furthermore, it is the diversity among community gardens that contributes to the importance of these plots as democratic spaces within the urban fabric (DeZeeuw et al., 2011). What the variety of these gardens have in common is that specific constituencies support and rely on them, meaning that all community gardens reflect mutual support and reciprocity within communities (DeZeeuw et al., 2011).

3.3 Impacts of Community Gardening

Community gardens and urban agriculture have been shown to support a variety of environmental, social, and economic goals. These goals include: public health and nutrition, environmental protection, poverty alleviation, social inclusion, democratic decision-making and encouraging community economic development (Calvin, 2011; Glover, 2010; Jettner, 2017; Kingsley & Townsend, 2006; Voicu & Been, 2006; Wekerle, 2004). These benefits have been found to apply not only to immediate garden members, but also to the wider community (Firth, et al 2011). At the municipal level, these accommodating policies help meet the needs of the municipality and its constituents, particularly those that are marginalized and underserved (Mendes et al., 2008).

For the most part, previous research has been focused on the social and economic sustainability impacts of community gardens, although the benefits to ecological sustainability are broadly accepted. Tidball and Krasny (2007) argue that community greening activities – consisting of a framework for greening originating at the local level, which includes community gardening – reduce the risks of climate-related disasters and improves ecological resilience to climate change. Community gardens and other greening activities increase both the amount and quality of green spaces, and provide a greater permeability, frequency and distribution of ecological infrastructures (Tidball & Krasny, 2007).

These measures increase the ecological resilience of the networks in which these spaces exist. They have also been shown to increase community investment in ecological resilience, with gardeners and other environmental stewards taking on more roles in support of environmental action (Tidball & Krasny, 2007). The more democratic and user-oriented that decision-making is in these spaces, the more socially resilient these spaces tend to be (Tidball & Krasny, 2007).

The democratic nature of the interactions within these garden spaces also has impacts on social sustainability. Firth et al. (2011) undertook case study analysis of two community gardens in Nottingham in order to investigate how community gardens help to build cohesion and vitality in a community through the development of social capital. Three types of social capital were identified as being generated by the interactions that take place between gardeners in community gardens: bonding social capital, bridging social capital, and linking social capital. . These three types of social capital, produced in urban green spaces have been shown to promote pro-social behaviours in garden users and help mitigate the negative effects associated with intensification in cities (Smith, et al., 2013). Bonding social capital creates strong ties between similar individuals in similar socio-demographic situations. Bridging social capital improves distant ties of similar individuals in differing socio-demographic situations, or differing individuals in similar situations. And linking social capital creates connections between completely dissimilar groups (Smith et al, 2013). Although each type of social capital has differing effects, they impact community development in positive ways overall.

The presence of any or all of the three types increases community mobility, the sense of ownership over space and the links both within and outside of the community (Firth et al., 2011). The degree of social capital created within community gardens varies based on typology, group dynamics, and organizational structure; however, based on certain shared characteristics, community gardens were shown to increase the presence of social capital across the board.

The role of community gardens as a 'Third Space' (Oldenburg, 1989) where interactions with other individuals or groups can be had is also a key point in the development of social capital (Firth et al., 2011). The informal nature of community gardens also helps neighbours develop familiarity and bridge gaps in cultural understanding to form stronger social bonds (Baker, 2004). In addition to this increase in familiarity, and in keeping with a 'Contact Theory' framework, extended and continued interaction to other members of the community garden has been demonstrated to have a positive effect on feelings of acceptance and tolerance among fellow garden members with differing socio-demographic backgrounds (Allport, 1954; Aptekar, 2015; Hewstone, 2009; Wessel, 2009). Community gardens may fulfill a somewhat unique role as locations of repeated contact between members in publicly-accessible spaces (Aptekar, 2015).

Finally, social capital is also generated through the interaction of garden users and institutional and authoritative structures. These external links between the gardeners and the broader community enable gardeners to access resources and improves feelings of community agency (Firth et al., 2011).

In addition to the social benefits associated with community gardening, studies have shown that community gardening also improves health and physical wellbeing. Ferris et al. (2001) link issues of health and community development with the use of green spaces in cities.

Community gardens were perceived to have a number of health benefits by those who used them, including improved mental health, physical activity, and nutrition (through increased access to healthy food) (Draper & Freedman, 2010; Wakefield et al., 2007). Access to fresh produce, physical activity, and social interactions all play a key role in the health benefits associated with community gardening (Ferris et al., 2001). Ferris et al. (2001) also suggest that people of colour, the poor and otherwise marginalized and vulnerable groups such as women and children, stand to benefit the most from participation in community gardening. It has been suggested that these benefits are magnified when community gardens have a strong sense of place and a stability of land tenure (Schmelzkopf, 2005; Saldivar-Takana & Krasny, 2004; Rosol, 2010).

Design of community gardens also has impacts on potential social and health benefits. Based on qualitative research undertaken in five community gardens in the UK and Ireland on the wellbeing of community gardeners, Calvin (2011) highlights two key aspects of design that enhance both the sustainability of the community garden sites and the wellbeing of site users: agency and dynamic balance. Based on the ecologically-sustainable design principles of Van der Ryn and Cowan (in Calvin, 2011) this study defines ecological design as "any form of design that minimizes environmentally-destructive impacts by integrating itself with living processes" (p.948).

Along with the presence of sustainable infrastructures, malleability, and design features, these principles facilitate the development of agency, which has beneficial effects on the perception of ownership, ability, mental health, and wellbeing. Flexibility in the design of the community gardens impacted feelings of control and ownership in the community gardens. In cases where the garden beds were flexible and movable, the gardeners reported greater feelings of agency, and as a result experienced beneficial impacts to their mental and emotional states (Calvin, 2011). The study notes that the principles of democracy and non-rigidity in design and a user-led approach do not align with the more rigid zoning and planning policies imposed by city planning authorities. These tools, Calvin (2011) argues, must be amended in order to support the sustainable design of community gardens.

3.4   Trends in Community Garden Land Ownership

Based on the above benefits, it would be expected that land security for community gardens would be prioritized as a key first step in securing the beneficial impacts associated with community garden activity. However, for the most part, the existing literature highlights the continued insecurity of land tenure and lack of ownership of land for community garden members. The literature may point to some reasons as to why community gardens remain land insecure. For example, there is significant research exploring the connections between community gardening and the process of gentrification, and in some cases policy enabling community gardening activities is designed specifically to improve land values (Pearsall & Anguelovski, 2016; Saldivar-Takana & Krasny, 2004; Rosol, 2010). This process of using community gardening as a temporary tool to increase property values may exacerbate the land insecurity experienced by community gardens, and have detrimental effects on the potential benefits community gardens have.

Community gardens tend to be developed in spaces with limited, unstable, or even illegal land tenure (Wekerle & Classens, 2015). The historic development of community gardening on liminal and temporarily unused land reinforces the instability of community gardens in space. Often community garden groups do not own the land they garden on; land is usually donated or rented for a limited time, from a public or private entity (Jettner, 2017). As a result, community gardens vary in land ownership type, with significant uncertainty in how long land will be available for cultivation, or what the relevant literature describes as 'uncertain land tenure security status' (Milburn & Vail, 2010; Jettner, 2017).

Intensification of urban areas and subsequent land scarcity seems to be increasing the demand for community gardens, but it also limits the potential spaces available to community gardens (Ferris et al., 2001). In response to this competition, municipalities have developed new policies for providing land for community gardening and urban agriculture. Public land leases are the most common, in unused lots, public parks and on institutional lands. Other options for obtaining land for community gardening include Community Land Trusts, emphyteutic leases (long-term, low-cost leases that can be provided to community organizations, usually through a public governing body), and private land leases to community organizations.

As raised by Wakefield et al. (2007) insecure land tenure was a primary concern affecting community members' feelings towards community gardens. In that study, all examined gardens were located on sites not directly owned by the gardeners. As such, many garden users were concerned about whether or not their gardens would continue to last over time. One particular case, that of the Regent Park community garden was particularly illustrative of the fear that gardeners had, as the municipally-owned housing project was scheduled for redevelopment and intensification. The gardeners were concerned that their community garden would not be prioritized and, as it was on municipally-owned land, that they would have no course of action to prevent its demolition. In reality, the municipality understood the value of the community garden and elected to preserve it; however, this outcome appears to be more of an anomaly than the norm.

Schmelzkopf (1995) explored the temporary nature of community gardens in a study of Latino community gardens in New York City. This work highlights both the important social benefits of community gardens as well as the land insecurity experienced by community gardening activities (Schmelzkopf, 1995). This insecurity may be due to a variety of factors associated with community gardening activities. First, community gardens are frequently developed by and serve communities that are marginalized; usually these groups are poor and have limited access to urban green spaces

or land and property ownership (Wakefield et al., 2007).

Second, because of the beneficial effects that community gardens have on adjacent areas, they are frequently employed by policy makers or the private market to increase property values in a certain area (McClintock, et al., 2016). This results in an extraction of the benefits of community gardens by land owners rather than community gardeners, while also frequently displacing the most vulnerable members of community gardens through the process of gentrification (Pearsall & Anguelovski, 2016; McClintock, et al., 2016; Saldivar-Takana & Krasny, 2004; Rosol, 2010).

Third, because community gardens are low-density land use, and their benefits are most commonly associated with health and social cohesion, they are not viewed as being the 'highest and best use' for plots in urban centers, and are usually only considered a temporary or seasonal use, one that does not receive any formal land-use protection or recognition (Horst, et al., 2017). This results in the majority of community gardens being established on lands that have no other potential economic value, such as park land. Park land is mainly owned and operated by municipalities, making community gardens that are established there vulnerable to the control of municipal agencies; this lack of control over the community gardens by garden members may in fact decrease some of their benefits by decreasing their perceptions of personal agency.

Municipal government is generally seen as the main provider of urban green space, while the private sector is responsible for the majority of constructions in urban areas (Webster, 2007). While this split is supported by patterns of development, it is worthwhile to unpack notions of private and public land ownership in the North American context (Webster, 2007). Blomley (2008) describes the dichotomies of land ownership and use. While land that is publicly owned, in most cases owned by some state body, is theoretically accessible by all members of the public, this is infrequently true in practice. True commons, that is land that is accessible to all individuals, is immensely rare, and when it appears, is frequently deemed dysfunctional due to its complicated organizational ownership (Blomley, 2004). It makes sense based on the general description of community gardens as being democratically organized and community driven, that they should resemble a commons as much as possible.

Frequently, commons are governed by a body that resembles neither the state nor the market and, as Blomley (2008) argues, have been shown to develop a reasonable degree of success over long periods of time. These governing bodies may be a collective or community organization that participates in community gardening activities. Community Land Trusts are perhaps the most equitable form of community garden land ownership, most closely resembling a commons.

Blomley (2008) also notes that land trusts are a formalized type of common, although they are not true commons, as a limited, if communal owning group can still dictate access. Community Land Trusts are a popular model for ecological preservation and have in some cases been applied to community gardening projects (Moore & McKee, 2012). Land trusts focus on local community autonomy, empowerment and the democratic management of assets, not unlike community gardens. Community Land Trusts usually focus their efforts on securing land for groups that are identified as being in need (Moore & McKee, 2012). Community land trusts have historically been used to secure affordable housing for low-income individuals as well as community amenities and services (Campbell & Salus, 2003). In a case study of the Madison Area Community Land Trust, Campbell & Salus (2003) note the potential for securing and ensuring land tenure stability through Community Land Trusts.

Policy Review

4.1 Introduction

For many years municipal governments have allowed residents to garden on vacant lots temporarily without formal approval or have assisted in community garden activities on a case-by-case basis (Henderson, 2010). In a review of the relationship between planning and community gardening, Lawson (2005) found that due to the ephemeral nature of community gardens, municipal governments have historically tended to ignore gardens in the long-term. This has made it difficult to effectively regulate the development of community gardens at a municipal or regional scale. These gardens have also been traditionally viewed as community-driven activities resulting in municipal planning departments supporting community gardens as user-initiated, ignoring long-term formal planning for these spaces. Research shows that the long-term planning of community gardens is supported by a network of resources including government, community organizations and businesses (Milburn, 2010).

Policies accommodating and promoting the development of community gardens have increased in the last two decades as discussion of local food security, and food and ecological justice have become important policy goals for local governing bodies (Beilin &

Hunter, 2011). Municipal governments are utilizing the numerous benefits associated with community gardens to address a variety of community problems associated with health, wellness, safety, beautification, and environmental issues. This has resulted in local governments adopting an active role in the provision and management of community gardens (Henderson, 2010). Governments are supporting community gardens through avenues such as developing supportive policies, investigating how policy barriers can be removed, and providing materials and other financial supports thereby, ensuring that the protection and development of community gardens is incorporated into wider policy directives through overarching policy documents (Barbolet et. al, 2009). Municipalities regulate community gardens through a variety of methods including land use and zoning restrictions, food safety legislation, and community design standards. Municipalities are in the unique position to both regulate and encourage the development of community gardens through economic incentives, policies and programs that support the development of community gardens and make land available for urban agriculture (Horst, et al., 2017). This includes planning tools such as downzoning sites for urban agriculture, regulating roof-top gardens, and developing long-term or

emphyteutic leases for community garden uses (Thibert, 2012). However, municipalities tend to be cautious when enacting these planning policies as community gardens are frequently challenged by neighbours and occasionally seen as, depending on the context, disruptive or gentrifying, this is particularly important as downzoning land for urban agriculture may be legally challenged as spot zoning in many instances (Thibert, 2012). It is important to develop planning tools and regulatory policies as part of a broader, comprehensive urban agriculture or community green space plan (Thibert, 2012).

According to Thibert (2012) the main methods available to municipalities for ensuring the development of community gardens are:

- removing regulatory barriers to developing community gardens;

- identifying community gardening as a permitted land use in certain areas of the city; and

· incorporating community gardens and urban agriculture into comprehensive land use plans.

In addition to these methods community gardens may also be supported through land preservation initiatives such as land banking, conservation easements, and establishment of Community Land Trusts.

4.2 Community Garden Policy in the City of Toronto

A review of the policy documents that pertain to community gardening in Toronto reveal that most commonly community gardening is mentioned as a means to improve either local food justice and urban agriculture or the biophysical environment. Therefore a variety of both food justice and ecological activist organizations have produced action plans, guidebooks, and other policy documents that advocate for and outline the importance of community gardening to urban agricultural systems. While the large number of these policy documents indicates a level of interest in community gardens and urban agriculture within the city, they tend to be aspirational in nature (ElzingaCheng, 2018). Whereas other cities have taken serious steps towards integrating urban agriculture into land use and zoning policy (e.g. Austin, TX), incentivizing urban agricultural uses for privately-owned lands (e.g. Baltimore, MD and Sacramento, CA) and provided funding opportunities for the development of urban agriculture initiatives (e.g. Vancouver, BC and Seattle, WA) (Horst et al., 2017), the City of Toronto has not made much meaningful policy change that would promote urban agriculture within the city limits (Official Plan, 2015; Wekerle, 2004; Wekerle & Classens, 2015).

