Planning for Housing and Food Security with Sustainable Design

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Submitted: July 31st 2018

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

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1.0 – Acknowledgements:

I would like to begin by saying that I appreciate and acknowledge the expertise and support provided by the following individuals: Dr. Rod MacRae, Dr. Justin Podur, Dr. Luisa Sotomayor and any staff or administration from the Faculty of Environmental Studies (FES) at York University.

Next, I would like to extend a special thanks to the following individuals for sharing their views and input on this Major Paper: Sarah Bakker – National Farmer's Union of Ontario (NFU-O), Dan Leeming – The Planning Partnership, Rick Eagan – The West Neighbourhood House, Abigail Friendly – Utrecht University, Greg Suttor – The Wellesley Institute, and Lauralyn Johnston – The Tower Renewal and Neighbourhood Revitalization.

Finally, I am forever grateful to my mother, Sherry, and my sister, Anita, for keeping me focused and motivated throughout this entire process.

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2.0 – Abstract:

Despite the social and economic success in Canada, both housing and food are recognized as important issues that are without a comprehensive framework that identifies the intersections between the two. Currently, there is the National Housing Strategy, and the National Food Strategy that will be released in Fall 2018, but these initiatives and others like them may not be enough to tackle the dilemma that the City of Toronto is facing. The concentration of people that are unable to afford and access adequate housing and food challenges the future health of communities. Given that, this paper is a compilation of meaningful literature and dialogue with planners, officials, housing providers, food advocates, and stakeholders in Toronto. Using this, there will be a discussion of strategies and plans aimed at housing and food in Canada. This will provide context, and explore the case for sustainable design as a possible way for bringing the issues of housing and food together in a more integrated framework. This paper offers potential recommendations through literature review, case studies, and interviews, and will conclude by looking at programs that can help to manage these problems and change the experiences of people.

3.0 – Foreword:

This Major Paper is a preliminary discussion to explore the present and future research surrounding the issues of housing and food policy in Canada. This paper achieves several learning objectives set out in the Plan of Study and Proposal using different knowledge, skills, and strategies. There is a focus on legislation, such as the Planning Act, Official Plan, Provincial Policy Statement, National Housing Strategy, National Food Strategy, and the Toronto Green Standard, to examine diverse topics (Objective 1.1). This paper serves as a way of understanding broader terms, including: housing affordability and accessibility, homeownership versus rent, food security and food insecurity, sustainable design, and the best practices for cities (Objective 2.1). The Plan of Study and Proposal aim to explain how housing and food policy can be conceptualized as physically and semantically interconnected (Objective 3.1). This required studying the disappearance of secure access to these necessities, the subsequent transformation of communities, and responses to these problems. After completing further research and analysis, the findings revealed that plans and strategies were already being put into action to leverage assets and tackle the crisis of housing and hunger in Toronto, and more broadly Ontario. This paper demonstrates the fulfillment of learning goals through coursework, research, and field experience. Ultimately, my hope is that this Major Paper will prompt useful discussion and inspire others to search for ways to merge policy on housing and food.

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4.0 – List of Abbreviations:

CCB	Community Capacity Building
CCHS	Canadian Community Health Survey
CFIC	Centre for Food in Canada
CFS	Community Food Security
CMA	Central Metropolitan Average
CMHC	Canadian Mortgage and Housing Corporation
COH	Canadian Observatory on Homelessness
FAO	Food and Agriculture Organization
FCM	Federation of Canadian Municipalities
FM	Farmers' Markets
HELP	Home Energy Loan Program
Hi-RIS	High Rise Retrofit Improvement Support
IZ	Inclusionary Zoning
LEED	Leadership in Energy and Environmental Design
LICOs	Low-Income Cut Offs
MBMs	Market Based Measure
NFB	Nutritious Food Basket
NFU-O	National Farmer's Union of Ontario
OAFB	Ontario Association of Food Banks
PUCF	Parkdale United Church Foundation
RGI	Rent-Geared-to-Income
SD	Sustainable Development
STEP	Sustainable Towers Engaging People
TCH	Toronto Community Housing
TGS	Toronto Green Standard
USDA	United States Department of Agriculture
USGBC	United States Green Building Council

5.0 – Introduction:

5.1 – Health, Housing, and Food

We have known for years that health inequities exist. These inequities affect all Canadians and are key determinants for ill health and exclusion in cities. The wellbeing of our communities is impacted by factors such as social, economic, and physical environments, personal development, access to quality housing, food, and social services. Put differently, these are basic human needs which many communities have a shortage of.

In Ontario, there are relatively high rates of homelessness and poverty. Currently, Toronto and its surrounding municipalities are facing a housing crisis, epitomized by a market that is the most unaffordable and volatile since the 1980s and 1990s[1]. Both research and lived experience demonstrate that communities without housing that is affordable, accessible, and of quality, experience significant ill health. This includes a range of negative medical and physical health outcomes. As a result, there are inherent linkages between the places where people live and their health. Like housing, food is a fundamental human need that is not readily available to many low and middle-income families in Toronto. The ability of the poor to purchase quality and nutritious food is undermined by unemployment, rising living costs, inadequate social assistance and the elimination of subsidies for housing, transportation, and healthcare[2]. Here, food insecurity hinders people's capacity to learn, work, and make progress on all fronts. This relationship is further complicated by sustainable design practices such as the Toronto Green Standard (TGS) and Leadership in Energy and Environmental Design (LEED) which identify guidelines and targets for new development. Therefore, cities like Toronto are facing a twofold challenge to match the changing demand for housing and to do so in ways that are socially and

[1] McMahon, T. (2015). *Affordable Housing Crisis Affects 1 in 5 Renters in Canada:* The Globe and Mail.
[2] Friendly, A. (2008). *Towards Food Security Policy for Canada's Social Housing Sector*. Canadian Policy Research Networks (CPRN), 2-52.

environmentally sustainable to ensure access to healthy foods so that people are no longer hungry.

5.2 – Research Objectives

This report will review, document, and recommend policies that act as tools for housing providers and officials to reach vulnerable populations, stabilize the lives of individuals and families, enhance wellbeing through nutrition, and build sustainable cities. The purpose of this paper is to explain how to plan communities whose members will have access to an adequate supply of housing and healthy food. This report will study the options of low-income communities compared to high-income communities, and the relationship of sustainable design practices to these outcomes. When people are unable to travel far for better food alternatives, they are at higher risk of obesity and diet-related diseases[3]. As a result, families must choose between necessities such as food or rent. This report reviews key concepts and themes, that include: the rent-food dichotomy, food deserts, affordability, and social inequalities. Doing so, this paper describes the problems that low-income households encounter, and explores solutions for the development of equitable neighbourhoods. At the end, this paper proposes a conceptual framework that guides present and future research on the issues of housing and food.

5.3 – Methodology

This Major Paper is anchored by, and uses three research tools that include: Literature Review, Case Study, and Participant Interviews. Normative Theory is applied as a method to gather findings and data, and highlight which aspects of the topic can be improved[4]. Normative Theory is appropriate for this research because the purpose is to study how things are, how they

[3] *Ibid.*
[4] Routio, P. (2007). *Normative Point of View*. Retrieved from: http://www2.uiah.fi/projekti/metodi/178.htm

should be, and what can be done to change the current situation. Using this, there is a focus on theories such as the Garden City and City Beautiful initiatives, modernism, challenges of systemic issues, new urbanism, and urban renewal. Normative Theory therefore produces suggestions and strategies that explain how housing can be located to support the livelihood of communities and designed to strengthen secure access to food[5].

5.3.1 – Literature Review

Literature Review refers to a method that uses articles, books, reports, and other sources to study a relevant topic or area of interest[6]. In any Literature Review, the purpose is to provide an overview, description, evaluation of all sources, and their strengths or weaknesses. Literature Review is an important tool for highlighting what has been discovered so far and identifying future gaps in research[7]. In this paper, Literature Review informs the primary and secondary findings on three components: housing, food, and sustainable design practices. Here, the goal is to examine the relationship between the status of shelter and adequacy of food. This paper stresses the factors which impact the livelihood of individuals, families, and their ability to afford and access food. Doing so, there is an assessment of programs and strategies that can be used at various levels to build healthy neighbourhoods. Given that, this Literature Review provides a historical background, describes theories or concepts, and demonstrates how to expand on the topic. Thus, the Literature Review is important to facilitate the information and findings that result from the Case Study and Participant Interviews.

[5] *Ibid.*
[6] Cooper, H. M. (1989) Integrating Research: A Guide for Literature Reviews, 2nd Ed, Sage Publications, Newbury Park, Calif.
[7] *Ibid.*

5.3.2 – Case Study

Generally, Case Studies bring together complex issues or experiences, and help to progress what is already known in previous research. In *Case Study Research: Design and Methods (1984),* Robert K. Yin defines the Case Study, "As an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used"[8]. Researchers can employ qualitative and quantitative data to examine events, relationships or conditions within a specific context. Given this, Case Studies are a valuable method for looking at problems based in communities, such as poverty, unemployment, transportation, inequality, and more. Using this method, researchers can adopt either a single-case or multiple-case design. As stated by Yin (1984), single-case design should be applied only when there are no other cases available for replication[9]. He goes on to say that multiple case design can employed with issues that show numerous sources of data. Unlike the single-case, multiple-case design enhances and supports previous results.

Moreover, there are three categories of Case Study, namely, exploratory, descriptive, and explanatory. First, the exploratory Case Studies set out to explore any phenomenon or points of interest in the data that may be useful to the researcher[10]. Here, the goal is to answer 'what' or 'who' questions and the research is often accompanied by extra data collection such as interviews, questionnaires, experiments, etc. Second, descriptive Case Studies describe the phenomena which occurs within the data[11]. Applying this method can be difficult because there is a possibility that the description lacks rigor and more problems may emerge. Third,

[8] Yin, R.K., (1984). *Case Study Research: Design and Methods*. Beverly Hills, Calif: Sage Publications.
[9] *Ibid.*
[10] *Ibid.*
[11] *Ibid.*

explanatory Case Studies examine the data closely on different levels to explain the phenomena in the data[12]. Unlike other categories of Case Studies, the explanatory method attempts to answer 'how' or 'why' questions. Keeping that in mind, this paper uses a multiple-case design and exploratory Case Studies to explain the processes and outcomes of successful housing or food policies from around the world. The Case Studies in this paper highlight examples and recommendations for changing the status of health, and they include:

- The Green Phoenix Project in Parkdale, Toronto
- The Rebirth of Regent Park, Toronto

Using this method is necessary to demonstrate different approaches that deal with providing affordable and adequate housing, secure access to food, and development of sustainable buildings. Ultimately, these Case Studies inform the types of programming and process that must be implemented to form healthy neighbourhoods.

5.3.3 – Participant Interviews

Participant Interviews are an important aspect of research as they determine success, validity, and reliability. Participant Interviews gather an account of human beliefs and experiences within the contexts that they occur[13]. Unlike other research methods, Participant Interviews investigate people's views and behaviours in greater detail. Doing so, this tool helps to build an all-inclusive study, report findings, and enables interviewees to speak in their own voice, express their own thoughts and feelings[14]. Here, Participant Interviews assess the value and limitations of any research.

[12] *Ibid.*
[13] Stuckey, M.L. (2013). *Three Types of Interviews: Qualitative Research Methods in Social Health.* Social Health Diabetes. 1:56-9
[14] *Ibid.*

Working to answer the questions and themes mentioned in *3.2 – Research Objectives*, I employed Participant Interviews in my study. Due to time constraints, a purposeful sample of interviews took place from September 2017 – January 2018. There were a total of six interviews, each 30-minutes in duration. These Participant Interviews were semi-structured with key officials and leaders working in areas of housing, food industry, and sustainable design practices. Experts included: Sarah Bakker – National Farmer's Union of Ontario (NFU-O), Dan Leeming – The Planning Partnership, Rick Eagan – The West Neighbourhood House, Abigail Friendly – Utrecht University, Greg Suttor – The Wellesley Institute, and Lauralyn Johnston – The Tower Renewal and Neighbourhood Revitalization (Fig. 1). Tailored to the respondents, each discussion began by asking interviewees about their area of expertise. As the conversation progressed, participants made connections between different components of the research study such as perspectives on affordable and accessible housing in Toronto, the basic right to nutritious foods, and what constitutes a green of sustainable building in design, construction, and operation. Finally, to formulate a framework for the future, interviewees provided recommendations and strategies for each of these issues.

Selection Criteria for Participant Interviews

Participant	Affiliation	Selection Criteria
Sarah Bakker	National Farmer's Union of Ontario (NFU-O)	As General Manager of the National Farmer's Union of Ontario (NFU-O), Sarah brings over 18 years of experience working in agriculture, marketing, fundraising, and the non-profit sector.
Dan Leeming	The Planning Partnership	As a Senior Advisor at The Planning Partnership, Dan is an expert in the planning, design, and development of communities throughout Ontario. His work on

		sustainable initiatives is vital to the discussion of LEED Certification in this paper.
Rick Eagan	The West Neighbourhood House	As a Community Development Coordinator at the West Neighbourhood House, Rick provides a unique perspective on topics such as housing, community mental health, community kitchens, and fostering change in Parkdale, Toronto.
Abigail Friendly	Utrecht University	As an Assistant Professor at Utrecht University, Dr. Friendly looks at issues and politics in large urban centres. Her work, *Towards Food Security Policy for Canada's Social Housing Sector (2008),* recognizes the importance of housing and food policy.
Greg Suttor	The Wellesley Institute	As a Senior Researcher at the Wellesley Institute, Dr. Suttor studies the relationships between housing histories, housing market realities, and well-being.
Lauralyn Johnston	The Tower Renewal and Neighbourhood Revitalization	As a Senior Planner and Project Manager at the City of Toronto, Lauralyn specializes in housing, sustainability, and building equitable cities, which is essential to this paper.