4.2.1 Evolution of Food Policy and Community Garden Policies in Toronto

In the case of Toronto, the first formalization of community garden development was the founding of the Toronto Food Policy Council (TFPC) by the Toronto City Council in 1991, and the release of the report "Supports for Urban Food Production: Creating a Garden City", in 1993. Over the past twenty years community agencies in Toronto along with the Toronto City Council have developed partnerships in order to develop new spaces for both food justice, urban agriculture and community gardening (Toronto Urban Growers, n.d.; Wekerle, 2004). Toronto's planning for community food security reflects a local and grassroots approach to community development. Therefore the existing policies rely on interlocking networks, advocacy groups and place-based movements to study and advocate for community garden development (Baker, 2004; Wekerle, 2004). A number of those non-governmental and local action groups have been key to informing, developing, and evaluating the policies that impact community gardens enacted by the Municipality. As a subcommittee of the board of health, the TFPC has been instrumental in maintaining a consistent focus on food security and urban agriculture within various agencies and departments of the city. Through local as well as citywide action, the TFPC has promoted issues of food security and improved policies relating to community gardening (Baker, 2004; Blay-Palmer, 2009).

The Food and Hunger Action Committee (FAHAC) was established in 1996, and developed the first comprehensive multi-sectoral food security plan. This report articulated a new approach for the city that involved working together with other agencies and a range of concrete initiatives including support for urban agriculture and advocacy at the municipal level to senior levels of government (Wekerle, 2004). A key element of the FAHAC plan was the request for the establishment of a permanent food security grants program to support community gardens, community markets, and community cooking programs (Food and Hunger Action Committee, 2001). These would organize in parts of the city where groups had less knowledge of how city bureaucracy works and how to obtain resources and funding. This funding resource was ultimately not provided. In 1997 the Parks, Forestry and Recreation division of the city created the position of Community Gardens Program Coordinator and in 1999 Toronto City Council endorsed the Community Garden Action Plan, which among other guidelines for garden development, sets the goal of establishing a minimum of one garden per ward of the city. During that same year the Toronto Community Garden Network was founded (Toronto Urban Growers, n.d.).

Following this commitment to supporting community gardens, the City of Toronto adopted the Toronto Food Charter – a commitment to ensuring increased food security in the city through community gardening and urban agriculture. In 2002 the City of Toronto Official Plan review resulted in the first express support for community and roof-top gardens as important elements for creating beautiful, healthy and active cities (Toronto Urban Growers, n.d.; Wekerle, 2004).

The City of Toronto's Planning and Development Department has been involved only minimally in policy for community gardening. In 1999 the city began the process of developing a new official plan, this provided a political opportunity for food justice activists to intervene and gain greater visibility for food security issues in the planning process. During this process, the TFPC developed a policy document outlining how planning could contribute to food security in the city. Feeding the City from the Back 40: A Commercial Food Production Plan for the City of Toronto (1999) proposed various new initiatives and programs (Toronto Food Policy Council, 1999). These recommendations included that the city adopt an urban agriculture development strategy, zone for and recognize food production as an urban land use, pilot urban agriculture on brownfields and, among other things, expand the community gardening program (Wekerle, 2004). As a result, in May 2000 Toronto City Council committed itself to promoting food security by passing the Toronto Food Charter. This commitment included directives to city departments to serve as a model in developing partnerships to increase access to healthy foods, including space for community food production. However, the new city plan did not adopt many of the recommendations from the TFPC. The new City Plan did identify the need to designate, preserve and enhance community infrastructure, open space and natural heritage, and in the vision statement, acknowledged the importance of community food security (Toronto Official Plan, 2015). This Official Plan also, unknowingly, sets out goals and objectives, like density targets, that place pressure on the community garden network by effectively limiting the lands available to community gardening initiatives to spaces zoned for park land. Illustrative of the development pressure that this placed on some community gardens is the identification in the plan of open space around inner-ring suburban residential towers for intensification and additional housing units. These sites are where the city's poor and majority visible minority residents have established their community gardens (Baker, 2004; Haaland & Konijnendick van den Bosch, 2015; Wekerle, 2004). Based on this context the following three policies have been highlighted as having direct impact on the development of community gardens in the City of Toronto.

4.2.2 Toronto Community Garden Program, City of Toronto, Parks, Recreation and Development Department, 2002.

In 2002, the Toronto Community Garden Program was established. The program focuses on the intersections of community, economic and ecological development (Toronto Parks and Recreation, 2002, 2). The program was established as a special project of the Parks and Recreation Division, and endeavours to provide opportunities for community groups to grow food and enhance public lands. The policies emphasize the importance of partnerships with non-governmental bodies.

A policy statement from the department of Parks and Recreation at the City of Toronto (2002, 2) identifies community gardens as useful in providing a variety of services including:

- growing food;
- beautifying the city;
- strengthening communities;
- contributing to the self-reliance of the people who work in them; and
- improving the physical environment.

The City of Toronto expressly states that it is committed to increasing the area of the city devoted to community gardening and the number of participants in community gardens (Toronto Parks and Recreation, 2002, 2).

As part of this program sites that are deemed suitable by the municipality for community gardening activities are identified by the city with respect to their historical value, ownership and title, and zoning limitations. If the desired site is deemed appropriate there is an application process in place, and certain design elements are prescribed through the program but the land, usually in a public park, is granted. All community garden proposals are subject to community consultations and community gardening activities require annually-reviewed permits (Toronto Parks and Recreation, 2002, 2). This program has increased the number of community gardens on city-owned land to 53[4] (City of Toronto, 2012).

---

[4]The various community actors, city departments, and institutions that keep records of community gardens in the City of Toronto contest this number. Toronto Urban Growers (TUG) lists the total number of community gardens in Toronto as 400 (TUG: http://torontourbangrowers.org/map) and the Toronto Community Garden Network lists the total number of gardens as 129 (TCGN: http://tcgn.ca/gardens/). Based on these sources the true number of gardens on municipally owned land is anywhere between 53 and 188.

4.2.3 GrowTO Urban Agriculture Action Plan, Toronto Food Policy Council[5], 2012.

The GrowTO Urban Agriculture Action Plan (2012) was released by the Toronto Food Policy Council in 2012 and was swiftly adopted by Toronto City Council. This lead to the release of the Toronto Agriculture Program, which presented a number of goals, a work plan, and a set of action areas that, the city would mobilize on including:

- linking gardeners to land and space;

- strengthening education and training;

- increasing visibility and promotion;

- adding value to gardens;

- cultivating relationships; and

- developing supportive policies (Toronto Agriculture Program, 2013).

Through this program, new lands have been prioritized for urban agriculture through the 'Community Engagement and Entrepreneurial Development (CEED) Gardens Program' (Toronto Agriculture Program, 2013) that provides new spaces for community gardening activities in hydro corridors. In addition a number of action items have been transitioned into tools such as for the testing of contaminated soil.

Although the Toronto Agriculture Program is most certainly moving towards a comprehensive program for urban agriculture within the city of Toronto, some key informants felt that the program had run into significant delays and jurisdictional problems with the land use agreements for the CEED gardens (ElzingaCheng, 2018; Stahlbrand, 2018). These informants also identified difficulty navigating the legal, jurisdictional, and regulatory landscape of the various applicable programs supporting and enabling urban agriculture.

---

[5]GrowTO was released by TFPC but was produced in cooperation and with support from a number of community actors, food justice advocates, institutions and organizations including: Afri-Can Food Basket; Toronto Environment Office; City of Toronto Environment Office; Cultivate Toronto; Everdale; Evergreen; FarmStart; FoodShare; Fresh City Farms; Greater Toronto Area Agriculture Action Committee (GTA AAC); Green Roofs for Healthy Cities; Green Thumbs Growing Kids; Greenest City; Housing Services Corporation; Metcalf Foundation; MetroAg; North York Harvest; Not Far From the Tree; Ryerson University; The Stop Community Food Centre; Toronto and Region Conservation Authority (TRCA); Toronto Community Garden Network; Toronto Community Housing Corporation; Toronto District School Board (TDSB); Toronto Food Policy Council; Toronto Public Health; Toronto Urban Growers (TUG); Toronto Youth Food Policy Council: University of Toronto; West End Food Coop (WEFC); YMCA; York University.

4.2.4   City of Toronto Official Plan, 2015.

The Official Plan (2015) makes reference to community gardens on multiple occasions:

- as part of what creates a beautiful city (1.2);

- as a part of the creation of the desired high-quality public realm (2.2.2);

- as locations of active and passive recreation (2.3.2);

- as an important community facility through which the city and local agencies deliver services (3.2.2); and

- as part of the larger network of diverse urban open spaces and natural areas (2.2.3) (Official Plan, 2015).

Although community gardening is considered to be a valuable tool for achieving other goals set out in the Official Plan, the only formal land use designation that allows for any public gardening activities is that of utility corridors which allows for raised bed gardening in the otherwise underused spaces in utility corridors throughout the city (Nasr, et al., 2010).

In addition to the highlighted policies, public services that own property within the City have developed policies and regulations. For example the Toronto Community Housing Corporation (TCHC) has a Community Garden Strategy (2010) that was prepared by the Toronto Community Food Animators, and the Toronto Transit Commission (TTC) has a Policy on Community Gardens (2011) that restricts community gardening activities on TTC owned lands to non-agricultural and not-for-profit uses.
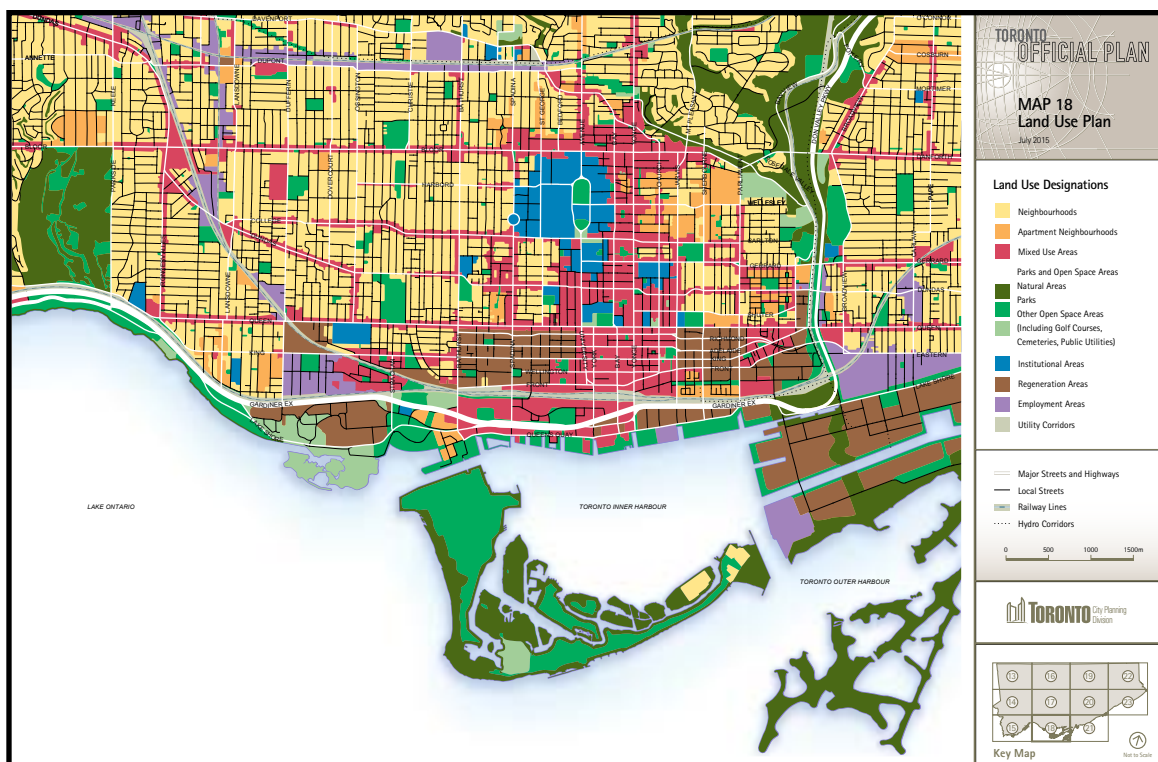
Figure 1. Excerpt from the Land Use Plan for the City of Toronto
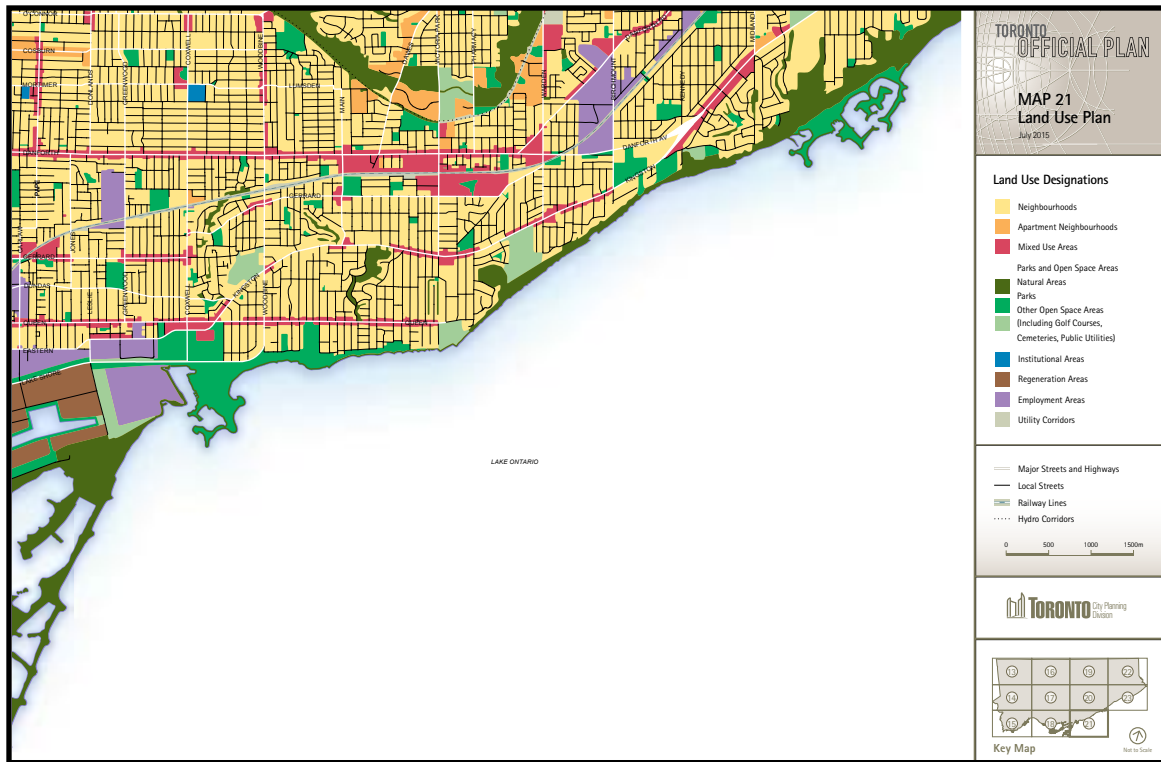
Figure 2. Excerpt from the Land Use Plan for the City of Toronto

4.3   Implications and Limitations

While the applicable policies for the development of community gardens in the City of Toronto attempt to provide legitimacy to community gardens and facilitate their development in recognition of their many benefits, there are two concerns surrounding these policies and their effects. First, the emphasis placed by the city on partnerships with non-governmental and non-profit organizations has been identified as a symptom of state disinvestment in community development initiatives as part of the broader, neoliberal roll-back of the welfare state, as experienced in other contexts (Horst et al., 2017; Rosol, 2004; Wekerle, 2004). While this reliance on local partnerships is not necessarily negative it does serve to impact the ability of the most marginalized groups to access funding,

expertise and land for the development of community gardens as competition for funding between community gardens increases as they become more numerous (Horst et al., 2017). It also limits the active role of the city in producing democratic and community oriented spaces. By relying on non-governmental organizations to facilitate community gardening this imposes restrictions on the possibility of expanding the benefits of community gardening across the municipal landscape. This is likely to exacerbate issues of gentrification of the community gardening network, as users facing greater marginalization may not have the understanding necessary to navigate the planning processes at the city level (ElzingaCheng, 2018; Wekerle, 2004).

Second, as sites of democratic community control, community gardens and the benefits they provide are more likely to be successful if garden members can exact communal control over the design, land tenure and organization of the garden (Calvin, 2011; Tidball & Krasny, 2007). By formalizing and regulating community garden location and design, there may be some detrimental effects to the success of their impacts. Also by requiring annual registration and approval, the city is increasing the insecurity of place felt by community gardens. By formalizing community gardens, there is the potential for exacerbating issues of exclusivity. When community gardens are established on public lands they require fencing and a clear delineation of useable space. This may lead to notions of inaccessibility among the wider community and may diminish the potential for increased social inclusion. Furthermore, the technical or political knowledge required to engage the municipality for the necessary permissions required may dissuade certain groups from accessing the resources necessary to legitimize a community garden initiative.

Finally, although the Toronto Official Plan does acknowledge community gardens as part of a wider network of urban green spaces, it does not proactively support urban agriculture or community gardening as a land use or community service (Toronto Official Plan, 2015; Wekerle & Classens, 2015). This absence in Toronto's new Official Plan is surprising. U.S. cities

have long included clear language in comprehensive plans that designate community gardens, not as an interim use, but as a legitimate and permanent use of land that meets the city's long-term goals. In the mid-1980s, the District of Columbia's Comprehensive Plan created a Food Production and Urban Gardens Program. Seattle's 1994 Comprehensive Plan includes goals for community gardens, and for inter-agency and intergovernmental cooperation to expand the Patch Program. The 1998 city plan for Berkeley, California, aims to find appropriate long-term gardening sites and identifies community gardens as a community-building recreational resource. The 1999 Plan Baltimore includes community gardens as part of the open space plan (Haaland & Konijnendick van den Bosch, 2015; Horst, et al., 2017; Wekerle, 2004). This invisibility of community gardening regulation in Toronto's Official Plan is not neutral. If these uses do not officially exist as land uses or community amenities, they will not be preserved, enhanced, or supported by policies articulated in the Official Plan (Wekerle & Classens, 2015).

Community garden policies and programs in Toronto have had significant success in terms of increases in gardens (Toronto Parks and Recreation, 1, 2002), public recognition of the benefits of community gardens, and the provision of public space for gardening activities (Baker, 2004; Toronto Food Policy Council, 1999; Toronto Parks and Recreation, 1, 2002; Wekerle & Classens, 2015).

However, there are some gaps in the policies at present. As identified by Wakefield et al. (2007), land tenure insecurity for community gardens in Toronto is a serious concern. While the number of community gardens has grown in accordance with increasing demand, the majority of community gardens now exist on public parkland. This has resulted in areas of the city with fewer parks having a lower ability to develop a community garden under the Municipal Community Garden Program. Furthermore, current densification recommendations given in the plan may directly target privately-owned land that serves community gardeners. Given the demonstrated benefits of community gardening activities, further policies including land use and zoning policies are necessary to preserve urban lands for community gardening, as well as to protect land that is currently used for community gardening.

Interview Outcomes and Case Study Analysis

The following sections highlight the similarities and differences between the four case studies and provide insight into the potential impacts that land ownership type may have on the perceived benefits of the community gardens in question.

All gardens selected for case study are located within the City of Toronto, and are therefore subject to the policies and regulations established in the previous chapters. The garden case studies were selected primarily because of their differing land ownership and tenure types. Because of this, the gardens vary in demographic composition, with the Milky Way Community Garden being a significant outlier. The reason for this is that the Milky Way Community Garden is the only communally-owned garden in the City of Toronto, and therefore a necessary inclusion in this research.

Motivations for establishing the community gardens varied across the case studies but could be broadly classified as socially oriented, ecologically oriented, economically oriented, or wellbeing oriented. In each case study, each motivational orientation was present but some were more important than others. For the Christie Pits and St. Saviour's Community Gardens the primary motivation was ecologically oriented, whereas for the Milky Way Community Garden the motivations were socially and economically oriented, and for the Huron-Sussex Community Garden the primary motivation was socially oriented (Carnat, 2018; Gysel, 2018; Lego, 2018; Sargent, 2018).

In terms of organization and design, every garden studied was organized collectively, with the majority of planning and organization delegated to one to two lead gardeners. The responsibilities of the lead gardeners included negotiating land leases and water provision, two elements that were highlighted multiple times as being key to establishing and sustaining community garden spaces. The gardeners tended their gardens at various times throughout the week: some relied on online scheduling platforms to ensure an adequate watering schedule, some were more relaxed about the scheduling of individuals and relied on volunteer eagerness to maintain the garden (Carnat, 2018; Gysel, 2018; Lego, 2018; Sargent, 2018). The only garden that was not entirely communally gardened was the Christie Pits Community Garden, which had organized its plots individually into an allotment style. One common theme among the three communally-worked gardens was that during the growing season, the entire garden membership was expected to work the garden

for one afternoon each week in order to be allowed to harvest their vegetables (Carnat, 2018; Gysel, 2018; Lego, 2018). This workday was noted as being key to both establishing communi-ty ties, and accessing the produce from the garden. Each garden reported their level of productivity at around one to three meals

Figure 3. Location of Community Garden Case Studies

per week per gardener being provided by the produce from the garden. None of the gardens were able to pro-duce enough vegetables for sale; for three of the four gar dens, financial gains were not considered as a goal (Carnat, 2018; Gysel, 2018; Lego, 2018; Sargent, 2018). The perceived benefits of community gardens were wide; most gardeners were focused on the personal benefits of mental, emotional, and physical health, as well as the availability of healthy, organic, flavourful food (Carnat, 2018; Gysel, 2018; Lego, 2018; Sargent, 2018). Concerns about land tenure were generally few, but members of the privately owned garden, the Hu-ron-Sussex Community Garden, felt less secure, while the leaders of the communally-owned garden, the Milky Way Community Garden, felt very secure that

the garden would be used in perpetuity for urban agri-cultural purposes (Carnat, 2018; ElzingaCheng, 2018; Lego, 2018). Results from the interviews have been in-corporated into the following four case studies as well as a discussion of the impact of the varying land own-ership types on the potential beneficial impacts of the community gardens.

5.1 Community Garden Case Studies

The following highlights the location of each garden, the rationale for and the history of establishment, rele-vant information about the landownership and tenure type, and some results from interviews with

community gardeners and organizers affiliated with each garden.

5.1.1 Christie Pits Community Garden: Publicly Owned Land

Location

This garden is located in the south-west corner of Christie Pits Park, a large public park in the Annex neighbourhood of Toronto. The garden is located in the lower section of the steeply sloped park and occupies an area with low visibility and partial sunlight. This section of the park is the location of a variety of miscellaneous park uses including a fire pit, pizza oven, and basketball courts. The garden serves the Christie Pits Neighbourhood, defined by lead gardener Luke Sargent as extending to Dupont Street to the North, Dufferin Road to the west, College Street to the South and Spadina Avenue to the East (Sargent, 2018).

Figure 4. Location of Christie Pits Community Garden

Size

The garden itself is approximately 372 m2 and is made up of about 15, 1x1.5m plots, divided up into three smaller sectional plots that serve the approximately 20 gardeners for individual cultivation (Sargent, 2018).

Approximately one-third of the garden is dedicated to community plots that are reserved for the community partners of the garden including the Christie-Ossington Community Center and the Korean Seniors Center (Sargent, 2018).

Figure 5. Christie Pits Community Garden Site

Costs

$12,000 of initial development funds from the City of Toronto (Christie Pits Community Garden, n.d.).

Background

The garden broke ground for its first growing season in May 2009. The garden organizers were originally interested in developing a space for community urban agriculture and were supported by the city primarily due to the potential of animating the allotted space (Sargent, 2018). Respondents from the garden high-lighted the space as originally being used for illegal and dangerous activities, due to its lack of sightlines from the street and its eclectic mix of uses (Sargent, 2018). The garden organizers were interested in a different space originally, but the city would only permit the garden to be established in its current area. This space was also promoted as having an easy water hook-up (Sargent, 2018).

The garden was established in order to promote urban food production and community building within and beyond the Christie-Ossington area (Sargent, 2018).

It is intended to provide a forum to connect with neighbours, share knowledge and develop space that operates on principles of inclusion and respect for each other and the environment (Christie Pits Community Garden, n.d.).

As it exists in a public park, the garden is completely publicly owned. While the garden plots are managed and cared for by the gardeners, the property is man-aged by the Parks and Recreation Department of the City of Toronto and is ultimately the responsibility of the city. As with all community gardens in public parks/on city-owned land, it is subject to an annual re-evaluation, meaning that although it is unlikely that the garden will be removed, the land tenure is annually renewed and subject to the standards of maintenance set by the parks department (Boyé, 2018; Toronto Parks and Recreation 2, 2002).

Figure 6. Communal Plot at Christie Pits. Courtesy of the Christie Pits Community Garden.

Demographics

The majority of the gardeners were identified as being middle-class university students or young professionals (Sargent, 2018; Wright, 2018). In addition to this primary gardener base, there is a minority group of local seniors, and the members of the Korean Seniors Center who access the garden (Sargent, 2018). The gardeners are fairly representative of the demographics of the surrounding census tracts (Statistics Canada, 2016).
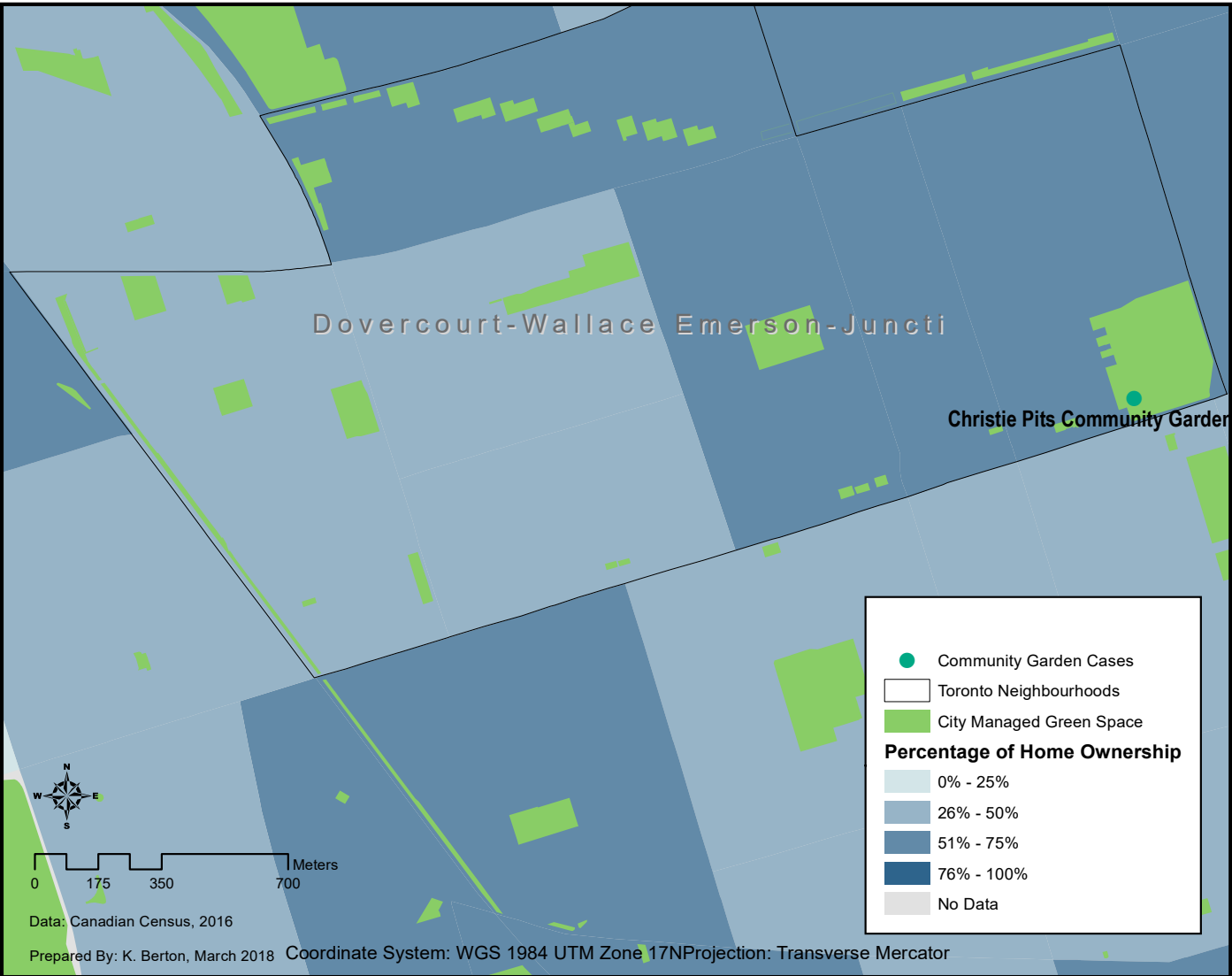
Figure 7. Home ownership near the Christie Pits Community Garden

The census tracts that surround the Christie Pits Community Garden are primarily composed of middle class homeowners, however, a large percentage of individuals who rent in the area and provide the garden with its membership are people who have no outdoor space to garden at home (Sargent, 2018). An analysis of change in affordability and mobility in the surrounding census tracts shows that while rent in the area is increasing at a lower rate than other areas of the city, a high percentage of renters and homeowners alike are spending more than 30 per cent of their income on shelter costs (Statistics Canada, 2016).

Figure 8. Measure of affordability near the Christie Pits Community Garden

Results of Interviews

Respondents from the Christie Pits Community Garden reported that their interest in participating in the garden was primarily based on the desire to spend time in nature and the therapeutic benefits of participating in a natural or green space (Sargent, 2018; Wright, 2018). The respondents from Christie Pits reported being less interested in the social or economic impacts of community gardening and most were interested in the environmental and personal well-being impacts. As such the community garden was not considered a space for social interaction, although gardeners did indicate that meeting fellow garden members was a nice part of participation.

> *"When I went into it I didn't have any social goal, it wasn't something I thought much about. But then as I… became more familiar with some of the people at the garden it's a nice perk."*
>
> *(Wright, 2018)*

Respondents from Christie Pits felt that although the garden was important and had an overall beneficial impact on the surrounding space and community, conflicts over land-use and the right

to the space were frequent and ongoing. One respondent felt that organizing and installing a locked gate was an important step in ensuring the security of the space while another felt that locking the gate was an exclusionary practice and would result in further conflict between gardeners and park users.

> *"There is a little bit of resentment over people not feeling they have access to the space. But we are open to them joining and participating, that can be difficult though." (Sargent, 2018)*

Angela ElzingaCheng from Greenest City as well as Rhonda Teitel-Payne from Toronto Urban Growers indicated during their interviews that installing community gardens on public space requires significant understanding of city planning, as well as patience for dealing with the long and drawn out process. Establishing a community garden on public land can take up to three years to organize (Rhonda Teitel-Payne, 2018). The Community Garden Program at the City of Toronto, is provided limited resources and therefore has

incorporated as part of its mandate a focus on Neighbourhood Improvement Areas (NIAs) (formerly "Priority Neighbourhoods", NIAs were identified as part of the Toronto Strong Neighbourhoods Strategy 2020 as areas requiring support through social, economic and cultural initiatives to improve safety and social cohesion) (City of Toronto, n.d.). This has resulted in a bottleneck effect on the support available to community garden initiatives outside these areas (Stahlbrand, 2018).