Fig. 1 (Above): This table depicts the experts selected for Participants Interviews, which were based on criteria such as theoretical perspectives and experiences informing the study

6.0 – Literature Review:

6.1 – The Progress of Housing in Canada:

"(And) to argue that housing is not a fundamental human need is difficult. Having decent, affordable housing should be a basic right for everybody in this country. The reason is simple: without stable shelter, everything else falls apart.[15]*"*

Our homes are the centre of our lives. We say that at home, we can 'be ourselves' and retreat from the pressures of school, work, and the streets. People require a place that they can call their own, and having this space is a key prerequisite for promoting strong and sustainable communities[16]. However, this is a fantasy for many living in Canada. Generally, low and middle-income populations are faced with limited choices and unable to satisfy their basic needs. These individuals and families are vulnerable to inadequate or unaffordable housing, homelessness, and hunger[17]. They are at great risk of having worse overall health and shorter lives.

Home (formal or informal) represents important social, economic, and physical dimensions that have the potential to transform our wellbeing. Specifically, our health can be affected by three factors: 1) Material, 2) Meaning, and 3) Spatial. To begin, Material dimensions refer to the physical state of a home and the need for repair or restoration[18]. Any expenditures on the integrity of housing mean that money cannot be spent on other needs that shape health. Moreover, Meaningful dimensions imply that a home is an essential source of status, pride, and control that is enhanced by tenure[19]. Here, the home serves as a setting for social interaction or lack thereof, which has emotional and psychological implications. Finally, Spatial dimensions refer to the location of housing relative to services and amenities such as employment

[15] Desmond, M. (2017). *Evicted: Poverty and Profit in the American City*. UK: Penguin Books.
[16] Dunn, J. (2002). *The Population Health Approach to Housing: A Framework for Research*. Ottawa, Ont: Canada Mortgage and Housing Corp.
[17] *Ibid.*
[18] *Ibid.*
[19] *Ibid.*

opportunities, supermarkets, schools, and recreation facilities[20]. Given this, if the costs of housing represent a significant proportion of a household's income then they will be unable to exercise control and discretion in each of these dimensions, which leads to health inequities. This demonstrates that housing is related to other necessities, and therefore influences the health of populations.

In *House, Home, and Community: Progress in Housing Canadians, 1945 – 1986 (1993),* John Miron explains the history of housing, clarifying issues and emerging policies. Doing so, he suggests that the conclusion of World War II led to the transformation of housing in Canada. He describes that as men and women returned home, many of them were uncertain of their future because the memories of hardship and misfortune still lingered[21]. However, at this time the economy was strong, employment was on the rise, and government programs ensured a smooth transition for all. In 1941, the Census found that half of the population in Canada was living in urban areas. Here, the author describes that, "Most individuals and families (11.1 million persons) lived in private dwellings – an average of 4.5 persons per dwelling. About 40% of private dwellings in urban areas were owner occupied, compared to 75% in rural areas"[22]. These figures show that sufficient housing was available, but fails to explain the condition these spaces were in or how they were supplied.

Generally, housing in Canada has been produced within the private sector and accompanied by public regulation, subsidization, and government involvement. Prior to 1945, the principal elements of housing policy were being implemented. Namely, a $25-million loan

[20] *Ibid.*
[21] Miron, JR. (ed). 1993. *House, Home, and Community: Progress in Housing Canadians*, 1945-1986. McGill-Queen's University Press and Canada Mortgage and Housing Corporation. 454.
[22] *Ibid.*

program in 1918 made mortgages available for the purchase and construction of new homes[23]. Approaches such as this provided low-interest loans with small down payments and long amortization periods. Ultimately, the goal was to help individuals and families buy their own homes long after the war had ended. To further this, the Dominion Housing Act of 1935 and Low Rental Housing Program of 1938 came into effect. Again, the target was any first-time homebuyer with middle to high-income. Identifying that more diverse shelter was required, the Federal Government designed some initiatives to develop the rental housing stock. All through this period, policies focused on two key groups, the first-time homebuyer and low-income renter.

Moreover, there was also a new wave of immigration and surge in life expectancy at that time. Demographically, "Canada's population doubled, and the number of households grew from 2.6-million in 1941 to 9.0-million in 1986"[24]. To plan for this development and the future, programs such as unemployment insurance, public or private pension plans, and guaranteed income supplements were announced. Together with the progression of education, healthcare, and housing, these programs helped change the situation of many in Canada. Here, the emphasis was on ensuring that cities provided spaces for low-income groups, the elderly, students, and the disabled[25]. However, the author explains that these processes demonstrate a paradox in which rising affluence corresponds with higher consumer spending and therefore, varying household outcomes. To explain this, data from the 1969 Family Expenditures Survey found, "There are 1,831,000 Canadian households spending in excess of 20% of their incomes for shelter. About two thirds of them are low-income. There are 1,076,000 spending in excess of 25% of income for shelter. Of them, four fifths are low-income"[26]. These findings reveal that the cost of living

[23] *Ibid.*
[24] *Ibid.*
[25] *Ibid.*
[26] *Ibid.*

was not declining despite more comprehensive policies and because of this, people were now experiencing problems with affordability and accessibility. This marked the beginning of new trends such as the mounting demand for housing, changes in consumer preferences, and the dichotomization of cities due to income, all of which are important and examined further by other scholars.

Going forward, decisions were made by authorities that exacerbated the precariousness of housing. Specifically, nothing was being done to recognize that some groups were doing better than others. People were divided into two different categories because of their housing tenure: homeowners and renters. As more rental housing was being developed in the 1960s, the income gap between homeowners and renters was 20%[27]. Later from 1984 - 1999, the income gap grew by 16%, signifying inequalities in the housing market[28]. During this time, government policies and programs were not allocating and maintaining enough rental housing. Instead, there was an emphasis on homeownership, which was well-financed and encompassed comprehensive measures. Consequently, 95% of people secure shelter through the private market in Canada, while only 5% of people use public housing, non-profit housing, or non-profit cooperatives[29]. Here, housing policy privileges a tenure that many cannot afford or access. These inequities have led to extreme outcomes such as poverty, homelessness, hunger, and dehousing.

In Canada, homelessness never had a standardized definition or significance. Prior to the 2000s, there were homeless persons, but not a homelessness problem. As a complex societal issue, homelessness became relevant later on, and this meant that any policies or responses were far behind. Recently, the Canadian Observatory on Homelessness (COH) developed a definition

[27] Hulchanski JD. *What Factors Shape Canada's Housing Policy? The Intergovernmental Role in Canada's Housing System*. In: Young R, Leuprecht C, Eds. Canada: The State of the Federation 2004 Municipal-Federal-Provincial Relations in Canada. Montreal: McGill-Queens University Press 2006; pp. 221-47.
[28] *Ibid.*
[29] *Ibid.*

and typology of homelessness which helps to improve measurement and relief of this problem. Here, they state that homelessness refers to, "(the) situation of an individual, family or community without stable, safe, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring this"[30]. The rise of homelessness in Canada is caused by a number of factors such as restructuring of the economy, income gap between rich and poor, and changes in housing policy. Despite the emergence of initiatives to tackle homelessness, there is typically an absence of resources, goals or outcomes.

Keeping this history in mind, there is an interest in finding out how the transformation of housing has impacted Canada, how people are poor or rich, where they live, and what their quality of life is like. Attempting to find the answers to these questions is a matter of ongoing debate by officials, decision-makers, and non-profit organizations. However, they have found the following tools and concepts to be important in these discussions: Low-Income Cut-Offs (LICOs), Basic Needs, Market Basket Measures (MBMs), and Affordable Housing. To begin, LICOs are established using data from the Survey of Household Spending. LICOs refer to the income level at which people may be strained because they spend more money than they have[31]. LICOs are set at a point where households spend on average 20% or more of their income on food, clothing, and housing. LICOs are important for assessing inequality or poverty and are used together with Basic Needs. Here, Basic Needs calculate the cost of necessities. Doing so, a household can be impoverished if they lack any items (i.e. food, clothing, housing, healthcare) required to maintain wellbeing[32]. MBMs measure the cost of purchasing a specific basket of goods and services. Using this basis, MBMs can show if households are low, middle or high-

[30] Gaetz, S.; Barr, C.; Friesen, A.; Harris, B.; Hill, C.; Kovacs-Burns, K.; Pauly, B.; Pearce, B.; Turner, A.; Marsolais, A. (2012) Canadian Definition of Homelessness. Toronto: Canadian Observatory on Homelessness Press
[31] Giles. P., (2004) *Low Income Measurement in Canada*, Income Research Paper Series, Statistics Canada, 10-11.
[32] Sarlo, C. (2006) *Poverty in Canada: 2006 Update* in Fraser Alert, Fraser Institute. (1).

income given what they can afford and access[33]. Finally, the term Affordable Housing refers to shelter that is affordable if the cost accounts for less than 30% of a household's before-tax income. Any individuals and families that encounter problems with affordability are forced to make trade-offs between housing and basic necessities. These tools are important to contextualize the status of housing and persistence of poverty.

In *The Three Cities within Toronto (2007),* David Hulchanski demonstrates that spaces are divided into distinct classes based on income. He describes that City #1 is a high-income area that has a consistent growth in wealth. City #2 is represented by middle-income, and City #3 comprises low-income households that are below the Central Metropolitan Average (CMA)[34]. The disappearance of middle-income communities has caused a spatial demarcation in Toronto. Hulchanski states, "Based on comparisons with the CMA, the proportion of middle-income neighbourhoods was 66% in 1970, but only 29% in 2005. Meanwhile, over the same period, the proportion of low-income neighbourhoods grew from 19% to 53%"[35]. This hollowing out of middle-income neighbourhoods means that rich and poor households will reside in polarized areas. The author examines this challenge and provides recommendations to turn around communities that are spatially divided. Hulchanski proposes using zoning and tax reductions to assist households allocate more income to meet basic needs. He suggests that these trends are reversible, especially with the support of all levels of government.

Simply put, Toronto is now defined by the rich who are getting richer, the poor who are getting poorer, and middle-income neighbourhoods that are disappearing. Toronto is experiencing a new pattern of economic, social, and demographic polarization. These trends are

[33] Human Resources and Social Development Canada. (2008) *Low Income in Canada: 2002–2004; Using the Market Basket Measure*, SP-628-10-07E, p. 5.
[34] Hulchanski, J. D. (2011). *The Three Cities Within Toronto: Income Polarization Among Toronto's Neighbourboods, 1970-2005*. Centre For Urban and Community Studies, University of Toronto
[35] *Ibid.*

similar to what has happened in places that are centers for the creative economy, such as New York, San Francisco, and London. Given this, Toronto faces difficult challenges, but has the unique chance to become a prosperous, sustainable, and inclusive City, where each person can fully develop their talents and fulfill their dreams.

At Home in the City: Housing and Neighbourhood Transformation (2010), by Ryan Walker and Tom Carter focuses on the conditions of shelter in Canada. Similar to those before them, the authors state that access to safe, affordable, and personalized housing in locations that meet people's needs is important. People want to buy a home they can afford and without this, their circumstances of health, education, and transportation are adversely affected. Together, the authors argue that the housing market determines access to space. Specifically, high-income groups with more money outbid others for housing and location, while low-income groups are displaced from desirable neighbourhoods. Here, the process of gentrification causes an exaggerated socio-spatial polarization of cities in Canada. According to the authors, "In 2010, 42% of urban renters spent more than 30% of their income on shelter, leaving many with little disposable income to cover the cost of other essentials like food, clothing, healthcare and education"[36]. Later, in 2015 roughly 20% of people spent half of their income on housing and other utilities, which put them at a higher risk of homelessness and hunger (Fig. 2)[37]. Here, the authors argue that these patterns of housing have impacts on the following aspects of people's lives: financial, locational, physical, psychological, and social[38]. Therefore, there are inherent connections between where someone lives and their ability to be successful in other aspects of their lives.

[36] Walker, R. & T. Carter (2010) *At Home in the City: Housing and Neighbourhood Transformation*. In T. Bunting, P. Filion, and R. Walker (eds.) Canadian Cities in Transition: New directions in the 21st Century, Oxford University Press Canada, pp. 342
[37] McMahon, T. (2015). *Affordable Housing Crisis Affects 1 in 5 Renters in Canada:* The Globe and Mail.
[38] *Ibid.*

Households Spending Greater than 50% of Gross Income on Rent

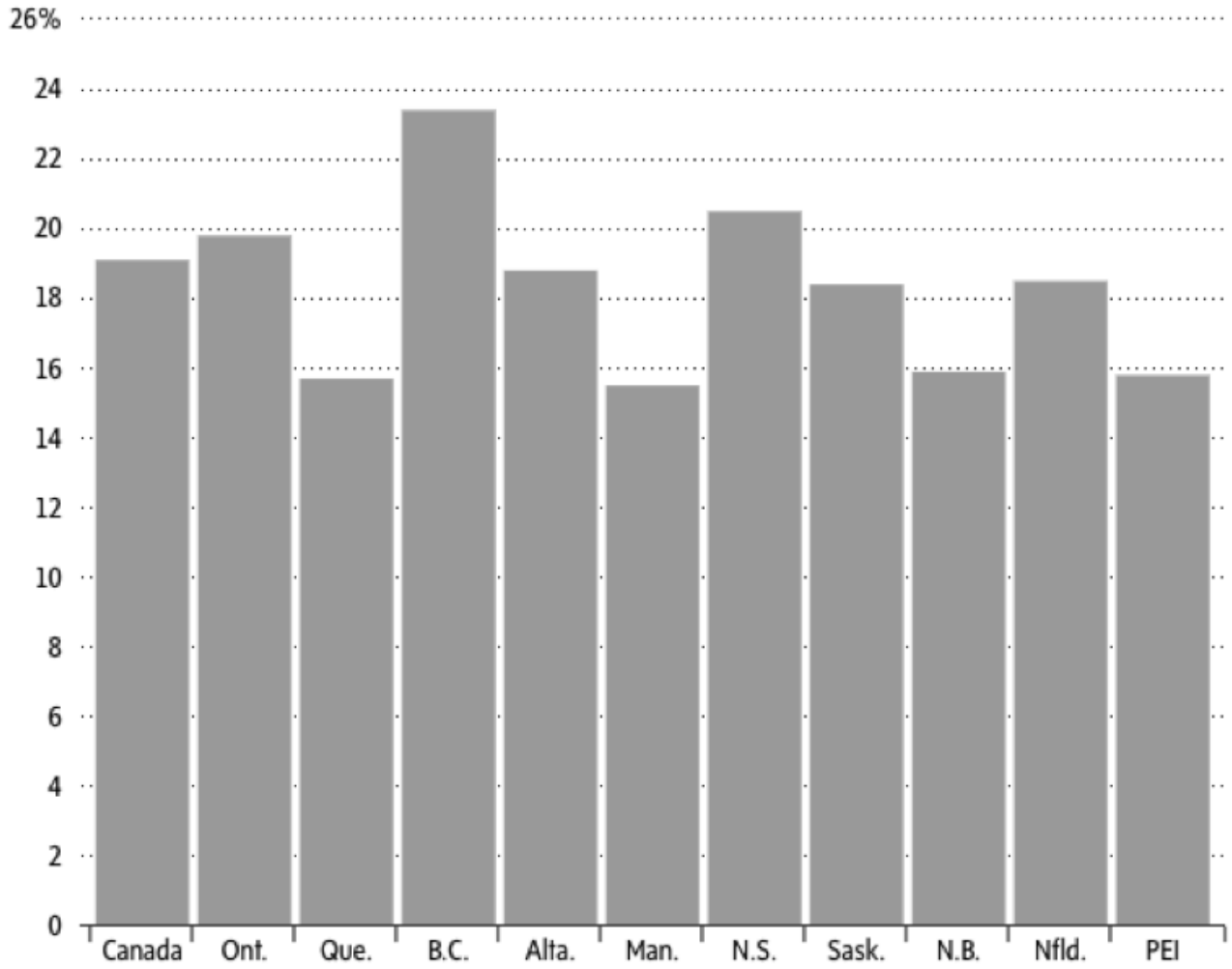


Fig. 2 (Above): Adapted from the Globe and Mail, this graph displays which percentage of the population spend 50% or more of their gross income on costs of housing in Canada[39]

[39] *Ibid.*

6.2 – The Old Face of New Hunger:

Thus far, scholars have described the pressures that inadequate and unaffordable housing exerts on the resources available for basic necessities. In Canada, people encounter many barriers especially when searching for food. Here, 'food security' only exists "when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and preferences for an active and healthy life"[40]. This explanation, which comes from the World Food Summit suggests that food must be provided through three key components: sustainable food systems, access to food, and appropriate food use. Given this, the Food and Agriculture Organization (FAO) defines 'food insecurity' as "the inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so"[41]. This can be caused by several factors such as: insufficient income, homelessness, dependence on welfare services, lone parenthood, and living with a disability or impairment. It is for these reasons that people can experience challenges with food selection, consumption, and pricing.

Despite the fact that each of these terms are interrelated, they are not synonymous with 'hunger'. Instead, the United States Department of Agriculture (USDA) refers to hunger as "the involuntary lack of food, which results in discomfort, illness, weakness, or pain that goes beyond the usual, uneasy sensation"[42]. This is a situation that forces people to go hungry because they must skip meals, compromise on nutrition, or rely on emergency food sources. All people, from the public to officials and decision-makers have been hungry at some point. However, an absence of hunger does not imply food security the same way the presence of hunger does not

[40] Friendly, A. (2008). *Towards Food Security Policy for Canada's Social Housing Sector*. Canadian Policy Research Networks (CPRN), 2-52.
[41] McIntyre, L. & Anderson, L. (2004). *Chapter 13: Food Insecurity* in Social Determinants of Health: Canadian Perspectives. Toronto: Canadian Scholar's Press.
[42] *Ibid.*

imply food insecurity. In this respect, the experience of hunger is physiological and difficult to measure. To determine the extent of hunger requires the collection of detailed information that is accomplished more effectively in the context of food security or food insecurity.

In *Social Determinants of Health: Canadian Perspectives (2004),* Lynn McIntyre and Laura Anderson review the history of food systems, which were not without their problems. Using Canada as an example, they state that while poverty is a consistent issue, the prevalence of being without food is relatively new[43]. Prior to World War I and World War II, people experienced many issues, including famine and malnutrition. Often, this was characterized by men and children that were well-fed, while women were cutting back on consumption in the interest of their families. As these circumstances persisted, millions were then impacted by the Great Depression, which left people unemployed and homeless. This recession led to inflation, changes in spending priorities and the restructuring of social programs. Around this time, the public and decision-makers began to notice the importance of mitigating issues associated with health. In 1948 Canada recognized food as a human right when they signed and adopted the Universal Declaration of Human Rights[44]. Since then, they have acknowledged the right to food through several domestic and international agreements. This call to action meant the emergence of food banks, school food programs, and more comprehensive social assistance. After this, the Government of Canada devised a plan to identify priorities and commitments for the future. Finally, by the 1980s and 1990s, food insecurity was a key area of concern and there was urgency to improve standards and dietary guidelines.

During this time policies and programs failed to eliminate or manage the crisis of food insecurity. In 2012, the Canadian Community Health Survey (CCHS) found that more than

[43] *Ibid.*
[44] *Ibid.*

12.6% of the population (four-million people) were facing challenges with obtaining affordable and accessible food[45]. Of them, 16.5% were children in households affected by some level of food insecurity and another 10% were children in households affected by a moderate or severe level of food insecurity[46]. Nationally, the highest rates of food insecurity were in Prince Edward Island, Nova Scotia, Quebec, Saskatchewan, British Columbia, Northwest Territories, and Nunavut. These findings suggest that finding viable and practical solutions to food insecurity changes with several factors.

In Canada, food insecurity is influenced by people's ability to pay for food, access food resources, and the desire for healthy food. Put differently, the three key factors that shape the outlook of food insecurity include: income, cost of food, and location. Of these, the strongest predictor of how people access safe and nutritious food is income. Data from the Centre for Food in Canada (CFIC) survey shows that low-income households experienced the most limitations to food choices and purchasing power. Also, low-income households were more price-sensitive and therefore, consumed cheaper, less nutritious foods. This acts as a significant marker of bad physical or mental health, and larger inequalities across communities. To this point, income can be a constraint if people are unable to clear debt, work in low-waged and unstable employment settings, rely on social assistance, or simply do not have enough money.

As an expense, food is an elastic budget element, whereas the cost of other necessities (e.g. rent, water, heat, and power) are not. "Both housing and food are basic needs. They're necessities: but food is the first to go after bills – it's housing before food". In this respect, housing costs are inelastic while food is readily put aside to make resources available for other needs. In *Adequacy of Food Spending Related to Housing Expenditures Among Lower-Income*

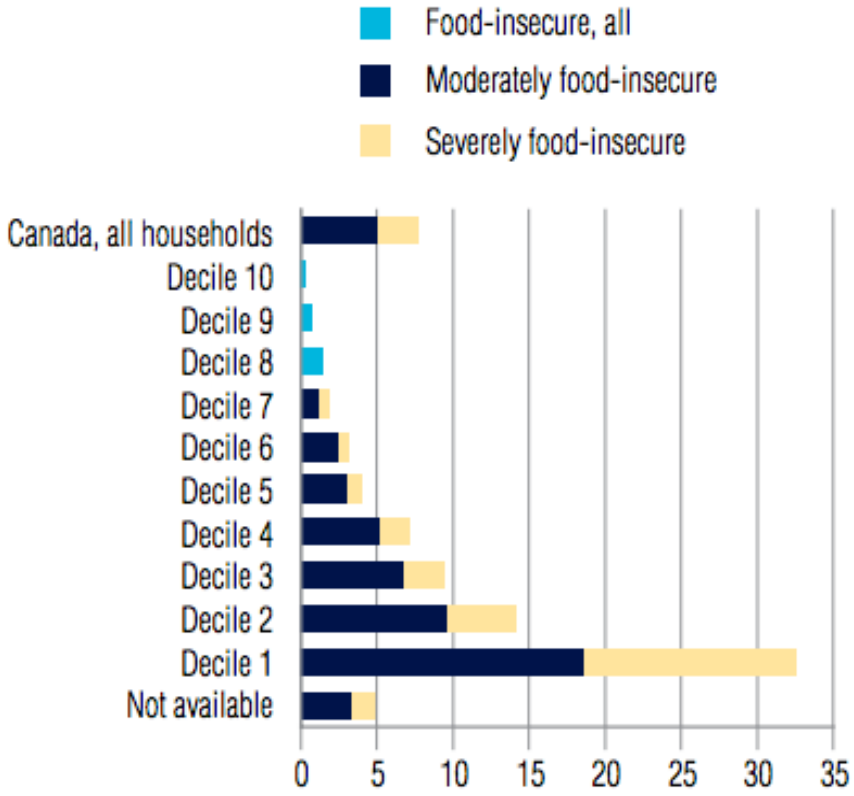
[45] *Ibid.*
[46] *Ibid.*

Canadian Households (2007), Sharon Kirkpatrick and Valerie Tarasuk investigate the barriers that prevent people from securing an adequate quantity or quality of food. They describe the relationship between food and income through different quintiles in Canada. Using a study of multistage sampling and 15,535 participants, the authors state that as the level of income changes so does the outlook on food. Here, they found that low-income households with an average income of $23,559 spent $3,888 on food annually or 16.3% of their total expenditures, while high-income households with an average income of $147,088 spent $11,091 on food annually or 7.5% of their total expenditures[47]. Given this, low-income households assign more of their income towards food while high-income households use less of their income for the same necessities. Because of this, people with low-income have greater rates of food insecurity at 32.5% compared to people with high-income at 0.3% (Fig. 3)[48]. To further exemplify this, the Nutritious Food Basket (NFB) found that a family of four with both parents working either full-time or part-time would experience a financial shortfall of $44.89 to meet their needs[49]. Alternatively, a lone parent with two children would encounter a financial shortfall of $496.77 for monthly expenses. Ultimately, this indicates the profound connection between income and food insecurity.

Similar to income, the price of food also impacts the health and welfare of communities in Canada, Prior to the global food crisis that occurred in 2007, concerns about hunger were not at the centre of attention for the public, and decision-makers. However, after the cost of food soared, many countries experienced serious social, political, and economic challenges. Some of

[47] Howard, A. & Edge, J. (2013) *Enough for All: Household Food Security in Canada*. Conference Board of Canada
[48] *Ibid.*
[49] McIntyre, L. & Anderson, L. (2004). *Chapter 13: Food Insecurity* in Social Determinants of Health: Canadian Perspectives. Toronto: Canadian Scholar's Press.

Household Food Insecurity in Canada by Household Income Distribution Decile, 2007-2008



Note: Data are to be interpreted with caution for Decile 10 in the "food-insecure, all" category and for deciles 6 and 7 in the "severely food-insecure" category. The territories were not included.
Source: Health Canada.

Fig. 3 (Above): Adapted from the Conference Board of Canada, this graph demonstrates the rates of food insecurity in Canada organized by household income[50]

the consequences of this were less national or international investment, unstable patterns of production and consumption, and subsequently, agricultural failure. From 2007 to 2010, the cost of food shifted significantly with prices of chicken, beef, pork, fruits and vegetables being higher than in previous years. The cost of commodities such as wheat, corn, sugar, and salt also went up

[50] Howard, A. & Edge, J. (2013) *Enough for All: Household Food Security in Canada*. Conference Board of Canada

from 50% to 100% during this period [51]. This rising cost of food was detrimental to communities and prevented any progress in improving health. Given this, the FAO reported that food price inflation forced an estimated forty-four million people into poverty[52].

Not all countries or households suffer equally and at the same time from food price inflation. Any changes in the cost of food can push vulnerable populations that are least able to cope further into poverty. This means that people are unable to afford and access nutritious foods or non-essential elements (i.e. transportation, clothing, education). What's more, households face other costs such as requiring functional infrastructure and tools (appliances, utensils, etc.) to prepare and store food[53]. Together, these issues cause permanent and harmful health outcomes, especially for those that are already disadvantaged. This demonstrates that changes in the cost of food impacts the ability of communities both locally and globally to acquire adequate food, and therefore serves as an important factor to the risk of food insecurity.