The reports collected at this community garden suggest that the public-land ownership type, while effective in terms of establishing long-term stability in community garden initiatives, is not an effective ownership type for the creation of social capital, or the development of community (Sargent, 2018; Wright, 2018). It is noteworthy that unique to this garden among those studied is the allotment plot style. Further research may be necessary to investigate whether this is a determining factor in the production of social capital in community gardens.

Figure 9. Weeding day at Christie Pits Community Garden. Courtesy of the Christie Pits Community Garden

5.1.2 Milky Way Community Garden:

Communally Owned Land

Location

The Milky Way Community Garden is located at 87 Milky Way, a laneway property in the Parkdale neighbourhood. The garden is fully enclosed with high fencing and residential properties on all sides. The garden is visible from Queen Street West through a parking lot and is accessible through a single gate which is currently kept locked at all times. The garden serves the Parkdale neighbourhood, which is defined as being within the boundaries of the rail corridor to the North, the lakeshore to the South, Parkside Drive to the West and Dovercourt Road to the East (Barndt, 2018).

Figure 10. Location of the Milky Way Community Garden

Size

The garden itself is approximately 650 m2 and is made up of 15, 1.5x3m raised beds. The entire garden is a communal plot system where all produce is grown, harvested, and shared by all gardeners (Carnat, 2018).
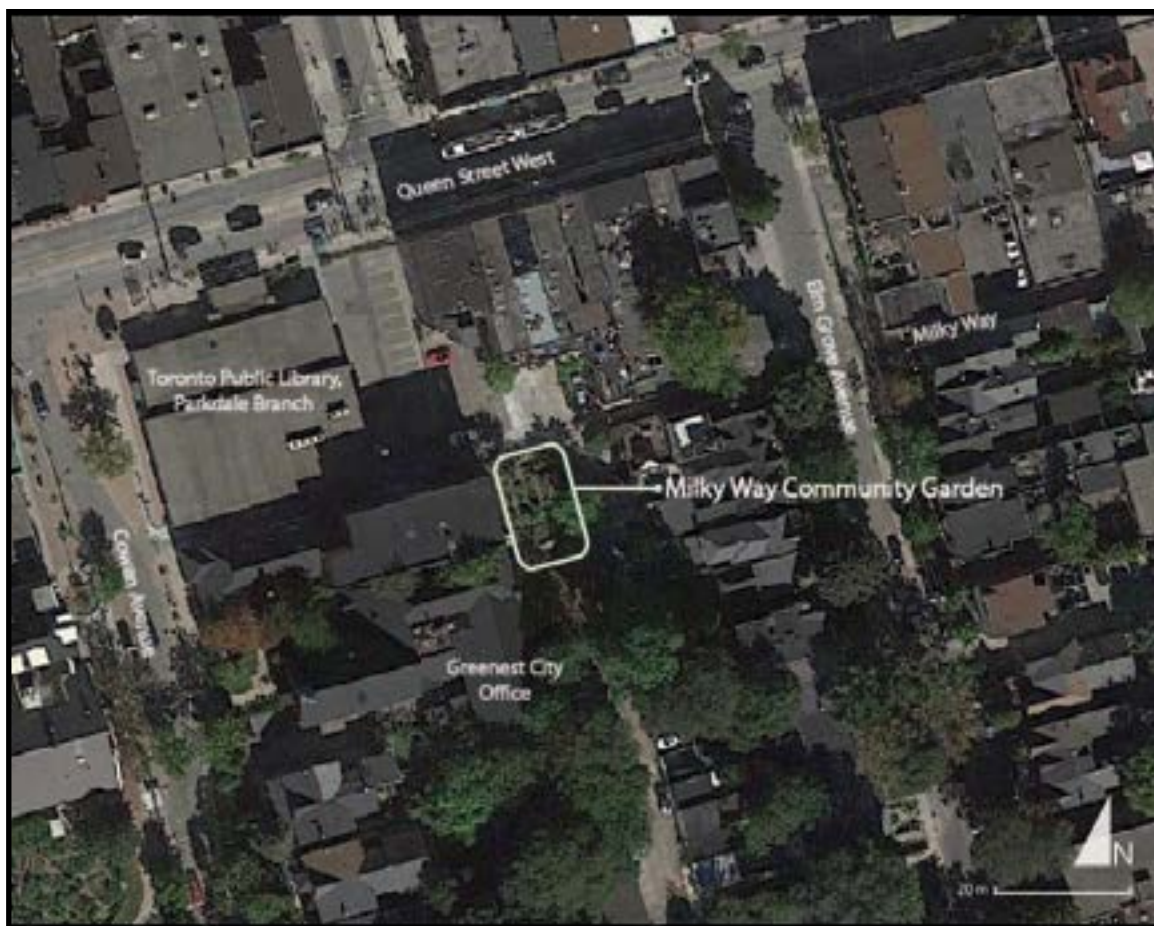
Figure 11. Milky Way Community Garden Site

Background

The Milky Way Community Garden was established in 2007. The lead gardener, Tish Carnat, originally approached the property owners, due to its proximity to the Parkdale Public Library, where Tish teaches ESL (Carnat, 2018). The garden was started because there was a concern about the affordability of fresh fruits and vegetables among the mainly Tibetan, Buddhist, and vegetarian students, raising serious issues of access to food and economic stability (Carnat, 2018). The original property owners were intending to build a home on the residentially zoned property but were having difficulty acquiring the appropriate approvals at the city (Barndt, 2018; Carnat, 2018; ElzingaCheng,

2018).They were very supportive of using the land for a community garden while they were waiting for their development applications and approvals from the city. Each year, for ten years, the owners and the gardeners renegotiated a new, informal agreement for the use of the property, always reliant upon the inability of the owners to develop the property. Finally, in 2017, one of the partners of the garden, Greenest City, approached the Parkdale Neighbourhood Land Trust (PNLT) with the idea of purchasing the property and holding it in trust for the community. PNLT agreed and purchased the land (Carnat, 2018; ElzingaCheng, 2018; Barndt, 2018).

Figure 12. Harvest Day at the Milky Way Community Garden. Courtesy of Tish Carnat

Cost

The land was purchased by the PNLT with funds from multiple donors for a negotiated price that was below market value (Barndt, 2018).

Figure 13. Fence at the Milky Way Community Garden. Courtesy of Katherine Berton

Demographics

The original gardeners were entirely made up of a single ESL class where the majority of students are recent immigrants from Tibet and India (Carnat, 2018). These students are mainly seniors on small, fixed incomes (Barndt, 2018; Carant, 2018). They all are residents of the Parkdale neighbourhood and the majority live in the mid-to-high rise apartment towers that dominate South Parkdale (Barndt, 2018).
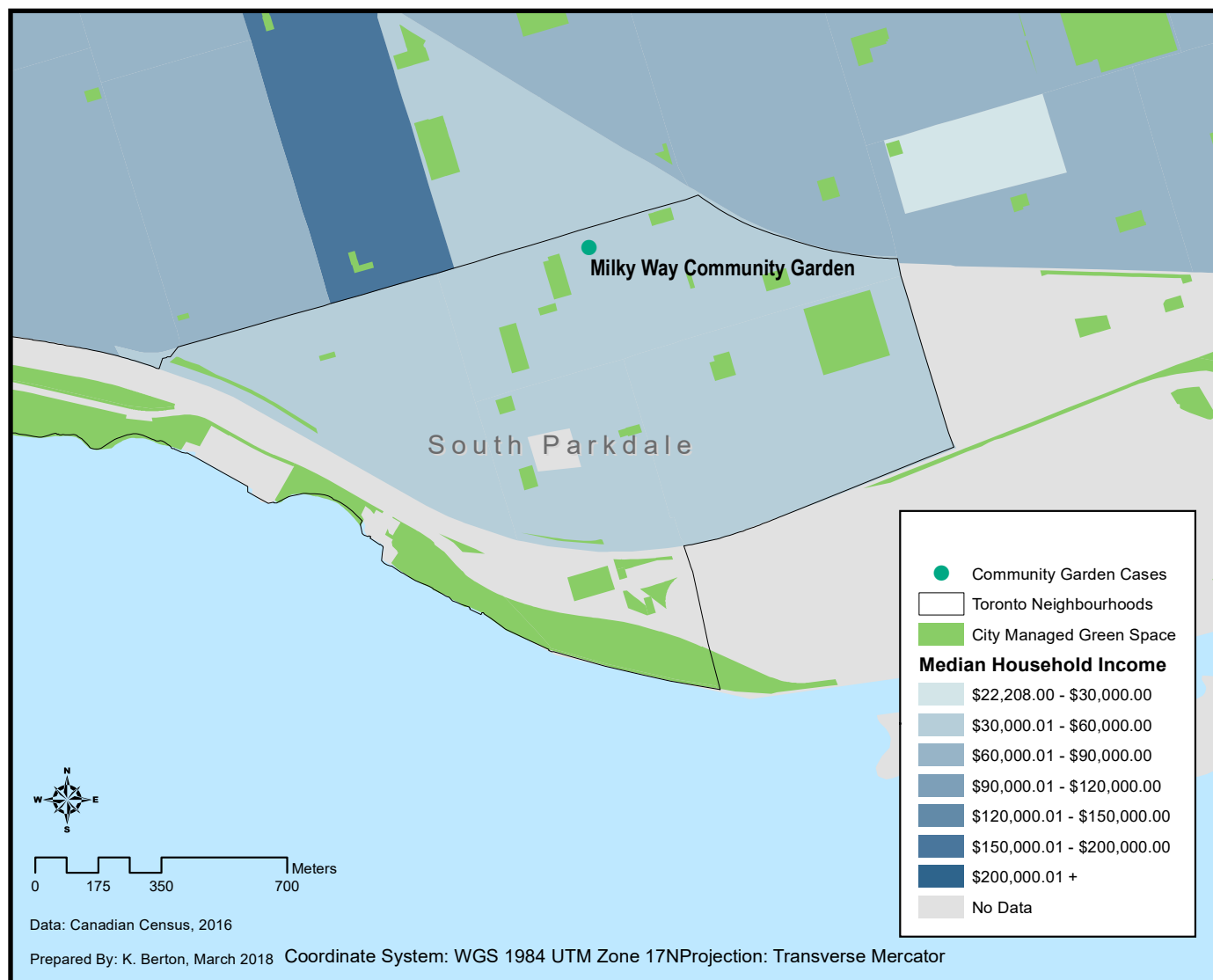
Figure 14. Median Household income surrounding the Milky Way Community Garden

The demographic profile of Parkdale as a whole is complex. One of the most diverse neighbourhoods in Toronto, Parkdale has both the highest proportion of renters of any city ward, as well as some of the most valuable resi dential property in the city (Barndt, 2018; Statistics Canada, 2016). Until recently, Parkdale has been home to a large number of low-income accommodations, and is currently in the process of both facilitating and resisting gentrification (Barndt, 2018).

Results of Interviews

Respondents from Milky Way indicated that they were mostly interested in the garden because of a desire to spend time outdoors, and a desire to grow their own healthy, organic vegetables. There were some discrepancies about the productivity of the garden but the gardeners felt that they were able to supplement up to three meals per week per person from the garden during the growing season (Carnat, 2018; Kaisang, 2018; Tashi, 2018; Thaung, 2018; Yangzom, 2018). The motivations for developing the garden were to broaden the social circles of the gardeners, and to allow them to supplement their diets (Carnat, 2018). Respondents felt that the main benefit of the garden was its potential for fostering positive interactions between the gardeners and the wider Parkdale Community (Kaisang, 2018; Tashi, 2018; Thaung, 2018; Yangzom, 2018). These interactions promote the production of bonding and bridging social capital.

The communal land-ownership type, held in trust by the PNLT, was perceived by the respondents as being something that ensured that the space would be used for urban agriculture in perpetuity (ElzingaCheng, 2018; Barndt, 2018). The belief expressed by PNLT was that while the land was held privately, it may not always be allocated for community gardening projects. PNLT recognized that community gardening has immense social, economic, and environmental benefits to the Parkdale neighbourhood and endeavoured, as part of its mandate, to provide quality public space (Barndt, 2018), and to secure the space for the community:

> *"PNLT focuses on metrics other than 'highest and best use', which is usually determined by monetary value. We acquire land on behalf of the community… prioritizing open space, housing and commercial space… with a specific interest in issues of equity." (Barndt, 2018)*

> *"It is going to be used forever for the community garden." (ElzingaCheng, 2018)*

Garden organizers felt that they were significantly more secure in their use of the space and that their investment in the garden was certain because of the land ownership type (ElzingaCheng, 2018; Carnat, 2018). Garden organizers expressed several times that they

Figure 15. Raised beds at the Milky Way Community Garden. Courtesy of Katherine Berton

were able to invest significantly greater resources into the space because they knew that it would be there for a significant period of time. This meant, in the opinion of some respondents, that the garden would be more beneficial to the community and would serve as a space for more interaction and education (Yangzom, 2018; Kaisang, 2018; Carnat, 2018; Tashi, 2018; Thaung, 2018).