As discussed, foods that are beneficial to health have become more difficult to obtain for low-income households compared to high-income households. Here, the location of outlets, particularly supermarkets and local shops represents another key feature that shapes the health of communities. This focus on the distance between households and food imposes challenges to the ways in which people acquire food. These barriers are informed by findings on food deserts and communities where safe and healthy food is not readily available. Generally, food deserts are defined as "areas where cheap and varied food is only accessible to those who have private transportation or are able to pay the costs of public transportation if available; access to a cheaper

[51] *Ibid.*
[52] *Ibid.*
[53] *Ibid.*

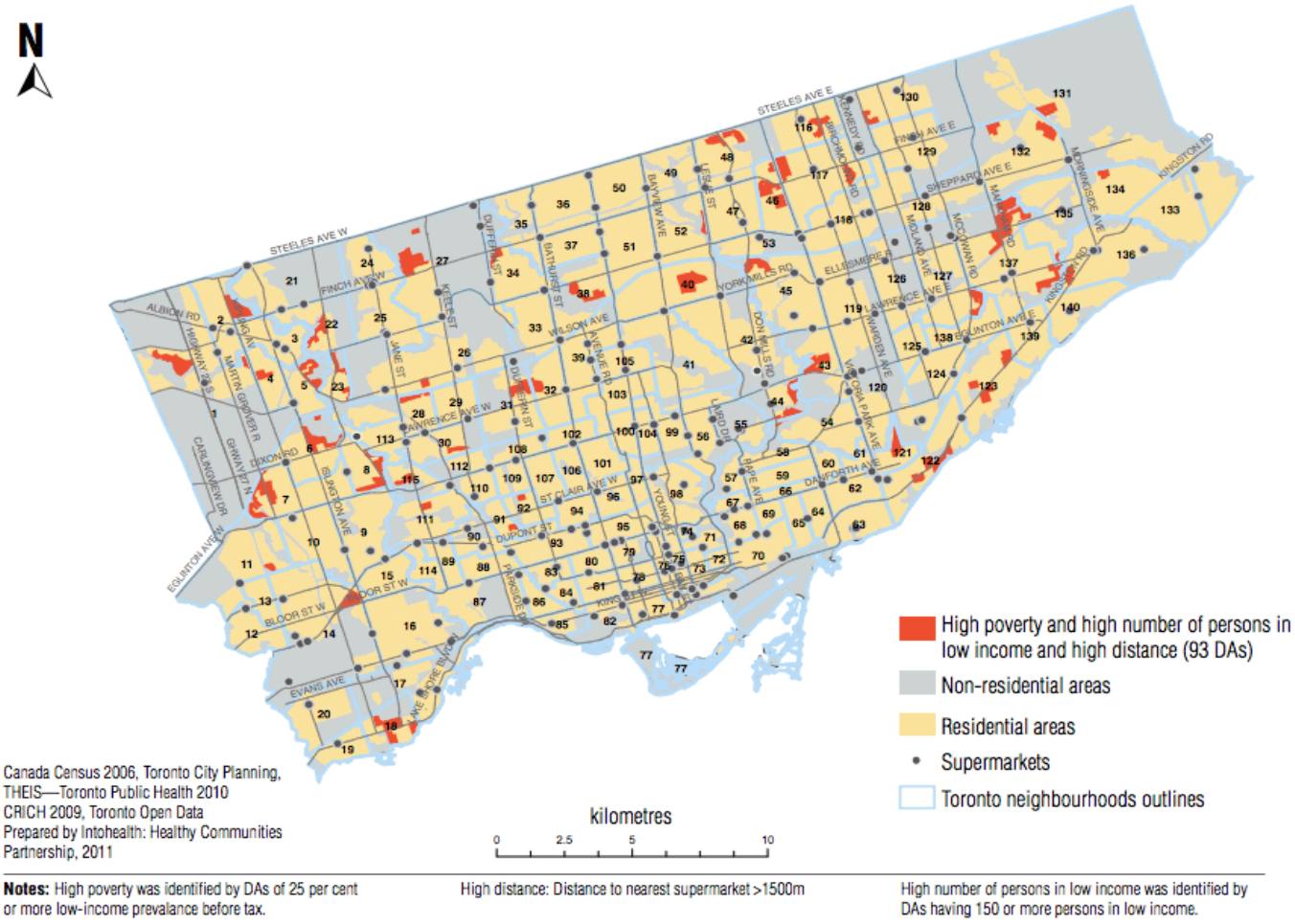
and wider range of food is most restricted for some of the groups who need this most"[54]. People that live in food deserts have no option but to rely on corner stores and fast food restaurants for the sake of cost and convenience. In Canada, food deserts are found in both urban and rural areas. For remote communities, shipping and distribution costs mean that prices of food are higher and unattainable. For urban communities, if people are without transportation or income, then they must travel farther for food. To this point, approximately 9.6% of households in urban areas experience food insecurity compared to 7.3% of households in rural areas that experience food insecurity (Fig. 4)[55]. It is for these reasons that location is the last factor in determining if people can reach supermarkets and local shops to obtain adequate food.

On this basis, exploring the factors that impact food accessibility and affordability are important for scholars looking at the health of communities. As stated earlier, people are unable to obtain adequate food and non-food essentials because of several socio-economic constraints. This includes income, cost of food, and location, each of which is a predictor of a household's likelihood for experiencing food insecurity. These problems are serious, especially for vulnerable populations that carry the greatest burden of living with them. However, approaching these issues remains challenging because doing so requires solutions that focus on the everyday realities of those impacted. Therefore, the chapter to follow expands on these findings and discusses the connections between housing, food insecurity, and the strategies or plans that are working to manage the future of these issues in Canada.

[54] Coveney, J., & O'Dwyer, L. A. (2009). *Effects of Mobility and Location on Food Access*. Health & Place, 15(1), 45–55

[55] Howard, A. & Edge, J. (2013) *Enough for All: Household Food Security in Canada*. Conference Board of Canada

Distance to Nearest Supermarket or Local Shop, Priority Areas (City of Toronto)



Source: City of Toronto.

Fig. 4 (Above): Adapted from the City of Toronto, this map depicts the proximity of areas with poverty to food outlets[56]

[56] *Ibid.*

6.3 – Fostering Environmentally Sustainable Cities

As with many countries, Canada experiences the positive and negative outcomes of development. In the City of Toronto, this means that there are issues such as the pollution of air and water quality, large volumes of solid waste, and deterioration of infrastructure[57]. Given the changes in population growth due to globalization, there have been more strains on communities to meet the basic needs of people. These stresses are important in determining the success of the environments that we live in. Currently, Toronto is focusing on the construction and repair of buildings or sites to manage the pressures on its resources[58].

Keeping that in mind, Toronto has developed a growing reputation for using new strategies and plans to improve the health of communities. Notably, in 2005, the David Suzuki Foundation recognized Toronto as a leader in waste diversion and climate change[59]. Given this and the emergence of several programs, Toronto is also setting an example for the implementation of balanced economic, social, and environmental systems. In 2006, Toronto adopted policies to encourage green roofs, advocate for sustainable building design, and engagement of all stakeholders[60]. To name a few of these programs, this work comprised: Clean Air Action Plan, Renewable Energy Action Plan, and Green Economic Development Strategy. Each of these uses an integrated set of targets, principles, and guidelines to make considerations for the future stresses on cities.

In Canada, the use of the term 'green' is associated with the concept of 'Sustainable Development' (SD). The 1987 Brundtland Commission Report popularized these concepts. In this document, SD refers to "meeting the needs of the present without compromising the ability

[57] City of Toronto. (2006). *Making a Sustainable City Happen: The Toronto Green Development Standard.*
[58] *Ibid.*
[59] *Ibid.*
[60] *Ibid.*

of future generations to meet their own needs"[61]. This describes two important aspects of SD, which include the responsibilities of each generation and the interdependences between various systems. As a result, these findings have led to the development of programs like those already mentioned and most importantly, the Toronto Green Standard (TGS). The TGS has origins in the Official Plan, Environmental Plan, and Energy Efficiency Office. These documents make suggestions for enhancing green roofs, energy efficiency, greenhouse gas emissions, and reuse of materials amongst other things. The Toronto Green Standard uses stepped levels of performance to support and measure SD in different communities. Tier 1 is required to pass the planning approval process and Tiers 2-4 are higher standards that come with financial incentives in post construction[62]. The intention of the Toronto Green Standard is to guide any public or private development through the perspective of SD.

Devising the Toronto Green Standard required consultation with numerous officials, decision-makers, and non-profit organizations. Doing so, the TGS aimed to tackle key features of cities. However, many have disputed the usefulness of the TGS, especially in relation to existing programs. Of these, the Leadership in Energy and Environmental Design (LEED) initiative is a voluntary green building rating system[63]. Developed by the United States Green Building Council (USGBC), LEED has been used to assist cities achieve a high level of environmental performance when designing new infrastructure. As with any program, LEED has several strengths and weaknesses (Fig. 5)[64].

[61] *Ibid.*
[62] *Ibid.*
[63] *Ibid.*
[64] *Ibid.*

LEED Certification for Buildings and Sites

Strength	Weaknesses
Comprehensiveness – LEED is an extensive rating system of rigorous requirements that covers all significant issues for buildings and sites	*Onerous Process without a Guaranteed Outcome – L*EED is complicated and requires documentation, with no guarantee of certification
*Brand Recognition & Credibility – L*EED is the most recognized of all green development standards	*Expensive* – Concerns that implementation, verification, commission of LEED is very expensive
Rigorous Verification of Environmental Performance – LEED follows the planning process through independent certification for building and site performance	*Not Flexible Enough* –LEED is not flexible enough to meet the goals of producing more sustainable buildings and sites
Quality Control – Process to become LEED certified helps to enhance the quality of performance	*Not Locally Oriented* – LEED is not adaptable to all local environments and settings
Ongoing Improvement – The Canada Green Building Council (CaGBC) developed LEED Canada to focus on weaknesses	*Not Universally Applicable* – LEED favours commercial development

Fig. 5 (Above): Adapted from the Toronto Green Development Standard, this table identifies the strengths and weaknesses of LEED Certification[65]

Thus far, this paper has examined the literature on housing, homelessness, food, cost of food, food deserts, and sustainable design practices. *Section 7.0 – Results & Discussion* continues to identify the connections between these components. This means using new research and findings on infrastructure, geography, and legislation. Also, there is interest in determining the capabilities of green development standards in helping to solve these issues in Toronto. The next section is based on document analysis and interviews with planners, officials, housing

[65] *Ibid.*

providers, food advocates, and stakeholders from the National Farmer's Union of Ontario (NFU-O), The Planning Partnership, The West Neighbourhood House, Utrecht University, The Wellesley Institute, and The Tower Renewal and Neighbourhood Revitalization. The following section will provide an integrated portrayal of the state of housing, food accessibility and affordability, sustainable design practices, the challenges that people encounter and suggestions of experts.

7.0 – Results & Discussion

Section 7.0 – Results & Discussion, presents the challenges that housing, food, and sustainable design practices pose to communities and offers important solutions to change these experiences. Doing so, this paper comprises six interviews, 30-minutes in duration with key experts working in each area of interest. A series of semi-structured questions were asked of participants to determine the application and usefulness of strategies or plans from various perspectives. This section examines each of these suggestions and their implications on communities in Canada. To frame this, *Section 7.0 – Results & Discussion* is divided into the following segments:

- 7.1 – Housing Affordability and Accessibility
- 7.2 – Appropriate Housing Choices for All
- 7.3 – The Continuum of Housing and Food Security
- 7.4 – Encouraging Sustainable Design in Housing and Food

7.1 – Housing Affordability and Accessibility

In Canada, the housing market is complex and difficult to forecast for officials, decision-makers, and organizations. This is highlighted by the rise of housing prices, alongside stagnant incomes and growing debt. Several banks in Canada monitor these patterns and they have determined that the costs of housing have increased significantly relative to income or wealth[66]. Together, the 'Big Five' financial institutions, Royal Bank of Canada (RBC), Toronto Dominion Bank (TD), Bank of Nova Scotia (Scotiabank), Bank of Montreal (BMO), and Canadian Imperial Bank of Commerce (CIBC), found that almost half of the average income in Canada is dedicated

[66] The Canadian Centre for Economic Analysis. (2017). *Understanding the Forces Driving the Shelter Affordability Issue: A Linked-Path Assessment of Housing Market Dynamics in Ontario and the GTHA.*

to housing[67]. This figure rises to 60% in Toronto and 87% in Vancouver[68]. Given this, the costs of housing have become unstable and income or wealth more unequally distributed. In response, the housing market has provided: large homes in car-dependent neighbourhoods on the low-density fringes and compact condominiums in the high-density core[69]. Yet, this has exacerbated pressures on the housing market and concerns for those seeking affordable and accessible housing. Notably, the disappearance of affordable and accessible housing has led many scholars to review and study the positive and negative impacts of housing on people and their wellbeing [70].

Generally, the concept of affordable and accessible housing recognizes the basic requirements of people that are unable to secure appropriate housing without assistance. This process of determining if housing is affordable and accessible varies by municipalities, regions, and countries. In 2002, the Provincial and Federal Governments of Canada came together to fund strategies and plans aimed at providing housing and support for all people[71]. Doing so, several programs were implemented such as grants for new construction, subsidies for households, funding for renovations, and down-payment assistance[72]. Here, affordable and accessible housing was meant to encompass 'public, social, and low-cost' shelter. However, any discussion of affordability and accessibility demonstrates that pinning down a definition in practice is difficult. In this respect, affordable housing refers to, "housing that is appropriate for the needs of a range of low to moderate income households and priced so that low and moderate incomes are

[67] *Ibid.*
[68] *Ibid.*
[69] *Ibid.*
[70] *Ibid.*
[71] Office of Auditor General of Ontario. (2017). *Social and Affordable Housing*. Ministry of Housing. 3 (3.14)
[72] *Ibid.*

able to meet their essential basic living costs"[73]. On this basis, housing is sufficient if people can access all the resources required to support wellbeing. With this in mind, the Canadian Mortgage and Housing Corporation (CMHC) established using 30% of income as a measure for the maximum level of commitments for housing. This rule or the 'Ontario Measure' has become widely accepted as the definition of affordable and accessible housing. However, there are problems associated with this approach. Due to the changes in income and market on which the 'Ontario Measure' was proposed, this benchmark is not suitable for all households. More high and middle-income households are spending over this proportion on housing and have money left over to spend on other things. Put differently, the 'Ontario Measure' no longer illustrates people experiencing housing stresses. Ultimately, this rule uses a fixed benchmark and is out-of-date.

But revising the definition of affordable and accessible housing is challenging because it has implications for the conceptualization of other basic necessities. Here, housing affordability impacts people's ability to secure food, clothing, transportation, and healthcare. As stated in *Section 6.0 – Literature Review,* there is a clear intersection between housing and food policy. Consequently, amending the definition of affordable and accessible housing means that the thresholds for food insecurity would also change. In this respect, the metrics for housing commitments determine the amount of income households have left to meet non-housing requirements. Given this, governments in the United States, Europe, Australia, and in recent years, Canada have attempted to identify the housing and food continuum, while suggesting new incentives or regulations for these issues.

[73] Sliogeris, E., Crabtree, L., Phibs, P., & Johnston, K. (2008). *Housing Affordability Literature Review and Affordable Housing Program Audit.* Penrith, N.S.W: University of Western Sydney.

Speaking on behalf of The West Neighbourhood House, Rick Eagan was asked about the definitional inconsistencies of affordable and accessible housing. He explained that the definition puts housing far beyond the means of people[74]. Tools such as the 'Ontario Measure' and Rent-Geared-to-Income (RGI) do not assess the true degree of housing problems. These metrics establish a standard with respect to income or wealth that is not always representative of communities. He described that what is affordable and accessible for some households may not be for others[75]. Given this, the focus he said must be on improving the practicality of housing in terms of the unit type, unit size, and cost[76]. Although changing the metric for housing accessibility and affordability clarifies these issues, it does not solve the problem that many communities are facing. This section leads to a discussion of the intersections between housing and food policy, and the international responses to these problems.

7.2 – Appropriate Housing Choices for All

Whatever measure is used, finding affordable and accessible housing in Canada is clearly a problem. Any effort to improve this and the wellbeing of communities involves looking at factors such as the supply and demand of housing. Over the past 40 years, people have been searching for and obtaining housing at unprecedented rates. In Toronto, an estimated 77% of housing was developed after 1986, primarily as single-detached housing and now as condominiums. Despite this, there has been a shortfall of housing because cities are approving the wrong type of applications in spaces with the wrong designations for use. This is a product of the patterns that development has taken in cities. Specifically, there are concerns that the planning process is complex with frequent delays. This, compounded with infrastructure costs, shortage of skilled labour, and impediments to the rezoning of land means there are significant

[74] Eagan, R. Community Development Coordinator. Personal Communication.
[75] *Ibid.*
[76] *Ibid.*

pressures on the housing market. The consequence of this is cities with low densities at the periphery and high densities in the downtown core, with nothing in-between. Anyone wishing to rent or buy is limited to semi-detached housing on the periphery, expensive and already existing detached or semi-detached housing in the inner cities, or towers in the downtown core. Even with this stock, there are very few new affordable and accessible housing opportunities being built. Together with the changes of income and other costs of living, these act barriers for many communities. Here, the problem is not only about supply and demand, but also whether or not the housing is appropriate for people.

Given these challenges, the extent to which people's housing needs are being met is important to the future of communities. The literature concludes that issues of securing affordable and accessible housing disproportionately affect low and middle-income populations. These communities experience further stresses from a dependence on welfare services, lone parenthood, balancing other costs of living, and disability or impairment. This means that people with low and middle-incomes must settle in the inner cities where the bulk of social housing is located. This has caused the socio-spatial polarization of communities and a housing situation that is not appropriate for all people. These households are unable to buy or rent new homes and must instead rely on apartments. In Toronto, there are over 170,000 apartments, which present challenges and opportunities for health[77]. Most of these towers are 40-60 years old and require investment for upkeep. These apartments impact health, especially because there are risks from pests, unsafe settings, and deteriorating utilities[78].

To grasp these circumstances and their outcomes, questions were asked about the factors that influence the outlook for affordable and accessible housing. Here, the data were consistent

[77] Leon, S. (2017). *Tall Order Understanding Change in Toronto's Inner-Suburban Rental Towers*. The Wellesley Institute.
[78] *Ibid.*

with other studies and such studies also proposed strategies and plans that could be used. Speaking on behalf of The Wellesley Institute, Greg Suttor discusses the forces shaping health in Toronto. He responded:

> "So a lot of the issues pertain to things that are in the housing market or in the labour market, how people get their income, how much they're in poverty or they're struggling – they relate to other issues that are implicated in those problems such as disability or mental illness or being newly arrived in Canada, and struggling in that circumstance or not knowing the system – so a lot of the factors that are creating these needs and issues are big systemic factors"[79].

This reflects the dilemma of housing that goes beyond the ability of most cities. Other interviewees also shared the view that systemic issues are limiting the effectiveness of key programs. Abigail Friendly of Utrecht University explained that solutions are only possible if the root causes of these problems are tackled[80]. In Canada, different levels of government are responsible for the provision of housing through enforcing standards for construction, carrying out inspections, and responding to complaints[81]. These departments disproportionately serve low and middle-income groups and aim to prevent eviction, direct landlord-tenant disputes, and offer housing assistance[82]. Also, planning and zoning regulations influence the ways new housing investment happens in Toronto. Both the Official Plan and Provincial Policy Statement advise the protection of towers and social housing, which can facilitate or impede the development of units that meet evolving expectations of communities. These measures, combined with Federal and Municipal Government funding are used to control prices and keep buildings from

[79] Suttor, G. Senior Researcher. Personal Communication.
[80] Friendly, A. Associate Professor. Personal Communication
[81] Suttor. G., (2016). *Housing in Neighbourhood Strategies.* The Wellesley Institute.
[82] *Ibid.*

deteriorating[83]. Despite this, more strategies and plans are required to provide affordable and accessible housing, as well as allowances or subsidies. Asked about these housing dynamics and possible solutions, Rick Eagan of The West Neighbourhood House stated:

> "I think the more kind of powerful tools that are available are things like Inclusionary Zoning (IZ), the one that we're doing a lot of work with in Parkdale is trying to build a Community Benefits Policy, much like what was used in Mount Dennis and stuff like that, with housing being used as one of the anchors that we would use or attach to any kind of new development, that would be occurring in the area"[84]

Here, strategies and plans that speak to these issues have focused on using planning and zoning regulations to leverage affordable and accessible housing. Tools such as Inclusionary Zoning (IZ) are designed to improve the inequalities between communities and this refers to a program that requires developers to reserve a percentage (typically 10-30%) of housing for affordable and accessible units[85]. Beginning in the United States, IZ pushed cities to explore ways of promoting greater integration and development of housing. These measures targeted rental and social housing to create more units. Given this, IZ can be either voluntary or mandatory in practice and cities will offer incentives in the former case for developers to meet these standards. In *Implementing Inclusionary Policy to Facilitate Affordable Housing Development in Ontario (2007),* John Gladki & Steve Pomeroy describe the features of IZ. Together, they explain that, "Voluntary IZ establishes a schedule of incentives that developers may elect to negotiate in exchange for inclusion of some negotiable level of affordable units", while "Mandatory IZ requires all residential developments over a certain size to include a percentage of affordable

[83] *Ibid.*
[84] Eagan, R. Community Development Coordinator. Personal Communication.
[85] Clayton, F. and Schwartz, G. (2015). *Is Inclusionary Zoning a Needed Tool for Providing Affordable Housing in the Greater Golden Horseshoe?* Centre for Urban Research and Land Development. Ryerson University.

housing and include specific offsets or compensation for the developer"[86]. The most common tradeoff is higher densities in exchange for affordable and accessible housing.

Over time, the concept of IZ has evolved, and been implemented in many different ways to change the wellbeing of communities. This tool has been effective in cities such as Boston, New York, Denver, and San Francisco, but is not yet permitted in Toronto[87]. Given this, there are other tools to provide affordable and accessible housing, including exemptions or reductions in development charges, taxes that are used for housing, and Section 37 of the Planning Act. Section 37 exchanges benefits for communities and permissions to build at densities or heights greater than permitted on sites[88]. Asked about the usefulness of Section 37, several participants agreed that this tool was similar to IZ as both look to provide affordable and accessible housing. These participants referred to Section 37 as a 'catalyst for benefits in communities' which should be applied more often for housing rather than artscape, streetscape, heritage preservation, and cash in lieu. IZ and Section 37 could be used in tandem to improve the stock of affordable and accessible housing for all types of units.

Given the extent of the challenges, policies must be grounded in the supply and demand of housing, as well as the social and economic costs of development. Rick Eagan of The West Neighbourhood House presents the approach of Community Benefits Policy, which is being applied more frequently to improve the health of people, especially those with low and middle-income or other stresses[89]. This framework aims to capitalize on each development as a way to

[86] Gladki, J, and Pomeroy. S. *Implementing Inclusionary Policy to Facilitate Affordable Housing Development in Ontario.* Toronto: Ontario Non-Profit Housing Association, 2007.
[87] *Ibid.*
[88] *Ibid.*
[89] Eagan, R. Community Development Coordinator. Personal Communication.

invest in the interests of communities[90]. These opportunities include initiatives on housing, highway expansion, cultural attractions, hospitals, and other work. Each of these creates employment, amenities for communities, social enterprise, and environmental benefits[91]. Using a Community Benefits Policy is important to consider the 'best value' so that the expectations of all groups are supported at the same time.

7.3 – The Continuum of Housing and Food Security

Generally, housing and food policy are important organizing principles for the growth and development of communities. Each issue is significantly related in the literature to the overall health of people, and has become more complex with time. This includes changes in the conceptual understanding of these terms and approaches to them. Keeping that in mind, the rest of this report explores whether there are strategies that encompass both of these components. Currently, Canada is without a comprehensive framework at the intersections of housing and food policy, and the responses to these problems. Instead, there is a fragmented approach that acts as a barrier to the emergence of any solutions. This has caused significant challenges for people and communities.

More to this, housing and food policy are separated at all levels of government in Canada. This is due to the failures of tackling these issues and disconnections in terms of accountability and responsibility. In the 1970s and 1980s, Canada attempted to implement policies aimed at hunger and health, which were unsuccessful because of push back from the Ministry of Agriculture[92]. Soon after this, statements supporting the work of Health Canada were adopted by

[90] Murphy, C., Gloger. A., Cooke, T., Elliott, H., Arsenault, M., Abdi, M., McIsaac, E., Houston, S., Taylor, C., Cartwright, J., Powell, R., Jamieson, A., Stellinga, A., Goddard, L., Zanotti, D. (2017). *Boldly Progressive, Fiscally Balanced: A Community Benefits Policy Framework for Ontario.* Community Benefits Ontario
[91] *Ibid.*
[92] Rideout, K., Riches, G., Ostry, A., Buckingham, D., & MacRae, R. (2007). *Bringing Home the Right to Food in Canada: Challenges and Possibilities for Achieving Food Security*. Public Health Nutrition, 10, 566-573

Agriculture Canada. Here, policies were put into action for agriculture, fishing, food processing, distributing and safety, but these never came together through a complete approach[93]. Although there was an emergence of strategies and plans to provide direction on these areas, there was still a divide between rhetoric and action. Many scholars have noted that, "Canada lacks a comprehensive or, 'joined up', food and nutrition policy directed at the optimal nourishment of the population"[94].

Looking closely at these issues, there is an absence of consistent and proactive approaches for housing and food policy that are more than temporary interventions. As stated in *Section 6.1 – The Progress of Housing in Canada,* different levels of government make decisions about the housing system, and policies are always responsible for creating, maintaining or exacerbating specific circumstances. Here, there are limits in terms of what can be done as municipalities can only do what their provinces allow. As a result, there is a documented account of governments being unable to assist with key housing issues. This dualism has manifested into a significant dilemma for officials, decision-makers, and non-profit organizations, which are searching for new short and long-term solutions. Together, these groups are exploring ways to locate housing in support of food-related necessities. The impact of housing and food is important as governments continue to provide and update measures that deal with this situation and incorporate other determinants of health.

Community Food Security (CFS) is a relatively new approach to help identify the social, economic, and environmental issues related to hunger and health. CFS refers to "a strategy for ensuring access to adequate amounts of safe, nutritious, culturally appropriate food for everyone, produced in an environmentally sustainable way, and provided in a manner that promotes human

[93] *Ibid.*
[94] *Ibid.*

dignity"[95]. Here, CFS creates connections between communities, food assets and opportunities, as well as integrates people into activities. Put differently, CFS promotes cooperation amongst all contributors. This approach improves health by stimulating the affordability and accessibility of food in communities. Although personal food choices and food intake are important to health, CFS tackles the driving forces behind these issues such as security, safety, accessibility, and affordability[96]. There is a range of short-term and long-term measures designed to achieve this (Fig. 6)[97].

Framework of Initiatives for Community Food Security (CFS)

Focus	Individual	Community	Government
Strategy or Plan	• Food Banks • Food Stamps • Soup Kitchens	• Community Gardens • Community Kitchens • Farmer's Markets • Community Food Programs • School Food Programs • Food-Buying Cooperatives	• Food Action Coalitions • Food Policy Council • Municipal Food Policy

Fig. 6 (Above): Adapted from *Making the Connection Food Security and Public Health,* this table summarizes the strategies and plans used through a Community Food Security (CFS) approach[98]

7.3.1 – Food Banks

Food Banks emerged in the 1970s and 1980s as a response to assist people and communities that were having trouble securing food following a severe recession. During this

[95] Moffatt, H. (2008). *Preliminary Rationale and Strategies for the Subsidized Housing Sector.* Vancouver Coastal Health. 1, 2-40
[96] *Ibid.*
[97] *Ibid.*
[98] *Ibid.*

time, the first Food Bank was launched in Edmonton, Alberta as a temporary measure that would be stopped after any issues of hunger and health were resolved. However, these problems persisted and Food Banks became an institutionalized response that collected food for distribution to those that were without it. In this way, a Food Bank is defined as "a centralized warehouse or clearing house registered as a non-profit organization for the purpose of collecting, storing, and distributing surplus food (donated / shared), free of charge, to front line agencies which provide supplementary food and meals to the hungry"[99]. In 1989, 378,000 people used Food Banks each month, and this went up to 720,231 people in 2007[100]. Here, Food Banks are an essential service to communities and can contribute to creating sustainable environments by preventing the waste of foods.

Given that Food Banks are now entrenched in Canada, there has been significant criticism of their effectiveness. Some scholars have described Food Banks as inefficient, disassociated with the issues of communities, and inconsistent in terms of the quality and quantity of donations[101]. This stems from the belief that Food Banks are temporary programs that do not directly tackle the problem of hunger. Asked about this and other ways of improving the food system in Toronto, Abigail Friendly of Utrecht University stated that there are different measures to change this narrative[102]. She referenced The Stop Community Food Centre and The Good Food Box, both of which are Food Banks attempting to transform inequitable food systems. These organizations are implementing programs for nutritional education, community gardens, and community kitchens to raise awareness and bring people together. Hoping to expand on this,

[99] De Roux-Smith, I. (2014). *Food Banks, Food Drives, and Food Insecurity: The Social Construction of Hunger.* McMaster University. 1-134
[100] *Ibid.*
[101] De Roux-Smith, I. (2014). *Food Banks, Food Drives, and Food Insecurity: The Social Construction of Hunger.* McMaster University. 1-134
[102] Friendly, A. Associate Professor. Personal Communication

the Ontario Association of Food Banks (OAFB) has started making connections between housing and food policy. Notably, the OAFB supports the Portable Housing Benefit, which provides financial assistance to people for their housing expenses[103]. Unlike other programs such as Rent-Geared-to-Income (RGI), this approach bridges the affordability and accessibility gap by allowing people to ensure that their rent does not go over 30% of income[104]. The aim is to improve affordable and accessible housing while providing good food and nutrition to all. Not only are Food Banks working towards stabilizing communities but there is also a new focus on the intersections between housing and food policy.