Figure 16. Spring work day at the Milky Way Community Garden. Courtesy of Tish Carnat

5.1.3 Saint Saviour's Anglican Church Community Garden: Privately Owned Land

Location

Located on the corner of Kimberly and Swanwick Avenues in Toronto's East end. The garden occupies the front and side yards of a church property and is fully open to both the church community and surrounding neighbourhood.
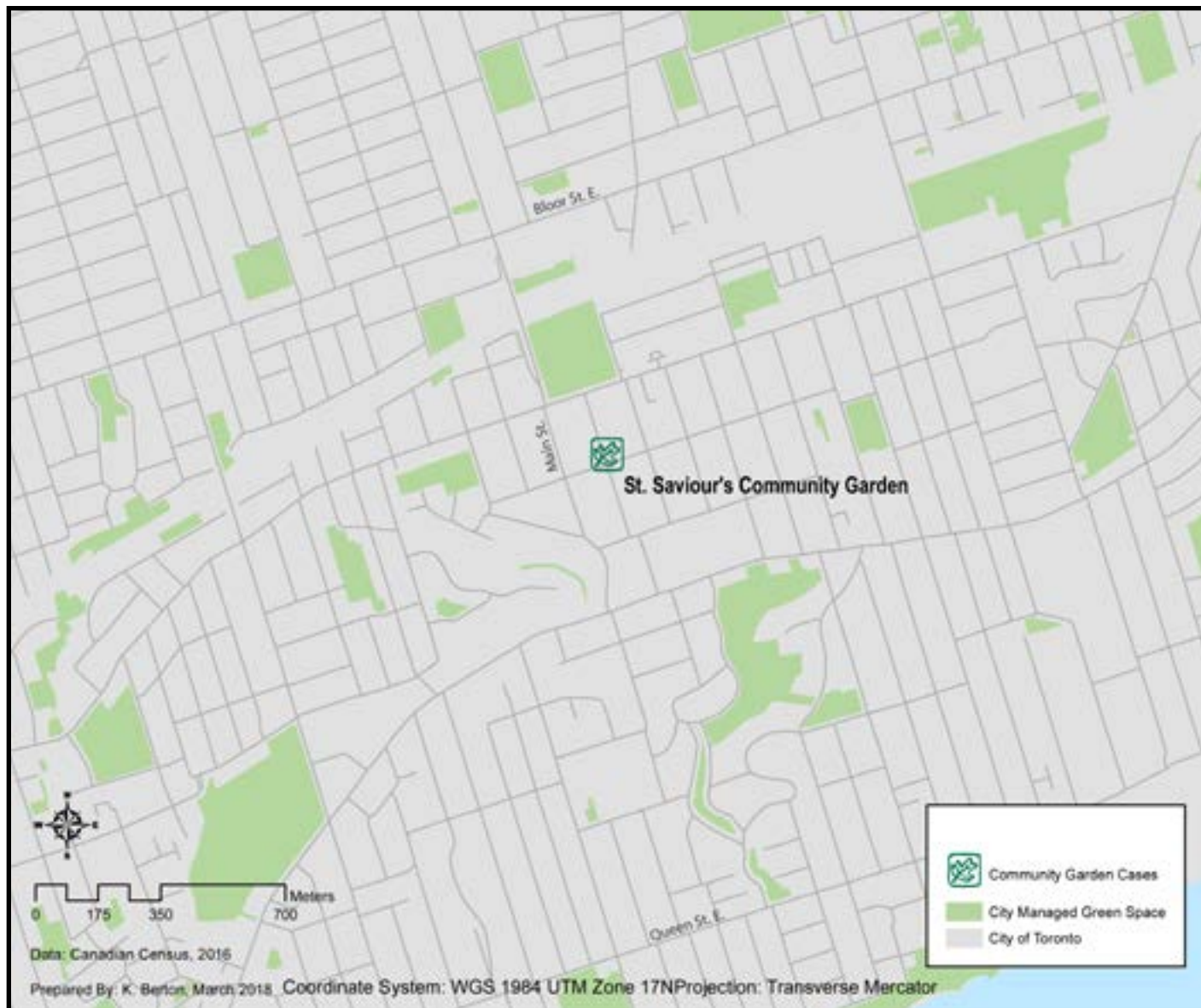
Figure 17. Location of the St. Saviour's Community Garden

Size

Saint Saviour's Community Garden is approximately 557 m2. It is entirely communal and the growing plots are arranged in sections around the church to maximize productivity and growing efficiency.

All plots are communally worked, with the exception of two areas that are reserved for specialized vegetables grown by two garden members (Gysel, 2018; Frank, 2018).

Cost

Operating budget and plant costs are covered through a combination of gardener funds and church funds. A small fund is supplied by the church to purchase equipment and plants, but any additional costs are funded by the gardeners based on their own interests (Gysel, 2018).

Figure 18. The St. Saviour's Community Garden Site

Background

Saint Saviour's was not originally intended to be a community garden. Lead gardener, Virginie Gysel, approached the church with a request to use part of their front yard for garden space, as her back garden was too shaded to grow vegetables or fruit trees (Gysel, 2018). The church accepted and was so pleased with Virginie's garden in 2013 that it allowed her to continue her gardening and expand the garden to completely surround the church. As the garden developed, neighbours and community members grew interested and asked if they could join or were invited when inquiring about the garden. Since the first growing season the garden has expanded to include five dedicated members (Gysel, 2018).

Demographics

The garden is varied with members from as far as the Lawrence West neighbourhood, nearly an hours' drive away (Gysel, 2018; Tysoe, 2018). The members are diverse, including long-term neighbourhood residents, recent immigrants, local homeowners and renters (Gysel, 2018; Frank, 2018; Okazaki, 2018; Tysoe, 2018). The neighbourhood is a middle-class family-oriented community, with numerous schools and daycares, and a majority proportion of homeowners (Statistics Canada, 2016).
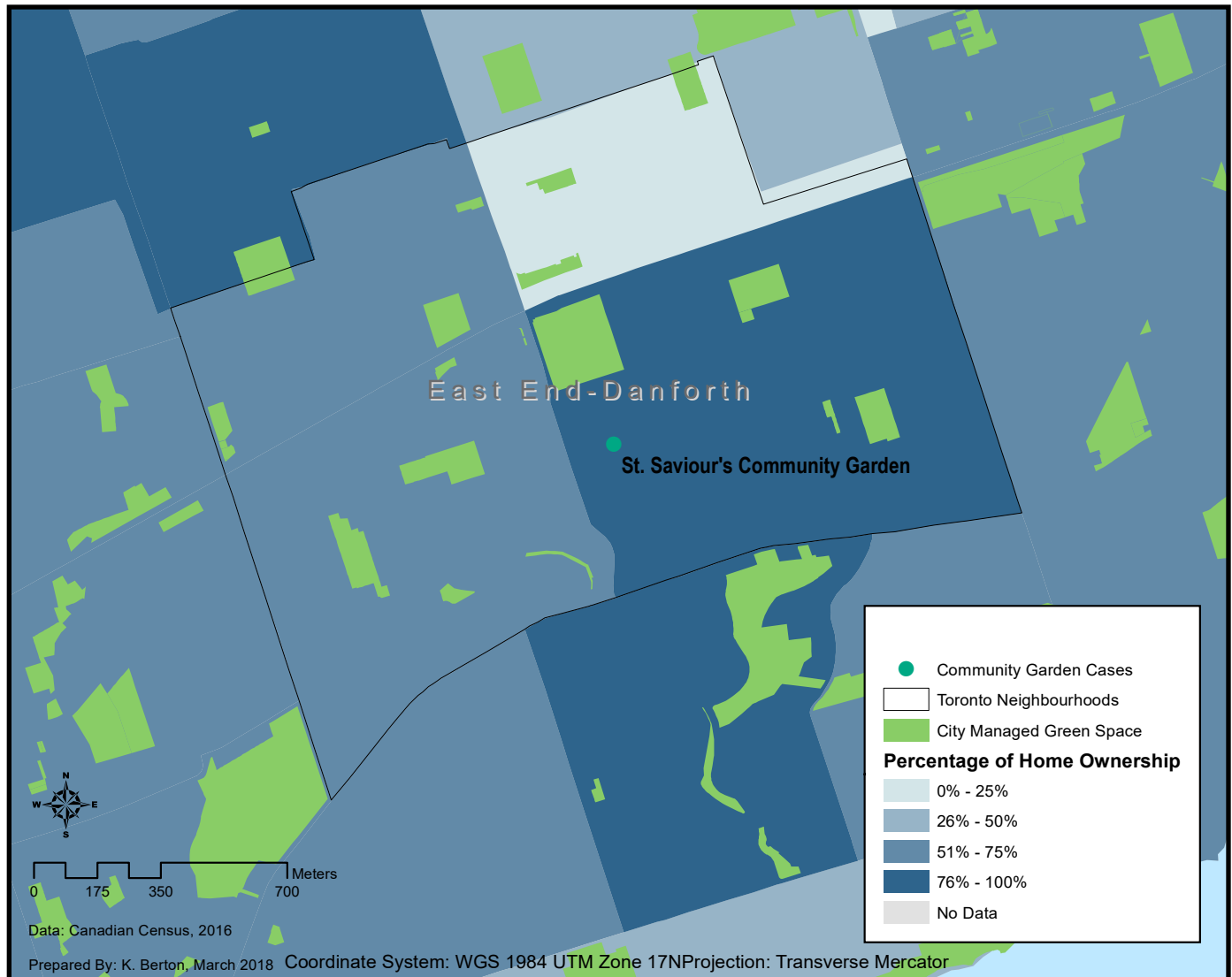
Figure 19. Home onwerhsip near the St. Saviour's Community Garden
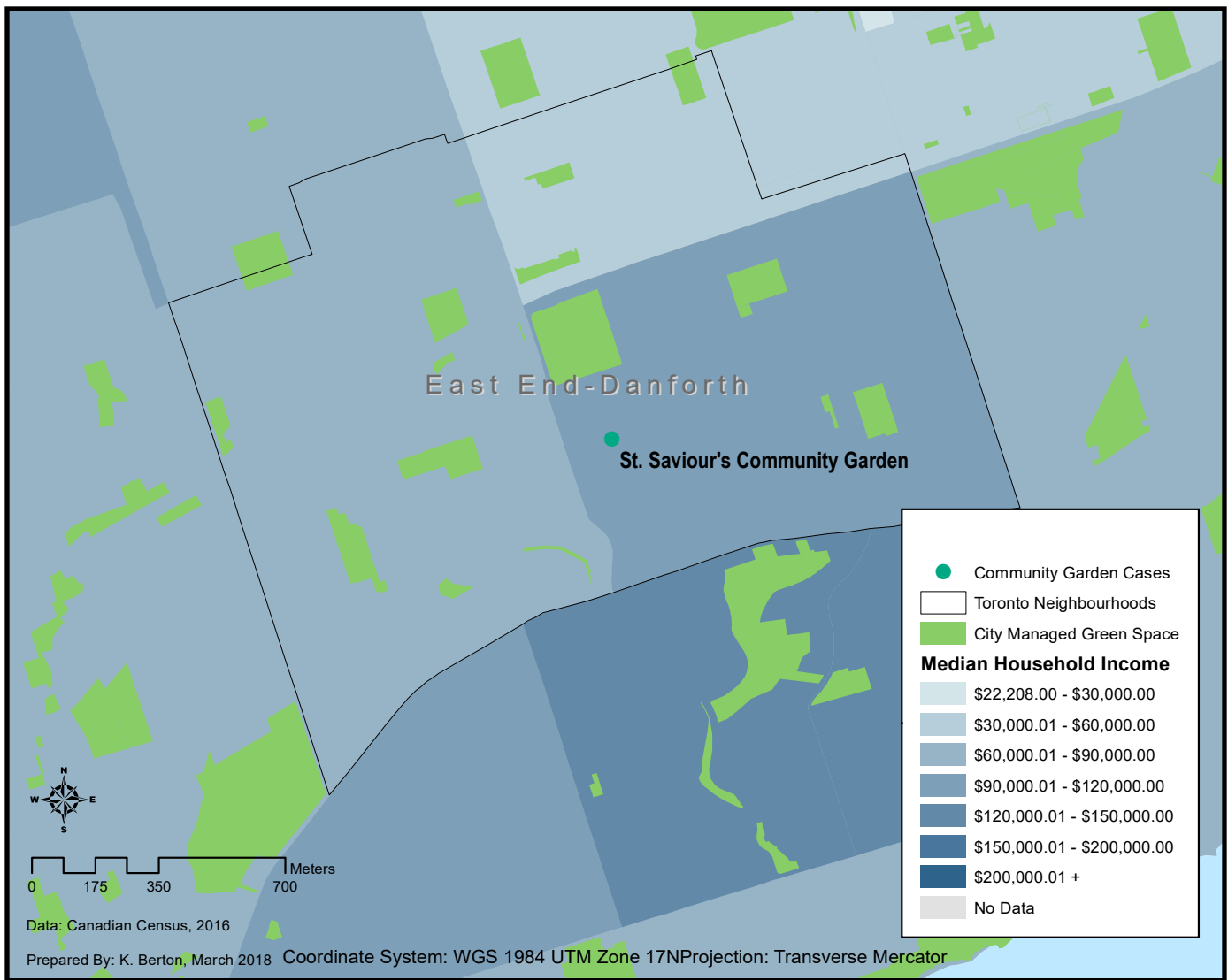
Figure 20. Median household income surrounding the St. Saviour's Community Garden

Results of Interviews

Respondents from the St. Saviour's Community Garden were mostly interested in joining the garden because of their interest in growing their own food. Because the garden is small, and grew in membership gradually, it is run by one lead gardener. While the aspects of democratic community organization wasnot the primary form of organizational structure as it was in the other case studies, this did not mean that community interaction was not present providing space for the creation of bonding and bridging so

cial capital (Gysel, 2018; Frank, 2018; Okazaki, 2018; Tysoe, 2018). In fact, most respondents indicated that their community involvement and connection had increased significantly. The gardeners connected with members of the community they had not ever interacted with and they garden would not always be there (Gysel, 2018; Frank, 2018; Okazaki, 2018; Tysoe, 2018). Some gardeners felt that this meant that they were less invested in the garden, feeling that since they did not own it directly

Figure 21. View of the garden from Kimberly Avenue. Courtesy of Luann Frank

felt that they likely would never have done so without the garden.

> *"I never would have met Virginie without the garden… we talk about growing." (Okazaki, 2018)*

The gardeners felt secure in the land ownership type; however they all recognized the likelihood that the they were less responsible for the garden and to the garden. The gardeners also highlighted that they relied on funding from the land-owner for a majority of the costs associated with maintaining a community garden (for example: water access, soil and seeds) (Gysel, 2018).

Figure 22. Plots at the St. Saviour's Community Garden. Courtesy of Luann Frank

5.1.4   Huron-Sussex Community Garden:

Institutional Land

Location

The Huron-Sussex Community Garden is located in a parkette at the corner of Huron and Glen Morris Streets. It is unfenced, and occupies a small parcel of land that runs along the south side of Glen Morris Street.

Figure 23. Location of the Huron-Sussex Community Garden

Size

The parkette that the garden sits on is approximately 465 m2 and the garden consists of 12, 1x1.5m raised beds. All the beds are communally worked and the produce is shared on communal work days during the growing season by seven core gardeners (Lego, 2018).

Cost

The garden receives its entire operating budget from membership fees that are paid at the start of each growing season. The fees are $50 per person and $100 per family. These fees provide funding for soil, seeds, maintenance, and expansion costs as the garden has grown each year since it was established (Lego, 2018).

Figure 24. The Huron-Sussex Community Garden Site

Background

Lead gardener, Beatrice Lego, originally established the garden in 2015 in an attempt to both develop a sense of community and to help beautify and improve the green space in her community (Lego, 2018). The University of Toronto owns the entirety of the Huron-Sussex neighbourhood. Therefore, Beatrice approached the university with a proposition to exchange maintenance of the parkette for the ability to use the space as a community garden (Lego, 2018). The university consented and the garden was established through the Huron-Sussex Neighbourhood Association.

Demographics

The neighbourhood is highly transitory. The university provides housing to its faculty and staff in buildings in this neighbourhood but leases are terminated after a maximum of four years so the community does not have a significant opportunity to build social bonds (Donnelly, 2018; Lego, 2018). The community is primarily made up of highly mobile, well-educated, mid-low income households (Statistics Canada, 2016).

Figure 25. Home ownership near the Huron-Sussex Community Garden

Figure 26. Median household income near the Huron-Sussex Community Garden

Results of Interviews

Respondents indicated that the garden, while being focused on food production and enhancement of communal public space, was primarily organized as a method for developing community ties (Donnelly, 2018; Lego, 2018). The highly transitory nature of the neighbourhood meant that the community felt fractured and members were isolated. The neighbourhood organization decided to counter this by organizing a community garden. Originally the lead gardener intended to establish the garden through the City of Toronto Community Garden Program, but after discovering that the process could take up to two years and that the program is only applicable to city-owned park spaces, she decided to approach the university (Lego, 2018). This was of a

benefit to her primarily because there is no publicly-owned land in the area the community wished to target.

The gardeners felt that although the neighbourhood is still transient, the garden has improved their connection, indicating a presence of bonding social capital in the space. In addition the garden has attracted members of the neighbourhood who are not associated with the university, thereby developing links outside the immediate community and demonstrating the presence of bridging social capital.