7.3.2 – Community Gardens and Community Kitchens

Community Capacity Building (CCB) refers to an approach for transforming communities by promoting the ability of people to develop, implement, and sustain their own solutions to problems[105]. CCB can be seen as a way of encouraging the growth and development of communities. This approach tackles various issues including, insufficient income, unemployment, inadequate provision of services, and overall health. In order for CCB to be useful, there must be, 1) a sense of community, 2) a commitment to community, 3) the capacity to solve problems, and 4) access to resources[106]. CCB pairs the issues of housing and food together with programs that promote skills, self-esteem, self-confidence, and involvement in change. Doing so, CCB requires resources, time, and commitment, which are not always met by communities. Despite this, CCB has been an effective approach for enabling those vulnerable

[103] De Roux-Smith, I. (2014). *Food Banks, Food Drives, and Food Insecurity: The Social Construction of Hunger.* McMaster University. 1-134
[104] *Ibid.*
[105] Moffatt, H. (2008). *Preliminary Rationale and Strategies for the Subsidized Housing Sector.* Vancouver Coastal Health. 1, 2-40
[106] *Ibid.*

groups to take control of their own lives and health[107]. Both community gardens and community kitchens are examples of CCB that helps to construct a more secure and sustainable food system.

Referenced in the 1987 Brundtland Commission Report, community gardens are programs designed to stress the importance of food production and distribution to change the outlook of health in communities[108]. In Canada, community gardens are built on abandoned or underutilized lands in both rural and urban areas. Here, collective spaces are planned with the input of communities and appeal to those that may not have access to food outlets. Also, community gardens foster dialogue between different groups and use food as a common interest to create relationships in communities. Users of community gardens have reported changes such as better diet and nutrition, budget savings, and improved overall health[109]. Building on this, community kitchens were implemented to address food insecurity and empower communities. Here, community kitchens are programs in which people prepare meals together, and take food home to others[110]. As participants of community kitchens do so, more food is produced than if people were working alone. This inspires people to learn valuable information about diet and nutrition, recipes, cooking, and shopping. In this way, community gardens and community kitchens provide opportunities for leadership, social interaction, and sustainable environments. Ultimately, research has found that there are benefits facilitated through these initiatives[111].

7.3.3 – Farmers' Markets

Farmers' Markets (FM) are amongst the methods being used by communities to reorganize the production, processing, and consumption of food. The approach of CFS suggests FM as a

[107] *Ibid.*
[108] Friendly, A. (2008). *Towards Food Security Policy for Canada's Social Housing Sector*. Canadian Policy Research Networks (CPRN), 2-52.
[109] *Ibid.*
[110] Moffatt, H. (2008). *Preliminary Rationale and Strategies for the Subsidized Housing Sector.* Vancouver Coastal Health. 1, 2-40
[111] *Ibid.*

way to manage the tension of satisfying small to medium-scale farmers and vulnerable consumers. Speaking to this relationship, Sarah Bakker of the National Farmer's Union of Ontario (NFU-O) explained that the goal must be to ensure that both farmers and locals are not being forced to cut corners[112]. She stated, "I want to make people able to afford food, not (make) food affordable"[113]. Here, there is an emphasis on guaranteeing fair compensation for farmers while also giving consumers the opportunities to access and afford these foods. In *Farmers Markets, Local Systems and the Social Economy (2010),* Chris Hergesheimer and Emily H. Kennedy described this "win-win" situation as challenging and explore the outcomes of FM. In doing so, there are four different kinds of FM, which include: traditional, public, festival, and farmer[114]. Each of these occupies diverse spaces, but work towards common interests. Collectively, all FM "cause people to congregate and associate"[115]. Given this, FM have allowed farmers and locals the ability to become more involved in the food system. This helps to build communities that have provide fresh and nutritious food in spaces that cater to the housing requirements of people. As with the initiatives of food banks, community gardens, and community kitchens, some farmers' markets have given attention to the dilemma of housing and food in Canada.

7.4 – Encouraging Sustainable Design in Housing and Food

Although there has been discussion about a comprehensive framework for housing and food in this report and literature, nothing tangible has emerged thus far in Canada. In 2001, the

[112] Bakker, S. General Manager. Personal Communication.
[113] *Ibid.*
[114] Hergesheimer, C., Kennedy, E.H. (2010). *Farmers Markets, Local Food Systems and the Social Economy: A Thematic Literature Review*. BC- Alberta Social Economy Research Alliance (BALTA).
[115] *Ibid.*

Food and Hunger Action Committee encouraged the connection between these issues[116]. Specifically, this outlined that adequate housing and food are good for communities as this produces benefits for environment, economy, and health. Despite the lack of robust policy for housing and food, approaches such as Community Food Security (CFS) and Community Capacity Building (CCB) have attempted to bridge any gaps. Together, these have provided opportunities for change through initiatives including, food banks, community gardens, community kitchens, farmers' markets, and more. This report has reviewed these programs and evaluated the potential for combining policy on housing and food. *Section 7.4 – Encouraging Sustainable Design in Housing and Food* looks at government responses to housing and food in the context of sustainable environments.

7.4.1 – Implementation Challenges and Opportunities

In Canada, more attention is being given to the impacts that inadequate housing and food have on shaping sustainable environments. Any changes in energy efficiency, greenhouse gas emissions, and climate change measures are important because of the ability to improve the overall health of people and communities[117].

The Federal Government launched policies and programs aimed at not only making housing affordable and accessible, but also more energy efficient. This was done in 1990 using the Green Plan, which combined the concerns of energy, climate change, economic growth, and expectations for sustainable environments[118]. Under the Green Plan in Ontario, there was the emergence of the Building Code and Energy Efficiency Act. Here, the Building Code specifies energy and water requirements for all residential and commercial buildings, while the Energy

[116] Friendly, A. (2008). *Towards Food Security Policy for Canada's Social Housing Sector*. Canadian Policy Research Networks (CPRN), 2-52.
[117] Tsenkova, S. & Youssef, K. (2011). *Green and Affordable Housing in Canada: Investment Strategies of Social Housing Organization.* University of Calgary: Faculty of Environmental Design. 1-18
[118] *Ibid.*

Efficiency Act uses the EnerGuide rating system to set performance targets for buildings in the housing market[119]. EnerGuide looks at criteria such as the energy efficiency of appliances, building envelope, and different land-use types to create complete communities[120]. Given this, developers are asked to choose between meeting the standards set out by either the Building Code or Energy Efficiency Act. Ultimately, the implementation of these measures resulted in only 8% of homes having improved energy efficiency, meaning that many buildings were operating at 50% or below the expected potential[121].

To further support these initiatives, the Municipal Government took on an important role in promoting energy efficiency and climate change through the Federation of Canadian Municipalities (FCM). Speaking to this, Lauralyn Johnston of the Tower Renewal and Neighbourhood Revitalization Project discussed several examples of these programs. She described the significance of initiatives, including: Home Energy Loan Program (HELP), High-Rise Retrofit Improvement Support (Hi-RIS), and Sustainable Towers Engaging People (STEP), all of which attempt to change the future of communities. Both HELP and Hi-RIS are programs that allow governments to fund the cost of building improvements. This grants property owners with access to financing, rebates, and incentives to successfully complete retrofits (Fig. 7)[122]. These initiatives have been found to prolong building longevity and support goals beyond energy efficiency and climate change.

[119] *Ibid.*
[120] *Ibid.*
[121] *Ibid.*
[122] City of Toronto. (2017). *Home Energy Loan Program and High-Rise Retrofit Improvement Support (Hi-RIS) Program Evaluation.* Parks and Environment Committee. Staff Report.

Overview of Home Energy Loan Program (HELP) and High-Rise Retrofit Improvement Support (Hi-RIS)

	Home Energy Loan Program (HELP)	**High-Rise Retrofit Improvement Support (Hi-RIS)**
Target Market & Participation	Single-Family Houses, Approximately 1000 Homes	Multi-Residential Buildings, Approximately 1000 Units
Eligibility	Single-Family Dwellings with Fewer than 7 Units	Buildings of 5 Storeys or more
Funding	$10 million	$10 million
Cost of Funding	Costs of Borrowing over Term + Administrative Charge of 2.0%	Cost of Borrowing over Term + Administrative Charge of 0.8%
Maximum Funding Provided	Up to 5.0% of Assessed Value	
Financing Offer	Includes low-interest, fixed-rate loans with 5, 10, 15, and 20 year payment terms	
Improvements Supported	Includes building envelope improvements, mechanical systems, lighting, water conversation	

Fig. 7 (Above): Adapted from the *Home Energy Loan Program and High-Rise Retrofit Improvement Support (Hi-RIS) Program Evaluation,* this chart compares the details of two programs[123].

Much like these programs, STEP encourages property owners to strengthen the health of communities by improving the performance targets for buildings. This happens through action in six key areas: i) Energy, ii) Water, iii) Waste, iv) Safety, v) Operations, and vi) Community[124]. Together, these initiatives completed the successful retrofit of a quarter of the 1,200 buildings in the scope of Toronto. As Lauralyn Johnston of the Tower Renewal and Neighbourhood Revitalization Project explains, the cost of this process comes at a fraction of designing and

[123] *Ibid.*
[124] *Ibid.*

constructing new buildings[125]. She believes that these initiatives are doing enough to improve energy efficiency and support the goals for affordable and accessible housing[126].

Along with these programs which create sustainable environments for housing, strategies and plans have also been devised to change the outlook for food. Cities like Toronto do not have the resources to fully revamp the food system. However, the opportunities to work with people, organizations, and different levels of government have proven to be effective in making healthy and nutritious foods readily available[127]. This process requires connecting issues of food to other necessities and embracing measures focused on fairness and resilience. Given this, food systems that are sustainable must prioritize the environment[128]. This refers to responsibilities such as ensuring that soil, air, and water can continue to provide for communities into the future[129]. Also, food systems that are sustainable must be thought of in terms of the economic and social impact on people. As stated in *Section 7.3 – The Continuum of Housing and Food Security,* initiatives such as food banks, community gardens, community kitchens, and farmers' markets are early stage initiatives which are important to food systems, but do not in and of themselves create sustainable environments[130].

Keeping that in mind, many programs support the expansion of a food system that not only ensures food is accessible to everyone but fosters communities where people feel like they can rely on each other. In 2009, Toronto City Council and the Tower Renewal and Neighbourhood Revitalization Project started Recipe for Community. The goal of this program was to use the universal language of food to bring people together, build on skills and knowledge, and beautify

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[125] Johnston, L. Senior Planner & Project Manager. Personal Communication.
[126] *Ibid.*
[127] McKeown, D. (2010). *Cultivating Food Connections: Towards a Healthy and Sustainable Food System for Toronto.* Toronto Public Health. ON: Toronto Public Health.
[128] *Ibid.*
[129] *Ibid.*
[130] MacRae, R. Associate Professor. Personal Communication

spaces[131]. Almost a decade later, this initiative has boosted the health of communities in Toronto, including Alexandra Park, St. James Town, Weston Mount Dennis, Scarborough Village, and Rexdale[132]. To do so, Recipe for Community leverages donations and grants which are reinvested into the housing stock. Going into detail about this, Lauralyn Johnston of the Tower Renewal and Neighbourhood Revitalization Project stated:

> "There's Recipe for Community which is basically based around food, and so it responds to residents' needs around food and brings the community together around food based things, so recipe sharing, barbeques, community outreach events around food, community gardens, market gardens, there is a whole bunch of different things – food handling safety courses, because that's a great way to get people, especially youth employed – we often bring in waste and water, and other people to come in from different divisions including the Toronto Region and Conservation Authority (TRCA) to talk about food waste and organics to be able to remove those things out of landfills, which then goes into how buildings themselves operate and lower the cost of those buildings"[133].

She describes that Recipe for Community has been an important program for recognizing the linkages between the goals of improving housing and food in ways that are sustainable[134]. Each of the strategies and plans discussed in this section support the vision for cleaner and greener communities. Other agencies, boards, and organizations that have not been explored in this report, but are significant to this research include:

- FoodShare – Established in 1985, FoodShare is a non-profit organization that works with people and communities to deliver healthy food and education about diet and

[131] City of Toronto. (2018). *Tower Community Initiatives – Recipe for Community.* Web. Retrieved from: www.toronto.ca/community-people/get-involved/community/tower-renewal/recipe-for-community
[132] *Ibid.*
[133] Johnston, L. Senior Planner & Project Manager. Personal Communication.
[134] *Ibid.*

nutrition[135]. FoodShare has collaborated with agencies such as Toronto Community Housing (TCH) and the Toronto District School Board (TDSB) on implementing community gardens, community kitchens, and farmers' markets to develop sustainable and adequate solutions that work for all[136]. FoodShare has created programs like the Good Food Box and others, which have contributed to the proliferation of initiatives for food.

- Toronto Food Policy Council (TFPC) – TFPC is a collection of people from different aspects of the food system that work together to ensure access to healthy, sustainable, and culturally acceptable food[137]. Launched in 1991, the TFPC has been involved in initiatives such as the Toronto Food Strategy, Urban Agriculture, and Toronto Youth Food Policy Council (TYFPC). Given the support of almost 30 members, the TFPC has brought in experts on several occasions to develop a synergy between housing and food in a sustainable environment[138].