> *"There's an older woman who has joined… she lives up at the corner in the housing there. And the daycare uses the space for picnics. It adds to the community." (Donnelly, 2018)*

Respondents generally felt that although there were definite benefits to having the community garden on privately-owned lands (proximity and speed of establishment), they were also frustrated by the instability of the project (Donnelly, 2018; Lego, 2018). Respondents were not concerned for the longevity of the project; however, they found that the need to renew their lease annually was inconvenient and they desired a longer lease cycle (Donnelly, 2018; Lego, 2018). They also highlighted the need for approval and the tendency towards bureaucracy on the part of the university when asking for expansion permissions. The gardeners expressed that the inability to enact control over the space meant that the gardeners were not able to develop the garden as they saw fit, as well as being unable to erect any permanent structures on the site (Donnelly, 2018; Lego, 2018). While the land ownership-type has provided the gardeners with some benefits, it has also resulted in a lower level of investment in the space. The gardeners ensure that all their interventions are temporary in nature and can be removed quickly (Donnelly, 2018; Lego, 2018).

Figure 27. Raised beds at the Huron-Sussex Community Garden. Courtesy of Katherine Berton

5.2 Results

As part of the analysis of the above case studies some broad themes were identified. These themes provide insight into how the case studies are similar or different in terms of motivation, social, economic, and environmental impact, and the potential impacts of the land-ownership type and tenure on the stability of the community gardens.

5.2.1 Perceived Benefits and Rationale

The benefits listed by community gardeners were diverse, but mostly focused on three major results of community gardening:

1.Closeness to nature.

All of the gardeners as well as the garden leaders expressed a desire to grow things – not necessarily for the purpose of eating: the act of growing itself was noted as a reason to establish or join in the garden:

> *"I find as I am getting older that I really miss… digging in the dirt. I find that it calms me." (Frank, 2018)*

> *"It's always great to see life is growing." (Okazaki, 2018)*

> *"The region lacks wild green spaces, so I like to spend time with nature" (Sargent, 2018)*
> *"It's a really… urban space, so it is nice to have this little Zen pocket." (Wright, 2018)*

Several participants highlighted that growing food was part of their cultural heritage; this was considered most important to participants who were born in other countries, regardless of the length of time they had spent in their respective communities:

> *"In Japan there is more time with food." (Okazaki, 2018)*

> *"[I] brought seeds from Burma [because] in Chinatown they don't have [them]." (Kaisang, 2018)*

> *"[Growing food] is the same like in Tibet" (Tashi, 2018)*

> *"I was born in the Caribbean, and we always planted – we had lands and we always planted everything and it's different in Toronto, there's just a lot of steel and concrete" (Frank, 2018)*

For some gardeners it was simply the ability to be a part of something growing that made their garden access important to them:

> *"Before it was grass that you just cut and it's just there. Now we've turned that land into something that actually produces food." (Frank, 2018)*

This relationship with nature, earth and greenery, was a constant theme across the different gardens surveyed despite the vastly different experiences and motivations of the gardeners.

2. Availability of fresh, organic and flavourful vegetables

It was not just important for the gardeners to grow their own vegetables; the quality of their produce was noted as being incredibly important by many of the gardeners:

> *"When I lived in Israel fruit has actual flavour so the only way to get something that has flavour is to grow it." (Tysoe, 2018)*

> *"The food tastes so good, you don't know until you have something really ripe – sometimes I will eat the vegetables on my drive home, just like that… it tastes better!" (Frank, 2018)*

Many gardeners found that their attachment to their vegetables came from growing the vegetables themselves but also commented on the fact that access to quality, organic vegetables was something that they wouldn't be able to have without the gardens:

> *"I grew up with organic and non-GMO foods…
> I like watching them grow." (Okazaki, 2018)*

While none of gardeners indicated that they could sustain themselves with the produce from their gardens, most feeling that only one to three meals per week were prepared with garden produce, they did indicate that the gardens subsidized their food costs during the growing season:

> *"Personally, financially, it helps me because the
> food is not just fresh but it's free." (Frank, 2018)*

This was particularly important to gardeners from the Milky Way Garden, as the culturally important foods that are grown there (e.g.: Asian long bean and bok choy) are considered luxury food items in most grocery stores, without taking into account that organic produce is considered a luxury in most grocery stores:

> *"Organic vegetables are generally expensive, and
> they weren't able to afford them in the grocery
> store." (Carnat, 2018)*

> *"Can't find the vegetables [we] like in grocery
> stores." (Yangzom, 2018)*

> *"So few people know how to use daikon, bok
> choy, burdock, or bitter melon, but I can grow it
> here." (Okazaki, 2018)*

Participants reported that a lot of the appeal of growing food in community gardens was the process itself. In addition to this the flavour, freshness and the fact that the vegetables were organic were also considered important:

> *"I like them (the produce) better because I grew
> them." (Okazaki, 2018)*

3. Building stronger community ties

The gardeners at the Saint Saviour's and Huron-Sussex community gardens felt that their involvement in the community gardens had improved their relationships with their immediate community. They indicated that their fellow gardeners were frequently not people who they would have interacted with, if the garden did not exist:

> *"You can only stay in those houses for four years
> so there is not much community involvement
> happening… The community garden was a
> way for me to get to know my neighbours…
> and build this community's sense of belonging."
> (Lego, 2018)*

> *"I am a newcomer-I tend to stick with the same
> ethnic group-only speaking Chinese and Japa-
> nese… without [the garden] Virginie is someone
> I never would have met." (Okazaki, 2018)*
> *"Even though it's not where I live I feel a part
> of the community through the garden." (Tysoe,
> 2018)*

> *"The number of neighbours I've met this way…
> is really nice… They see community members
> out there gardening and it gives people the
> chance to stop and talk." (Gysel, 2018)*

The Milky Way Garden was, until recently, worked entirely by an ESL class run out of the nearby Parkdale Library. Although these members all knew each other prior to starting the garden, the garden has provided a physical space for significant knowledge sharing between those gardeners who have farming experience, those who do not, and those whose English is stronger than others. There is the continued hope that when the garden expands next growing season, there will be increased culture and knowledge sharing between the current gardeners and the rest of the neighbourhood:

> *"My dream is that… people who have difficulty managing their day to day lives… but they have English skills and I just feel like they can help the ESL students with English, and the students in the garden can help bring calm to them." (Carnat, 2018)*

The gardeners at Milky Way also indicated that they are excited to expand the garden and include the wider community, indicating that they were interested in increasing the potential for creating bridging social capital in the space.

The Christie Pits community garden respondents felt that although they were interacting more frequently with other gardeners as a result of their participation, the nature of their private plots meant that they were frequently in the garden at times when no one else was in the space:

> *"You can go on a Saturday at like 1pm or any day really, and it will be pretty empty." (Wright, 2018)*

This meant that the garden had less of an impact on the bonding capital produced in the space.

Due to conflicts between the nearby uses of the space, the community garden respondents from Christie Pits were concerned about the outside community doing damage to their garden space:

> *"There's a lot of people who want to be there (the garden) and they don't feel safe down there [the space allotted to the garden]" (Sargent, 2018)*

> *"There is an idea of ownership from the outside, and people who don't feel like they are welcome there… so there is sometimes a little bit of resentment and – because it is a public park they feel like they should be able to walk through anywhere. The garden challenges that." (Wright, 2018)*

> *"Do we try to share the garden or do we hunker down and make it as private and closed off as possible and keep our veggies? I think that's the big question on public land." (Sargent, 2018) "There are more people who want to do something other than garden with it" (Sargent, 2018)*

The conflict over the use of the space resulted in the gardeners being less likely to have positive interactions with the surrounding community. However, lead gardeners were invested in creating the opportunity for communication between the non-garden users of the space and the gardeners, attempting to engage community members in the garden as a means of developing commonality:

> *"I tried to bring a previous user of the space for the garden on board… for a while we had him watering the garden for us… eventually he left." (Sargent, 2018)*

For the most part community gardeners also showed compassion when dealing with vandalism or theft of vegetables in the gardens:

> "As long as they are being eaten, not thrown away, it is ok." (Okazaki, 2018)

> "If someone needs to steal a tomato to eat, that's fine with me." (Frank, 2018)

> "It can be frustrating, but in the end if someone needs it or learns something from it, that's good." (Donnelly, 2018)

This appreciation of the needs of others and the desire to share the produce from the gardens may indicate that the act of gardening and sharing produce is increasing the community's ability to foster mutual care and understanding. However, some gardeners expressed a frustration with the impacts of the vandalism and theft of vegetables on the participation and investment in the garden by other members:

> "I got really frustrated… it wasn't because we were losing vegetables but because we were losing our best gardeners, having to see the people who were most passionate about it leave was really frustrating." (Sargent, 2018)

The Huron-Sussex gardeners expressed that their community garden is especially important for community-building activities within the highly transient students, staff, and seniors in the neighbourhood. The desire to create a community organized space around food sharing was specifically originated as a method for getting to know neighbours and increasing relationships within the community:

> "I wanted to create a space that could bring the community together around food." (Lego, 2018)

These commonalities and differences are important in exploring the impacts that land ownership type and tenure may have on the experience of benefits associated with community gardening.

5.2.2 Thoughts on land ownership

Thoughts and feelings about land ownership and tenure were varied, however for the most part gardeners were not particularly concerned about the potential removal of their community garden, feeling that, in general their gardens were not threatened and that if they were to lose their garden they would take their new skills and develop a new garden elsewhere::

> "I don't have a fear of them taking out the garden." (Wright, 2018)

> "Everything comes and goes so if it goes away I will find another place… I just feel fortunate to have the garden." (Okazaki, 2018)

> "They are so happy that we are there… I can't imagine that it would be a small tenure for the garden." (Tysoe, 2018)

> "It is going to be used forever for the community garden… [but] Milky Way is unusual, because we own the space." (ElzingaCheng, 2018)

When expanding on these feelings, respondents from private, institutional, and public land felt that their relationship to the land was purely one of use, and that their ownership of the space only extended as far as the investment in the garden was worth it:

"The only concern in my mind is that… [one day] they might have to sell [the church]." (Gysel, 2018)

"Because it's not my garden I can be lazier." (Okazaki, 2018)

"I wouldn't have bothered to go on a year-long waitlist for a garden that might be gone in a year… you can do more if you know it's going to be there for a long time." (Wright, 2018)

The Milky Way Community Garden, now owned by the Parkdale Neighbourhood Land Trust and managed by Greenest City, indicated that they felt significantly more secure in the garden's ownership, as compared to the ownership and tenure types in place before the communal purchase of the land:

"Our lease agreement is that as long as we are using the land for a community use that fits within the strategic direction of Greenest City, we don't have to ask PNLT for permission to do stuff in the space, and that is actually very important." (ElzingaCheng, 2018)

A community organizer from Greenest City, which now runs both the HOPE (Healthy Organic Parkdale Edibles) Garden, a garden on municipally-owned land and the Milky Way Garden, found that the outright ownership of the land by the community, something that would never have been possible without the PNLT, meant that although there are significant barriers preventing the expansion of the garden in the face of communal ownership, that Greenest City can still access the space however they need to:

"I wanted to create a spa "That's the amazing thing about owning the space. If it was a park and we were trying to get a community garden and it was taking a few years, we would have to continue dealing with the city's… process around permitting to do anything in the space. But because we own this I can plan an event tomorrow and do it!" (ElzingaCheng, 2018)

This was flagged as particularly important for the economic viability of the Milky Way Garden. Members of the Huron-Sussex Garden had been frustrated by the temporary nature of their garden's tenure, understanding that the university has the desire to intensify the neighbourhood and is currently reviewing a development plan for the area, leading them to feel that their garden is limited by the annual renewal of the lease:

"Every year the university has told us that it is a temporary project and that at some point they will be using this land for something else… and that I think is difficult knowing that that is the case." (Donnelly, 2018)

"I wanted to expand into other parts of the parkette but [UofT] didn't approve it because of regulatory issues." (Lego, 2018)

"There is also a development plan on Huron-Sussex to densify it. This land seems to not be touched by the development – but every year we have to renew our ask of having the land." (Lego, 2018)

Benefits for the land-ownership and tenure types at Huron-Sussex Garden included the speed with which the garden was established, and the ability to have the garden within 5-10 minutes of the majority of garden members, as there is no publicly-owned land in the

neighbourhood:

> *"If you go with private owners it is faster to set up the garden." (Lego, 2018)*

> *"Where I live there is no city land. I didn't want to have a community garden that's 30 minutes away. I wanted to have it in my neighbourhood… you want something that's close by where you live." (Lego, 2018)*

> *"It was important to have the garden a 5-10 minute walk from the community members, and that had implications for who would own the land." (Donnelly, 2018)*

The differences between land-ownership types are quite clear. While people with gardens established on privately-owned land – including institutional land – felt that their gardens were generally secure, and valued by the land-owners, they did express concern and frustration over the instability of the land-tenure and the need to re-evaluate the tenure agreement annually. The garden that exists on publicly-owned land was rated as being particularly secure, but there were significant conflicts identified over the use of the space as a garden. These concerns resulted in difficulties maintaining a strong membership base and lead to concerns over the longevity of the garden. The Milky Way garden was rated by both gardeners and associated community organizers to be the most secure in its land tenure. This security was primarily attributed to the commitment the Parkdale Neighbourhood Land Trust had made to use the land for community gardening in perpetuity as well as PNLT's mandate to support community development regardless of the potential profitability of the land or land use (ElzingaCheng, 2018; Barndt, 2018). Community organizers also expressed that the ownership of the garden was important, for gardening purposes, but also for fundraising opportunities, as well as for community outreach and interest in the garden activities.

Discussion

This research set out to achieve the following objectives:

1. To explore the roles of community organizations in the provision of community gardens in city neighbourhoods;

2. To examine the impact of increased land security and sense of autonomy over community garden spaces in terms of creating useful public goods; and,

3. To develop recommendations that benefit community organizers, city planners, and community garden users in the development of community garden spaces.

These goals were achieved by investigating the following research questions:

1. What, if any, are the perceived impacts of land tenure on the social benefits of community gardens?

2. What types of land ownership appear to amplify the benefits of community gardens?

3. How can community organizers and policy makers create a greater stability of place for community gardens?

In response to these questions, this study has highlighted the role of land-ownership type and tenure and the potential benefits associated with community gardening initiatives in Toronto. This study has provided a broad overview of key themes and a preoccupation relating to the sustainability and security of place experienced by community garden initiatives in the City of Toronto, and has analyzed the perceptions of stability and potential benefits and impacts of four case studies of community gardens with differing land-ownership type and tenure. A review of the relevant literature and the policy landscape in the City of Toronto provided grounding for the research and aided in developing the context within which each case study exists. The four case studies provide insights into the development, benefits and impacts, and sustainability of community gardens based on semi-formal interviews with key stakeholders such as community gardeners, community organizers and city officials. The study concludes with a discussion of the findings from the case studies and provides recommendations for the future development and support of community gardening initiatives. A theme among the findings of this study is that, in general, community gardeners felt that the land-ownership type of their respective gardens was less important than the function of the garden itself; however

among the case studies, gardeners also reported a higher level of personal and financial investment in their gardens when they perceived the garden's tenure to be longer and more stable (Milburn & Vail, 2010; Jettner, 2017; Personal Communications: ElzingaCheng, 2018; Okazaki, 2018; Wright, 2018). While gardeners were less concerned about land-ownership and tenure, something that contradicts findings in studies by Wakefield et al. (2007), the results of a perceived stability were in line with the literature. Gardeners felt that there were both personal and community benefits to the gardens, many expressing that the communal working of the garden had helped them develop stronger social ties with their community and their fellow gardeners. These perceived benefits were amplified in the minds of the gardeners and community organizers associated with the communally-owned garden (ElzingaCheng, 2018; Carnat, 2018; Barndt, 2018). In community gardens that had been established on private lands, respondents reported feeling frustration about the lack of control they could exert over their garden, indicating that the possible benefits associated with agency and ownership of community gardens may be lessened when establishing gardens in this tenure type (Calvin, 2011; Lego, 2018). This is in keeping with Calvin's (2011) findings that greater autonomy and agency over community garden spaces result in stronger social and economic benefits.