7.4.2 – The Future of Sustainable Design and LEED Certification

Earlier in this report, the Leadership in Energy and Environmental Design (LEED) rating system was reviewed and compared to the Toronto Green Standard (TGS). LEED is accepted in Canada and the United States and is used for the design, construction, and operation of buildings[139]. As such, this provides standards for what constitutes a sustainable building. LEED acts as a resource for developers to determine ways for improving efficiency and overall performance in buildings. Doing so, LEED takes an exhaustive approach to sustainable design

[135] FoodShare. (2018). *About Us – Food Share*. Web. Retrieved from: www.foodshare.net/about/
[136] *Ibid.*
[137] City of Toronto. (2018). *Toronto Food Policy Council 2017-2018 Annual Report.* Board of Health. Staff Report.
[138] Medical Officer of Health. (2011). *Toronto Food Policy Council 2011 – Membership Update. Board of Health.*
[139] Bocking, S., Hill, S., Howes, M., Ash, E. (2007). *Green Building and LEED Certification: The Case for Trent University.* Environmental Advisory Board. Trent University

by tackling aspects such as site development, water, energy, waste, pollution, and innovation[140]. As each of the requirements of LEED are met, the building earns points for the basis of Silver, Gold, or Platinum status certification[141]. In this report, LEED was presumed to have the potential to bring together housing and food policy with a focus on sustainable environments. Since there is no comprehensive framework for these issues, this report speculated that LEED could be applied as a solution moving forward. After looking at literature and speaking with experts, applying this rating system to housing and food policy is not feasible.

Dan Leeming of The Planning Partnership talked about the advantages and disadvantages of LEED[142]. He explained that LEED is useful, but strictly for the design of commercial buildings[143]. As of 2006, there were 61 developments, ranging from a fire station to new luxury towers, registered for the LEED rating system. This included post-secondary buildings, such as the University of Toronto Scarborough Campus Student Centre, Humber College Urban Ecology Centre, UOIT / Durham College Athletic Facility, and York University Pond Road Student Centre[144]. Here, LEED demonstrates the ability to ensure buildings are healthier for people and the environment. Despite this, applying LEED to existing and new buildings is not easy. Put differently, not only do developers prefer to complete upgrades using other strategies and plans, but many of these initiatives are cost-effective and cover more features than LEED. Asked about this, Lauralyn Johnston of the Tower Renewal and Neighbourhood Revitalization Project shared similar perspective[145]. She stated that there are few opportunities to integrate LEED into housing and food policy. Currently, there are only several towers which use this rating system and are

[140] *Ibid.*
[141] *Ibid.*
[142] *Ibid.*
[143] *Ibid.*
[144] *Ibid.*
[145] Johnston, L. Senior Planner & Project Manager. Personal Communication.

managed by Toronto Community Housing (TCH)[146]. This illustrates that other initiatives are being used to satisfy the design of sustainable environments. What's more, a study by the City of Toronto found that there are no requirements or features that are exclusive to LEED and not part of the TGS[147]. However, in the TGS, there are measures which look at broader issues, like transportation, food, ecology, and waste. Given that, the case for using the LEED rating system to bring together housing and food policy in a sustainable way is ineffective as there are already other strategies and plans which fulfill these goals.

7.4.3 – Case Studies

Section 7.4.3 – Case Studies, presents two local initiatives that have emerged as successful examples of tackling the housing and food requirements of communities through sustainable design. Using the analytical frameworks set out above, practices for affordability, accessibility, and sustainability are examined, and the section concludes by offering key lessons to gain from these experiences.

The Green Phoenix Project in Parkdale, Toronto

In Toronto, Parkdale is a neighbourhood bounded by Dufferin Street to the East; Wright Avenue to the North, Roncesvalles Avenue to the West; and the Gardiner Expressway to the South[148]. Commonly seen as a dividing line between North and South Parkdale is Queen Street West. In 2006, the population of Parkdale was 36,655 which was mostly unchanged in 2011 at 36,628[149]. Although this aspect of Parkdale has remained the same, the neighbourhood is among

[146] Toronto Community Housing. (2018). *Building for Sustainability.* Revitalization – LEED Certification. Web. Retrieved from: https://www.torontohousing.ca/capital-initiatives/revitalization/building-for-sustainability
[147] City of Toronto. (2014*). Summary Comparison - Version 2.0 Toronto Green Standard for New Mid-High Rise Residential, Commercial, Industrial & Institutional (4 Storeys and Higher) and LEED Canada for New Construction & Major Renovations Rating System. Staff Report. 1-13*
[148] Richer, C., Htoo, S., Kamizaki, K., Mallin, M., Goodmurphy, B., Akande. A., Molale, A. (2010). *Beyond Bread and Butter: Toward Food Security in a Changing Parkdale. 1-52.*
[149] *Ibid.*

the few in Toronto that is undergoing significant transformation. Given that Parkdale is broken into North and South, there is a clear demarcation in the demographics of these communities. North Parkdale is comprised of affluent people, which has put pressure on the value of residential and commercial spaces[150]. This process of gentrification has led to concerns regarding housing affordability and accessibility, food production, processing, and consumption, and

Sustainable Design Features of The Green Phoenix Project, Parkdale

Fig. 8 (Above): Adapted from *Planning by Design: A Healthy Communities Handbook,* examples of the sustainable design features of The Green Phoenix Project in Parkdale (from left to right) exterior insulation and finish system, and solar wall[151].

[150] *Ibid.*
[151] *Ibid.*

overall patterns of growth in the neighbourhood. South Parkdale has a large population of marginalized people, such as low and middle-income households, recent immigrants or refugees, the homeless, and those living with mental illness or addiction[152]. These groups are attracted to South Parkdale because of the opportunities for rental housing, supportive housing, and rooming houses. In 2006, 91% of people in South Parkdale were renters, 51.7% of which encountered challenges with the affordability and accessibility of basic necessities[153]. This demonstrates that Parkdale is split and on two different trajectories. Here, neighbourhood change has impacted the health of people and outcomes of housing, food, and health.

In response to the pressures in Parkdale, several agencies and organizations have emphasized the importance of initiatives that make a strong connection between housing, food, and health. In 1976, the Parkdale United Church Foundation (PUCF) built a 137-dwelling apartment called the Phoenix Place in Parkdale[154]. This building offered units at below market value for those unable to find adequate housing in Toronto. In 2002, the PUCF decided to create more units that varied in type or size, which were also sustainable for the environment[155]. These changes were completed in 2007 and the PUCF then looked into the renovation of a nearby property, Shalom House. Doing so, the PUCF carried out the retrofit of this building and Phoenix Place with a geothermal heating and cooling plant. These improvements prepared the buildings for what is now The Green Phoenix Project. This initiative aims to provide 21 new units at below market value and an upgrade of the building features including: solar wall, exterior insulation and finish system, high performance windows, energy-efficient light bulbs, new air supply and

[152] *Ibid.*
[153] *Ibid.*
[154] Government of Ontario. (2009). *Planning by Design: A Healthy Communities Handbook.* Ministry of Municipal Affairs and Housing. Ontario Professional Planners Institute (OPPI). 1-50.
[155] *Ibid.*

exhaust (Fig. 8)[156]. Also, to integrate food into these measures, the initiative expects to establish a community kitchen, community garden, food bank, and other community programs in the buildings[157]. Currently, these improvements are underway in compliance with various planning and design criteria.

As Parkdale becomes a desirable neighbourhood in Toronto, the features which are essential to people in this area are being lost. The Green Phoenix Project helps to keep this balance and ensure that the neighbourhood considers the priorities of a wider range of residents. Ultimately, this initiative is a showcase of usefulness of sustainable design in making a case for improved housing and food opportunities.

The Rebirth of Regent Park, Toronto

Regent Park was planned and designed in the 1940s and 1950s as the largest public housing development in Canada. The neighbourhood which replaced a previous community is bordered by Gerrard Street to the North; Queen Street to the South; the Don River in the East; and Parliament Street in the West[158]. In 1948, the Toronto Housing Authority (THA) approved the decision to demolish a portion of Cabbagetown to make way for Regent Park. The proposal for Regent Park was to take the available 69-acres and replicate the principles of both the Garden City and Radiant City which were devised by Ebenezer Howard and Le Corbusier[159]. This meant that communities would be self-contained and surrounded by parks rather than paths or streets. This approach would separate housing, work, and other uses. On this basis, 1,289 units of affordable and accessible housing were built through low-rise, three to six-storey townhouses

[156] *Ibid.*
[157] Infrastructure Ontario. (2018). *Client Profile: Parkdale United Church Foundation. Web. Retrieved from: www.infrastructureontario.ca/Parkdale-United-Church-Foundation/*
[158] Daniels Spectrum. (2017). *Case Study: Daniels Spectrum – Regent Park.* Ontario Trillium Foundation. Artscape. 1-13
[159] *Ibid.*

and apartments. Another 253 townhouses and 479 high-rise units were constructed to provide for the growing population in Regent Park[160]. Initially, Regent Park was praised for using effective principles to accommodate the shelter requirements of people. However, the neighbourhood quickly fell into disrepair due to the isolation and neglect of buildings, issues of violence, mental health, homelessness, lack of income, and more[161]. Further to this, the responsibility for housing was passed through different municipalities, thereby inhibiting the ability to improve any of these circumstances.

In 2004 Toronto City Council endorsed a revitalization initiative that called for mixed-income development, including a variety of townhouses, mid-rise or high-rise apartments, and housing sold at, or below market value. Doing so, there was a desire to reintegrate the streets and create spaces for recreational, cultural, retail, and employment uses. Daniels Corporation, which has since completed several phases of the revitalization in Regent Park, stated that this process would take place over a 12-year period with a total investment of $1 billion[162]. This would ensure that all 2,083 units of affordable and accessible housing are replaced and an extra 700 units built to supplement this[163]. Thus far, these efforts have resulted in the development of FreshCo. by Sobeys, Toronto Birth Centre, Community Food Centre, Aquatic Centre, Arts and Culture Centre, Regent Park Community Centre, and more services in Regent Park[164]. To specifically tackle issues of housing and food, Daniels Corporation focused on design by providing affordable and accessible housing while creating opportunities in these spaces for community gardens, community kitchens, rooftop gardens, raised planters, markets (Fig. 9)[165].

[160] *Ibid.*
[161] *Ibid.*
[162] *Ibid.*
[163] *Ibid.*
[164] *Ibid.*
[165] *Ibid.*

Sustainable Design Features in Regent Park, Toronto

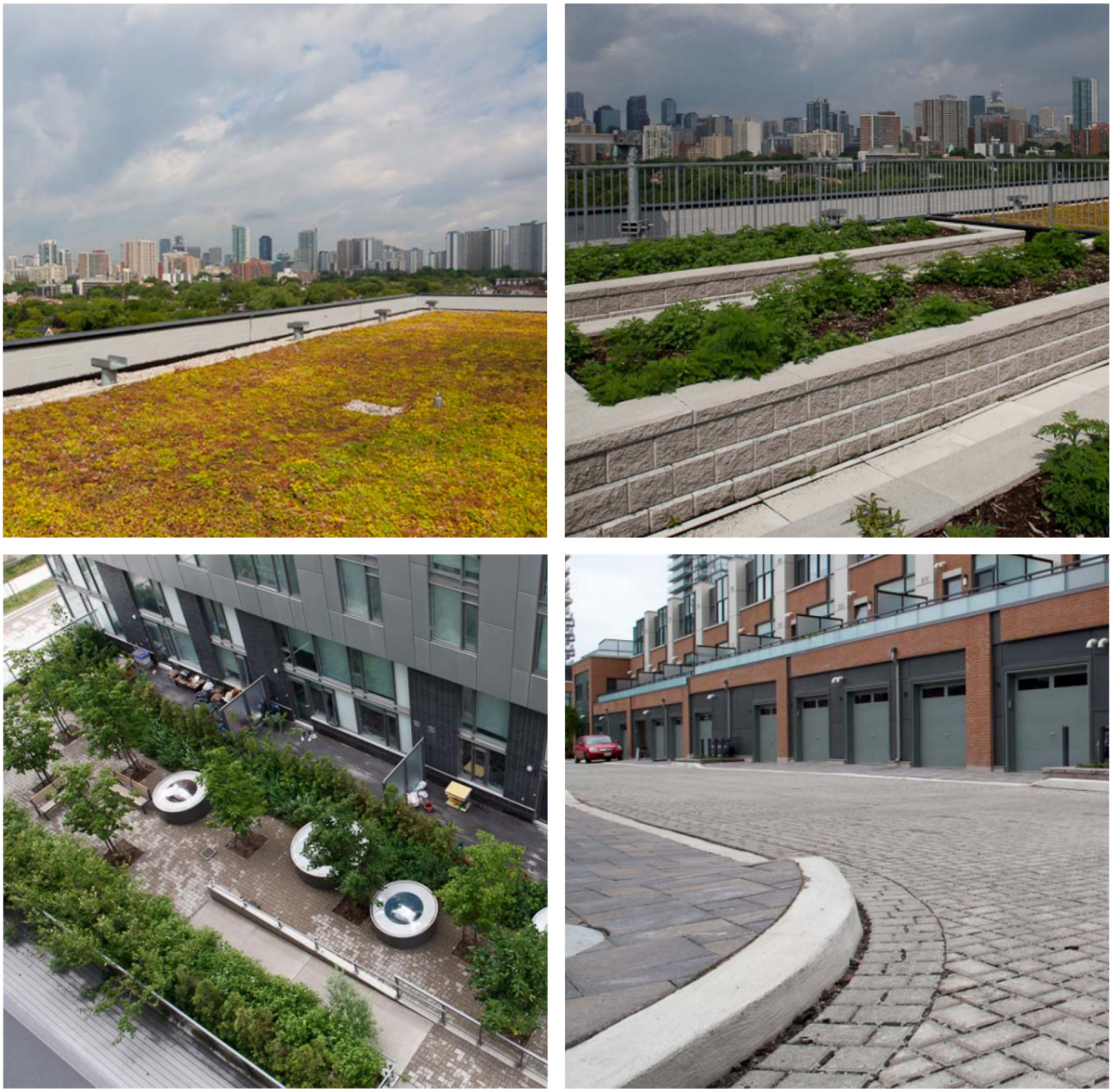

Fig. 9 (Above): Adapted from *Regent Park Revitalization – Project*, examples of the sustainable design features used in buildings (from top left to bottom right), green roof, raised planters, rooftop gardens, and permeable surfaces[166].

Working with Toronto Community Housing (TCH), and several other public and private sector organizations, there was also the implementation of sustainable features in each of the buildings,

[166] *Ibid.*

which included water efficient plumbing fixtures, permeable surfaces, new filtration and management systems. Here, the goal for Regent Park was to ensure integration of housing and food in buildings in ways that would minimize costs and produce savings over their lifetime.

Studies have shown that the redevelopment of Regent Park has changed the circumstances of people, but does not directly tackle the profound systemic issues within communities. In the planning framework, which was established for Regent Park, the goal was to incorporate social mixing[167]. This would be accomplished either through the infusion of market housing or upgrading the existing housing. Using social mixing improves the socio-economic outcomes of people. This process places high-income households close to low-income households in an attempt to normalize the circumstances of these communities[168]. There is an assumption that social mixing could facilitate social inclusion, promote awareness, raise levels of social capital, and mitigate other problems[169]. This redevelopment in Regent Park is viewed as being successful by many, as it represents an example of planning and design that transforms a neighbourhood into a successful, mixed-use space with diverse options for a wide range of people. Others have argued that Regent Park is a form of gentrification that will soon be occupied solely by high-income households as low-income households are displaced due to changing land values[170]. If this is the case, the redevelopment will be another failure of planning, policy, and neoliberalism because it is not thought of as a long-term solution to systemic problems. This demonstrates that there is no one-size-fits-all approach to issues such as spatial segregation and poverty. Despite that, there are significant strategies from the redevelopment of Regent Park that can be applied to other communities, including the provision of adequate social services, diverse mix of housing,

[167] Robinson, T. (2017). *Public Project, Private Developer: Understanding the Impact of Local Policy Frameworks on the Public-Private Housing Redevelopment of Regent Park in Toronto, Ontario.* Queen's University. 1-262
[168] *Ibid.*
[169] *Ibid.*
[170] *Ibid.*

and the encouragement of sustainable features in buildings.

8.0 – Recommendations & Conclusions

The findings from this report help to inform the importance of devising a comprehensive framework that encompasses policy on housing and food to promote the health of people and communities. Here, having the integration of adequate foods into housing promotes health, and supports the potential for people to afford and access basic necessities. As discussed, there are short and long-term programs that attempt to accomplish this by offering subsidies for housing, funding for renovations, food free of charge, information on diet and nutritious choices, as well as other strategies. Though important, these are early stage initiatives, and changing the future design of housing and food requires greater shifts in policy. Given this, recommendations can be made to improve upon this. Therefore, the following recommendations are informed by interviews with experts, a literature review, document analysis and case studies to support the the integration of policy on housing and food in a sustainable way. Below, the table summarizes these recommendations at each level of implementation:

Policy & Program Recommendations

Stage of Implementation	Recommendations
Local Community	• *Continue to Make Use of Resources that Already Exist:* Local organizations, agencies, boards, and committees must continue to make use of the resources which already exist to tackle the issues of housing and food. This includes food banks, community gardens, community kitchens, farmers' markets and other programs to act as an early stage initiative for people and communities.
Municipal	• *Providers of Housing to put into Practice the Commitment to Food:* This means that planners, officials, and housing providers

	within municipalities must ensure that food becomes an integral component of the ways communities are planned, organized, and designed. • *Integrate Food into Non-Food Programs:* In many communities, food brings people together and the same can be said about different organizations, agencies, and boards. Here, there is opportunity to integrate food into strategies or plans such as Home Energy Loan Program (HELP), High-Rise Retrofit Improvement Support (Hi-RIS), and Sustainable Towers Engaging People (STEP), and Recipe for Community. Given that these programs emerged from the Tower Renewal and Neighbourhood Revitalization Project, there are possibilities to foster spaces for food, learning, and health. This has been the case with STEP and Recipe for Community, both of which set out specific goals for energy and water efficiency, food, neighbourhood engagement, employment, and more in their mandate.
Provincial & Federal	• *Give Inclusionary Zoning (IZ) some Teeth:* Across the Canada, there were concerns that implementing IZ would present legal challenges. On April, 12th, 2018, IZ came into effect in Ontario, but this framework failed to provide flexibility to municipalities in delivering the housing outcomes necessary for a full range of affordable and accessible choices. As a result, municipalities require the support of the Provincial and Federal Government to develop improved requirements, oversight, and enforcement for IZ. • *Offer Improved Information on Food, Food Safety and Handling, Malnutrition, and Diet:* With the release of a National Food Strategy in Fall 2018, there must also be programs that will expand food literacy programming. • *Provincial and Federal Governments have a Responsibility to their People:* Responsibilities for housing and food were placed on

	municipalities directly and indirectly years ago. This has had significant impacts on the health of people and communities and policy has not done enough to change this. Currently, in the National Housing Strategy, there is no discussion of food or potential for collaboration between housing and food providers. Going forward, there must be commitment from the Provincial and Federal Governments to the health of people in Canada, which means funding, strategies, and plans aimed at tackling housing affordability and accessibility, and adequate food. In the National Housing Strategy, and National Food Strategy, which is to come in Fall 2018, there must be recognition and policy by the Provincial and Federal Government for housing and food. This will alleviate the pressure that is placed on municipalities.

Like with any research, the findings can be limited by temporal, methodological, and structural constraints. Given that, the suggestions discussed are relevant to communities in Toronto, and must be evaluated as a way to improve policy on housing and food. Using the Normative Theory in this paper, findings demonstrated that these suggestions point to desirable principles and best practices for the future success of communities. As a result, other avenues of research should also be explored to expand on this paper, such as review effective practices used in cities across the world to determine possible outcomes in Toronto. This means focusing on factors that are important to the redevelopment of communities. Specifically, there should be research on the relationship between urban planning practices, real estate markets, political actors, world economy, and more. Normative Theory has helped delineate the subpar frameworks used in Canada. Therefore, the data, findings, and recommendations in this paper contribute to new approaches for housing agencies, food organizations, developers, and finally,

people.

9.0 – References

Bakker, S. General Manager. Personal Communication.

Bocking, S., Hill, S., Howes, M., Ash, E. (2007). *Green Building and LEED Certification: The Case for Trent University.* Environmental Advisory Board. Trent University

City of Toronto. (2006). *Making a Sustainable City Happen: The Toronto Green Development Standard.*

City of Toronto. (2017). *Home Energy Loan Program and High-Rise Retrofit Improvement Support (Hi-RIS) Program Evaluation.* Parks and Environment Committee. Staff Report.

City of Toronto. (2018). *Tower Community Initiatives – Recipe for Community.* Web. Retrieved from: www.toronto.ca/community-people/get-involved/community/tower-renewal/recipe-for-community

City of Toronto. (2018). *Toronto Food Policy Council 2017-2018 Annual Report.* Board of Health. Staff Report.

Clayton, F. and Schwartz, G. (2015). *Is Inclusionary Zoning a Needed Tool for Providing Affordable Housing in the Greater Golden Horseshoe?* Centre for Urban Research and Land Development. Ryerson University.

Cooper, H. M. (1989) Integrating Research: A Guide for Literature Reviews, 2nd Ed, Sage Publications, Newbury Park, Calif.

Coveney, J., & O'Dwyer, L. A. (2009). *Effects of Mobility and Location on Food Access*. Health & Place, 15(1), 45–55

Daniels Spectrum. (2017). *Case Study: Daniels Spectrum – Regent Park.* Ontario Trillium Foundation. Artscape. 1-13

De Roux-Smith, I. (2014). *Food Banks, Food Drives, and Food Insecurity: The Social Construction of Hunger.* McMaster University. 1-134

Desmond, M. (2017). *Evicted: Poverty and Profit in the American City*. UK: Penguin Books.

Dunn, J. (2002). *The Population Health Approach to Housing: A Framework for Research*. Ottawa, Ont: Canada Mortgage and Housing Corp.

Eagan, R. Community Development Coordinator. Personal Communication.

FoodShare. (2018). *About Us – Food Share*. Web. Retrieved from: www.foodshare.net/about/

Friendly, A. (2008). *Towards Food Security Policy for Canada's Social Housing Sector*. Canadian Policy Research Networks (CPRN), 2-52.

Friendly, A. Associate Professor. Personal Communication

Gaetz, S.; Barr, C.; Friesen, A.; Harris, B.; Hill, C.; Kovacs-Burns, K.; Pauly, B.; Pearce, B.; Turner, A.; Marsolais, A. (2012) Canadian Definition of Homelessness. Toronto: Canadian Observatory on Homelessness Press

Giles, P. (2004) *Low Income Measurement in Canada*, Income Research Paper Series, Statistics Canada, pp. 10-11.

Gladki, J, and Pomeroy. S. *Implementing Inclusionary Policy to Facilitate Affordable Housing Development in Ontario.* Toronto: Ontario Non-Profit Housing Association, 2007.

Government of Ontario. (2009). *Planning by Design: A Healthy Communities Handbook.* Ministry of Municipal Affairs and Housing. Ontario Professional Planners Institute (OPPI). 1-50.

Hergesheimer, C., Kennedy, E.H. (2010). *Farmers Markets, Local Food Systems and the Social Economy: A Thematic Literature Review*. BC- Alberta Social Economy Research Alliance (BALTA).

Howard, A. & Edge, J. (2013) *Enough for All: Household Food Security in Canada*. Conference Board of Canada

Hulchanski JD. *What Factors Shape Canada's Housing Policy? The Intergovernmental Role in Canada's Housing System*. In: Young R, Leuprecht C, Eds. Canada: The State of the Federation 2004 Municipal-Federal-Provincial Relations in Canada. Montreal: McGill-Queens University Press 2006; pp. 221-47.

Hulchanski, J. D. (2011). *The Three Cities Within Toronto: Income Polarization Among Toronto's Neighbourboods, 1970-2005*. Centre For Urban and Community Studies, University of Toronto

Human Resources and Social Development Canada. (2008) *Low Income in Canada: 2002–2004; Using the Market Basket Measure*, SP-628-10-07E, p. 5.

Infrastructure Ontario. (2018). *Client Profile: Parkdale United Church Foundation. Web. Retrieved from: www.infrastructureontario.ca/Parkdale-United-Church-Foundation/*

Johnston, L. Senior Planner & Project Manager. Personal Communication.

Leon, S. (2017). *Tall Order Understanding Change in Toronto's Inner-Suburban Rental Towers*. The Wellesley Institute.

MacRae, R. Associate Professor. Personal Communication

McIntyre, L. & Anderson, L. (2004). *Chapter 13: Food Insecurity* in Social Determinants of Health: Canadian Perspectives. Toronto: Canadian Scholar's Press.

McKeown, D. (2010). *Cultivating Food Connections: Towards a Healthy and Sustainable Food System for Toronto.* Toronto Public Health. ON: Toronto Public Health.

McMahon, T. (2015). *Affordable Housing Crisis Affects 1 in 5 Renters in Canada:* The Globe and Mail.

Medical Officer of Health. (2011). *Toronto Food Policy Council 2011 – Membership Update. Board of Health.*

Miron, JR. (ed). 1993. *House, Home, and Community: Progress in Housing Canadians*, 1945-1986. McGill-Queen's University Press and Canada Mortgage and Housing Corporation. 454.

Moffatt, H. (2008). *Preliminary Rationale and Strategies for the Subsidized Housing Sector.* Vancouver Coastal Health. 1, 2-40

Murphy, C., Gloger. A., Cooke, T., Elliott, H., Arsenault, M., Abdi, M., McIsaac, E., Houston, S., Taylor, C., Cartwright, J., Powell, R., Jamieson, A., Stellinga, A., Goddard, L., Zanotti, D. (2017). *Boldly Progressive, Fiscally Balanced: A Community Benefits Policy Framework for Ontario.* Community Benefits Ontario

Office of Auditor General of Ontario. (2017). *Social and Affordable Housing*. Ministry of Housing. 3 (3.14)

Richer, C., Htoo, S., Kamizaki, K., Mallin, M., Goodmurphy, B., Akande. A., Molale, A. (2010). *Beyond Bread and Butter: Toward Food Security in a Changing Parkdale. 1-52.*

Rideout, K., Riches, G., Ostry, A., Buckingham, D., & MacRae, R. (2007). *Bringing Home the Right to Food in Canada: Challenges and Possibilities for Achieving Food Security*. Public Health Nutrition, 10, 566-573

Robinson, T. (2017). *Public Project, Private Developer: Understanding the Impact of Local Policy Frameworks on the Public-Private Housing Redevelopment of Regent Park in Toronto, Ontario.* Queen's University. 1-262

Routio, P. (2007). *Normative Point of View*. Retrieved from: http://www2.uiah.fi/projekti/metodi/178.htm

Sarlo, C. (2006) *Poverty in Canada: 2006 Update* in Fraser Alert, Fraser Institute. (1).

Sliogeris, E., Crabtree, L., Phibs, P., & Johnston, K. (2008). *Housing Affordability Literature Review and Affordable Housing Program Audit.* Penrith, N.S.W: University of Western Sydney.

Stuckey, M.L. (2013). *Three Types of Interviews: Qualitative Research Methods in Social Health.* Social Health Diabetes. 1:56-9

Suttor. G., (2016). *Housing in Neighbourhood Strategies.* The Wellesley Institute.

Suttor, G. Senior Researcher. Personal Communication.

Toronto Community Housing. (2018). *Building for Sustainability.* Revitalization – LEED Certification. Web. Retrieved from: https://www.torontohousing.ca/capital-initiatives/revitalization/building-for-sustainability

Tsenkova, S. & Youssef, K. (2011). *Green and Affordable Housing in Canada: Investment*

Strategies of Social Housing Organization. University of Calgary: Faculty of Environmental Design. 1-18

The Canadian Centre for Economic Analysis. (2017). *Understanding the Forces Driving the Shelter Affordability Issue: A Linked-Path Assessment of Housing Market Dynamics in Ontario and the GTHA*.

Walker, R. & T. Carter (2010) *At Home in the City: Housing and Neighbourhood Transformation*. In T. Bunting, P. Filion, and R. Walker (eds.) Canadian Cities in Transition: New directions in the 21st Century, Oxford University Press Canada, pp. 342

Yin, R.K., (1984). *Case Study Research: Design and Methods*. Beverly Hills, Calif: Sage Publications.