One finding that was in contradiction to the reviewed literature was that the Christie Pits Community Garden case study, that is established on public land with a relatively stable and long-term land agreement, reported lower feelings of community involvement and lower instances of strong relationships with fellow gardeners. This may be a result of the organization of the garden; this was the only garden that functioned as an individual plot/allotment style garden. The Christie Pits Community Garden Case Study highlighted that conflicts over the use of land for community gardens in public parks may also be decreasing their potential beneficial impacts, as the garden becomes a space that is aggressively contested. As confirmed by Rhonda Teitel-Payne (2018), establishing community gardens on publicly-owned land is frequently seen as a co-optation of publicly accessible space, confirming one gardener's sentiments of an "us and them" mentality at play (Wright, 2018).

Concerns over land tenure for community gardening and urban agriculture were raised in particular by community organizers and city affiliated departments (ElzingaCheng, 2018, Brandt, 2018; Stahlbrand, 2018). These concerns over the future availability of garden lands were highlighted in the context of Toronto, a city which is rapidly densifying, and whose real estate market has seen an almost 30 per cent increase in the value of urban land in the last decade (Danyluke, 2009; Statistics Canada, 2016; Wekerle & Classens, 2015).

Those gardens established on land that was owned fully by someone other than a gardener (or produce recipient) rated the fear of displacement as higher than either the publicly owned or the church garden. Land ownership type and tenure agreements had an impact on perceptions of longevity within the gardens, in particular those gardens that had extended longevity found it easier to access funding, as expressed by Angela ElzingaCheng, and Virginie Gysel (2018). In keeping with the reviewed literature, this result highlights the potential impacts of land-ownership and tenure on community gardening activities. In both instances the perceived security of the garden increased the willingness of outside individuals to invest in infrastructure for the gardens.

As expressed by Rhonda Teitel-Payne, those landowners who have a mandate of service to a community are more likely to provide a long-term lease agreement for a community garden. This is, as expressed by PNLT's Joshua Barndt (2018), because the value that is con

ferred upon urban land is usually conflated with the development value of the land, not the potential for its service to the community. As such, private owners, even those who are interested in supporting urban agriculture, are likely to provide short term, informal leases, such as those organized by the Milky Way Garden prior to the purchase of the land by PNLT, and the Huron-Sussex Community Garden. These short-term leases, as highlighted by Beatrice Lego, can frustrate gardeners, potentially stymying participation in the gardens, thereby limiting the potential for the development of social capital. While this finding is in line with the literature, one element of these results is that the distinction between organization of a community garden (by a group or individual) may not be difficult regardless of land-ownership type or tenure, but that the sustainability of garden initiatives may come into question if the tenure is uncertain due to a lack of perceived ownership or agency, echoing Calvin's (2011) and Tidball and Krasny's (2007) findings.

6.1   Limitations

Although case studies provide detailed and rich qualitative information, and provide insights into avenues for further research, they limit the ability to extrapolate information to the larger context (Yin, 1994). Case studies are also more likely to be subject to participant or researcher bias, and are difficult to replicate (Yin, 1994). The sample of respondents was limited due to the time frame for completion of the project, and due to the seasonal nature of the activity of community gardening. These restricting factors necessitated a limited sample size that may not be adequately representative of the reality of community gardens. Due to the focused nature of the personal interviews, the responses collected are subject to a significant amount of researcher interpretation, expanding the possibility of observer bias. Because data collected in this study is self-reported, there is a possibility of respondent bias as well, including selective memory recall, attribution, exaggeration, or minimization. The somewhat political nature of the topic is also likely to encourage some respondents (community organizers, City of Toronto affiliates) to skew their responses in a way that promotes their own desired outcomes on the subject. The limited time period in which this study was undertaken is also a significant limitation to the study. The rapid nature of the research, as well as the season during which the research was conducted, resulted in limited access to community garden members.

There was also a significant non-response rate from organizations that have limited capacity such as volunteer-based groups or small city departments. There were also limitations in the data drawn from the 2016 Canadian Census. Due to the restructuring of the National Household Survey in 2011 comparative data does not exist between 2016, 2011 and previous years. In addition, high non-response rates and changing land uses in some dissemination areas has resulted in missing data, further limiting comparisons over time.

These limitations extend to data collected by the City of Toronto. Changes in the collection field and method for the Wellbeing Survey meant that previous years' data could not be compared to the 2011 survey. This limits the research significantly as any bolstering of the argument by quantitative, independently collected data is not possible. Language barriers also existed between several respondents and the researcher, particularly those from the Milky Way Community Garden. Had there been greater funding available and a longer timeline for the research, interpreters would have been organized to circumvent this limitation, however, this was not possible under the given circumstances.

6.2   Next Steps

There is significant potential for further study on the subject of land-tenure, ownership type and community gardens. Although this study is primarily an exploratory exercise, it highlights themes for further consideration such as the agency of Community Land Trusts in the establishment of community gardens in dense neighbourhoods, the importance of policy that expressly legitimizes community gardening and urban agriculture in urban areas, and the potential impacts of both design and co-working types of gardens on the potential benefits associated with community gardening. Further study into the potential impacts that land-ownership type has on the ability to raise funds for community gardening activities is required, as well as potential links between community garden tenure and participation in the garden.

Recomendations

7.1   Recommendations for the City of Toronto

In order to facilitate and enhance Toronto's community garden network the following actions should be taken:

1. Develop and expand a land-use specification that legally enables community gardening or other types of urban agriculture.

Specifically, create and zone appropriate sites for urban agriculture and community gardening within the City of Toronto. As highlighted by Wekerle & Classens (2015), development pressures within the city will only intensify over time and, as expressed by community organizers (ElzingaCheng, 2018; Barndt, 2018), protected tenure for community gardens is a valuable asset in both fundraising and public outreach activities for community garden initiatives. Cities that have incorporated community gardening and urban agriculture into comprehensive plans include Seattle, WA, Baltimore, MD, and Austin, TX (Horst et al., 2017).

2. Create an expedited application process for the use of private and public property for community gardening activities.

The process for establishing a community garden on property that is not parkland is identified as being costly, long, and exceptionally difficult. Angela ElzingaCheng (2018) identified that the current application process to develop a legal community garden on land held in trust by the PNLT has been so long and costly that it will delay the garden's development this growing season. Developing a clear, concise and less costly application process will ensure that community garden initiatives are not hindered unduly, before they have even started growing.

3. Promote and support community organizers who work with communities to develop community gardens.

Establish funding opportunities for community organizers and wherever possible provide funding to community gardening initiatives, on private or public land. This may include revisiting the funding recommendations made by the Food and Hunger Action Committee in 2001. An example of these funding opportunities is the City of Vancouver, which provides tax incentives to land owners who restrict land use to urban agriculture on their properties (Horst et al., 2017).

In addition to developing new funding opportunities, the Municipality and associated agencies should support the development of Community Land Trusts and similar initiatives. The Parkdale Neighbourhood Land Trust is the only land trust currently operating in the City of Toronto, with a second in the process of establishing itself in the Kensington Market neighbourhood. These land trusts can perform a role that the municipality is unable to in its mandate. By recognizing the benefits of low economic value – high social value uses, Community Land Trusts are able to provide secure tenure to community gardening initiatives in a way the city is unable to (Barndt, 2018).

7.2   Recommendations for community gardeners

1. Prioritize potential garden sites with long-term tenures.

Gardens with long-term tenures are considered more stable, and are therefore seen to be safer investments for potential funding partners (ElzingaCheng, 2018). Long-term tenure agreements offer both a longer relationship-building period and a greater investment from community gardeners. Gardens with these tenure agreements are more likely to foster stronger bonds, and result in more interest from members, as highlighted in the Milky Way Community Garden and St. Saviour's Community Garden case studies. In order to reap these benefits, community organizers must aim to negotiate for leases with landowners that are on the order of decades rather than months or years.

2. Develop communal land-ownership bodies.

In the current economic climate, the most secure form of land-ownership for community gardens is through community-based institutions whose mandate is to benefit their local communities, as expressed by community gardeners and organizers during interviews. In the case of the Milky Way Community Garden, the communal land-ownership type resulted in an increase in the ability of the garden organizers to raise funds, plan for the future of the site, and develop long-term relationships with other community organizations. This improved perceptions of stability.

In addition to the benefits to the garden initiatives the land-trust was able to respond to development pressure on the community garden by securing the land for agricultural uses in perpetuity (Barndt, 2018; ElzingaCheng, 2018). By developing organizations like land trusts and cooperatives, communities can respond to development pressures by prioritizing urban agriculture within dense neighbourhoods.

3. Develop partnerships with local community organizers or city-wide organizations.

Angela ElzingaCheng and Tish Carnat highlighted the importance of making connections through organizations that have the knowledge to support community garden initiatives. These organizations, such as TUG and Greenest City, act as mediators between land-owners (or city institutions), and garden members. In cases like the Milky Way Community Garden where gardeners had significant knowledge of agriculture, but limited knowledge of land-ownership systems in Toronto, the partnership of Greenest City facilitated a stable and long-term land tenure solution (Barndt, 2018; Carnat, 2018; ElzingaCheng, 2018). These types of partnerships are frequently able to navigate the bureaucratic and complex application process and negotiate legal requirements on behalf of a community garden initiative.

REFERENCES

Allport, G. (1954). *The Nature of Prejudice.* Cambridge, MA: Addison-Wesley.

Aptekar, S. (2015). Visions of Public Space: Reproducing and Resisting Social Hierarchies in a Community Garden. *Sociological Forum.* 30:1, 209-227

Baker, L. (2005). Tending Culutral Landscapes and Food Citizenship in Toronto's Community Gardens. *The Georgraphical Review,* 94 (3), 305-325

Barbolet, H., Cuddeford, V., Wright, J. (2009) Dig it! A practical Toolkit: How local governments can support community gardens. *Centre for Sustainable Community Development.*

Beilin, R. & Hunter, A. (2011). Co-constructing the sustainable city: how indicators help us "grow" more than just food in community gardens. *Local Environment.* 16:6, 523-538

Blay-Palmer, A. (2009). The Canadian Pioneer: The Genesis of Urban Food Policy in Toronto. *International Planning Studies.* 14:4, 401-416

Blomley, N. (2004). Unreal Estate: Propriety Space and Public Gardening. *Antipode.* 615-641.

Blomley, N. (2008). Enclosure, Common Right and the Property of the Poor. *Social and Legal Studies.* 17:3, 311-331

Brand, R., & Gaffikin, F. (2007). Collaborative planning in an uncollaborative world. *Planning Theory*, 6:3, 282-313

Calvin, A.A. 2011. Realising ecological sustainability in community gardens: a capability approach. *Local Environment.* 16:10

Campbell, M.C. & Salus, D.A. (2003). Community and Conservation land trusts as unlikely partners? The Case of Troy Gardens, Madison, Wisconsin. *Land Use Policy.* 20:2, 169-180

Christie Pits Community Garden (n.d.) Gardens In Action. Retreived Febraury 26th, 2018 from: https://garden sinaction.wordpress.com/about/

City of Toronto. (2012). Toronto Community Gardens by Ward. Retreived: March 16th, 2018 from: https://www. toronto.ca/wp-content/uploads/2017/11/90b7-community-gardens-map.pdf

City of Toronto. (n.d.) Neighbouhood Improvement Area Profiles. Retrieved: February 27th, 2018 from: https://www.toronto.ca/city-government/data-research-maps/neighbourhoods-communities/nia-profiles/

Danyluk, M. (2009). Cultivating Potential: Planning for Urban Agriculture in Toronto's Hydro Corridors. *Toronto Food Policy Council.*

Draper, C. Freedman, D. (2010). Review and Analysis of the Benefits, Purposes, and Motivations Associated with Community Gardening in the United States. *Journal of Community Practice.* 18:4, 458-492

Desimni, J. (2015). Limitations of the Temporary: Landscape and Abandonment. *Journal of Urban History*, 4 (2), 279-293.

DeZeeuw, H., Van Veenhuizen, R., Dubbeling, M. (2011). *Journal of Agricultural Science.* 149, 153-163

Ferris, J., Norman, C., Sempik, J. 2001. People, Land and Sustainability: Community Gardens and the Social Dimension of Sustainable Development. *Social Policy & Administration.* 35:5. 559-568

Firth, C., Maye, D. & Pearson, D. (2011). Developing 'community' in community gardens. *Local Environment.* 16:6. 555-568

Food and Hunger Action Committee, The Growing Season: Phase 2 Report, Toronto Food Policy Council, City of Toronto, February 2001.

Glover, T. (2010) Social Capital in the Lived Experiences of Community Gardeners. *Leisure Sciences.* 25, 143-162

Toronto Food Policy Council. (2012). GrowTO: An urban agriculture action plan for Toronto.

Haaland, C., & Konijnendijk van den Bosch, C. (2015). Challenges and strategies for urban green-space planning in cities undergoing densification: A review. *Urban Forestry & Urban Greening.* 14, 760-771

Hannah, A.K, & Oh, P. (2000). Rethinking Urban Poverty: A Look at Community Gardens. *Bulletin of Science, Technology & Society.* 20:3, 207-216

Henderson, B.R. (2010) Is Getting into the Community Garden Business a Good Way to Engage Citizens in Local Government. *National Civic Review.* 12-17

Hewstone, M. (2009). Living Apart, Living Together? The Role of Intergroup Contact in Social integration. *Proceedings of the British Academy.* 162, 243-300

Horst, M., McClintock, N. & Hoey, L. (2017). The intersection of Planning, Urban Agriculture, and Food Justice: A review of the Literature. *Journal of the American Planning Association.* 83:3, 277-296

Jettner, J.F. (2017). Community gardens: Exploring race, racial diversity and social capital in urban food deserts. *Virginia Commonwealth University.*

Kingsley, J. & Townsend, M. (2006) 'Dig In' to Social Capital: Community Gardens as Mechanisms for Growing Urban Social Connectedness. *Urban Policy and Research.* 24:1, 525-537

Lawson, J. (2005) City Bountiful: A century of community gardening in America. Berkley: University of Califonia Press.

Low, S and Smith, N. (2006) (eds) *The Politics of the Public Sphere.* London: Routledge.

McClintock, N. (2013). Assessing the potential contribution of Vacant land to urban vegetable production and consumption in Oakland California. *Landscape and Urban Planning.* 111, 46-58

McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: coming to terms with urban agriculture's contradictions. *Local Environment.* 19:2, 147-171

Mendes, W., Balmer, K., Kaethler, T. & Rhoads, A. (2008). Using Land Inventories to Plan for Urban Agriculture: Experiences from Portland and Vancouver. Journal of the American Planning Association. 74:4, 435-449

Mikadze, V. (2014). Ephemeral urban landscapes of Guerrilla Gardeners: a phenomenological approach. *Land scape Research.* 40(5), 519-529.

Milbourne, P. (2012). Everyday (in)justices and ordinary environmentalisms: community gardening in disadvan taged urban neighbourhoods. *Local Environment.* 17:9, 943-957

Milburn, L.S. & Vail, B.A. (2010). Sowing the Seeds of Success: Cultivating a Future for Community Gardens. *Landscape Journal.* 29:1, 71-89

Moore, T. & McKee, K. (2012) Empowering Local Communities? An International Review of Community Land Trusts. *Housing Studies.* 27:2, 280-290

Nasr, J., MacRae, R., Khuns, J. (2010). *Scaling up Urban Agriculture in Toronto: Building the Infrastructure.* Toronto, ON: Metcalf Food Solutions.

Oldenburg, R. (1989). *The Great Good Place.* New York, NY: Marlowe & Company.

Pearsall, H. & Anguelovski, I. (2016). Contesting and Resisting Environmental Gentrification: Responses to New Paradoxes and Challenges for Urban Environmnetal Justice. *Sociological Research Online.* 21:3, 8-15

Perkins, H. (2010). Green Spaces of Self-Interest Within Shared Urban Governance. *Georgraphy Compass.* 4(3), 255-268

Pudup, M. (2008). It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum.* 39:3, 1228-1240

Rosol, M. (2010). Public Participation in Post-Fordist Urban Green Space Governance: The Case of Community Gardens in Berlin. *International Journal of Urban and Regional Research.* 34:3, 548-563

Saldivar-Tanaka, L., & Krasny, M. (2004). Culturing community development, neighborhood open space, and civic agriculture: The case of Latino community gardens in New York City. *Agriculture and Human Values.* 21, 399-412

Schmelzkopf, K. (1995). Urban Community Gardens as contested space. *Geographical Review.* 85:3, 364-381

Schmelzkopf, K. (2002). Incommensurability, Land Use, and the Right to Space: Community Gardens in New York City. *Urban Geography.* 23:4, 323-343

Smith, L. Case, J. Smith, H. Harwell, C. Summers, J.K. (2013). Relating ecosystems services to domains of human well-being: Foundation for a U.S. index. *Ecological Indicators.* 28, 79-90

Statistics Canada. (2016). *CANSIM II: Canadian Census.* Ottawa, Ont.: Statistics Canada.

Thibert, J. (2012). Making Local Planning Work for Urban Agriculture in the North American Context: A View from the ground. *Journal of Planning Education and Research.* 32:3, 349-357

Tidball, G. & Krasny, M. (2007). From Risk to Resilience: What Role for Community Greening and Civic Ecology in Cities? *Urban community Greening and Civic Ecology.*

Toronto Agriculture Program. (2013). Retrieved: 21, February, 2018 from http://app.toronto.ca/tmmis/viewAgendaItemDetails.do?function=getMinutesItemPreview&agendaItemId=45846

Toronto Community Food Animators. (2010). Toronto Community Housing Community Garden Strategy.

Toronto Food Policy Council. (1999). Feeding the City from the Back 40: A Commercial Food Production Plan for the City of Toronto. Retrieved from: https://www1.toronto.ca/city_of_toronto/toronto_public_health/healthy_families/nutrition/toronto_food_policy_council/files/pdf/tfpc_feeding.pdf

Toronto Official Plan. (2015). Toronto, ON: City of Toronto Planning and Development Office.

Toronto Parks and Recreation, 1. (2002). Community Gardens Policy Statement. Parks, Forestry and Recreation Division. Retrieved December 5th, 2017 from: http://publiccommons.ca/public/uploads/CommunityGardens.pdf

Toronto Parks and Recreation, 2. (2002). Community Gardens Program Toolkit. Economic Development, Cul
    ture & Tourism Department, Parks and Recreation Division.

Toronto Transit Commision. (2011). TTC Policy on Community Gardens. Retrieved: 28, February 2018 from
    https://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meet
    ings/2011/May_11_2011/Reports/TTC_POLICY_ON_COMMUN.pdf

Toronto Urban Growers. (n.d.). History of Community Gardening in Toronto. Retrieved: February 21st, 2018
    from http://torontourbangrowers.org/tug-projects

Voicu, I. & Been, V. (2006). The Effect of Community Gardens on Neighbouring Property Values. *American Real
Estate and Urban Economics Association.* 36:2, 241-283

Wakefield, S., Yeudall, F., Taron, C., Reynolds, J., Skinner, A. 2007. Growing urban health: Community gardening
    in South-East Toronto. *Health Promotion International.* 22:2, 92-102

Webster, C. (2007). Property Rights, Public Space and Urban Design. *Town Planning Review.* 78:1, 81-101

Wekerle, G. (2004). Food Justice Movements: Policy, Planning, and Networks. *Journal of Planning Education
    and Research.* 23:3, 78-386

Wekerle, G. & Classens, M. (2015). Food Production in the City: (re)negotiating land, food and property. *Local
    Environment.* 20:10, 1175– 1193

Wessel, T. (2009). Does Diversity in Urban Space Enhance Intergroup Contact and Tolerance? *Geografiska
    Annaler: Series B, Human Geography.* 91:1, 5-17

Yin, R.K. (1994). *Case Study Research: Design and Methods, Second Eddition.* London: Sage Publications

Zukin, S. (2010). *Naked city: the death and life of authentic urban places.* New York: Oxford University Press.

Interviews

Barndt, J. Community Organizer. Parkdale Neighbourhood Land Trust. Phone Interview. February 28th , 2018.

Boye, S. Email Interview. February 14th, 2018.

Carnat, T. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Dolma, D. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Donnelly, S. Community Gardener.Huron-Sussex Community Garden. In Person Interview. February 27th, 2018.

ElzingaCheng, A. Community Organizer. Greenest City. In Person Interview. February 28th, 2018.

Frank, L. Community Gardener. St. Saviours Community Garden. Phone Interview. February 12th, 2018.

Gysel, V. Community Gardener. St. Saviours Community Garden. In Person Interview. February 15th, 2018.

Harki. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Kaisang, D. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Lego, B. Community Gardener. Huron-Sussex Community Garden. In Person Interview. February 15th, 2018.

Okazaki, I. Community Gardener. St. Saviours Community Garden. In Person Interview. February 22nd, 2018.

Sangey, S. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Sanpwint. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Sargent, L. Community Gardener. Christie Pits Community Garden. In Person Interview. February 12th, 2018.

Stahlbrand, L. Toronto Food Policy Council. Phone Interview. March 6th, 2018.

Tashi, T. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Teitel-Payne, R. Community Organizer. Toronto Urban Growers. Email Interview. February 16th, 2018.

Thaung, K. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

Tysoe, L. Community Gardener. St. Saviours Community Garden. In Person Interview. February 16th, 2018.

Wright, L. Community Gardener. Christie Pits Community Garden. In Person Interview. February 19th, 2018.

Yangzom, D. Community Gardener. Milky Way Community Garden. In Person Interview. February 13th, 2018.

APPENDICES

Appendix i: Interviewees by type and affiliation.

Type	Garden/Organization	Name
Gardener	Milky Way Community Garden	Tsering Tashi
		Kuji Thaung
		Sanpwint
		Harki
		Dhekyi Yangzom
		Dolma Kaisang
		Dolma Dolma
		Sangey Sangey
		Tish Carnat
	Huron-Sussex Community Garden	Sarah Donnelly
		Beatrice Lego
	St. Saviours Community Garden	Virginie Gysel
		Luann Frank
		Ichiko Okazaki
		Leah Tysoe
	Christie Pits Community Garden	Luke Sargent
		Laura Wright
Community Organizer	Greenest City	Angela ElzingaCheng
	Parkdale Neighbourhood Land Trust	Joshua Barndt
	Toronto Urban Growers	Rhonda-Teitel-Payne
City Affiliate	Toronto Food Policy Council	Lori Stahlbrand
Other		Solomon Boye

APPENDICES

Appendix ii: Interview Template

[This is a general template for interviews with professional respondents; specific subjects will also have questions asked of them that pertain to their specific areas of responsibilities.]

Thank you for agreeing to be interviewed. I have several questions about your experience with community gardens and the land ownership options available with respect to them. You don't have to answer any of my questions. If anything is unclear let me know or if for any other reason you prefer not to answer, you are not obliged to do so.

Specific role:

1. What is your basic area of responsibility?
    Be sure to get spatial area/jurisdiction as well as main tasks.

2. What is your specific involvement with community gardens in your municipality?

3. Who are the main people and organizations you work with as part of your efforts in this area?

4. How do you involve private land owners and community groups in your policy development around community gardens?

General issues:

5. What are the major trends in the provision of land for community gardening activities?

6. What avenues exist for community gardener or organizers to obtain the right to use a parcel of land for gardening and or food production?

7. Is there a benefit to establishing community gardens on public/communally/privately owned land with respect to the longevity of the community garden? If so, why is this?

8. What problems are posed by attempts to develop community gardens on public/communally/privately owned land with respect to the longevity of the community garden?

Appendices

[This is a general template for interviews with community garden respondents; specific subjects will also have questions asked of them that pertain to their specific areas of responsibilities.]

Thank you for agreeing to be interviewed. I have several questions about your experience with community gardens and the land ownership options available with respect to them. You don't have to answer any of my questions. If anything is unclear let me know or if for any other reason you prefer not to answer, you are not obliged to do so.

Specific role:

1. Please describe your interest in community gardening.

2. How did you first get involved in your community garden?

3. What are your responsibilities with respect to the community garden?

4. What, if any, is the role you play in organizing the community garden in relation to the person/people who own the land?

General issues:

5. Please describe the benefits you see in community gardening?

6. Do you every worry that the community garden will be removed? Why/why not?

7. How do you feel about owning/not owning that land the garden sits on?

8. Do you think the community garden has impacted the neighbourhood? For better or worse? In what ways?

APPENDICES

Appendix iii: Research Ethics Board I Certification

McGill

Research Ethics Board Office
James Administration Bldg
845 Sherbrooke Street West, Rm 325
Montreal, QC H3A 0G4

Tel: (514) 398-6831
Fax: (514) 398-4644
Website: www.mcgill.ca/research/researchers/compliance/human/

Research Ethics Board I
Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 307-1217

Project Title: Growing Community: Strategies for Sustainability in Community Gardening

Principal Investigator: Katherine Berton **Department:** School of Urban Planning

Status: Master's Student **Supervisor:** Prof. Julian Agyeman

Approval Period: <u>January 26, 2018 to January 25, 2019</u>

The REB-I reviewed and approved this project by delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans.

Deanna Collin
Ethics Review Administrator, REB I & II

* Approval is granted only for the research and purposes described.
* Modifications to the approved research must be reviewed and approved by the REB before they can be implemented.
* A Request for Renewal form must be submitted before the above expiry date. Research cannot be conducted without a current ethics approval. Submit 2-3 weeks ahead of the expiry date.
* When a project has been completed or terminated, a Study Closure form must be submitted.
* Unanticipated issues that may increase the risk level to participants or that may have other ethical implications must be promptly reported to the REB. Serious adverse events experienced by a participant in conjunction with the research must be reported to the REB without delay.
* The REB must be promptly notified of any new information that may affect the welfare or consent of participants.
* The REB must be notified of any suspension or cancellation imposed by a funding agency or regulatory body that is related to this study.
* The REB must be notified of any findings that may have ethical implications or may affect the decision of the REB.

Appendix iv: Consent Form

School of Urban Planning	**École d'urbanisme**	**Tel:** (514) 398-4075
McGill University	**Université McGill**	**Fax:** (514) 398-8376
Macdonald Harrington Building	Édifice Macdonald-Harrington	**Email**: admissions.planning@mcgill.ca
815 Sherbrooke Street West	815, rue Sherbrooke ouest	**URL:** http://www.mcgill.ca/urbanplanning
Montreal, QC, Canada, H3A 0C2	Montréal, QC, Canada, H3A 0C2	

Participant Consent

Researchers: Katherine Berton, katherine.berton@mail.mcgill.ca, 416.949.7059

Supervisor: Professor Julian Agyeman, julian.agyeman@mcgill.ca

Title of Project: Growing Community: Strategies for Sustainability in Community Gardening

Purpose of the Study: You have been invited to take part in a research study about community gardens and land-ownership in Toronto. This study will be conducted by Katherine Berton, a graduate student of the School of Urban Planning at McGill University and supervised by Professor Julian Agyeman. Research has shown that community gardens increase social inclusion, and improve feelings of belonging to and responsibility for a neighbourhood, while also providing ecological and health benefits. However, the frequently informal and unstable land tenures of community gardens mean that the beneficial impacts of community gardens lack stability of place. This research is interested in investigating how we can improve the stability and longevity of community gardens in order to increase their beneficial impacts on a community. This research asks: (1) How do community gardens impact their users in beneficial or negative ways? (2) Does land ownership type impact how community gardens are perceived? (3) What land ownership type provides the greatest stability of place?

Study Procedures: Your participation in this study will consist of an in-person interview of about one hour, conducted at whichever location, day, and time is most convenient for you. With your consent, the interview will be recorded so that an accurate transcription of your remarks can be made; the recording will not be publicly released in any form, and is solely to aid the quality of the research. In some cases, you may be contacted for a brief follow-up interview by phone, although you will be under no obligation to participate in this follow-up.

Voluntary Participation: Participation in this study is voluntary. You may refuse to participate in parts of the study, you may decline to answer any question, and you may withdraw from the study at any time, for any reason. If you decide to withdraw from the study, any information you have provided will be destroyed unless you give permission otherwise.

Potential Risks: There are no anticipated risks to you by participating in this research.

Potential Benefits: Participating in the study might not benefit you directly, but we hope to learn more about the impacts of land ownership type on community gardens in the City of Toronto.

Compensation: No compensation is offered as part of this study.

Confidentiality: Unless you specifically indicate otherwise (below), your name and organization will not be associated with any of your comments in reports arising from this research. In the course of the research, the principal investigator will collect no information about you beyond your name, your organizational affiliation, and the comments you make during the interview.

Your identity will only be known to the primary investigator and will be stored in a password-protected file on a computer which only the principal investigator can access. A de-identified and coded transcription of your interview will be available to the primary investigator for analysis; this will be stored in a password-protected file on a server at the School of Urban

Planning which only the principal investigator can access. The interview transcript and the file with your identity will be stored on separate computers, so even in the event of a data breach, there is minimal risk of your confidentiality being compromised.

If you give your consent, the interview will be recorded, but the recording is solely for the use of the researcher to improve the accuracy and quality of the research. Recordings will never be disseminated in public. The results of the research will be disseminated to the McGill School of Urban Planning, in peer-reviewed journal articles, presentations at scholarly conferences, and interviews with the media.

You have two options relating to your anonymity in the dissemination of research results:

Yes:_____No:_____You consent to be identified by name in reports.

Yes:_____No:_____You consent to have your organization's name used.

You have an option relating to the digital audio recording of your interview:

Yes:_____No:_____You consent to have your interview recorded to improve the accuracy and quality of the research.

Recordings will never be disseminated in public.

Questions: If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions or wish to report a research-related problem, you may contact Katherine Berton at 416.949.7059 or katherine.berton@mail.mcgill.ca.

If you have any ethical concerns or complaints about your participation in this study, and want to speak with someone not on the research team, please contact the McGill Ethics Manager at 514-398-6831 or Deanna.collin@mcgill.ca.

Please sign below if you have read the above information and consent to participate in this study. Agreeing to participate in this study does not waive any of your rights or release the researchers from their responsibilities. A copy of this consent form will be given to you and the researcher will keep a copy.

Participant's Name: (please print) _____

Participant's Signature: _____ *Date:* _____